

BUCHANAN'S Journal of Man

New Series, Vol. III., enlarged, beginning February, 1889, \$2.00.

Prices, Vol. III., \$2.00 per annum. Single copies 20 cents.

\$2.25 to subscribers in Europe, India, and Japan. \$2.50 to Australia.

Bound Copies of Vol. I., \$2.00.

Vol. II., \$1.75.

Unbound copies of Vol. II., \$1.00.

PUBLISHED MONTHLY, 6 JAMES STREET.

Vol. III.

BOSTON, DECEMBER, 1889.

No. 11.

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1890

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THE FOURTH VOLUME

OF THE

JOURNAL OF MAN,

Which begins in February, 1890, will continue as heretofore to present, as *fully as its limits* allow, the highest truths of PHILOSOPHY and most important matters concerning social progress and reform.

THE SYLLABUS OF ANTHROPOLOGY

Will be continued, presenting in the course of the year a complete statement of the cerebral science which in its imperfect development has been called PHRENOLOGY.

The practical aspects of SPIRITUAL SCIENCE and MEDIUMSHIP will be given for the instruction of those who have spiritual endowments.

HYGIENE

Will receive more attention than heretofore, giving not only instruction as to health, but directions and PRESCRIPTIONS in reference to the treatment of common diseases, any one of which, to those who need it, will be worth more than the price of the JOURNAL volume. INTEMPERANCE will also be treated, giving its true philosophy and the best methods of treatment for the CURE OF DRUNKENNESS.

PSYCHOMETRY

And its prophetic power will receive attention, and Education, Religion, and Scientific Progress will be considered.

The JOURNAL is a labor of love, but a heavy tax upon its editor, which he cannot sustain without the co-operation of his friends to enable it to reach the many thousands who need it but do not know of it. Specimen copies will be furnished freely to those who will use them.

PREMIUMS WILL BE GIVEN

For obtaining new subscribers. To those who send one additional subscriber a copy of the NEW EDUCATION will be sent. To those who send two, the MANUAL OF PSYCHOMETRY will be sent. For three new subscribers both will be sent, and for four the CHART OF SARCOGNOMY will be added.

BUCHANAN'S JOURNAL OF MAN.

VOL. III.

DECEMBER, 1889.

No. 11

The Existence of Jesus, Past and Present.

ESSAY OF DR. PEEBLES, CONCLUDED.

ANTONINUS PIUS, born 86 A. D., governing a province of Asia as proconsul before becoming Emperor of Rome, not only referred to the "Christians and the God (Jesus) that they worshipped," but according to Capitolinus he "treated the Christians with moderation and clemency." He died in 161 A. D., and so greatly was he venerated that five of his successors assumed the name of Antoninus. He was immediately succeeded by Marcus Aurelius, who also mentioned the Christians and their "obstinacy in the face of martyrdom."

Hieracles, governor of Bithynia, and one of the brightest ornaments of the Platonic school of philosophy, wrote two books against the Christians, the design of which was, so say the most reliable authorities, to make Appollonius (born about B. C. 3) the equal or a greater than Jesus Christ. And bear in mind here that Hieracles in no possible way questioned the existence of Jesus nor the genuineness of the gospels (in these two books), which gospels, according to the strongest opponents of Christianity, were in general use among the Christians as authentic records as early as A. D. 180.

Tacitus, born about 55 A. D., a Roman historian, entering public service under Vespasian, became a consul in the reign of Nerva. In a series of sixteen books by Tacitus ("*The Annals*") he writes thus of *this* Christus, and the Christians:—

"They (these Christians) had their denomination from *Christus*, who, in the reign of Tiberius, was put to death as a criminal by the Procurator Pontius Pilate. This superstition was thus for a while repressed, only to break out afresh, not merely throughout Judea, where the evil originated, but throughout Rome also, where things atrocious and disgraceful congregate and find many patrons." (Tacitus, *Ann.*, lib. xv. c. 44).

I never knew but one scoffing atheist ignorant enough and impudent enough to deny the genuineness of the above passage, and he quickly quieted down when I showed him what the infidel Gibbon said of it. Here it is:—

"The most sceptical criticism is obliged to respect the truth of *this* extraordinary fact, and the integrity of this celebrated passage of Tacitus. . . It may be proved by the consent of the most ancient manuscripts, by his reputation, which guarded his text from the interpolations of pious fraud, and by the purport of his narration."

Suetonius, another Roman historian (born A. D. 69, about the beginning of Vespasian), and author of the "Lives of the Twelve Cæsars," testifies most emphatically to the existence of Jesus and the Christians. The sceptical Gibbon characterized him by the epithets, "the accurate and the diligent." Writing an elaborate history of Nero, Suetonius says ("Life of Nero," c. 16):—

"Punishments were inflicted upon the Christians, a set of men attached to a new and mischievous superstition. . . . *He* was called Christus, and His disciples, Christians."

Marcus Aurelius, the philosopher and Roman Emperor (born at Rome 121 A. D.) received apologies and severe reprimands from Melito, Miltiades, Athenagoras and others because of his persecutions of the Christians. And yet, so far as we know, he only mentioned the "Christians" once; and then to attribute their eagerness for martyrdom to sheer obstinacy and a pompous love of notoriety." See F. W. Farrar's "Lives of the Fathers," vol. i. p. 71.

The fact that no President of the United States, or historian like Bancroft, has officially mentioned "the Fox girls," or Andrew Jackson Davis, or the Spiritualists, is no proof their non-existence. But the Emperor Aurelius ("Meditations," xi. 3) *did* mention the "Christians" of his time, "their superstitions" and their "obstinacy." And it follows logically that there could no more be Christians in the year 100 A. D., or 200 A. D., without a Jesus Christ, than there could be Mohammedans without a Mohamet—or an effect without a cause.

Porphyry, sometimes termed the "old man of Tyre," was a Neo-Platonic philosopher, studying under Plotinus at Rome. He wrote a series of fifteen books against the Jews and Christians. In treating of the Christians, he admitted the existence of Jesus and his magical powers, but denied his divinity. He died in Rome near the close of the second century. Theodosius, be it said to his shame, ordered a large portion of his books to be burned.

Valentinus, a celebrated Gnostic, came from Egypt to Rome a little previous to A. D. 140. He was an iconoclast of many disciples. He admitted the existence of Jesus; but wrote against the Christians, quoting from the synoptic gospels. In his writings, he mingled the Platonic ideas with the doctrines of John's gospel.

Marcion, who reached Rome from Sinope on the Black Sea about A. D. 138, according to classical authors, cherished violent prejudices against both Judaism and the accepted Christianity of that period. He publicly attacked Christianity, sneering at the superstitions of "certain Christians." He also rejected as non-authoritative portions of the New Testament collection of books; and yet, he zealously confessed in his writings that the life of Jesus was actual and beautifully self-sacrificing.

Julian, a Roman Emperor and philosopher, dying in June, A. D. 363, was educated a Christian, under Eusebius of Nicomedia. But going to classic Athens to further pursue his studies, he became enamored of the orator Libanius, and accepted the Platonic philosophy. He wrote several books against Christ and the Christians, but al-

ways frankly admitted the existence of Jesus Christ. Cyril wrote a refutation of these books. Julian's style was sometimes severe. Here is a sample. After penning severe words against Jesus and John (see Hier. Epist., 83 b. 8), he says:—

“These things therefore we shall shortly discuss, when we come particularly to consider the monstrous deeds and fraudulent machinations of the Evangelists.” Though living in the very blaze of Roman civilization and oratory, the Emperor Julian frankly admitted the existence of Jesus and the genuine goodness of his life. And yet he insisted that his marvellous works were equalled, if not excelled, by Egyptian wonder-workers and Grecian thaumaturgists, and that his admiring disciples hurtfully magnified his virtues. In Libanius' admirable funeral oration upon Julian's life and death this remarkable passage occurs: “But when the winter had extended the nights, Julian, besides many other beautiful works, attacked the books which make a man of Palestine to be a god, and the Son of God. . . . In a long contest and with strenuous arguments in the execution of this work, he appears to have excelled the Tyrian old man.”

Pliny the Younger, born A. D. 61, was a friend of Tacitus, and noted for his eloquence and competency as a Roman official. Sent with consular powers by Trajan to Pontus and Bithynia, he found large numbers of Christian believers in the Galilean Jews, charged with infatuation and criminal offences. Hesitating what to do, he addressed a letter to the Emperor Trajan, commencing: “Pliny to the Emperor Trajan, wisheth health and happiness.” Pliny then writes in this wise about these followers of Jesus:—

“I prohibit assemblies, . . . for many of all ages, and every rank of both sexes likewise are accused, and will be accused. Nor has the contagion of this superstition seized cities only, but the lesser towns also and the districts of the open country. Nevertheless it seems to me that it may be restrained and corrected.” The worst that can be proved against these Christians is that “they habitually meet together on a certain day, before dawn, to sing a hymn to Christ as God, and to bind themselves by an oath (*Sacramento*), not to the perpetration of any evil, but to avoid the guilt of theft, robbery, and adultery, and never to break their word or refuse the rendering back of that which has been entrusted to their care.”—*Pliny's Letters*, x. 97.

Celsus, an Epicurean philosopher, living under the Antonines, early in the second century, and the friend of that noted sophist and rhetorician Lucian, most bitterly attacked Christianity, as Origen's replies abundantly prove. And yet Celsus, the acute and the eloquent—the witty Ingersoll, in fact, of that period—the middle and latter part of the second century), most manfully admitted the existence of the “Hebrew Jesus,” the general facts of the gospels, and mentions some of the leading incidents of his life, including the “miracles” by which, said he, “multitudes were led to believe on him as the Messiah.” And further, Celsus declared that “these miraculous or spiritual works were wrought through magic which Jesus

learned when in Egypt.' Quoting a passage from Celsus' book, presented by Origen, he further says, in his sarcastic style:—

"Hereafter I intend to confine myself to the books of the disciples of Jesus. . . The Christians and Jews most stupidly contend with each other; and this controversy of theirs about Jesus, differs in nothing from the proverb about the contention for the shadow of an ass." (Apul., 9th lib. met.)

What a tremendous pity that the philosopher Celsus had not been honored with the acquaintance of Gerald Massey, the myth-hunter, to have just informed him that Jesus Christ never existed! That would have ended all controversy! Though the Jews, out of jealousy and hatred, were continually disputing with the Christians of the first, and second, and all along the early centuries, they never doubted nor denied the existence of Jesus Christ, the founder of Christianity.

There was in fact no dispute for hundreds upon hundreds of years after the dawn of the Christian era, about the actual existence of Jesus. If such a doubt had been expressed, the sarcastic Celsus with other philosophers, and rabbis too, would have at once hurled it at the Christians, saying, "Oh, silly and superstitious souls, why believe in a myth—*why worship a myth?*" Nothing of the kind was dreamed of—but, on the contrary, Jews, Greeks, and Romans, Tacitus and Pliny, Hierocles and Valentinus, Celsus the sarcastic, Porphyry the classical, Julian the Platonic, and others, during the last half of the first century, the first half of the second century and the third century, opposing or writing against, and all anxious to overthrow Christianity, never, *never*, so far as I am aware, in a single instance, denied the existence of Jesus Christ or the extension of Christianity!

This paltry business of writing Jesus Christ out of existence by the gall-dipped pen-strokes of atheists, and a few over-ambitious Spiritists, seems to have developed upon the dreamy Dupuis, the fickle Robert Taylor, Gerald Massey, James Burns, Mr. Traugher and some dozen or more others of less calibre. Shades of scholastic rabbis and Roman philosophers—what next?

Eight. Wishing a few years ago to take counsel from the highest and profoundest Hebrew authority in the land, touching this matter of Jesus' existence, I wrote a series of pointed questions to President Wise, which he kindly answered in the columns of the *American Israelite*, published in Cincinnati, Ohio, and of which he is the editor.

I have room for but a few paragraphs of his admirable and satisfactory reply to my published letter of May 31, 1886.

"The Jews, (says Rabbi Wise) as far as their literature is known to me, never questioned the real existence of either Jesus or Peter, Paul and James, or any other of the original collaborators in the origin of Christianity." . . . After referring to the mythical theory recently advanced relating to Jesus and the gospels, he thus continues: "Therefore, scholarly Israelites and learned rabbi, with the *Talmud before them, never denied the existence of Jesus of Nazareth.*"

“Rabbi Tarphon and Rabbi Eliezer ben Hyrcan, *who were contemporary* with the apostles, especially the latter, whose intimate connections with the apostle James are especially noticed in the Talmud, and whose certainly unintentional statement (note 30, p. 258, His. 2d Commonwealth of the Hebrews) that Jesus brought the science of necromancy with him from Egypt, the mnemonic signs, etc., is clearly noted. His (Rabbi Eliezer ben Hyrcan's) colleagues and successors never contradicted the oft-repeated statement that Jesus brought necromancy from Egypt; hence his *personal existence* could never have been doubted by the men of the Talmud, as said, up to a contemporary of the apostle James, the very generation of Jesus. Therefore I have maintained all along that the personal existence of Jesus of Nazareth cannot be denied.”

And yet, it *is* denied.

But is there any one sufficiently unprincipled and audacious to charge the learned Rabbi Wise with falsifying; or with *not* finding accounts both of Jesus and of his contemporaries, and what they in the Talmud said of him? Dare any of these Lilliputian doubters accuse Rabbi Wise, Deutsch, Herzfeld, Grætz, Rosenspitz, and other Hebrew scholars and orientalists of first reading *into* the Talmud what they read *out* of it concerning Jesus?

Here we might have rested the question. But no! tempted to pile Ossa upon Pelion I adduced testimonies direct and indirect from Celsus, Suetonius, Justin, Hieracles, Antoninus, Tacitus, Marcion, Basilides, Valentinus, Porphyry, Julian, the Emperor Marcus Aurelius and others — *testimonies* giving unmistakable proofs of Jesus' existence and of the trouble that he and the early Christians caused both the Jews and the Romans.

No rational man will dispute that Christianity — be it true or false — is a potent force, a MIGHTY POWER in the world. Did such a momentous effect or influence as Christianity is to-day, have no original cause? Was it born of nothing and founded without a founder?

These who take this position could very well believe in thoughts without thinkers, paintings without painters, structures without architects, effects without adequate causes, and in a well-ordered and wisely-governed universe without any Moral Governor! Great is the belief of unbelievers! Will some one of them inform us who “invented Jesus,” and these “early Christians” that so vexed the Jews in their synagogues, and a little later so annoyed Julian and Pliny the Younger?

Ninth. Having piled Ossa upon Pelion, classically speaking, I now proceed to roll leafy Olympus upon Ossa by way of cumulative testimonies from exalted spirits.

But, says some spiritistic doubter, “Many spirits with whom I have conversed declared that they had never seen Jesus Christ in the word of spirits.”

Quite likely! and for the reason probably that they were dark, unprogressed, demoniac spirits undergoing the disciplines of *hadēs*. The negative testimony of such disorderly demons is of no possible

account. Very few Americans ever saw Longfellow and still fewer Englishmen ever grasped the hand of the poet Tennyson. But none, however, in consequence of this would deny the existence of these distinguished poets.

Old ruins point to past civilizations. Results have corresponding causes. The existence of 200,000,000 of Mahomedans without a Mahomet; or of grand Socratic schools of thinkers throughout the world without any Socrates, would be quite as plausible a position to assume as that which, admitting the wide extent and potency of Christianity, denies the existence of the founder, aflame with spiritual gifts, divine principles, and great central ideas!

If believing — if knowing that spiritual beings under certain conditions converse with mortals constitutes a Spiritualist — then, *am I a Spiritualist* — and *that*, too, notwithstanding the vile babble of certain spiritualistic “*liars and libellers*,” who, out of envy and jealousy and spiteful malice, once reported me as having “renounced Spiritualism,” and gone to “preaching Calvinistic orthodoxy.” *That kind* of lying spiritism should be renounced and denounced by every lover of the truth. It proved itself to be irreligious, materialistic, Christ-denying and devilish. It was and *is* deceiving, conjuring necromancy — and just as different from the orderly ministry of angels, who, under the providence of God, are sent to this dark rudimentary world to demonstrate a future life, guide the straying into the paths of wisdom, lift the dim curtain from the eyes of the dying, comfort the mourning and lead souls to God, as the Heavens are different from the lurid ghastly hells.

During my past thirty-five years’ connection with Spiritualism, as a sympathizer, or public exponent, I have met, I suppose, in this and foreign countries, during my two journeys around the world, full 3000 mediums, and through hundreds of these I have received communications. And so far as memory serves me, not so much as *one* intelligent and highly unfolded spirit, in writing or speaking through this multitude of sensitives, has denied the existence of Jesus Christ.

A few years since I directed a series of questions through several of our Spiritualist journals to mediums only, inquiring if they in their clairvoyant conditions or if their spirit-controls had seen Jesus of Nazareth in the Higher Life. In response I received over one hundred — *one hundred letters*, declaring in the most positive manner that these seers, or their controlling intelligences, had seen, and some of them had personally conversed with, the Crucified Man of Nazareth.

We have room for but a very few of these replies, or rather references and quotations.

The *spirit controls* of W. J. Colville say: —

“We know of no spirit in spirit-life, who lived on earth a life so thoroughly exemplary as Jesus did. We do not know of any who has reached the same altitude in spiritual life in connection with the present dispensation. Jesus, in the spiritual world to-day, is looked upon as the ruler of the earth, as the guiding angel of the planet for,

the present dispensation, surrounded by an innumerable company of angels which constitute the Christ-spheres."

Nettie C. Maynard was the reputed medium, for a time, of President Lincoln. Her *spirit controls* replied thus:—

"You inquire if I have seen Jesus of Nazareth. I have not, to my knowledge. My mind has not been especially turned in that direction. None, however, in our world of spiritual activities, so far as I have heard, deny his existence. He is spoken of with reverence, and is admitted to be far, *far* above us. He was the most perfect reformer, the most unselfish teacher, and the best attuned instrument of God and angels that your world has known. It is he that keeps the Christ-idea so alive in the hearts of millions. In our temples of worship is seen the picture of Jesus, denominated by one of old — 'The brightness of the Father's glory.' I get these conceptions, that Jesus Christ was so exalted and divine, from the sphere of wisdom."

F. J. South's "spirit-band," as reported by Col. Hay, replied as follows in substance:—

"Jesus of Nazareth was an actual personage. He was the inspired leader in his day and generation on account of the spiritual wave that was then being poured out upon the world. And he is the centre of spirit work to-day, in connection with this planet. He claimed to be no more than a brother to all humanity, though he is the spirit guardian of the earth through this now terminating cycle, surrounded by an innumerable company of angels, and glorified hosts."

Prof. Henry Kiddle, in writing upon the statements of these and other spirits in attestation of Jesus' existence, wisely says:—

"They (these spirit testimonies) are attested and verified by, what appears to me, an overwhelming mass of testimony from the spirit world, given through various mediums—some of the purest and best—and many high and inspirational speakers. If we can reject this testimony, then indeed must Spiritualism be pronounced worthless as a source of reliable information as a spiritual revelation."

A. F. Melchers, formerly connected with the ably conducted *Deutsche Zeitung*, Charleston, S. C., and now editor of the *Better Way*, Cincinnati, while having beautiful and spiritually uplifting communications in the privacy of and through members of his own family, received direct communications from the Nazarene.

One evening when "all was in perfect harmony," they felt "a very unusual sensation, so marked that all noticed it." . . . "A holy and heavenly inspiration came over us," (said Mr. Melchers) "and my wife, being clairaudient, remarked that a very high spirit was present." It proved to be Jesus of Nazareth, who, while present, said in substance, among other things, "*I am the one that was crucified. Read the Scriptures carefully. Live pure and holy lives. A new heaven and a new earth will soon be inaugurated. Strive to be worthy.*"

Having doubts "that Jesus Christ would condescend to visit the domain of us poor mortals," Mr. Melchers, inquiring of their familiars or spirit guides, received the following communication:—

"I come to help you out of your doubts. Our Lord Jesus Christ was really here in person the other evening. He came for the purpose of inspiring you all in your work. Be diligent, and prayerful, and true to yourselves. . . . The light with which Jesus was surrounded was so bright that all we familiar spirits had to retire. Praise God for all his kindnesses towards you."

David Duguid, a quiet, sincere, and most conscientious man of Glasgow, Scotland, whom I've had the pleasure of personally knowing for full fifteen years, is a medium for painting, clairvoyance, trance and impression; and has continued a series of orderly seances for about twenty years. No one can enter his seance room without feeling that he is in a consecrated place. Among his controlling intelligences is a very gifted and noble spirit calling himself Hafed — *Hafed, once the Prince of Persia*.

This very intelligent spirit, giving his experiences in earth and spirit life through Mr. Duguid, tells of his direct knowledge of and travels with his cotemporary Jesus the Nazarene. These experiences, with the "key," all afire with historical references and spiritual reminiscences, are published in two large volumes by H. Nisbet, Glasgow, Scotland.

When in Scotland two years ago this summer, I held (in connection with elder F. W. Evans, H. Nisbet and others) several eminently interesting seances with Mr. Duguid, at each of which Hafed answered our questions, and all were taken down by a reporter. What I intend to publish in full in the future, I here very closely condense.

"I (Hafed) knew Jesus from an infant—till he left this earth. I was one of those chosen by the '*Spirit of Flame*,' as it was called in Persia, to proceed to Bethlehem, where we found the child Jesus as had been prophesied by Hebrews, Egyptians, and Persians. Very early in his life he was sent to Egypt to be protected and educated. He was there put in charge of my friend Issha. Hermas my friend and brother was brought up with Jesus in his childhood, and studied with him in the same cell. Then he came under my own direct tutoring, and was with me a long time and did many marvellous things when a youth. Jesus was initiated into our order when a young man. After initiation he visited his parents in Judea, but soon returned to me for awhile, after which we travelled into India, where he was initiated into a community of brothers who had banished themselves from the world. Then we returned to Persia—and then to India and Judea, where commenced his public ministry. . . . He came as the Light of the world; and the time will come when his moral truths and divine teachings will spiritually enlighten the world of mankind."

The following question and answer I give verbatim.

Question. "Hafed, did you ever in the spirit-world meet an intellectual, broad-minded spirit who denied the existence of the Jesus of the New Testament?"

Answer. "I never did. How could we, when we see him day by day. At different times we have given some description of a magni-

ficent spirit Temple where we meet — where all kindred, tongues, colors, and races meet, from the darkest Africans to the purest white. There assemble the philosophers and sages of different peoples and ages, to discuss and counsel about the affairs of their own and other nations, and *all* recognize Jesus as he *is*, the Prince above all! He had more of the divine in him than other men. I was conscious of this when walking with him on earth. He was and *is* our Prince, and his spiritual power on earth is increasing, and must go on unto victory!”

James Freeman Clarke, the late eminent Unitarian minister, introduces us to a highly cultured lady in “Light on the Hidden Way,” who, while she never attended a seance or read a spiritualist work, became developed in the sacred quietness of home as a very gifted medium. This seeress saw, described and conversed with many orders and conditions of spirits, some of which she had known when in their bodies. Her book is thrillingly interesting. We select and give the gist of the following paragraphs from pages 128–131.

Question. “What sect seems to be *the* church? and was Jesus God, or man?”

Answer. “I have not seen the faintest indication of any sect in Heaven. The shining ones have gathered from all nations and religions, the pure and saintly of the ages, who have feared God, loved their brother, and worked righteousness. . . . I falter as I try to speak of him (Jesus) who in the providence of God was the highest and purest revelation of a spiritual soul. Above the dim mists of superstition and materialism towers this majestic, colossal figure, mantled in holiness, his face all aglow with conscious intimate communion with the Father, the ideal sanctified soul. — One with the Father because filled with the Holy Spirit. Yet is he our elder Brother and Friend; and enthroned in the living grateful hearts of all who have been led by him into a higher life, he lives and works with that great company of holy souls, to lead humanity onward and upward into the perfect light.”

Here end the testimonies. And in the face of this array of *one hundred* or more mediumistic and spirit witnesses testifying to the existence of Jesus, several of which are quoted above, is there a Spiritualist so prejudiced, so engulfed in materialistic stupidity, and so given over to a dogged brazen-browed effrontery, as to pronounce all the above-named mediums, and hundreds of others, *impostors*; and their spirit-controls deceiving and lying spirits? If not, then the *fact* of Jesus’ existence is established.

Further still: if Massey, Traugher, Burns and other spiritualists, uniting with scoffing atheists, persist in denying the real existence of Jesus, of what avail are mediumistic and clairvoyant evidences? — of what *possible use* are our spirit communications? Or, putting it in the spirited words of the scholarly Henry Kiddle — if the testimonies of these high and exalted spirits who declare in the most positive terms that they have seen Jesus in the Heavenly Life are not to be credited, then “*Spiritualism must be pronounced worthless as a source of reliable information.*”

The testimonies of distinguished Jewish rabbis, of Roman historians and philosophers, of clairvoyant and clairaudent mediums, and of bright and noble spirits, unitedly unite like the fibres and braided strands of the cable, stretching in golden links along the centuries, from cotemporary rabbis of Talmudic fame, through the apostolic period, the blaze of Roman civilization, eloquence, and philosophy, the cloistered scholarship of the mediæval ages, down to hundreds upon hundreds of our most gifted mediums of this century, and *all* in attestation and demonstration of the *fact* of Jesus Christ's existence. And though he may not have been seen by you or myself he was seen (according to Paul, 1 Cor. xv: 5, 6, 7, 8) after his crucifixion, death, and burial, "by Cephas; then of the twelve."

"After that he was seen of above five hundred brethren at once; of whom the greater part remain unto this present, but some are fallen asleep.

"After that, he was seen of James, then of all the apostles.

"And last of all he was seen of me also, as of one born out of due time."

It is but justice to say that this article is far from being as precise in language, perfect in arrangement, and far-reaching in research as I could desire. But being the proprietor of two journals (a weekly and a monthly) and a correspondent by contract for a Philadelphia daily, together with a Sanitarium full of patients upon my hands, requiring medical advice and treatment, I have done the best I could under the circumstances. And before critics sharpen their pens for critiques, I beg them to read the able and exhaustive reviews and replies of W. E. Coleman, of California (published in the *R. P. Journal* of 1884), to Gerald Massey, where, as I before said, Massey met his Waterloo! His echoes ought to have remained silent.

Time and space prevent me from giving further mediumistic and spirit testimonies to the truth of Jesus' existence, one of which I was personally connected with in the city of Jerusalem when upon my first tour around the world. It was a *seance* never to be forgotten, those being present who on earth had lived, and walked, and talked with Jesus.

I close with the eloquent and clear-ringing words of two famous sceptics, Ingersoll and Renan.

"My own opinion is that the man called Christ lived. His life is worth its example, its benevolence, its self-denial and heroism. . . . I place him with the great, the generous, the self-denying of this earth, and for the man Christ I feel only admiration and respect. Let me say, *once for all*, to that great and serene man I gladly pay the homage of my admiration and my tears." — *Ingersoll*.

"The highest consciousness of God that has existed in the human breast was that of Jesus. He founded that lofty Spiritualism which during ages has filled souls with joy in passing through this valley of tears." — *Renan*.

J. M. PEEBLES, M.D.

Hammonton, Atlantic Co., N. J.

The questions in reference to Jesus or Christ assume more of the ethical than the historical character. Among the active minds of the church the disposition is continually becoming more apparent to neglect or ignore the historical and miraculous aspects of Christianity as unimportant or perhaps doubtful, and to confine attention to the sublime system of ethics of which Jesus is the recognized representative. This is certainly the drift of rationalism in the church.

Unfortunately, the sublime ethical doctrine of infinite love to God and man is not heartily realized either by the rational or the faithist class. It requires a higher development of humanity than that which we have inherited from ages of warfare. Still, it is a great benefit to cherish this ideal, to talk of it and preach it, even if we never realize it. The hearty sympathy with this grand ethical doctrine was well expressed as follows, by Ludwig Noire, a German writer on the philosophy of Evolution, whose sentiments differ widely from those of the majority of his class: —

“If the question was put to us in the following form: Are we Darwinians, or Christians? then I would exclaim out of the fulness of my heart: Christians!

“We do not call ourselves Copernicans, nor Newtonians, nor Keplerians; we do not take our name from those who have advanced our knowledge. Science is a gigantic structure to which every age, every century, every great intellect, before disappearing, add a stone. When you have told me all you know, you have become through that very fact quite dispensable to me, and if I sought of you nothing but knowledge, I would never call on you again. But if it is your own being, if it is your belief, your purpose, the aims and objects of your aspirations, which you pour into my soul, oh then my heart will be lit up by a similar flame, and inseparably united in absolute atonement with you—then would I confess and profess you loudly and everywhere.

“Thus we also confess. We confess our faith, our belief, in the highest ideal, towards which for more than two thousand years the longings and the aspirations of the most exalted of our race have been directed, for which millions have given their lives, no less in the noiseless, unnoticed sacrifice of active love for humanity, than in the night of the dungeon, in the secrecy of the torture-chamber, or in the lurid glare of the stake. This highest ideal is humanity, the brotherhood of man, the union of mankind into one great nation, into one great family. The time will come when all joys and pains will be borne and felt by all in common, when all evil will be prevented and shorn of its power, when all sufferers will find shelter. Nobody has felt this ideal in more beauty and purity, nobody has proclaimed it with more glory and with more enthusiasm, than that divine master, whose great, flaming heart felt and experienced itself all the sorrow and all the anguish, then and now still resting upon humanity, blind and wearily sighing for a saviour, and who first raised the command of neighboring love into the sympathetic feeling of the oneness of all humanity in those imperishable words of comfort: “Come to me all ye who are weary and heavily laden, and I will

give you rest!" As long as this highest ideal has not been realized, so long will we rejoice in being named after Him who revealed this ideal to us, and who has been the purest and noblest example of absolute humanity upon this earth. In the fulness of time this now most beautiful flower of ideality may ripen into full fruitage, and then the name will disappear, because its essence will have become universally accepted, and a name only signifies a distinction. But His picture will be raised up in the temple of humanity as that of its greatest benefactor, and gratitude and reverence will be offered up to His memory by coming generations, who will have forgotten all the dark clouds of superstition and unbelief which for so long have endeavored to obscure its beauty."

A REPLY TO DR. PEEBLES. — Prof. Loveland has briefly replied to Dr. Peebles' essay on the existence of Jesus. He objects to the Talmud as authority, because it is not old enough, saying that the Mishna (its authoritative portion) was not completed until "almost 150 years after the reputed death of Jesus." It is true that Talmudic writings were in production even down to the fifth century, but the *completion* of any portion of the Talmud is hardly relevant in this case, for it is the antiquity with which we are concerned; and the real origin of the Talmud in Jewish laws and usages is beyond any definite history, but its earliest *writings* antedate the Christian era. They were produced by HILLEL, one of the worthiest and noblest as well as most learned of the Jews, whose long life almost entirely preceded the Christian era, as he was born more than a hundred years before Christ. The Talmud, therefore, runs back prior to the origin of Christianity, and is most excellent authority upon these questions, as the learned admit. This part of the argument seems impregnable.

Mr. Loveland objects to the language of Dr. Peebles as discourteous to his opponents, and insists upon the unreliability of the early Christian writers, and the commonness of forgery and interpolation, which is certainly a well-grounded charge, and he objects very reasonably to the quotation from Josephus as intrinsically improbable, and probably an interpolation. He objects to Justin Martyr's reference to the memoirs of the Apostles that it is not a reference to the books of the New Testament, and says that the reference to Papias as mentioning the gospels is of no value, for none of his writings are in existence, and all we have is what Eusebius says that Ireneus says that Papias said that Arioston said that John the Presbyter said that Matthew wrote a gospel in Hebrew! although Matthew was really written in Greek! He adds: "The Fathers of the first century are all interpolated, and those of the second century are to a greater or less extent liars," and as the historical character of the four gospels is not established, he thinks it useless to prop them up by outside testimony.

It may be replied, however, that the historical value of the four gospels is another question. However unreliable they may be, the existence of Jesus is not disproved by discrediting their accuracy. The Talmud has not been discredited.

As to mediumistic testimony, he considers it quite worthless — a mere expression of the medium's or the sitters' mind, which is undoubtedly true in a vast number of instances. But notwithstanding the vast amount of mediumistic stuff that has no value when carefully examined, that opinion does not entirely cover the case. There are many valuable and reliable communications by direct spirit writing, a vast deal of evidence of this kind, which cannot be thrust aside by a candid inquirer, and if any *one* should be considered indecisive by itself, on so important a question, a large amount of corroborative testimony produces conviction, like an accumulation of strong circumstantial evidence. The integrity of Duguid cannot be impeached, and the very best evidence of this kind which Dr. Peebles might adduce he has not even mentioned. A compilation of the decisive facts which belong to spiritual communication and impression would leave no room for doubt. Moreover, I affirm we need neither historical nor mediumistic evidences upon a question which is decisively answered by the science of PSYCHOMETRY, the world's future oracle upon all disputed historical questions. It *does* affirm the past and present existence of Jesus, and his lofty rank in the noble, pure, and world-redeeming qualities for which mankind have justly given him credit, but which they have failed to imitate, even when most loudly professing to be his followers.

All whom history records are living now, and when the world is a little more advanced we shall hear from them. In all past centuries their approaches to mortality have been repelled with horror or shunned by ignorance, but evolution is slowly bringing the world into communion with its ancestral races, and all shall know that JESUS exists as well as Socrates and Washington — that he is still revered by his beloved disciple JOHN, and that his mother MARY still lives, as worthy of love and honor as her illustrious son. But when mankind shall have been brought into communication with the most exalted spirits, the superstitions of a paganized and worldly church will be slowly disappearing from the earth, leaving a history at which future ages will wonder.

Sublime Enthusiasm.

HELEN WILMANS, of Georgia, is one of the few whose intelligence and honesty give respectability to the Mind Cure theories and practice which have so unwholesome an odor in the sphere of Eddyism, which is but another name for egotism, fraud, and delusion.

The following passage in *Wilmans' Express* is especially characteristic of the Wilmans school of psychic therapeutics. It expresses forcibly the sentiments which come from intense action on the upper posterior regions of the brain, which give courage, hope, enthusiasm, and self-reliance. It is so far above average human life that it reminds us of the romantic hope and courage inspired by morphine, a stimulus often used by brilliant writers. Wilkie Collins, who has recently died, produced his famous writings under the inspiration of opium. One of his friends (Mr. Caine) tells the story as follows :

"We were sitting in Wilkie's workshop, with proofs of his current work everywhere about us. The point was a knotty one, and a very serious issue seemed involved in it. Wilkie was much worried. 'My brain is not very clear,' he said, once or twice, taking a turn across the room. Presently, and as if by a sudden impulse, he opened a cabinet, and took out a wineglass and what seemed to be a bottle of medicine, and was labelled with the name of a well-known London chemist. 'I'm going to show you one of the secrets of my prison house,' he said, with a smile. Then he poured from the bottle a full wineglass of a liquid resembling port wine in color. 'Do you see that?' he asked. 'It's laudanum.' Straightway he drank it off. I was all but dumbfounded.

"'Good Heaven, Wilkie Collins!' I said, 'how long have you taken that drug?' 'Twenty years,' he answered. 'More than once a day?' 'Oh yes; much more. Don't be alarmed. Remember that De Quincy used to drink laudanum out of a jug.' Then he told me a story, too long to repeat, of how a man-servant of his own had killed himself by taking less than half of one of his doses. 'Why do you take it?' I asked. 'To stimulate the brain and steady the nerves.' 'And you think it does that?' 'Undoubtedly,' and, laughing a little at my consternation, he turned back to the difficult subject I had come to discuss. 'I'll see it clearer now. Let us begin again,' he said. 'Wait,' I said. 'You say, my dear fellow, that the habit of taking laudanum stimulates your brain and steadies your nerves. Has it the same effect on other people?' 'It had on Bulwer Lytton,' answered Collins; 'he told me so himself.' 'Well then, Wilkie Collins,' I said, 'you know how much I suffer from brain and nerve exhaustion. Do you advise me to use this drug?' He paused, changed color slightly and then said quietly, 'No.'"

We have no reason to attribute opium eating to Mrs. Wilmans, but it is seldom such enthusiasm as hers is generated by the healthy action of the brain unaided by stimulants. Laudanum, morphine, strong tea, ether, and nitrous oxide gas produce such an exaltation of the sentiment of power and wisdom, but they leave a wreck, for the condition they produce is abnormal.

To generate this conquering enthusiasm it requires a brain extremely well developed in the higher regions, and an active life in obedience to the noblest impulses. Such a life brings man into contact with realms of spiritual power, which give him a noble inspiration, and thus lift him still higher. There is a vast realm of exalted life which seldom comes in contact with earth life, because earth life is on too low a plane. Mediumship seldom reaches it, because it is seldom accompanied by the elevated life that is necessary. Only they whose lives are ruled by the noblest purposes inhale the Divine aroma that sustains them.

The language of Mrs. Wilmans may serve to strengthen and encourage many whose modest diffidence hinders their development, but such expressions sometimes inspire a delusive vanity and self-confidence in weaker minds. Yet resolute enthusiasm and aspiration, combined with proper reverence and modesty, lead to a noble

life. Under the heading, "The light that never shone on land or sea," Mrs. Wilmans writes as follows:—

"I cannot tell how long ago it was that I began to feel the utter unsatisfactoriness of the world's pursuits and the world's victories; but I was only a child when a deep-seated sense of disappointment about this matter took possession of me. Now this seemed very strange, from the fact that I was in perfect health and strength and beauty, and surrounded by all the elegancies of that time. Moreover, my life was full of the small victories that young people seem to prize so highly. But these victories were disappointing to me, and "*Is this all?*" was a question that constantly dimmed and overshadowed them. As I looked forward—in imagination—I saw nothing for myself but what I was already too conscious of in the lives of the women I knew. My schoolmates—animated by the brightest hopes—married the men of their choice, to immediately descend from their positions as idols in their husband's affections, and to take place as servitors, and shoulder burdens most grievous to bear. I fancied—at the time—that men were free, and women alone were enslaved; I found out later that both sexes were enslaved, and all by the same tyrant—*Ignorance*; and that woman's degradation was only a shade deeper and darker than man's.

All these thoughts I kept to myself, and only mused about them when alone. I knew that my friends would have called them "morbid," and that our family physician would have pronounced me a sufferer from indigestion and liver complaint, and prescribed calomel for me.

Now, deep seated in my organization was a living fountain of *faith* in something better than the world had ever realized; something that I somehow *knew* was accessible to us *right here and now* if we could only discover a clue to its whereabouts. And so strong was this conviction that its light shone in on all the wretched complications of my advancing life and gave me courage to meet them. It gave me courage—not only to meet them—but to triumph over them; to put them beneath my feet; to carry forever and under all circumstances the radiant front of a conqueror. And so I escaped the fate that was grinding the very souls out of thousands of women in my situation. This faith in something better—of which I am speaking—lifted me bodily above contagion; above disease and the fear of disease; above death and the fear of death; gave me the strength to endure—in after life—such hardships as few people could live through; and to endure them, not like a whipped slave, but with a constant consciousness of secret triumph that I knew would finally burst every bond, and lift, if need be, the very world from off my shoulders—sometime.

"Sometime." My refuge was always in this "Sometime." Crushed to the earth and my soul ground into dust daily, and I did not know it, I had escaped into the "Sometime." Poverty, with its never-ending grind, became my daily companion, but I ignored its presence and felt jubilantly exultant, inasmuch as the harder it pinched the closer seemed the long-looked-for "Sometime." Death came and buried

from my eyes the idols of my household. Oh, then, there was no refuge for me but an escape into the "Sometime," and the "Sometime" was closer still. And so the crushing and the misery went on until it shoved me bodily into the wide-open door of the splendid "Sometime," and I began to realize its glories.

Then came the power of introspection, that inner sight which marks the passage of life from instinctive or unconscious growth to intelligent growth, that vital awakening of the reasoning powers by which a man recognizes the Law (instead of the letter) of Being; and begins to live in the Law (ignoring the letter); thus spiritualizing his whole organism, and passing out of the realm of mind, where he is diseaseless and deathless.

And this is the road up that steep incline from animalhood to glorious manhood. And oh, how the light begins to dawn. It is indescribable; it is "the light that never shone on land or sea."

I have been true to my ideal; my dreams are becoming actualized in my present life; those dreams that went out on reconnoitring tours like the doves from Noah's ark, have no need to return to me; land is in sight. I am touching the shore.

I am not using words recklessly; I have measured their force; I know the tremendous import of the claim I am making, but I will not abate one particle of it. At last I know the latent power in man — by the intelligent recognition of which disease, the ravages of old age, and death can be banished.

By slow degrees, as I approached this knowledge, my surroundings changed; power and influence and money — the lever that now moves the world — came to me; success seemed to crown every effort; blessings flowed in from every direction; presents and praises were lavished freely.

But, after all, this is simply in accordance with the law. He who holds true to his highest ideal and will not be shaken by taunts, ridicule, abuse or distrust, will become a magnet, and will attract to himself his fit surroundings, and will draw within his reach all those appliances by which his work can be prosecuted.

And nothing shall hinder him; the stumbling stones will move out of his path as he continues his climb up the hill toward still higher and higher unfoldments in the great brain and heart of the race; the splendid race for whose sorrows the baby cheeks of such a one had been so often blistered with tears — his childish play hours overshadowed with dreadful foreboding, and the brightest days of his maturity clouded with the gloom of unspeakable thought; the race for whom and with whom he lived and always meant to live, and among whom neither the selfish allurements nor demoniacal denouncements of religion would either persuade or frighten into drawing a line derogatory to even the smallest fraction of it."

This is inspiring language for those whose inner strength responds to it and who are not thereby led into the delusions of imaginative hope. For myself I can say that I have always had a dim consciousness of infinite possibilities, and an intense yearning for a higher life than earth has ever afforded, or that has ever been portrayed, except

by glimpses in the language of romance. To me this was neither romance nor fiction, but a profound consciousness of the divine possibilities in man; and it was accompanied by a clear conception of the pathway that leads to the ideal region — the sublime pathway of science — science that comprehends two worlds. Travelling on this path, far away from worldly ambitions and vanities, I have enjoyed a half a century of progress in a new world of thought, along a path that future generations are destined to tread.

A MEMORABLE CRIME.—In 1483, Columbus proposed to King John of Portugal to make his now famous voyage to America, which the board of scientific men rejected as visionary. In the same year Martin Luther was born, who opened a new world in religion, and in 1484 William Tyndale was born, whose translation of the Bible introduced it to the people beyond the authority of priests. The 6th of October just past reminds us of the sad fate of poor persecuted Tyndale, whom the Catholic church strangled and burnt on the 6th of October, three hundred and fifty-three years ago, as a troublesome heretic and follower of Luther. The recent celebration in honor of Bruno reminds us of the other martyr, Tyndale — martyred for his devotion to the Bible by a church which professes to be founded upon it. The new world is about to spend millions in honor of Columbus. The educated world now honors Bruno and the Protestant world reveres the memory of Tyndale. Thus throughout history has the college vetoed and the church imprisoned or burned to arrest the evolution of humanity. Colleges and churches are better to-day, but how much? Is there a single college or church in which the pursuit of science is untrammelled, or in which an honest and careful investigation of the science of man — his soul and body — would not result in the ostracism of the honest seeker of truth.

THE CATHOLIC CELEBRATION at Baltimore in November passed off with great éclat and very large attendance. The Boston *Herald* takes a hopeful view of the Catholic question, believing that the Catholic church will become Americanized. The liberal expressions in Bishop Spalding's address at Washington and in some of the addresses at Baltimore favor this idea. As the church embodies a conglomeration of contradictions it will not be very difficult to add a few more — down with Bruno, up with American liberty.

THEOLOGICAL ISSUES.—In addition to the issues presented by Romanism and by the National Reform or God-in-the-Constitution party, the Prohibition party seems to be rapidly becoming adulterated with the theological mania by the influence of the Woman's Christian Temperance Union, guided by Mrs. Frances E. Willard, who wishes to have "His law the true basis of government and the supreme authority in national as in individual life," which means simply that the government shall be seized by bibliolaters and all other classes put down by law. Judge Poston, of Kentucky, published in the *Southern Journal*, at Louisville, a prohibition organ, a statesman-like protest against this corruption of the Prohibition party, which did not meet favor with the editor. He said in conclu-

sion, of the Prohibition party: "That party cannot expect the support of those opposed to the contemplated religious amendments. I am not alone in my protest against the combination. I speak the sentiments of vast multitudes in this country. It will very soon become necessary for us to determine whether the Prohibition party will separate the issues and permit each party to fight its own battles, or connect Prohibition with the religious features and declare that both shall conquer or die together. I cannot advocate both principles, and I can agree to no compromise that does not procure to mankind the right to free thought and freedom of conscience and absolute immunity from intolerance as regards religious convictions. I ask those who are urging religious laws and amendments to consider that any religion that God has established will certainly be self-sustaining and not need legislative enactments to sustain its existence or promote its growth."

COLONEL OLCOTT is said to have created a veritable furore in his recent Buddhistic tour through Japan. At first some of the Buddhist priests gave him the cold shoulder. Then he began to excite popular interest, which was intensified as he went through the larger provincial towns. At Nagoya, a large commercial town between Tokio and Kioto, he had audiences at each lecture of about 4,000 people, and it is said that the wildest applause everywhere greets his declarations that the closest relationship exists between the stable progress of the nation and the maintenance of true Buddhism. The Buddhists who control his tour seeing the effect he is producing, are hurrying him about, so that he is delivering orations and lectures in three or four different places in the same day. He does not speak a word of Japanese, and his lectures are therefore delivered in English and translated on the platform by an interpreter, sentence by sentence, as he goes along. Yet he arouses great enthusiasm. Not only the common people hear him, but also the high officials. In many of the large towns through which he passed special meetings were held at times suitable to officials, at which they were alone present. — *Home Journal*.

CHURCH TITHES. — The established Church of England has great difficulty in collecting tithes, especially in Wales, and is now asking a law to facilitate their collection. The time is sure to come when the people will no longer submit to this tax.

The World's Future Rulers.

(From the Tablet.)

WE are constantly told that Europe is dwindling and becoming of little account, and that the mastery of the world will rest with the peoples from whose lips fall the large music of our English speech. The O'd World quarrels, the frontier feuds of Europe, the strife and rivalries of Teuton and Gaul, will endure for yet a little longer, but they are always of fading consequence for the world. The French and the German armies may watch one another across

the Rhine, and the Cossack may still dream of watering his horse beneath the shadow of St. Sophia, but these poor ambitions and hatreds will mean as little for the future of mankind as did the quarrels of the greens and the blues in the dying days of the Lower Empire. The map of Europe may be changed and rechanged, and its peoples may conquer and be conquered, but they and the very tongues they speak shall fail and fade entirely, until French and Slav and German, except for their literatures, shall become forgotten dialects like Welsh or Irish, the picturesque survivals of an Old World tribalism. It may be worth while, then, to pause for a little and see what justification in sober fact there is for this loud boast of the coming empire and almost universal dominion of the English-speaking peoples.

At the present hour the peoples of the United Kingdom and the United States represent about one fifteenth of humanity, and govern one third of the planet and one fourth of its inhabitants. In the beginning of the eighteenth century this race numbered less than 6,000,000 souls: at the beginning of the nineteenth century they increased to 20,500,000; at the present time they are about 100,000,000. In the space of eighty years the English-speaking peoples multiplied five times over, and it is confidently reckoned that within another hundred years they will have outnumbered all the other civilized peoples put together. M. Kummer, the chief of the Federal Bureau of Statistics in Switzerland, has reckoned that the total population of Europe in the year 2000 will be 565,000,000, while Dr. Strong, of New York, reckons that in 1980 the population of Europe will be 534,000,000. No complete statistics showing the average increase all over Europe are available for the early decades of the century, but the average increase of the continent for the ten years from 1870 to 1880 was 6.89. If, however, we were to apply the same test to the English peoples, and suppose them to multiply for another hundred years as they did from 1870 to 1880, they would reach the enormous total of 1,343,000,000. It would be unreasonable, however, to suppose that the ratio of increase will continue so long. Dr. Strong bases his calculations in this way: In Great Britain the ratio of increase from 1840 to 1850 was 2.49 per cent.; during the next ten years it was 5.44; the next ten years it was 8.60; and from 1870 to 1880 it was 10.57 per cent. So we see the ratio of increase steadily rising for forty years, and there is no apparent reason why it should not continue to rise. But as he is dealing with so long a period of time as a hundred years, Dr. Strong prefers to suppose that the average ratio of increase for the century will be only half what it has been during the last decade, and so puts the probable population of Great Britain in 1980 at 57,000,000.

On the other hand, the Swiss statistician fixes it for 2000 at 142,000,000. Accepting, however, the American estimate, let us consider the other branches of the English-speaking peoples. The Australian rate of increase for the ten years from 1870 to 1880 was 56.50 per cent.; that of South Africa 73.28. But suppose that Canada, Australia, and South Africa double their population once every

25 years — the United States has done that ever since 1685 — then the English population of the British colonies in 1980 will be 176,000,000. For the United States very complete and satisfactory statistics are available from the beginning of the century. The ratio of increase varied during the decades from 1800 to 1880 from 36 to 30 per cent. With these figures before him, Dr. Strong (M. Kummer confines his investigation to Europe) proposes to leave out of account all future immigration and to confine himself to the increase of births over deaths, leaving immigration as a set-off against any possible check upon growth. Calculated upon this strictly moderate basis, the population of the United States stands for 1980 at 480,000,000. The total Anglo-Saxon population of the world would then be 713,000,000, as compared with 534,000,000 of Continental Europe. And it must be remembered that these figures show the largest probable population of Europe and the smallest probable numbers of the English-speaking race.

In face of these tremendous figures it is well to be reminded that if the whole of the English-speaking populations of the world — multiplied as they are likely to be at the end of another century — were to be planted down in the territory of the United States and then doubled, the people would still not be so thick upon the ground as they are to-day in Belgium. While in France the population is 180 to the square mile, in Germany 216, in England and Wales 428, in Belgium 481, in the United States, exclusive of Alaska, the population is only 16 per square mile. Indeed, the 50,000,000 of the United States in 1880 might be put into Texas, and yet the population would not be as dense as in Germany. Put the whole present population of the United States into Dakota, and the people would be less crowded than to-day in England and Wales. Our share of the earth's surface, therefore, seems an ample inheritance even for the overwhelming increase of the future. It is of more immediate consequence to inquire whether this people, scattered over so many climes and so many lands, but bound by a common speech and common memories and common laws, will remain in any real sense a homogeneous race. The whole tendency of civilization seems to point to an answer in the affirmative. Increased facilities of communication and the always growing intercourse between England and the peoples across the Atlantic and in the Pacific will have their inevitable effect in checking anything like separateness of speech or thought. Already it is matter for common observation that a phrase or word which one season is noted as an "Americanism" the next is accepted by all as though it were a part of our inherited English speech. No doubt in Canada and the United States, as in Australia and South Africa, the dominant type will be affected by streams of immigration from other lands. But here also history repeats itself, and as Saxon and Norman and Dane and Celt and Gaul helped by their fusion in the making of England, so the same elements will continue to be absorbed by the English-speaking peoples over seas.

The Land and the People.

EVERYWHERE our cities are growing, and the country relatively declining. The *Boston Herald* says, "It is not in New England alone, that farm lands are rapidly depreciating in value. The State assessors of New York find a general depreciation in this class of property throughout all the counties in the state, and it is predicted that in a few years the occupants are likely to become tenants, instead of owners, in consequence of the mortgage sales of their lands. The difficulty seems to be that the eastern farmers cannot compete with those in the west. In the cities, on the other hand, real estate is continually increasing in value. New York city has added \$50,000,000 to its real value in the past year; Brooklyn, \$20,000,000; Buffalo, \$5,000,000, and so on, a condition of things which is probably duplicated in most of our New England cities."

New England is full of abandoned farms. It is estimated that 200,000 acres of land in Vermont once under successful cultivation are now abandoned, and growing up in forest. The *Herald* says the difficulty is not in the farms but in the men, and that "wherever the farmers have mixed their crops with brains, and maintained the old economy of living, they have been comparatively successful." Good farms can be had in Vermont for five dollars an acre.

Small farms are declining, large farms are increasing, and farmers are becoming tenants. The reign of plutocracy is approaching. The following table tells the story:

| Size of Farms. | 1870. | 1880. |
|---------------------------|---------|-----------|
| 10 to 20 acres..... | 294,604 | 254,749 |
| 20 to 50 acres..... | 847,614 | 781,474 |
| 50 to 100 acres..... | 754,221 | 1,032,910 |
| 100 to 500 acres..... | 565,054 | 1,695,983 |
| 500 to 1,000 acres..... | 15,873 | 75,972 |
| 1,000 acres and over..... | 3,720 | 28,578 |

Farms in Illinois are said to have depreciated in value 25 per cent. in eight years. Farmers have not been shrewd or energetic as to their political interests. They have not given proper support to agricultural newspapers, agricultural colleges or fairs, or any combined movements for their own advantage. Hence politicians think but little of the farmers' votes.

Farm life is too monotonous to attract the young. If farmers would build their houses nearer together, and provide more amusements and reading for the young people, the farm would retain the people. Life does not grow monotonous to an educated and reading people.

LAND FOR THE PEOPLE. — Texas has 25,000,000 acres of land for sale to homesteaders at \$2 to \$8 an acre. It has a fine soil and delightful climate, as I know by personal experience. The proceeds of the lands are devoted to the school fund, which is larger by far than in any other State. Texas has a great future.

THE CONDITION OF FRANCE appears to be financially prosperous. The Minister of Finance, M. Rouvier, shows in his report that the capital invested in industrial undertakings has increased 7,000,-

000,000 francs since 1876. There were 2,228,000,000 francs of deposits in savings banks by 6,492,000 depositors. The *Journal* of the Statistical Society shows that France in 1879 produced 110,000,000 bushels of wheat, or 11 bushels an acre; now it produces 294,250,000 bushels, being 18 bushels to the acre, which is above the American average. The average value of the land has risen from £8 per acre a century ago to £27 at present. Wages, too, have risen. The agricultural laborer got sixpence a day in 1789, who now gets two shillings. Meantime the price of bread has not materially varied. The total national commerce a century ago was about forty million pounds—now it is £374,000,000. What is going on in France is occurring all through the civilized world. The whole world is advancing.

REFORMATORY MOVEMENTS.—Notwithstanding the desires manifested by many good people for a better social condition, it is not yet demonstrated that our people have the moral qualities that fit them for a nobler social order. The effort is still in progress. Co-operative colonies are being formed, and Nationalism aims to educate the whole nation to realize an ideal condition. In looking at the history of progress, however, there is not much to make us hopeful of speedy results. Jay Chapel says:—

“Rochester! Historic ground! It was there that the first meetings were held in this country for labor and land reform, and for years before the advent of Spiritualism, which found its earliest supporters there. Nearly every phase of reform found many of its most intelligent advocates in that embryo flower city. Forty-five years ago it was the centre and focus of the great socialistic excitement that had taken such a hold in this country under Fourier. Conventions were held there frequently and associations projected. There Brisbane and our genial friend Leland, and others full of zeal for a new order of society, found a fertile field.

“Leland said, in 1844, that twenty thousand persons was a ‘low estimate of those ready and willing, even anxious, to take their place in associative unity,’ west of the longitude of Rochester in this State. Nine associations were contemplated within a radius of fifty miles of that city, and four of them were put in operation,—Clarkson, Sodus Bay, Bloomfield, and Ontario,—with an actual membership of over one thousand persons. They had twenty-five hundred acres of land, fine water-power and all the facilities of success, but all were short lived, ended disastrously, and made the name of association odious to the masses.”

Of all the champions of Fourierism, Brisbane was the most enthusiastic. We hear nothing more from him. The last time I saw him, nearly twenty years ago, he said he had concluded that he was a “d—— fool” and he knew it. The Utopian agitators of that period have generally subsided.

But Utopian agitation is again beginning, with greater prestige and more practical methods, under the name of Nationalism, in a form likely to produce political results.

POLITICAL MOVEMENTS. — The Texas Federation of Labor resolves in favor of the single land tax, eight hours days labor, government issue of money in place of national banks, government ownership of railways, telegraphs, and telephones, abolition of the United States Senate and the grand jury system, the Australian ballot system, election of all officers by the people, and a lien for laborers on the products of labor.

The *Chicago Express* wants a sufficient volume of money issued to make \$50 per capita, limitation of land ownership as to quantity, no more public domain to aliens, government ownership of railroads, telegraphs, and telephones, a woman suffrage plank, a radical temperance plank, and a radical tariff plank.

The Code of Health.

THE wise and prudent man keeps himself in high health, enjoying life and ready for every duty. The careless man, the absent-minded man, and the fool think nothing of the matter until they find themselves suffering from ill health, and even then procrastinate until they find that they *must* have a doctor.

No one should be content to live with any abatement of the normal energies and the normal enjoyment of life. To decline in health is a vice or a crime, for declining in health means failing more or less in every duty. We should be ashamed to confess it, unless the cause was something beyond our own control. Perfect health results in long life. Every human being should aim to live a century. Many have inherited so little physiological capital from their ancestors that great longevity is impossible, but if each surpasses his parents a few generations will develop normal longevity. The writer has already lived thirty years longer than his father. Sir Spencer Wells says that the average longevity in England has been increased nineteen years in the last half century.

Cold weather has arrived and brings to the front the question of clothing and of warmth. Clothing protects by being a non-conductor and retaining our heat. The best possible material for clothing is woollen. It is not only the best non-conductor, but is generally more porous and thereby gives freer escape for the transpiration of the skin, which is essential to health, while it also maintains the healthy action of the skin by its warmth and stimulating influence. To a few persons it is too stimulating or irritating, and they need to use cotton or silk under it.

SARCOGNOMY shows the importance of healthy action of the skin, by the fact that the entire surface of the body corresponds with the entire surface of the brain, and consequently whatever oppresses the skin oppresses through the brain the entire constitution. Moreover, the varying conditions of the different portions of the skin produce varying conditions of the brain. Coldness of the lower limbs impairs the action of the base of the brain, diminishing the vital force, driving the blood toward the chest and the brain, tending to develop colds, bronchitis, consumption, pneumonia, and pleurisy, developing insom-

nia and nervous disorders. Hence warm clothing of the lower limbs is essential to healthy vigor. This idea is conveyed by the old maxim that we should keep the head cool and the feet warm—a maxim which is not universal in its application, as there are some in whom the head is not naturally very warm, and who need to protect it. Such persons are benefited by wearing a silk cap and by sleeping in a nightcap.

The posterior surface of the body corresponds to the energetic region of the brain, and is the energetic region of the body. The spinal cord and the adjacent ganglia are the sources of all the energy of the body. Hence the protection of the back is the chief function of clothing. The entire front of the body and head may be exposed to the cold wind with comparative impunity, but the back cannot be chilled without serious injury, especially in the region of the shoulders. Exposing the shoulders to a draft of cold air or the proximity of a cold window is dangerous. It is dangerous to expose the shoulders without some extra protection to the cold sky of night, as in sitting or standing out of doors at night. A cape or shawl or overcoat is a necessary protection.

Another important region for protection is the base of the brain. In cold weather warm clothing around the chin and back of the neck preserves all the vital forces and enables us to resist the cold. Nature has supplied males with this protection in their beard, the growth of which protects the respiratory tract in the brain.

The demand for warmth in the winter requires more calorific food. Animal food, of which we need very little in the summer, is beneficially used in winter, and is indispensable in very cold climates. In summer we need food non-stimulant and antiseptic, such as ripe fruits, sweets, and acids. Of antiseptics the principal is salt, which is more needed in summer, not only on account of its antiseptic, anti-febrile effect, but on account of the great loss of it by perspiration. Of antiseptic acids, lemon juice and dilute phosphoric acid, used as lemon juice to make a pleasant beverage, are very valuable. The latter can be obtained of any druggist. Half a teaspoonful is enough for a glass.

The great importance of the skin, by its secretions and its exposure to the atmosphere, in maintaining a good condition of the brain and a regular equilibrium of the vital functions, requires us to preserve its uniform action. First in importance for this purpose is woollen clothing of a porous texture, of which a good flannel, not too dense, is the ideal. Any fabric of pure wool and loose texture is beneficial to the skin.

Next in importance to woollen clothing is the direct treatment of the skin by baths, friction, manipulation, and sunshine. Water has many different effects. It is soothing and sedative, opposed to inflammation and fever. Warm water is most soothing, and makes the favorite bath of the Japanese. Nothing is better for headache, even when it amounts to neuralgia, than pouring on hot water, and nothing can compare with hot water in the treatment of a sprain. Many find benefit in a drink of hot water which stimulates and

soothes the stomach and removes unwholesome contents. The warm bath is soothing. It is very valuable for infants when attacked with convulsions. Hot water in a bath for feet and legs relieves the head, and is the best thing at the beginning of a fever or of pneumonia. Hot or warm water poured on the body below the navel is the best thing to cool a fever; and blankets wrung out of hot water as hot as can be handled, and used to envelop the whole person, proved the best thing in the Eclectic practice at Cincinnati to arrest the ravages of cholera.

Cold water in a momentary dash is very stimulating, and is good to warm the feet or any part of the body, if followed by brisk friction. But prolonged it is very cooling and depressing. A cold plunge bath is too strong for delicate constitutions, and if prolonged is dangerous, but for the robust it is a fine tonic, if followed by friction or lying between blankets. Some heroic constitutions have been able to break the ice and take a plunge bath in winter; but for many that would be suicide. The safer method for most persons is to use a basin or tub and a wet towel or sponge on each part of the body successively, followed by dry friction with a coarse crash towel. Salt water is often better than fresh for bathing, being more invigorating or stimulating to the skin. Good soap cleanses, opens the pores, and soothes irritations. Oatmeal, corn meal, and bran are also valuable additions to the bath, soothing and softening the skin.

Gentle manipulation and percussion by a proper person of a healthy and benevolent constitution are not only beneficial to the skin but *curative for all diseases* — the most important agency known to the healing art. "THERAPEUTIC SARCOGNOMY" shows how this may be used by every family for the preservation of health, prevention and cure of disease, as will be fully shown in the next edition of that work, with such scientific demonstration as should remove all doubt.

Sun baths are a valuable agent. Mankind languish like plants when deprived of sunshine. At the Hotel Flower and at some European establishments, sun bathing is an important part of the treatment. Blue light has a beneficial, soothing, nervine effect and yellow is an active stimulant. Dr. Babbitt has written largely on this subject.

To return to the question of clothing. Its purity must be maintained by the laundry; frequent change is necessary. The skin is suffocated by the lack of ventilation, as by rubber shoes or by very dense cloth in our garments, or when clothing is not changed, and this is realized even in our beds, especially when they are occupied by more than one. The cotton sheets become saturated with our transpiration, and we are compelled to shift from one side of the bed to the other, or, like Franklin, to get up and shake out the bedclothes to purify them. It is said of a well-known literary character that he promotes his comfort by having half a dozen beds in use, and going from one to another. Franklin was said to have used two beds. If we sleep next to blankets there is not so much necessity for this change.

Bedclothing should insure comfortable warmth but not induce perspiration. Whether we lie on the side or back is not important. It is desirable, however, to change the position several times in the night, as any one position produces gravitation and pressure on certain parts which are relieved by a change. The head of the bed should be toward the north, as sensitive persons realize that this is beneficial or tonic to the nervous system. Northern magnetism is a tonic. Southern is sedative. The windows should be on the south. There is a great difference between apartments with a northern and those with a southern exposure. Invalids cannot afford to neglect this.

Unless the bedroom is very large, there should be a gentle ventilation provided by a narrow opening at the window most remote from the bed, the warm air being allowed to escape by the chimney flue or the top of the window. The higher the window is from the ground the better for the sleeper. Malaria accumulates near the ground; upper stories escape. But there is no good ventilation in a very warm bedroom. The breath does not ascend readily in a warm atmosphere, and the sleeper is breathing more of his own breath than of the pure air. In a cool room this does not occur: the breath ascends rapidly and fresh air comes to the nostrils.

There is a little matter which I have found generally unknown or overlooked. The support of the head should be by a pillow *under the neck* instead of the head. This supports the head and takes its weight from the neck, which is a great addition to comfort.

Good sleep requires some plethora of the blood-vessels and a well-nourished condition. There should be no hunger or thirst or sense of emptiness. It is therefore beneficial to drink freely at night of anything not very stimulating. Fluids diminish excitability; even a restive horse is less troublesome after drinking very freely.

When sound sleep is difficult to obtain we may resort to mild hypnotics. Generally warm feet and a non-stimulant supper, such as mush and milk, or a free use of onions, which are very sedative, will be sufficient. Some have succeeded by using a wet cloth upon the eyes and forehead, and some by taking a glass of ale or beer. An English gentleman suffering from insomnia found most relief from medicines acting upon the liver.

For a gentle hypnotic there is perhaps nothing better than the extract of lettuce. Its action is wholesome, and entirely free from the evil effects of opium. Next to this I would mention a tincture of cochineal. This is a safe and wholesome agent, the value of which is unknown to the medical profession. SULFONAL has recently been discovered, and come into use extensively. It produces a calm and wholesome sleep, and is the best hypnotic known at present. The lettuce has no narcotic character and is not as strong a soporific as the sulfonal, but it has a very beneficial influence upon the digestive organs.

Sleep should be an active time in the organic life as the animal life is resting. The secretions should all be active, and their activity is promoted by drinking freely. Aperient and alterative medicines

and mineral waters may well be taken at night, if they are not too strong. By promoting the secretions they purify the system and enable us to wake up refreshed. Of these alteratives, such as determine to the skin have a good influence over repose, especially such as elder-flowers (*Sambucus*) and crawley root. Most of the mineral waters are beneficial drinks at night. Phosphate of soda and muriate of ammonia may be added to our drinking water with benefit — a spoonful to each glass — as they have a very healthy effect on the secretions.

Ripe fruits or cooked fruits are beneficial at night, as their influence is soothing and purifying, anti-scorbutic and anti-febrile, as well as gently aperient, removing the necessity of cathartics.

The regular purification of the body by the action of the bowels and kidneys is very important indeed. Some accomplish it by the use of fruit, others by *cracked wheat*, or *whole wheat*, or by brown bread, and others with sluggish bowels rely upon enemas of warm water from a fountain pipe, the fluid descending from a bag four or five feet by its gravity.

If aperient medicines become necessary we have a very good one in the butternut (*Juglans cinerea*) or white walnut. A fluid extract of the bark is a convenient and mild aperient. Perhaps the most pleasant mild aperient is one lately introduced, called the *Rhamnus frangula*, of which Metcalf of Boston prepares a very pleasant elixir. For a stronger purgative the favorite at present is the *Rhamnus Purshiana*, commonly called Cascara Sagrada, a fluid extract of which is a vigorous but not harsh aperient.

When in addition to torpid bowels we have an inactive or unhealthy liver, there are many good remedies without resorting to the obsolescent blue pill and calomel.

The blue flag (*Iris versicolor*), in the form of fluid extract or in its powdered extract (Irisin or Iridin), will certainly act vigorously upon the liver and bowels. When the liver is in an unhealthy, congested, or tender condition there is nothing better than Leptandrin, a black powder which is a pure liver tonic; but treatment of the liver requires purgatives, as they deplete the blood-vessels of the liver and diminish its congestion. Hence the cascara and leptandrin may be combined. Purgatives are beneficially associated with hyoscyamus; thirty drops of the fluid extract or half a grain of the solid alcoholic extract will obviate any unpleasant influence from a cathartic.

An important new remedy has been lately introduced under the name of PANCROBILIN. It has long been known that the natural agents of the stomach and bowels may be obtained from animals and used with great benefit by man. Pepsin is obtained from the stomachs of hogs or of fowls, and greatly aids the human stomach in digestion. The inspissated bile of the ox, made into pills and taken in doses of five or ten grains, compensates for deficient action of the liver, and acts as a wholesome aperient, especially beneficial in dyspepsia. Of late, the pancreatic juice and the secretions of the liver have been combined under the name of pancrobilin, and found

very beneficial in constipation and emaciated conditions. It seems to compensate for failure of the digestive organs and liver, and is therefore a true restorative for a class of invalids that were formerly worried with calomel and seriously injured. It is probably the best addition to our resources for impaired abdominal organs. Of medicines for a similar purpose, one of the best is tag alder (*Alnus rubra*), in fluid extract, which promotes all the secretions.

The great support of the digestive organs is a life of cheerful activity. Active industry gives appetite, and a cheerful, amiable mind does more for health than medicines.

The protection of the lungs requires protecting the legs, feet, shoulders and the space between them, from cold. In severe weather a woollen muffler round the lower part of the face gives them much protection, and if it is extended over the nose it serves as a respirator to protect the lungs from an intensely cold air. In all irritations of the lungs a moist atmosphere which is not cold is soothing. Hence a vessel of boiling water on the stove makes a soothing atmosphere, and if sugar is dissolved in the water it produces a still more soothing effect, for which patients have been accustomed to resort to the sugar houses in Louisiana when the syrup was being boiled.

There is an important precaution for the protection of the lungs which has been overlooked by writers on medicine and hygiene. It is to guard against a heterogeneous atmosphere. A current of cold air entering a warm apartment and mixing with the warm air, making streaks of hot and cold, is very irritating and apt to produce colds. If it comes in in very fine streams and slowly through fine crevices into the upper part of the apartment so as to become promptly warmed and become homogeneous with the rest of the air, no injury is done; but whoever sits where a stream of cold air is coming in must expect to suffer, and it is prudent to keep away from all the crevices by which the cold air enters.

Frequently we have a stream of cold air coming in at the door and forming a stratum of cold air on the floor, while the heat of the stove makes the upper portion of the apartment ten, fifteen, or twenty degrees warmer—a very unwholesome condition. The best arrangement for preventing this is found in the new-fashioned grates which draw in a supply of warm air and thus prevent the entrance of cold currents. This might be imitated by a pipe from the outside discharging a current of cold air against the stove or above it, which would be a cheap and satisfactory substitute.

There is a great number of pulmonic agents and they are combined in various cough and lung remedies (patent or proprietary medicines), the majority of which are valuable. The elements of which they are compounded are demulcents, such as flaxseed, gum arabic, Iceland moss, glycerine, sugar, licorice, and honey; expectorants, such as squills, sanguinaria (bloodroot), ipecac, lobelia, yerba santa, drosera, lippia, penthorum, elecampane, tar; and soothing or healing agents, such as morphine, paregoric, hyoscyamus, poppy heads, papine, cannabis indica, cochineal, balsam Peru, coltsfoot, comfrey, and gnaphalium, sometimes called life everlasting, which

gives great relief in febrile conditions of the lungs. A vast variety of useful compounds are made of such materials.

Persons who are much exposed to cold and wet need great vital calorific power, without which they contract rheumatism. Modern science has developed recently two sure remedies for this in the salicylate of soda and SALOL, each of which is reliable. Salol is a tasteless white powder, which in addition to its anti-rheumatic qualities has a very wholesome effect on the digestive organs, in which it has the advantage of the salicylate.

An Illustration of Sarcognomy.

A DOCTRINE of the new Anthropology which has been taught and demonstrated for forty years is that the calorific function is connected in the brain with the medulla oblongata, and in the body with the hypogastric region (between the umbilicus and pubes) and the lower portion of the spinal cord, consequently fever or febrile heat may be most effectively treated on the pelvic region by currents of warm water. Cold water might also be used, but perhaps not so beneficially. Of course a similar treatment in the bowels, between the hypogastric and spinal regions, would be equally effective. This is well illustrated in an article in that excellent periodical, Dr. Foote's *Health Monthly*, which is here copied.

One of the hobbies, or we might say crazes, of physicians in acute practice during the past ten years has been experimenting with medicines called antipyretics, for the reduction of temperature in fevers. Perhaps a dozen or more new medical compounds have been discovered or invented, which have the power thus to reduce abnormal temperature, but most of them have other properties which make them risky medicines, and some are very uncertain in their effects, producing now and then poisonous results without apparent reason, in doses which have seemed safe in other cases. There are some physicians also who begin to question the utility of efforts in this direction — for the reduction of temperature. One modern theory supposes that the increase in temperature may be one of nature's devices for burning out the causes of fever which have found their way into the body. If the fever can be borne by the patient, it may be just the thing to destroy the cause of the disease — especially when living germs are the cause. Nevertheless, there are many cases in which a continued high temperature threatens disaster and when it seems advisable to find some means to subdue it. As water is used to quench fires in other structures, so it seems to be the safest means for cooling off a superheated human body, and without the opportunity as yet to test a method of employing water for this purpose, we reproduce here an account of it as told by *Good Health*, a periodical published by the managers of the Sanitarium at Battle Creek, Mich., who no doubt have had abundant opportunity to test this method and to indorse it. They thus describe it :—

“Several years ago our attention was called to a series of experiments made by Dr. Winternitz, Professor of Hydropathy in the Medical University of Vienna, for the purpose of determining the influence upon temperature of enemas of water of different temperature in cases of fever. The results claimed by Prof. Winternitz were so striking that we improved the first opportunity to repeat his experiments, and with such results as have justified the continued use of this means of lowering temperatures in fevers, in cases in which the ordinary measures were not efficient. The only objection we have found to the method has been the inconvenience to the patient occasioned by the frequent use of a bed-pan. In a recent case in which we found it necessary to resort to this method, the nurse observed that if the tin can of the fountain syringe used in administering the enema happened to be lowered below the level of the bed on which the patient lay, water which had previously been introduced into the rectum returned readily through the tube into the can. On learning this fact, the attendants were instructed to employ the enema in this way. From one to two pints of water, of 70 or 75° F. temperature, were allowed to pass into the bowels; and after being retained for five or ten minutes, or until the patient experienced uncomfortable sensations, it was made to pass out through the tube by simply lowering the reservoir to the level of the floor. A new supply of water of a proper temperature being introduced into the reservoir, it was again raised to the proper height and the operation so continued until six quarts of water had been used. Then the patient was allowed to rest half an hour or an hour, according to the height of the fever, and the same process was repeated. Careful record was made of the temperature of the patient just before the treatment and immediately after. It was found to be invariably reduced from one to one and a half degrees by each treatment. The temperature, which had been exceedingly obstinate previous to the employment of this method, ranging from 104° to 105°, during the intervals between the treatments would, of course, rise somewhat; but each time it stopped short of the point reached during the previous interval, so that in the course of a few hours the fever was brought down to very nearly a normal temperature. The temperature of the water, when taken after passing through the bowels, was found to have risen each time from 10 to 13 degrees.

“The great capacity of water for absorbing heat renders it one of the most useful of all substances for lowering the temperature; and it is readily apparent that, by the means described, heat may be abstracted from the body almost ad libitum, and the temperature may thus be controlled with a rapidity and a degree of certainty which cannot be approached by any other method. In a still more recent case, in which the same treatment was employed, the temperature of the patient had reached 106° F. in spite of the vigorous application of ordinary measures of treatment, such as cold compresses, etc.; but it was, in four or five hours, brought down to nearly 100° by the use of the cold enemas.

“The advantages of this method are: 1. It may be employed with-

out wetting or moving the patient; very frequently a patient will sleep continuously during the administration of the treatment. 2. It seldom causes chilliness, which is frequently a disturbing symptom, especially in fevers of a low type, and even, when the temperature is alarmingly high, causing the patient to dread the employment of sponging with cool or tepid water. 3. It is not necessary to employ cold water, a temperature of 80° or even 85° being thoroughly efficient. In the majority of cases, however, water 70° or even 60° may be employed without danger. The water comes in such immediate contact with surfaces filled with large blood-vessels that a temperature but a few degrees below that of the body is more effective than very much colder water applied to the surface.

"In cases in which the use of the cool enema is attended by chilliness, this uncomfortable symptom may usually be relieved by the application of a hot bag or fomentations to the spine or to the pit of the stomach.

"The simple measures of treatment we have described will be found more effective in lowering the temperature than any or all other remedies which have ever been recommended for this purpose."

The foregoing measures might be greatly aided by adding febrifuge remedies to the water. Even common salt would be a very valuable addition, and in continued fevers, especially those of putrescent tendency, the bisulphite of lime or of soda would be a very valuable addition, capable of counteracting septicæmia or blood poisoning. In typhoid fever the addition of Baptisia would make a highly successful treatment capable of healing the ulcers in the bowels. The French Declat's Syrup of Phenic Acid would be valuable in any fever.

Maternal Impressions — a Glimmer of Light.

THE stubborn resistance of the orthodox medical profession to every idea of psychic character has prevented the proper recognition of maternal impressions on the foetus. It is therefore like a glimmer of light to find in the *Medical Record*, of New York, an article from Dr. W. H. Lowman (who is, notwithstanding, a good specimen of an old foggy) illustrating maternal impressions, from which I quote the following:—

"Records are rich in stories showing the effects of maternal impressions. The ancients fully believed in them, as we have attested by Baptista Porta, Furnelius and others. The belief that psychical, mental, and physical impress is implanted on the foetus has always found a responsive chord in writers of all ages, not only from love of the mystic and wonderful that belonged to some, but also, we are forced to conclude after careful study, from actual and positive knowledge of such things by many of these authors. In sacred history we have at least one well-attested case of the result of impression upon animals during heat, in which Jacob craftily outwitted his father-in-law. (Genesis xxx.)

Were we to search medical literature from remote antiquity,

through all there would be a connected and unbroken chain of records, from the marked Cain and cursed Ham on through mediæval folios through Roman and Grecian history, mythical and true, to this day; and we would find numberless instances of strange freaks of nature and Minotaurean wonders attributed to sensorial and psychical impressions. The greater number are not reliable, but still there is sufficient to be of positive value. The tendency of the day is decidedly agnostic, and especially is this sceptical inclination manifested in regard to everything that is immaterial, that is not tangible. A man of science who meets a new fact simply arrests his judgment until he can explain it. The dogmatist takes refuge in the intellectual indolence of denial. Every scientist is naturally a materialist, but there are many who cannot see beyond the limit of their narrow sphere and who will not look beyond the tip of their Æsculapian proboscis, and anything that cannot be dissected, vivisected, or subjected to the microscope, kymograph, and balance is cast aside as valueless and without foundation. Such are hot-house plants developed in the labyrinths of laboratories, and, when subjected to the light of practical truth, it matters not how much sneering hauteur and enthusiasm they have for their pseudo-scientific knowledge, the well-attested results of observation must and will drive their puny theories to the wall. I confess myself to have been very sceptical in regard to the effect of maternal impressions until facts compelled me to admit that a single well-observed and carefully tested fact is sufficient to upset a dozen *a priori* theories. Scepticism is the order of the day, and a sceptical incredulity is considered an evidence of superior wisdom. On anatomo-physiological principles the influence of maternal impressions in the production of monstrosities has been denied. The "coarse materialism" of many has ignored the demonstrated fact that other psychological impressions are admitted to produce other physical effects. Our mental impress is left on the off-spring.

The embryo, prior to the beginning of the third month, is much more easily affected than later. This is consistent with embryological law. In embryological experimentation in production of monstrosities by artificial methods, "an interference with development at an early period produces a far greater malformation than one at a later period." The experiments of Dareste, Symkiewicz and Fol in varnishing eggs in different ways, irregularly heating them, subjecting them to the motion of a railway car, produced different monstrosities; yet, while many scientists, great minds, and embryologists like Thomson, Geoffroy St. Hilaire, and Carpenter, and physicians like Velpeau and Flint, were firm believers in it, a tangible cause has not yet been found.

Profound grief, mental or physical shocks acting on the mother, produce defects mentally and physically in the child. Dr. Spitzka gives the statistics of Legrand du Saulle, in reference to the *ouvriers* of Paris, of the defective children born in 1871, as "enfants du siege." The French are known to be exceedingly impressionable and emotional. Of ninety-two children born in Paris during the

siege, sixty-four had mental or physical anomalies, and the remaining twenty-eight were weaklings; twenty-one imbecile, or idiotic, and eight showed moral obliquity or emotional insanity. The financial crises, in Berlin (1875 and 1880) were followed by an increased number of idiots born. Can we not see the effects of the civil war in our country? Melancholy envelops many in its dark shades. Observers of large experience with the illegitimate say that the mental suffering of the disgraced mother reacts on them, arrests development, produces mental deficiency, or in after years, even though under the best moral care, that offspring oftentimes follows the mother in a life of sin. Plato, in the "seventh book of laws," after discussing how easily impressions are stamped upon newly born infants, says: "Nay more, if I were not afraid of appearing ridiculous, I would say that a woman during her year of pregnancy should of all women be most carefully tended, and kept from violent or excessive pleasure and pains; and at that time she should cultivate gentleness, benevolence, and kindness." While Bavaria banished "a maid with two heads" from her limits, "lest that by frequent looking upon her the imagination of women with child, strongly moved, should make the like impression in the infants" they bore in their wombs, the Roman aristocrats recognized the law of maternal impressions and considered their wives sacred during the first months of pregnancy. It is certain that the mind is more susceptible at this time to impressions. The Romans therefore jealously guarded their wives against external mal-impressions of a shocking character at such times, and surrounded them during the whole period with beautiful objects and agreeable sights and sounds. The result is well known. We have as their progeny a race of high artistic development, which has given birth to many like Michael Angelo and Patti."

BIRTH-MARKS AND THEIR REMOVAL.

From The Health Monthly.

An instance of the removal of a birth-mark, related to me by the mother who accomplished it, is worth recording for the practical use it may serve in other cases of a similar kind. In the month of February the mother became possessed of a strong desire for red raspberries. The husband planned a surprise and gratification of her desire by ordering at a hothouse the forcing of some of the longed-for fruit. In due time he brought home and set before her a dish of the berries.

It chanced that she was entertaining a lady guest, and who was either not aware that she was enceinte, or had been wishing for the fruit. Some call upon her made it necessary for her to leave the room just after the berries were brought. As she left, with an impulse of courtesy she said to her guest, "Help yourself to the berries." Upon her return she saw with a shock of disappointment an empty dish, every berry gone, and before she could think to restrain herself reached her hand to her face and drew it down on one side from the forehead to the chin, exclaiming, "Oh, I'm so sorry!"

When the baby came, a daughter, the entire side of the face corresponding to the side she had covered with her hand was a splash of bright red spots. After a few days she felt an impulse to lick her baby's face, which she obeyed. Following it up at intervals as her strength permitted, she finally after a week or so had the satisfaction of finding the skin entirely free from any discoloration, and the spots never reappeared during the three years of the child's life.

It would be worth while for any mother to try this manner of treating marks that seem only a discoloration of the skin. Possibly it might avail to remove the marks involving structural tissue, but it does not appear probable.

One of the most unique marks ever brought to my notice was upon the lower portion of the thigh of a woman. It was that of the heart of a sheep—perfect in form, with veins that were plainly visible under the gauzy epidermis. There seemed to be no cuticle over it, and very slight contact would occasion bleeding.

Her mother had, on stepping out in the dark into the woodshed, reached up to support herself before she ventured to step off the doorway, and her hand touched the heart of a sheep that hung, with some other portions of the carcass, near the door.

What seems very singular in this instance is the fact that the mother did not see the portion of the meat that her hand touched. But the shock was severe at the instant, and she placed her hands on her limb to brace herself.

The psychological chemistry of birth-marks, and the mother's impress, belongs in a very interesting realm of the subtle and occult forces, whether or not it may be comprehended in "vital force."

Lucinda B. Chandler.

CURE FOR DIPHTHERIA.—The *New England Observer*, published at Keene, New Hampshire, contained the following announcement in October. As for the remedy mentioned, it would probably be more efficient if less diluted: "Dr. Allen, of Peterboro, N. H., has a new remedy. The subject of diphtheria, its prevention and cure, is one of great importance. Dr. Allen thinks he has found a cure that will reach even very bad cases, and he has had opportunity to test it, with excellent results in every case. He stumbled upon it, as it were, entirely by accident. He had a severe case of diphtheria under his care, the patient being a young boy. The Doctor was using Platt's Chlorides as a disinfectant, and the boy took a fancy to the odor, and asked to have some near his nose. The Doctor would hardly have acceded to the request, but it seems that the boy's grandmother saturated a handkerchief with the disinfectant and put it on the child's face. At this time, the membrane, peculiar to diphtheria, had formed nearly up to the teeth, and Dr. Allen considered the case a hopeless one. That night, after the application of the chlorides, holes appeared in the membrane, and in the morning the membrane had disappeared. The boy lived. Dr. Allen says he has had several cases since then that were very bad and he has not lost one; he has

used this remedy in these cases. The directions which he gives are : Dilute the chlorides with ten parts water. If used to prevent the disease, wet a cloth in the liquid and place it over the mouth and nose for about ten minutes at a time, several times in the day. If used to cure the disease, keep the wet cloth over the face nearly all the time until the membrane is gone."

Civilized Diabolism.

THE Moral Education Society of Chicago has issued a leaflet on capital punishment, from which the following extracts are taken : —

"To contemplate for weeks and months, and read over and over with satisfaction, the promised execution of a fellowman, and to set a watch upon him for days lest this ineffably 'civilized' mode of killing shall be avoided by the condemned; what is this but another form of the savage modes of torture and the savage delight therein?"

"The name of 'Capital Punishment' has a better sound, and the accessories of a consenting community give a sort of dignity to the savage performance, but the fact is only a repetition of the savagery that gloated over the tortured victim.

"Judicial killing is but an evolution of the torture stake of barbarism. And the worst of it is, the judicial process lifts the savagery into the realm of respectability, not only, but of right to the general mind.

"So long ago as 1855, Charles Sumner stated in reply to a request for his views on capital punishment : —

"It is sad to believe that much of the prejudice in favor of the gallows may be traced to three discreditable sources : first, a spirit of vengeance, which surely does not belong to man; secondly, an unworthy timidity, as if a powerful civilized community would be in peril if life were not sometimes taken by the government; and thirdly, a blind obedience to the traditions of a past age.

"But the rack and thumbscrew, the wheel, the iron crown, the bed of steel, and every instrument of barbarous torture, which we now reject with horror, were once upheld by the same spirit of vengeance, the same timidity, and the same tradition of another age."

"In vol. 133, *North American Review*, Wendell Phillips left his testimony : 'But even if we restrict the punishment of death to murder alone, when we remember our experience that the infliction of the death penalty nourishes the spirit of revenge, demoralizes the community, lessens the sacredness of life, largely prevents the prosecution, and to a great extent the punishment, of crime, it becomes evident you must prove the death penalty absolutely necessary before government is justified in using it. No amount of expediency will authorize *breaking into the bloody house of life* at risk of such evil results.'

"Now, that capital punishment is not absolutely necessary for the protection of society in almost any epoch of civilization is found by the amplest testimony : —

"Egypt for fifty years during the reign of Sabacon; Rome for two

hundred and fifty years; Tuscany for more than twenty-five years; Russia for twenty years during the reign of Elizabeth, and substantially during the reign of her successor, Catharine; Sir James Mackintosh in India for seven years; the State of Rhode Island since 1855; Michigan since 1847; Wisconsin since 1853; Maine since 1835; Holland since 1870; Saxony since 1838; Belgium since 1831; and several other states, prove by their experience that life and property are safer with no death penalty inflicted than in the neighboring countries which still use death penalty.

"All experience confirms the universal judgment of those who have studied the subject, and which *Rantone* utters when he said: 'The strongest safeguard of life is its sanctity, and this sentiment every execution diminishes.'

"We appeal to all thinking, humane people to reflect upon the demoralizing influences attendant upon the infliction of the death penalty, to consider that the murderous feeling which led to the commission of the first crime is multiplied by just the number of persons who indulge in a satisfactory contemplation of the killing of the murderer."

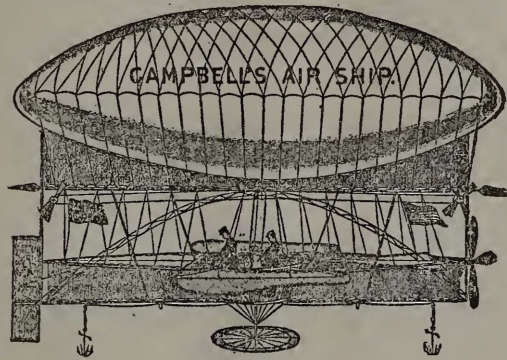
But capital punishment is a very small matter compared to the other mortal agonies and national crimes that still exist in nations falsely calling themselves Christian.

France, Germany, Italy, Russia, Austria, and England are spending millions to prepare for wholesale slaughter, and military men believe that it will not be very long before the slaughter will begin. They are all experimenting with cannon and with a smokeless powder which fills the air with stench. The United States authorities, too, are experimenting with smokeless powder and terrible guns for self-defence. If the Devil is not the ruling influence of civilized nations -- what is? The voice of the angel world is unheard. Seventeen millions of men in Europe are organized for international murder.

Scientific.

BALLOON TRAVELLING.—The difficulties of aerial navigation increase in proportion to the size of the animal attempting it. The smaller a body is, the greater is the supporting power of the atmosphere in proportion to its weight. Hence dust and mist float in the air. The motive power of an animal also, increases as its size diminishes. Hence it is easy for an insect to fly but impossible to a man. The wings of a house fly vibrate 335 times a second or 20,000 times a minute, producing the sound F. Those of bee vibrate 440 times a second, 26,400 a minute. Hence the bee flies with the speed of a bird. For a man to fly he must be lifted by a balloon and have power to propel the balloon greater than that of his muscles. The crazy scheme of De Bausset for a steel balloon containing a vacuum is appealing vigorously to the credulous for \$250,000 to construct it. Popular ignorance on scientific subjects gives great encouragement to humbug. A simple and rational plan contrived by Peter Campbell

of Brooklyn, is exhibited in the accompanying engraving, but the ability to propel and steer balloons depends entirely on the quietness of the atmosphere. The balloon can do nothing against the wind by hand power. The balloon corps of the French army is exhibiting its progress at the exposition building. A correspondent says: "the wonderful steering-apparatus for balloons of Captains Renard and Krebs occupies the place of honor in this most interesting exhibit. The centre of the ceiling is covered by a section of the newest model of balloon, "La France," from the state factories at Mendon, and from it hangs Renard and Krebs's wonderful car with its steering-apparatus and electric motor. "La France" is the only balloon which has really obeyed its helm to the extent of cutting a perfect



circle in space. The huge balloon is the shape of a cigar but is more swollen, or bulged out, at the bow than at the stern. The length is 50.40 metres—nearly 160 feet—and the car is about 75 feet long by 5 feet wide. The car is constructed of light bamboo poles and wicker-work; the forward part contains the electric motor, the centre the machine, and the stern the long shaft of the screw. The rudder is in the bow and is formed of a huge light frame—some 10 feet square—covered with varnished silk. The huge "screw" is constructed in the same manner and is exactly the shape of the screw of an ocean steamer. The speed obtained is 23k. 400 kilometres—nearly 15 miles—an hour. Judging from the excellent sketches representing "La France" in motion, it must be a grand sight to see this monster balloon cleaving its way through the air—there is something weird and uncanny about the look of the whole thing which repels, but at the same time attracts us. One cannot help thinking whether all this is not a fore-runner of a change in our recognized means of locomotion. The next thing we have will be a balloon service from Havre to New York.

Yet the idea of a steering apparatus for balloons was conceived as far back as 1784 and to-day we are practically not much further advanced. We find a model of a balloon with three screws and a rudder constructed in 1784 by General Meusnier, who seems to have been the father of the idea. After him we have Gifford in 1852, Dupuy de Lome in 1870-72, Haenlein in 1873, with a gas motor, Tissandier in 1883-84, and finally Renard and Krebs in 1888."

The question of balloon travelling depends entirely on the concentration of great power in a light engine. My own plan was to

use gun cotton as an explosive for propelling power, the success of which would be certain. The success of Renard and Krebs with an electric motor is very encouraging.

A GREAT MARINE RAILWAY.—The magnificent railway plan of Capt. Eads is about to be imitated by a marine railway to carry ships across the narrow neck of land connecting New Brunswick and Nova Scotia, 17 1-2 miles, connecting the Bay of Fundy on Northumberland Straits. It is called the Chignecto Marine Railway, and by carrying ships across, will save some hundreds of miles of dangerous passage. The contractors are to complete it by September, 1890.

A SEA OF PHOSPHORESCENT FIRE, extending as far as the eye could reach, was passed recently, one hundred and eighty-five miles east by north of Cape Henlopen, by the Allan Line steamship Manitoban, from Glasgow. Captain Dunlop, master of the Manitoban, said: "Early on Tuesday night the heavens suddenly became overcast and intensely dark, and I left the bridge temporarily, leaving second officer Johnson in charge. I had hardly reached the chart room when the cry of fire was announced on the starboard bow. I rushed on the bridge and found the sea to be like a mass of flame, presenting a scene of sublime grandeur. Whenever a sea broke over the bow of the vessel, the drops of fire spread over the rigging and decks like the flying embers of a genuine conflagration, where sparks were driven by a strong wind. Everywhere on the decks were found tiny sparkling phosphorescent beads which did not disappear until the next morning. For two hours the vessel was steaming through this sea of fire, causing considerable alarm to many of the superstitious sailors and passengers. In the distance the sea appeared to be breaking on a strand, but a dip of the log without finding bottom indicated that the shoal water was not near at hand."

RARE METALS AND THEIR USES.—Some rare metals, possessing special qualities, are required for certain work. Thus palladium is used in making some parts of timepieces, and iridium for the points of gold pens, and the uninitiated have no idea of the value of such scarce products. Vanadium costs, for instance, \$12,000 per pound; zirconium, \$7,900, and lithium, which is the lightest of metals, \$7,700 per pound. Rhodium, which is extremely hard and brittle, and is only fusible at a very high temperature, fetches \$2,500; and iridium, the heaviest substance hitherto discovered, costs \$1,200 per pound. It will therefore be seen that gold and silver are far from being the most precious metals as far as their market value is concerned.—*Pop. Science News*.

ACOUSTICS.—"One of the most extraordinary edifices in the world, in an acoustical point of view," writes Sir Morell Mackenzie, "is the Mormon Temple of Salt Lake City. Its form is that of a beehive, and 14,000 people can be comfortably seated within its walls; still, from one end of nave to the other you can literally hear a pin fall. The demonstration of that fact is made by the sextons.

“When visitors are present at the services they are posted in some place along the wall. A sexton walks then to an opposite wall, stops and drops a pin in his hat. Every one hears the infinitesimal noise made by the fall of the pin.

“Brigham Young boasted to have received the plan of his temple from heaven, and never to have known anything about acoustics. The truth was that he had simply imitated the St. Paul's cupola, so famous for its resounding gallery.”

GALILEO DISCOVERER OF THE MICROSCOPE.—M. Govi, an Italian savant, has presented a paper to the French Academy of Sciences in which he claims for Galileo the distinction of having discovered the microscope as well as the telescope. He has found a book printed in 1610, according to which Galileo had already directed his tube fitted with lenses to the observation of small near objects. The philosopher himself stated, shortly after this date, that he had been able to observe through a lens the movements of minute animals and their organs of sense. In a letter written in 1614 to a Signor Trade he states that he has with his microscope “seen and observed flies as large as a sheep, and how their bodies were covered with hairs, and they had sharp claws.” The date usually assigned to the discovery of the microscope is 1621, and the invention is attributed to Cornelius Drebbel, a Dutchman; but according to M. Govi the date must be thrown back eleven years, and the credit of the first construction awarded to Galileo.

STACHYS, THE NEW VEGETABLE.—*Stachys tuberifera*, formerly *Affinis*, is the new botanical name of this vegetable, which is a native of North Africa, but comes to us from Japan, where it is called *Chiro-gi*. It is allied to the English ornamental Woundwort, and belongs to the same family as the coleus and the sweet scented herbs, lavender, thyme, and mint, but differs from all of its relatives in that it yields edible tuberous roots.

These roots are formed of ring like ridges, giving them the appearance of a one horned caterpillar. It is one to three inches long and one-half to three-fourths of an inch in diameter. The skin is thin, smooth, and semi-transparent. This peculiar vegetable requires no more special treatment than do potatoes. Planted whole tubers, in hills two feet apart, a yield at the rate of nearly 500 bushels to the acre has been reported. The plant, growing about one foot in height, has a round, bushy habit, having medium-sized oval-shaped leaves and small pink blossoms. When the tubers are pickled alone and properly seasoned or mixed with small cucumbers, onions, peppers, and cauliflower pickles, they are excellent.

Cooked as “vegetable oysters” they are delicious, or boiled, mashed, and seasoned in the way of the egg plant they become a novel dish, having a pleasant and somewhat spicy flavor, midway between the Jerusalem artichoke and boiled chestnuts.

A point in favor of stachys is that the roots may be kept as well as potatoes. In the gardening journals of Europe some discussion has occurred as to a popular name for this vegetable, some suggesting Chinese artichoke.

Chap. 5. — Craniology — The Study of the Head.

Correspondence of brain and cranium — Gall the discoverer — Why neglected now — Practical power of craniology — Anthropology explains large regions of the brain not reached before — Position of the brain — The front lobe as now recognized — How to judge intellectual development and intellectual power — Meaning of the moral faculties — Form of their organic development — How to examine with the hands — What we may find — Its practical value — My first observations — Law of antagonism — Moral evolution — Struggle of the superior and basilar — Lateral ventricles — Erroneous anatomy current among phrenologists — True character and great importance of the basilar organs — Practical ideas about them — Abnormal conditions and crime not due entirely to unbalanced development — Degeneration of the brain under evil influences — A horrible example — Psychometry necessary to trace the abnormal — Coronal and basilar development divided by a horizontal line from the brow: examples — Triple division in profile — Mr. Bridges' method of showing the basilar angle or depth — Illustrations: Owen and Combe compared to six murderers measured in profile — Effects of excess and of deficiency in the basilar angle illustrated by examples and casts — Variations from 11 to 45 degrees — Other measurements necessary: occipital fulness, basilar breadth, circumference around the neck, cerebellum — Does the basilar region indicate longevity?

As the brain fills the cranium it is obvious that the form of the cranium corresponds to the form of the brain, and that by a careful study of the cranium we may learn the development or size of all parts of the brain which grow outwardly, but not of its interior structures which do not reach the surface. Nevertheless, as the interior structures contribute to swell its outward extension, we may learn something of them from craniology, and as these interior parts have manifestations and connections in the body they are not beyond our reach in life.

The beginning of the true science of the brain was in the discovery by Gall of its true anatomy, and the discovery of many of its functions by scientific inferences from its comparative development among men and among animals. This comparison of development, which is called craniology, furnishes a solid foundation for the leading principles of cerebral science; and although it is inapplicable to any *minute* investigation of the brain for the discovery of functions, experience has shown it to be very valuable in the study of men and animals, and no one who has engaged in this study seriously has failed to recognize Gall as a great discoverer.

It is a very interesting study, and should be considered indispensable by every ethnologist, to whom, without cerebral science, a collection of crania is of no more value than any other bones, while to the true Anthropologist crania are a reliable means of discovering individual and national character.

The discoveries of Gall have fallen into neglect among scientists, because they have neglected their basis in comparative development. By reviving the interesting study of craniology we bring Anthropology into social and professional use, and we convert Ethnology from that barren quackery, a study of dry, unmeaning bones, into a study of national character. Moreover, we give to physicians a safe method of studying the constitutional peculiarities of patients, thus assisting them in diagnosis and therapeutics. The physician properly instructed will find in his patient's head the source of his tempera-

ment, and thus obtain an understanding of his constitution not obtainable from any other source. I hope, therefore, that every reader will at once begin to interest himself in studying the heads of his acquaintance in connection with their character, guided by the rules which this volume gives. It is a very practical science. In examining a head I feel great certainty as to the character, and realize that I understand the person fully, and uniformly find my opinion corroborated by its subject. Many of my readers can attain this certainty if they use the same diligence. If I select my own pupils in this science I can promise they will be enabled to examine heads and describe character with an accuracy which must convince every observer and every subject of examination.

The method of Gall and Spurzheim was to study the growth and prominence of the exterior surface of the cranium, but not of the parts covered by the face and neck. ANTHROPOLOGY, however, shows how to experiment upon these hidden basilar surfaces so that we can know as much of them as of any other part, and it assumes also to judge of their development by the external signs.

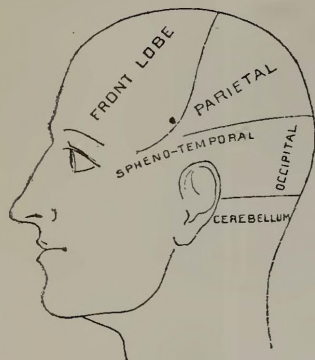
The exterior regions studied by Gall and Spurzheim constituted only about two thirds of the surface of the brain, as the basilar and internal surfaces which we now study constitute fully one-third. How to judge of the basilar and internal surfaces will be shown when we are considering the organs. At present we look to the exterior surfaces.

The reader should acquire the habit of looking at the contour of every head, for in this way he will learn a great deal of human nature in comparing men's heads with their characters. The study of cranial developments is not a study of "bumps," as the ignorant suppose, but a study of form and size. Bumps are chiefly the effect of a ridge or growth of bone, which indicates not brain but the absence of it. This idea became associated with cerebral science because Dr. Gall, though highly endowed with the faculties for philosophy and originality, was not well endowed with the lower perceptive organs, and consequently was not a good judge of development; hence he gave his attention chiefly to extreme development or prominence of special organs.

As the brain consists of two similar halves, the right and left, this must always be borne in mind. We speak of the hemispheres of the principal portion of the brain, the CEREBRUM, which externally appears composed of convolutions, and the lobes of the cerebellum, the small physiological brain, which occupies the portion of the skull behind the ears adjacent to the neck, rising as high as the little occipital knob which any one can find on the median line of the back head, A horizontal line from that knob running forward just over the cavity of the ear will show the place of the membrane called tentorium, which separates the cerebrum from the cerebellum.

The cerebrum in front rests upon the bony plate (superorbital plate) which forms the vault of the sockets of the eyes, and consequently we judge this front lobe by the breadth of the forehead and its extension forward from the middle of the head and over the eyes.

We were formerly accustomed to call that the front lobe which thus rests upon the eye sockets; but anatomists, from the study of man and animals, have been led to extend the front lobe upward and backward to the middle of the upper surface of the brain. The portion of the front lobe which contains the intellectual organs is that which nature indicates by leaving it generally uncovered by hair. Of course, the hair sometimes encroaches on it and sometimes recedes farther back, but there is a general correspondence of the naked space and the intellectual organs.



Intellectual development is easily judged by the eye. We estimate the breadth of the forehead for the original, inventive, planning, and literary faculties and poetic refinement. We estimate its total projection forward from the middle of the head (which corresponds with the ear) for the amount of intellectual development, and we compare the lower with the upper part of the forehead to determine the relative amount of the knowing, perceptive organs and those which give understanding.

The height of the forehead is not the criterion of intellectual development, but of the sentiments of a social nature, which harmonize with the intellect, and the organ of imagination, which elevates the outer part of the forehead. A high forehead may indicate intellectual deficiency, and a low forehead may indicate great intellectual capacity by its projection. When we cut off the lower portion of the forehead by a nearly vertical line we leave a much higher forehead. The more we cut off the higher the forehead becomes. This is illustrated by the triple outline, in which the exterior presents a forehead like Lord Bacon, the middle like Bulwer, and the interior line shows an extreme deficiency of intellect.



A vertical line from the ear gives us a basis of measurement of the projection. In a largely developed head a tape line from the cavity of one ear to the other over the top of the forehead would measure fully thirteen inches—in inferior heads eleven inches or less. In a straight line, measured by callipers, from the cavity of the ear to the summit of the forehead, the large head would measure about 5.4 inches, while a small development would measure 5, and in a small head $4\frac{3}{4}$.

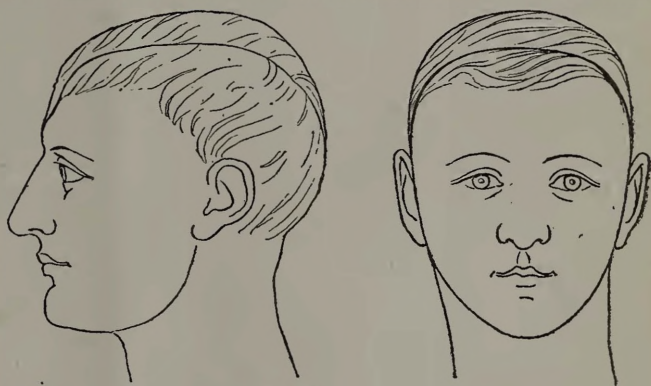
But this difference of intellectual development is not an exact criterion of the intellectual power. Education may double the intellectual power, but there must be a native capacity to be educated. Other things being equal, the larger intellectual development will give the clearer and better mind.

The amount of intellect one can display depends largely on the activity of his temperament and force of character. The force of character and energy of temperament depend mainly on the posterior half of the head. A head short and narrow in the back will give no force of character and consequently no mental energy. Hence we cannot pronounce confidently on the intellect till we consider the whole brain. The body too must be considered. A large chest containing a large heart and lungs will give great power and endurance to the brain. A small chest makes a feeble brain. The energy of the brain is also proportioned to the perfection of the health. The reader should be familiar with these general views before he proceeds to the study of the special organs.

Having glanced at the intellectual developments, let us proceed to the moral or ethical; and at the beginning let me protest that the word *moral* has so degenerated under puritanical influences as to have lost its true meaning in society and become a misleading term, a word that conveys a meagre idea of character — a negative quality — an exemption from sensuality and the grosser style of vices. The moral or ethical region of the brain is not a cold, negative region. It is a region of positive goodness, of love, generosity, kindness, sympathy, hope, faith, sincerity, truthfulness, reverence, firmness, heroism, spirituality, enthusiasm, fidelity, perseverance, honesty, industry, patience, fortitude, cheerfulness; in short, absolute excellence.

How do we determine these qualities by the organs? We look to the upward development of the brain. All the good elements of humanity are above, in brain and in body. Their growth in the brain is upward, and they give its upper surface a beautifully rounded form. It rises high above the forehead as seen in profile, and rises high above the sides of the head as seen in front. Where

the side of the head meets the top there is an angle formed, marked in many persons by a distinct ridge of bone called the temporal arch, which starts up from the outer angle of the brow, separating the side head from the front and the top. In good

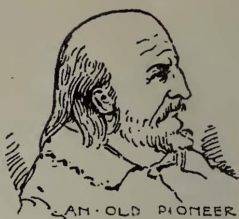


heads there is a rounded form, rising high above the ears and above the temporal arch. In heads of a low type there is scarcely any elevation above the forehead and the temporal arch, and these flat heads, if associated with a broad and deep basilar region, supply many criminals.

The measurement over the head by a tape line from the cavity of one ear to the other should be more than that around the forehead. In a well-developed head it should be about fourteen inches.

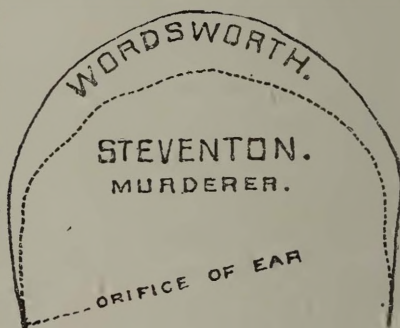
We find in common life, among good specimens of the Anglo-Saxon population, many high heads which are accompanied by substantial characters and social virtues. For example, the *New York*

Sun of Nov. 3, '89, gives the annexed sketch of an old pioneer in the Cumberland mountains of Kentucky, which, it says, "is a very excellent picture of Mont Runyan, one of the most kindly old farmers to be found in the mountains of Pike County." Such heads give a strong character; if high and narrow they give great courage and heroism.



EUSTACE

Phrenologists often refer to the high head of the philanthropic clergyman, Father Oberlin. The head of EUSTACE, the benevolent negro who received the Monthyon prize for virtue at Paris is an equally striking illustration of benevolence, though not accompanied by the occipital organs in sufficient development to raise him above the humble position that he occupied as a servant.



The contrast in upward development is forcibly shown in the comparative outlines of Wordsworth the poet, and the murderer Steventon, as published by Dr. P. J. Browne, and the symmetrical contour of a noble development is shown in the two views of the outline of Burns the poet, also given by Dr. Browne. (See end of chapter.)

All portions of the head that are covered by hair require examination by the hands. The hand must not be rubbed over the head, nor the fingers used as if hunting for protuberances. The whole hand should be gently laid upon the head with a light pressure, sufficient to hold the scalp and make it slide upon the cranium. Then with a gentle vermicular motion of the hands we feel the cranium through the scalp, and get a perfect idea of its form. Thus we learn the development of the ethical region, the region of positive goodness, and the exact relative development of each organ in the coronal group, by which we ascertain each peculiar emotion of virtue, and each defect of character when the development is below what it should be. For example, we may find a really good person who is rather close and selfish from the lack of Liberality, or a just and honorable person who is cold and domineering in his home from the lack of Love; or a good, clever soul whose manners are abrupt and familiar or offensive from the lack of Reverence; or an apparently amiable person who is full of suspicion and censorious remarks from the lack of Faith and Admiration; or a sincerely religious person who nevertheless, for want of Conscientiousness, sacrifices principle to his interest or passions; or one of very good principles, who from lack of Firmness does not carry them out steadily and cannot maintain a consistent character. The study of human nature has an endless

variety and attraction, and sometimes leads into strange mysteries in which Cranioscopy becomes our guide and dissipates the mystery.

Pre-eminently practical is this study of the ethical organs, for it guides us surely in the selection of friends, associates, partners, agents, and conjugal companions for life, and when our children grow up, in selecting their temporary or permanent associates. It is more necessary that the husband of our daughter should have the virtues well developed than the money and equipage that rule in fashion. How many have learned in sorrow that a wedded life without love is ten times worse than celibacy. Everything that is necessary in the judgment of character—all the external reliable indications—will be given in this volume so clearly and plainly that no judicious person can mistake them.

The regular practice of cranioscopy among friends will soon make any one expert in determining character. It was in 1831-32 that I began the study of heads and crania, with such instruction as the writings of Combe and Spurzheim afforded; and notwithstanding the limited and defective state of the science, I soon became expert and able to satisfy inquirers better than I satisfied myself, for I could not be contented when I recognized any error or inaccuracy in the application of the science, and it was not long before I found all its errors and its incompleteness.

To return to the laws of cranioscopy. Every faculty or organ must be judged by comparison with its opposite, for there can be no element of character which has not its opposite, and the crude phrenological system was incapable of accuracy, because it overlooked this principle, which is a fundamental law of Anthropology. Liberality is balanced and restrained by selfish avarice, courage by fear, love by domineering hate, reverence by arrogant profligacy, caution by careless recklessness, modesty by ostentatious vanity, and so on through all human capacities and faculties; and the profound investigation of psychology into which we are led by this law gives a systematic understanding of humanity, which was before impossible, for many of these antagonisms have been entirely unknown. An antagonism, for example, to the perceptive faculties has never been suspected. How much more interesting does this profound study become, when it is made practical every day by the study of the living examples that illustrate and enforce the philosophy.

The ethical organs, when we find them developed, are positive assurances of virtues that exist, and these ethical organs and faculties are a large part of the existence of every human being, as necessary to his life as any portion of his body, and if they do not absolutely rule him in this life, they must in a future period, which is his inevitable destiny. Evolution is an onward movement that has no backward course; no ebbing tide, no reincarnation for continued folly and crime. Beyond the bounds of the material world the spiritual power regains its sway, and the creature from whom we turn away in this life comes to us with a new countenance in a future of the next, and we greet him with pleasure. If we understand this, we will never forget that each man is our brother, however much his nature

may have been deformed by the unfortunate environment of earth life. Was it not an intuition of this truth which produced the maxim, "*De mortuis nil nisi bonum*" (Speak nothing but good of the dead).

Earth life is a struggle between the ethical elements that reach toward heaven and the animal elements that delight in sensuality, passion, force, and selfishness. The upper surface of the brain corresponds with the former, its basilar surface with the latter, and the skilful cranioscopist must balance the coronal and basilar regions to see if the upward or downward tendencies predominate.

The dividing line between the coronal and basilar organs is the closed cavity in the interior of the brain called the lateral ventricles, which extend through its middle five inches or more antero-posteriorly from the middle of the forehead near to the end of the occiput.

In the works of phrenological authors the reader is not instructed in reference to the ventricles which separate the regions below the *corpus callosum* from those above. He is led to regard the brain as a solid, undivided mass, composed of fibres radiating in conelike masses from the medulla oblongata to all parts of the cranium, and capable of being measured and estimated by measuring with callipers from the cavity of the ears to all points of the surface. Gall and Spurzheim, who understood cerebral anatomy perfectly, neglected to give instructions as to cranioscopy, and this fanciful misstatement was originated by Mr. Geo. Combe, who was no anatomist. Its application led into great practical errors, which are exposed in this chapter. Heads that were deep in the base were credited with large moral development, because they measured large from the ear to the top of the head. In 1836 I discovered this error and remodelled the rules of cranioscopy.

The region below the ventricles is in close communication with every part of the body, to which it gives sensation and motion. It is the portion of the brain first formed before the convolutions exist, when the embryo, in the first months, is but a growing animal without a moral or intellectual nature, but possessing the capacity for influx and development. In the mature brain there is intelligence below the ventricles, but it is intelligence of the lower order, without reflection or understanding.

In short, the basilar brain below the ventricles is the brain of pure animalism, and without the upper brain it would run into riotous sensuality and crazy crime, but duly associated with the upper brain it keeps in its proper sphere and maintains the functions of the body. The only normal life is that in which the whole brain participates, and no single function falls out of harmony with the whole.

These remarks, however, do not justify the Gnostic and Puritanic contempt for the body and the animal organs of the brain, as essentially evil and despicable, requiring to be subdued by fasting, self-denial, mortification, and the neglect of physical culture and pleasure, for the function of the animal organs is to act as instru-

mentalities and supports for the higher faculties, without which they could neither attain their proper development nor carry out their purposes. The power of the brain and energy of the moral nature depend on the formation of good blood by the abdominal organs, as well as its vitalization and circulation from the thorax. As these functions decline, so does the power of the brain decline, and the moral nature lose its power. It is upon the perfection of the animal nature that a superior moral nature is built up, as the sweetest and most beautiful tulips grow upon that majestic forest tree, the *Liriodendron* or poplar. Every portion of the animal nature requires full culture and growth. How insane, then, has been the fanaticism still surviving from a remote past, of the dirty hermit saints, the fakirs, the monks, the nuns, the flagellants, and the celibates of every variety, whose benighted superstition arrays itself against the Divine Wisdom of the plan and laws of nature.

As the body is necessary to the brain and soul, so are the basilar organs necessary to the coronal, and in the full exposition of Anthropology it will appear not only that the frontal organs are dependent on the occipital for their power, but that each coronal organ has a radical correlative in the basilar portion of the brain, by which it is invigorated, as Firmness is sustained by Combateness.

With this understanding we may examine and compare the coronal and basilar organs, and determine whether the latter are simply supporting their normal rulers or by overgrowth have overpowered them and produced an abnormal condition — the rebellion of the infernal against the supernal.

It would be a great error, however, to believe the abnormality of crime due only to excessive basilar development. This would be far from the truth. The inspection of the pictures in a rogue's gallery, or of the heads of the convicts in a prison, would reveal no such remarkable basilar development, for many of those pictures look as well as those of honorable citizens. The abnormal comes more from abnormal conditions than from abnormal development. The abnormal in the body is generally the result of abnormal or morbid conditions, for which a cause can be discovered, and comparatively seldom the result of disproportionate development.

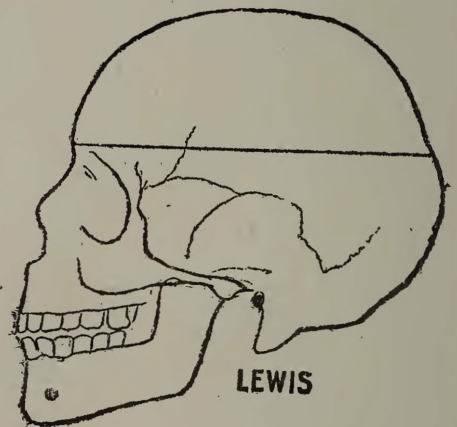
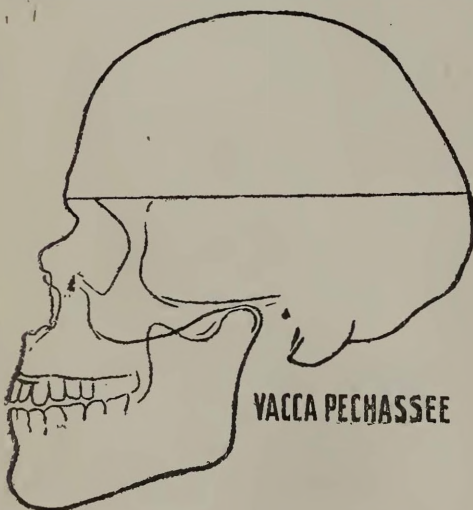
In like manner the abnormality of crime is mainly the result of abnormal inactive or unhealthy conditions, especially in the upper region of the brain, which fails in manifesting its normal power. We have no special moral education. The method proposed in "The New Education" is still an untried method in our national systems. The moral faculties of youth are subjected to the malaria of selfishness, crime, and vice, in streets, in prisons, in discordant, unhappy, tyrannical families, and in the collisions of selfish and dishonest business transactions. An unhealthy moral atmosphere is found everywhere, except in a few superior families, and whenever we walk on the streets we meet hundreds whose countenances evince their moral torpor or confirmed selfishness and gloom.

Moreover, the dominant hereditary falsehoods inherited from ages of ignorance are impressed on the entire community, and but for the

gradual removal of these delusions we should still be burning heretics and witches. Crime is therefore mainly the result of false education and abnormal brains, in which the moral region is often so nearly paralyzed as to undergo gradual absorption, leaving the cranial bones to thicken by growing inward. A collection of criminal crania will reveal the character of those who bore them by the opacity of the cranium in its thickened portions, over the moral organs, that have declined. I obtained, half a century ago, the skull of a negro woman who murdered her child without cause, in which there was no translucency above, except at the organ of Firmness—the skull being so abnormally thick above and heavy as to suggest the idea of a block of wood when lifted.

In this abnormal decline of the moral brain, it is very seldom indeed that any change of the external form can be perceived, although growth of highly cultivated organs is sometimes manifested externally. For these reasons cranioscopy is not *generally* able to explain crime, insanity, or any other abnormal condition. It requires psychometry to ascertain the exact condition of the brain, but in the normal brain cranioscopy gives a clear revelation of its capacities; and it shows the natural *tendencies to crime* due to defective moral development and large animal organs. It is in such cases that crime may be successfully detected or explained. Let us then proceed to consider the virtuous and vicious tendencies revealed by cranioscopy.

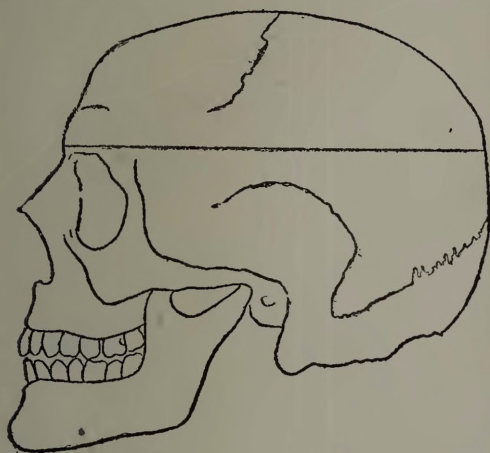
As the lateral ventricles, the space that separates interiorly the upper and lower portions of the brain, are the central region around which we should estimate upward and downward, we should understand that their level may be located by a line passing from the centre of the forehead a little below the horizontal direction to a point on the occiput an inch above the occipital knob. But as it



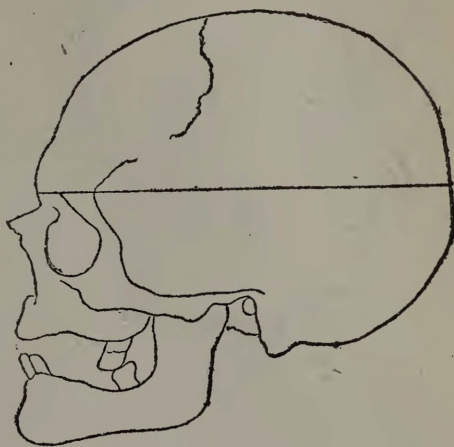
will be more convenient to measure by a horizontal line, even if it does not exactly correspond to the ventricles, we may draw a horizontal line from the brow backwards to an inch above the occipital knob and this will make a fair basis for estimating the animal development, as the basilar portion of the forehead is not important in this comparison.

In all criminal heads which are not examples of abnormal brain this line will show too great a proportion of brain below the ventricles, as in the contrast between two Indian skulls that I obtained in Florida in 1839 (with a little risk of my own, on account of the Seminoles). Vacca Pechassee, or the Cow Chief, who was peaceable and much respected by the whites, shows a much more favorable balance than Lewis, a vicious Indian who was shot for his numerous crimes.

A similar contrast is seen between the heads of a French count, drowned on the coast of Florida while engaged in importing slaves, and that of J. R. Smith, a very worthy and amiable citizen whose cranium I obtained at the same time as the Count's.



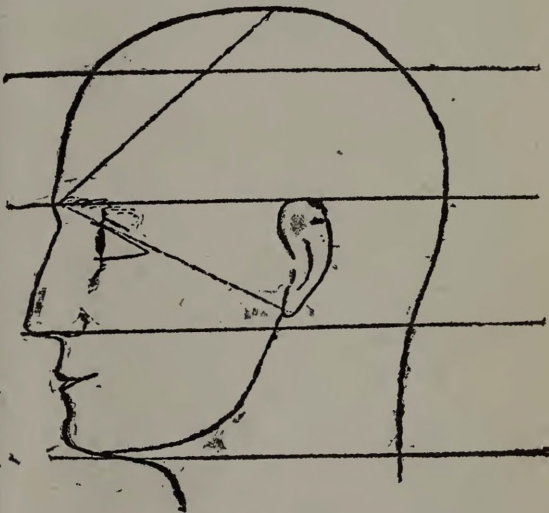
FRENCH COUNT.



J. R. SMITH.

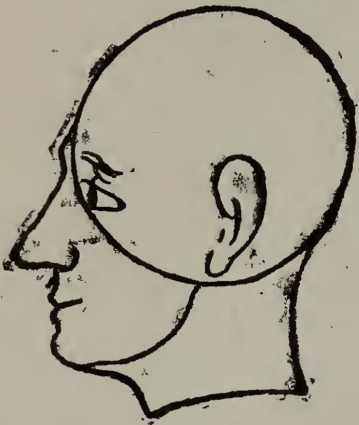
In a profile view of an inferior head there are three equal measurements, the central breadth corresponding to the nose and ear, with an equal breadth to the top of the head, and another from the nose to the chin. In superior heads, as in this profile, the head rises considerably above the upper breadth. Unless the upper measurement predominates, the head is unfavorably organized, and this predominance of the lower measurement has been found in the worst criminals.

This is a very simple and satisfactory method of comparing the upward and downward development, and the reader will observe the comparison of the coronal and basilar angles, made by lines from the brow back to the summit and base of the middle of the head. The base line in this drawing goes to the extreme base, the bottom of the cerebellum, which is the most correct method of comparison.



The proportions of the different parts of the head and proper methods of estimating development, which have not been given by phrenological authors, should be clearly understood to make our cranioscopy exact and scientific. The profile of the head may be

divided into three parts horizontally from the top of the forehead to a line passing under the chin, the middle part corresponding to the length of the nose, and a half breadth rising above the top of the forehead. The total length of the face nearly corresponds to the total length of the head, antero-posteriorly, and each of these three breadths may be estimated as one third of the length of the head, which is correct when the basilar development is large, but when it is moderate the middle breadth is about one third of an inch less. The



horizontal line through the brow corresponds with the base of the front lobe. One breadth below it, extending to the lower end of the nose and the ear, corresponds with the depth of the brain, while above it is an equal or greater breadth to the summit of the forehead, and a half breadth from the top of the forehead to the summit of the head, when it is well developed. This half breadth gives the ascendancy of the moral nature. When the height from the line of the brow to the summit of the head is no greater than from the brow

line to the bottom of the brain, which corresponds nearly with the lower end of the ear, the animal organs are too large in proportion to the moral development. The height of the moral development above the brow line in a well-formed head should be equal to half the entire length of the head, giving it a beautiful semicircular arch around a central point above the cavity of the ear, corresponding nearly with the middle of the lateral ventricles. A circle described around this centre will correspond with the outline of a well-developed head, until it passes through the neck and face.

As to the measurements, a large head, eight inches long, should rise four inches above the brow line, or 5.2 above the line which passes through the cavity of the ear and 6 to 6 1-3 inches above the base line of the brain, passing below the cerebellum and cutting the lower margin of the ear. In such a head, the oblique calliper measurement from the cavity of the ear to the summit of the head on the median line (the organs of Patience and Firmness) would be six inches.

In the most common form of head this calliper measurement to the summit is just equal to the breadth behind the cavity of the ear at the top of the mastoid process, and as this latter measurement gives the breadth of two brains or hemispheres, it is apparent that the oblique height of each brain is twice its basilar breadth. In good heads the elevation above the brow line is fully three times the depth from the brow line to the cavity of the ear and about twice the depth to the base of the cerebellum.

Mr. Frederick Bridges, of England, made some careful observations on this subject which were published about thirty years ago, showing that when the basilar line was very low it might be in-

dicated more picturesquely by measuring from the brow to the cavity of the ear and estimating the angle formed by this line with the horizontal base line. In his drawings, which are here reproduced, the oblique line from the ear extends not to the root of the nose but to the base of the front lobe externally, which is above the outer angle of the brow. The angle thus formed he found to be in good heads about 25 degrees, but in murderers as high as 40 degrees, owing to the basilar depth of the head. The comparison of the heads of the philanthropists Robert Owen and George Combe with those of the murderers Palmer, Dove, Greenacre, Wilson, Rush, Courvoisier, is very striking. In these engravings Mr. Bridges has divided the profile into six parts for comparison — three equal divisions antero-posteriorly being divided into six by a horizontal line through the upper part of the forehead at the centres of ossification for the frontal bones. This is not a very definite point, but by using it he makes a sixfold division of the profile in which the six parts approximate equality in good heads, as in Mr. Owen and Mr. Combe, but differ very widely in the criminals. This is an ingenious and admirable mode of displaying the same contrast which is seen when we draw the horizontal line through the brow.

As this measurement, whether taken vertically from the horizontal line through the brow or by means of the oblique line from brow to ear shows the amount of basilar development, it may be useful to show a deficiency as well as an excess. I have always relied upon the eye and the hand for this estimate of excess or deficiency, but no doubt this measurement of the angle will give additional precision. Mr. Bridges has observed what I have taught for half a century, that the most violent and dangerous heads were not those broad at the ears, but those which were deep. The animal force being indicated by depth, and not, as Gall believed, by breadth over the ear, where he located Destructiveness.

Mr. Bridges' observations are so interesting that I shall quote them freely. Speaking of this anterior basilar angle, which he calls phrenometrical, he says he has found the proper development for a human being to be 25 degrees, but that —

“We have, however, found that this angle gradually increases up to 45 degrees. The angle of murderers we find to range from 35 to 45 degrees, the average being 40 degrees. Now, in the degree that the angle is below 25 degrees we find energy of character to decrease in the same ratio. We have met with persons whose angle was not indicated. At the Isle of Man, last summer, I fell in with a family who were on a visit there. The angle of the husband was 11 degrees on the quadrant; that of wife 13 degrees; they had with them five of their own children — three girls and two boys. The angle of the girls was 9 degrees, and of the boys 7 degrees; and certainly I never before met with so tame and useless a family. They were, in fact, almost totally void of energy and will-power; their whole affairs were left to the management of a female servant, whose angle was 25 degrees. I have met with persons with highly developed mental and moral powers so small in the angle that they were practically destitute of energy to give effect to their higher powers.

[Mr. Bridges' line from the cavity of the ear or base of the cerebrum to the outer portion of the front lobe, above the orbital process at the outer end of the brow, is generally parallel to the line I have used, from the base of the cerebellum and lower end of the ear to the base of the forehead, where it joins the nose, and consequently makes the same angle, which is correctly stated at 25 degrees in good heads, and more than forty degrees in the badly organized. Sometimes, however, there is a little difference in the course of the two lines, and the use of both is desirable. There are heads of quite a wicked type, with a deep occiput and cerebellum, neither broad nor deep at the ear, which would be judged too favorably by Mr. Bridges' line, and would require the base line below the cerebellum to develop their lawless criminality. Mr. Bridges' line alone would make no distinction between such incarnate devils and the gentle amiable persons that have a shallow occiput, but in the majority of cases his line would give correct results. A good method of determining the occipital depth is to measure with the callipers from the organ of Patience to the base of the cerebellum, a measurement ranging from 5 1-2 in a small head to 7 in a larger one.]

"Two gentlemen called upon me some time since with a boy six years old. His head over the ears was not by any means wide; in fact, to have judged by the absurd bumpology system without regard to this angle, destructiveness would have been pronounced small. When I placed my mathematical instrument to his head, I found his angle 38 degrees. I remarked to the gentlemen that the degree of his angle indicated large destructiveness, and that I should expect he would show a tendency to acts of violence. They said that I was perfectly right; that only the day before he had made an attempt on the life of his father, and a few days before that he had made a similar attempt on the lives of his brother and sister. The gentlemen brought the lad to test phrenology, as they conceived that his head indicated small destructiveness. After being fully satisfied upon that point, they requested me to put my instrument to their heads. The angle of the first I tried registered 11 degrees, that of the other 14 degrees. I informed them that they were wanting in destructiveness, which they admitted. But, said they, we have been told that we had large destructiveness by one who professed to be a practical phrenologist; but our feelings and actions are quite the reverse, as neither of us can bear to inflict pain, or witness it done by others. I told them that I could well understand how the mistake had been made, as they were both wide over the ears, and that width had been taken for destructiveness.

"Another remarkable case came under my notice. A lady and gentleman brought a youth, 14 years of age, for my opinion of his natural disposition. I found his angle 40 degrees, the base of the brain large, and the moral region small. I asked if he was their son, and on being informed that he was, I intimated that he had a most dangerous type of head; that he was not a fit subject to be at large, as he was liable to commit crimes of a most heinous character; and

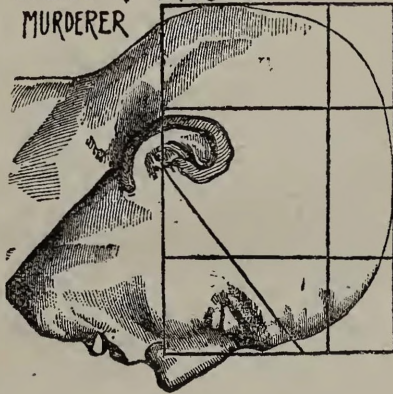
that individuals with his type of brain manifested preference to take life by poison. The father and mother, without hesitation, stated that he had the day before robbed the drawer of £68; that that morning he had made an attempt to poison them; and that they only escaped by an accident, in consequence of the servant letting fall the dish which contained the poison. The dog died shortly after eating the contents of the dish off the floor, which led to an investigation, and it was found that the food contained arsenic, which the boy had procured through two females from a druggist. His head was a similar type to that of Palmer, and his character, so far as it had been developed, strikingly resembled that of that most notorious criminal.

“One day I was in my study, explaining to Mr. Calderwood and a friend the principle upon which my model head was constructed; while thus engaged a boy entered with a parcel for Mrs. Bridges. When he had given it to her, she requested me to take his basilar phrenometrical angle. On doing so I found that it registered 38 degrees, the base of the brain large, the moral region small, and cautiousness and the reflective faculties very small, the temperament very active, which imparted great intensity to the action of his brain. When the boy had left the room, Mr. Calderwood asked me what my opinion was of the lad. I informed him that the formation of his head indicated that he was not a fit subject to be at large; that if he lived and was permitted to be at large, he would most certainly commit some most diabolical outrage. The following day our servant came into the house in a state of great excitement, and stated that the boy had deliberately lighted a lucifer match and set her child on fire, which had burnt its clothes. The child at the time was playing with several other children at the back door of the residence of its grandmother, whose attention was roused by the screams of the children. She ran to see what was the matter, and found the child in flames, which she promptly extinguished by wrapping it in her woollen apron. Now, this was the second time that the boy had set fire to this child, but the act was concealed to oblige his mother. His father was a seafaring man, and the mother, with the boy, lodged next door to where the child lived. These malicious acts so alarmed the people in the neighborhood, that the person with whom they lodged got rid of them. The boy had made several desperate attacks upon his father with a knife. The last time he stabbed his father in the head, which prevented him from going to sea for several weeks. Now, this boy belongs to that dangerous class of criminals like Dove, who ought not to be allowed at large.

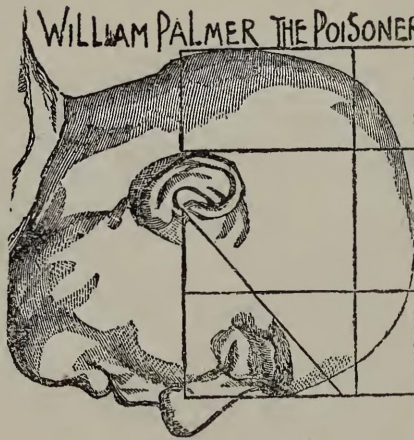
“The same excess of the animal feelings over the moral is found in all murderers. Robert Marley, the ticket-of-leave man, who murdered Cope, in London, had the same excess. His type is that of the brigand and desperate freebooter. The ticket-of-leave system is evidently wanting in the means by which to determine the natural tendencies of the criminals permitted to go at large. But this difficulty may now be overcome, and criminals can be classified with practical certainty.

CONTRASTS OF CORONAL AND BASILAR DEVELOPMENT.

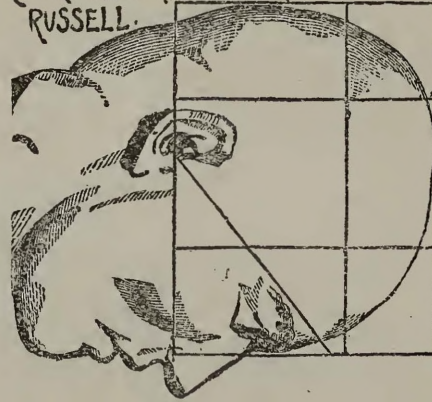
GLEESON 'WILSON.
MURDERER



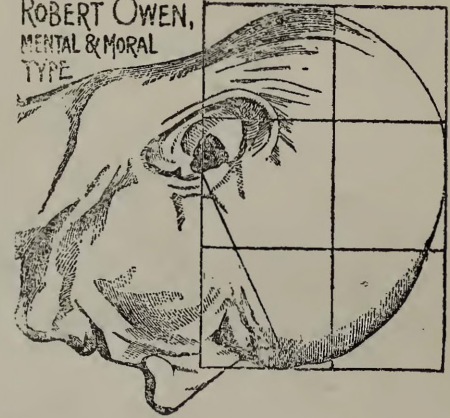
WILLIAM PALMER THE POISONER



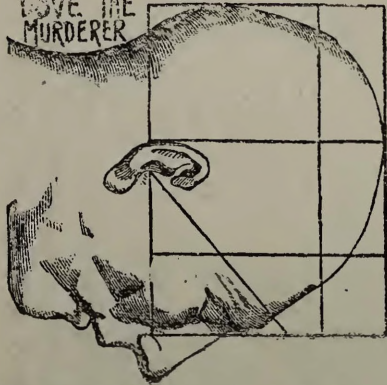
COURVOISIER; MURDERER OF LORD WM.
RUSSELL.



ROBERT OWEN,
MENTAL & MORAL
TYPE



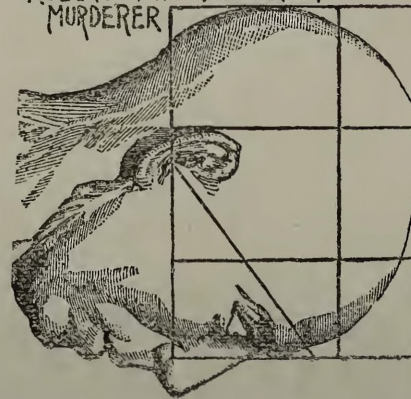
DOVE THE
MURDERER



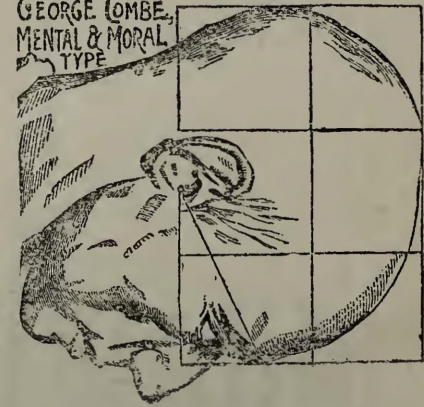
RUSH.
MURDERER



ROBERT MARLEY, TICKET OF LEAVE
MURDERER



GEORGE COMBE,
MENTAL & MORAL
TYPE



"Dove, who was executed at York for the murder of his wife by poison, had great deficiency of the mental and moral region. The type of his head is that of a low, vicious, partially mental and moral idiot, who ought not to have been allowed personal liberty. His conduct from childhood was vicious. He delighted in putting into the eyes of animals red-hot wire and vitriol. In fact, his whole career, from childhood to poisoning his wife, was one series of vicious tricks, and was strictly in accordance with the formation of his brain. The attempt to prove that Dove was insane did not succeed.

"When his body was laid upon the table I at once proceeded to examine the head with my phreno-physiometer. After the examination, Mr. Barrot asked me my opinion respecting the head. My reply was that I considered the execution of Dove in every sense of the word a legal murder; that the reflective faculties and moral feelings of the culprit were so small that he was rendered idiotic, and could not, therefore, form any correct idea of a moral sense to be a guiding rule for correct moral conduct; that, in fact, he could not, from the malformation of his brain, have any more idea in a practical sense of moral principles than a dog or a monkey, as the configuration of his brain did not range much higher than that of the black monkey.

"I demonstrated with my phreno-physiometer, and showed that the basilar-phrenometrical angle was 40 degrees; the vertical depth of the base of the brain four inches; the vertical depth of the moral region at benevolence 7-10ths of an inch; the retreat of the forehead at an angle of 55 degrees, in contrast to 85 degrees (the proper angle that a forehead should retreat), the side depth of the mental region 1 7-10 inches, the average being 2 5-10 inches.

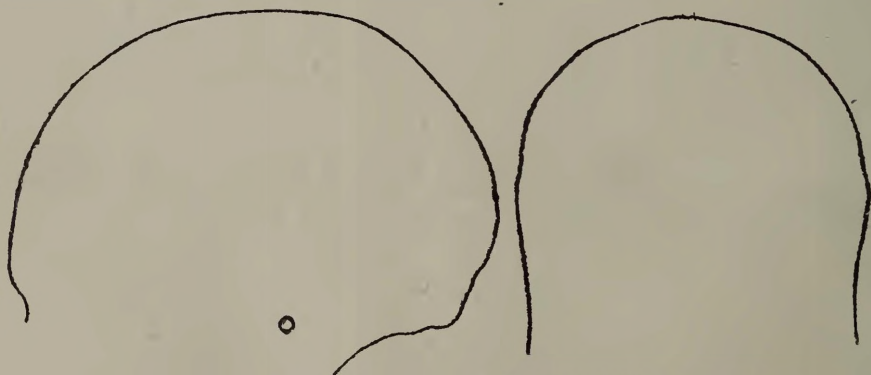
"When I had done with Dove, Mr. Noble invited all present into a room to further test the truth of my method of demonstration. On entering the room, a large number of casts of heads placed upon a long table caught my eye. I was requested to demonstrate upon them with my phreno-physiometer. There was one cast in particular that the sceptical doctor appeared most anxious about, and he with great pomp remarked, pointing to the cast, 'That is a case against phrenology.' I at once placed my instrument to the head, and the basilar-phrenometrical angle indicated 45 degrees. I remarked that the formation of that head was of the murderer's type. When the doctor heard my statement, he was ready to burst with indignation at the laugh that was produced at his expense. Mr. Noble informed me that I was perfectly right in my remarks, that it was the cast of the head of a murderer who was executed for the murder of his wife by poison. Mr. Noble stated that the head of this man had been pronounced a case against phrenology. I then demonstrated upon all the casts of the heads, and found that they were all of the murderer's type; not one of them had the basilar-phrenometrical under 40 degrees, several of them being 45 degrees. I then demonstrated upon the heads of Mr. Noble and Mr. Wright, and showed the great contrast between the configuration of their heads and those of the murderers."

These graphic and truthful illustrations of Mr. Bridges do not, however, cover the whole ground — far from it. They do not give the breadth of the lower occipital region, which makes the miser, the knave, and the brigand — while its narrowness makes a yielding, unselfish character. To realize the entire animal force by all its indications, we should measure with the callipers the breadth of the mastoid process (the ridge of bone behind the ear), which varies commonly from five to five and three fourths inches, and the breadth or the circumference of the neck. A circumference exceeding fourteen inches would indicate strong animal forces, one under ten would indicate some deficiency. The size of the neck not only indicates a well-developed basilar region, but indicates vital force, as it contains the spinal column, large blood-vessels, the windpipe, and numerous muscles.

Behind the oblique line of Mr. Bridges lies the cerebellum, which is an organ of animal life contributing to sustain the physical instead of the spiritual. This we estimate by grasping the head behind the mastoid processes and below the occipital knob. We then find the right and left halves of the cerebellum under our hands, in shape like two small turnips.

The basilar depth of the brain has been regarded by some as a reliable indication of longevity, but this is obviously wrong, for though it is an indication of vital force, and thus contributes to the strength of the constitution, it is not so important to longevity as the healthful upper posterior region, and it often shortens life by its excesses in every direction. Woman is distinguished from man by a smaller relative basilar development, but exceeds man in longevity.

Finally, we observe in the profile of well-formed heads something nearly corresponding to a semicircle above the horizontal base line through the brow.



ROBERT BURNS.
(POET)

Psychometry.

Mrs. C. H. Buchanan continues as heretofore the practice of Psychometry. Fees for written opinions three dollars, for fuller investigation of life periods and conditions five dollars. The inquirer need only send a specimen of writing. It is better to state by questions what the writer especially desires to know, and also to mention the date of birth. The purpose of judicious psychometry is not merely to gratify curiosity but as a PSYCHOMETRIC COUNSELLOR, to show the individual his own nature and the wisest course for him to pursue in his relations to others—Such advice as a wise parent would give to his children. Every opinion is deliberately prepared, and her correspondents (from different quarters of the world), who uniformly express much satisfaction, often express surprise at the accuracy of the description and gratitude for the value of the suggestions given.

Works of Prof. Buchanan.

"MANUAL OF PSYCHOMETRY"—The dawn of a new civilization—Explaining the discovery by which mankind may acquire the command of all knowledge.—"The like of this work is not to be found in the whole literature of the past."—*Home Journal*, New York.—"A discovery which the future historian must place among the noblest and greatest of this great epoch of human thought."—*Theosophist*, Madras, India. Price by mail \$2.16. Published by the author, 6 James St., Boston.

THE NEW EDUCATION.—Moral, Industrial, Hygienic, Intellectual—Third edition. Price by mail \$1.50—No work on this subject has ever received greater commendation from the enlightened. Rev. B. F. Barrett, one of the most eminent writers of his church says: "We are perfectly charmed with your book. I regard it as by far the most valuable work on education ever published. Your work is destined in my judgment to inaugurate a new era in popular education." Address the author.

Dr. J. R. Buchanan

Gives advice in chronic cases.

Patients at a distance are examined by psychometric diagnosis and advice, with the necessary remedies sent by mail or express.

THE ARENA.

THE ARENA for December has just appeared,—a new monthly magazine in size and price like the "North American Review," five dollars a year, fifty cents a number—112 pages monthly. It has a portrait of M. J. Savage, the distinguished philosophic divine of Boston, and the following table of contents:—

Rev. Minot J. Savage—Agencies that are working a revolution in theology.

W. H. H. Murray—The religious question.

Rabbi Solomon Schindler—History in the public schools.

Prof. Joseph Rodes Buchanan—Development of genius by proper education.

George E. McNeill—The democracy of labor organization.

Mary A. Livermore—Centuries of dishonor.

Hudson Tuttle—A threatened invasion of religious freedom.

Helen Campbell—Certain convictions as to poverty.

N. P. Gilman—Poverty and crime in our great cities.

O. B. Frothingham—Is poverty increasing?

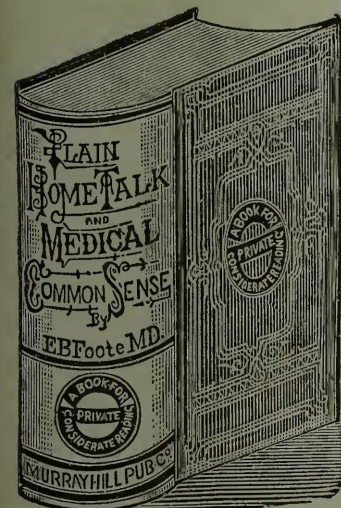
O. P. Gifford—Our poor.

C. A. Bartol—The word God in our constitution.

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