

# The Open Court

A MONTHLY MAGAZINE

Devoted to the Science of Religion, the Religion of Science, and the  
Extension of the Religious Parliament Idea

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CHICAGO

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## THE LIBERATOR

ST. GAUDENS' LINCOLN, LINCOLN PARK, CHICAGO

Uprisen from his fascèd chair of state,  
Above his riven people bending grave,  
His heart upon the sorrow of the slave,  
Stands simply strong the kindly man of fate.  
By war's deep bitterness and brothers' hate  
Untouched he stands, intent alone to save  
What God himself and human justice gave,—  
The right of men to freedom's fair estate.  
In homely strength he towers almost divine,  
His mighty shoulders bent with breaking care,  
His thought-worn face with sympathies grown fine;  
And as men gaze their hearts as oft declare  
That this is he whom all their hearts enshrine,—  
This man that saved a race from slow despair.

Chicago, 1899.

—HORACE SPENCER FISKE.



ABRAHAM LINCOLN

FROM A PHOTOGRAPH OF ST. GAUDENS' STATUE OF LINCOLN  
BY COURTESY OF MR. W. SCOTT THURBER, CHICAGO

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## THE REMAINS OF A PHŒNICIAN TEMPLE.

BY PROF. CHARLES C. TORREY.

IT is surprising how few undoubted monuments of the old Phœnician civilisation have been preserved for us,—or, to speak more accurately, how few are now known to be in existence. For more than a thousand years the Phœnicians were in many respects the foremost people of Western Asia. They were great builders, and all along the line of magnificent cities with which they had bordered the Mediterranean shore, from Carmel two hundred miles northward to Laodicea, great temples, palaces, and other monuments must have been conspicuous far and wide, as are the towers of Naples and Genoa, or the mosques of Constantinople, at the present day. But all these buildings have disappeared, and so completely as to leave hardly a trace behind. At Rome, Pæstum, Agrigentum, Athens, Ephesus, Baalbek, and many other cities of the Mediterranean lands, stately ruins, sufficient to give us some idea of the ancient splendor, are still standing; but on no one of the old Phœnician sites has there been found, hitherto, anything to correspond to the remains just mentioned.

The explanation of this fact is not far to seek. It lies partly in the character of the building material—soft limestone—chiefly used on the Syrian coast; partly in the terrible devastation of war followed by wholesale demolition and conflagration, to which these cities have been subjected in a degree rarely paralleled, Sidon and Tyre especially being reduced again and again almost to mere rubbish heaps; and finally, to the lack, thus far, of any systematic and thorough excavation in these regions. There is undoubtedly to be found, beneath the surface, much that will help to supply our sore lack of knowledge of the civilisation of this remarkable people.

The recent discovery of the extensive ruins of a Phœnician temple—the first of the kind which has come to light—is therefore a matter of no small interest; especially since inscribed stones, found *in situ*, tell us both the name of the king who erected the building, and that of the god to whom it was dedicated.

Less than two miles north of the present city of Sidon, the Auwaly river runs through an opening in the mountains into the sea. This is the river mentioned by several of the ancient geographers under the name *Bostrenus*. This chief passage is the oft-quoted one in Dionysius Periegetes (third or fourth century A. D.),



THE SITE OF THE TEMPLE (THE ARROW POINTING TO THE UPPER WALL).

who, in naming the principal Phœnician cities, speaks of Sidon in the following terms:

... καὶ Σιδόνα ἀθρεμέσσαν  
 Ναιομένην χαρίεντος ἐφ' ἰδάσι Βοστρηνοῖο.

“And blooming Sidon, situated by the waters of the beautiful Bostrenus.”<sup>1</sup>

The phrase “situated *upon* the Bostrenus” has caused some difficulty, to be sure. No one would think of describing the present city of Sidon as lying on this stream, though it might well be said to lie near by it. But there can be no question that the limits of

<sup>1</sup>For the whole passage and the best-known Latin translations of it, see Reland's *Palestina*, p. 437.

the ancient city extended far beyond those of the modern village, and it is certain that no part of the adjoining territory would have been more likely to be thus occupied than this narrow strip of hillside and plain running northward to the "Bostrenus." The discovery about to be described must be admitted to furnish strong evidence that the statement of the geographer Dionysius was literally correct.

At all events, and whatever the territory included in old Sidon, it has long been known that great buildings must have stood in this particular district, where the Auwaly river breaks through the hills at the edge of the plain, half a mile back from the shore. The



UPPER WALL, LOOKING WEST.

stone bridge over the stream is built in part of huge squared blocks which travellers have recognised as the building-units of old Phœnician edifices. Dr. Thomson, for example, in *The Land and the Book*, speaks of noticing that many of these stones bore "the mark of the Phœnician bevel." Such stones as these have been found on both sides of the river, and no one place in particular has been known as the source of the supply.

In the fall of the year 1900, a number of these stones were uncovered, on the hillside just above the south bank of the river. The owner of the land had his workmen dig away the surface of

the ground at this point, with the result that they soon uncovered part of a large wall, built of limestone blocks nearly cubical in shape, the edges generally measuring from three to four feet. These blocks he proceeded to remove and dispose of in the usual manner, cutting them up to be used as building stones. A second similar wall was found near by, and this one also he began to take to pieces.

While this was going on, a workman who was removing the blocks from one of the walls came upon one with an inscribed face. On removing this, another, similarly inscribed, was found; then others, until five in all had come to light. In that region, every



UPPER WALL, LOOKING EAST.

day-laborer, however ignorant, knows that a "*hajar biktibi*," or inscribed stone, is a valuable find, and also that it is a dangerous possession; so these were promptly disposed of, presumably to men who had had more experience in dealing with such contraband goods. The inscribed faces were sawn off and carried away by night on camel back. The price at which the workmen sold them, I was told, was a *mejidi* (less than a dollar) apiece.

Happening to be in Sidon not long after these events, I heard the news of the recent find, and lost no time in visiting the place. I had also the good fortune to get sight of one of the inscriptions.



As for the ruin which had been unearthed, it consisted, first, of a portion of a massive wall from which the earth had been partly cleared away on both sides. This was a double wall (and thus about seven feet in thickness), all of whose blocks were large, of about the same size, and nicely squared and fitted. It was found to run east and west. Then there was the second wall, about fifty yards further down the hill, in a garden, in which it formed the support of one terrace,—as it had probably served for generations past. This, being parallel with the other, and consisting of exactly similar blocks, was evidently a part of the same building, which



LOWER WALL (A CANE IS LEANING AGAINST ONE OF THE STONES).

must have had the form of a huge square, or rectangle.<sup>1</sup> This lower, or northern, wall was even more massive than its fellow, consisting apparently of three or more courses of stone throughout, and thus more than ten feet in thickness. It was in the core of this lower wall that the inscribed stones were found.

As for the inscription itself, it proved to be not the least important part of the find. Reduced to its simplest form, it runs as

<sup>1</sup> In the illustration which shows the whole hillside, the position of the upper wall is indicated by the arrow; the lower wall is some distance below the modern house. Some idea of the great size of the building can thus be gained.

follows: "*Bod-Ashtart*,<sup>1</sup> *King of Sidon, grandson of King Eshmun-azar, built this house for his god Eshmun.*" From the evidence of various kinds which I was able to collect, it appeared that all five of the stones above mentioned bore the same inscription, in somewhat varying form. That is, the King had caused a number of the stones of his new edifice to be suitably inscribed, and then had built them—like so many Babylonian stamped bricks, or the filled corner-stone of a modern public building—into one or more of the walls; not for men of his generation to read,—for the inscribed faces were all hidden from view, as I was repeatedly assured by



ONE OF THE INSCRIBED STONES.

those who found them,—but "for his god Eshmun" and for posterity.

This great building was a temple, then, and in its day it must have been an imposing edifice. It occupied an almost ideal site, standing just at the turn of the hill, in full view of the sea, and in the one spot near Sidon where a comparatively unobstructed outlook eastward is to be had. Just below, and in plain sight, is the rushing river; on the other side, perhaps two hundred yards away,

<sup>1</sup> Sometimes written "*Bad-Ashtart*," which is (probably) the original and more correct form of the name. We know, however, from the Greek transliteration that the pronunciation "*Eød*" was current. The meaning of the name is "Member (branch) of Astarte."

is a magnificent spring—a rarity in that region. The cape where the present city of Sidon stands is just hidden from sight by a spur of the mountain. The view toward the East is especially fine, including the deep and picturesque valley, which seems to run back nearly to the twin peaks of the Taumât.

It remains to ask who this King Bod-Ashtart was, and at what time he lived. A Sidonian king bearing this name is known to us from at least one other source, namely, an inscribed stone now preserved in the museum of the Louvre. The inscription, however, presents no features of especial interest, nor anything by which it could certainly be connected with the builder of the temple on the Auwaly river; and as it is not dated, it may be dismissed from further consideration here. Another occurrence of the name is possibly to be recognised in the Greek “Strato” (Σράτων), the name given by certain Greek historians to two different kings of Sidon; the one the well-known friend of the Athenians, who reigned in the first half of the fourth century, the other the monarch who was reigning in Sidon at the time when Alexander the Great invaded Phœnicia (333 B. C.). It can hardly be doubted that the Phœnician name of which “Strato” was the Greek representative was one which contained the name of the goddess Ashtart (Astarte); it may, however, have been “Abd-Ashtart” rather than “Bod-Ashtart;” in fact, there is evidence seeming to show that this was true in the case of the former of the two kings just mentioned. It must be remembered, furthermore, that the number of Sidonian kings bearing the one or the other of these two names was probably not small; it is useless to try to connect any one of them with our “Bod-Ashtart, grandson of Eshmunazar” without some further evidence.

By a piece of great good fortune, however, we are able to establish a sure connection between the inscription which our King put upon the stones of his temple and certain passages in the famous inscription of King Eshmunazar; and the result of the combination is to give us the information most needed, the lineage of this Bod-Ashtart, and the approximate date at which he lived.

The one Sidonian royal family with which students of Phœnician history feel somewhat acquainted is the “Eshmunazar dynasty,” of which three successive members have heretofore been known. The first of these, Eshmunazar I., is known to us only through the inscriptions of his successors, who give nothing more than his name and title. His son Tabnit is a somewhat less shadowy figure, for his sarcophagus, discovered in the year 1887 and

now in the museum at Constantinople, bears an epitaph of considerable length, and when found contained the embalmed body of the King himself in a very good state of preservation. King Tabnit is styled a "priest of Ashtart," and appears to have married his own sister, or half-sister, who was a "priestess of Ashtart." His reign cannot have been a very long one, for the body found in the sarcophagus was plainly that of a man in the prime of life. Tabnit's son Eshmunazar II., the third in the series, inherited the kingdom in his youth—perhaps while yet a mere boy—and reigned fourteen years. The inscription on his sarcophagus, which was discovered in 1855 and is now in the Louvre, is the longest and most important of all the Phœnician inscriptions which have hitherto been found. The young King's mother, Em-Ashtart,<sup>1</sup> the wife of Tabnit and Priestess of Astarte above mentioned, seems to have composed this epitaph. She speaks of her son as "cut off before his time"; and in celebrating his deeds, and especially his building operations, she makes use of the first person plural, "*we* built," "*we* caused to dwell," "*we* added," etc. From these facts we may safely conclude that the queen-mother was the virtual ruler during the minority of her son.

Now it is in the record of the building operations ascribed in this epitaph to the reign of King Eshmunazar II. that the connection with the Bod-Ashtart inscription is to be found, in a series of striking coincidences. What comes to light as a result of the comparison is no less important a fact than this, that one of the buildings of which the queen-mother says, "We built it," was the temple on the Auwaly River which forms the subject of the present article. The identification is beyond question. In the Eshmunazar inscription, the building is described in the following terms: (1) It was a temple "to Eshmun, the Holy Lord." This striking phrase is exactly the one which is used in the Bod-Ashtart inscription, and it occurs nowhere else. (2) It was built "in the mountain." (3) It was by a "spring" (further designated by a Phœnician word whose meaning is uncertain). The fact has already been noticed, above, that the magnificent spring near the Bod-Ashtart ruin is the only one of any importance in all the mountain district immediately adjoining Sidon. (4) Still another coincidence lies in the use, in both inscriptions, of a certain peculiar expression which appears to be the designation of this same mountain district. The phrase is not

<sup>1</sup> The name means "Mother of Astarte." It may be that the first member of the compound should be pronounced *Am* (abbreviated from *Amat*), in which case the name would mean "Servant of Astarte."

exactly the same in the two inscriptions, to be sure; here the adjective "lofty" is used, there the adjective "mighty," the noun being the same in both cases; but it is sufficiently plain that the two forms cannot be separated from each other. Thus a slight addition is made to the already strong evidence tending to bring these two inscriptions very near together.<sup>1</sup>

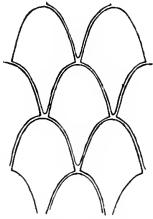
Having established the fact that the temple whose ruin has been described above was the "house of Eshmun" mentioned in the Eshmunazar inscription, some important conclusions follow. It is of course beyond question that Bod-Ashtart was the builder of the house; or at all events, that he began the work and carried it on for some time, whether he finished it or not. His reign therefore came between those of Tabnit and Eshmunazar II., and was probably the only reign in that interval. The time during which he occupied the throne must have been brief, probably only a few years; for, as has been said above, Eshmunazar was very young at the time of his accession. It is most likely that Bod-Ashtart was the elder brother of Eshmunazar, though he may have been his half-brother, and possibly was not the son of Tabnit at all. As for Em-Ashtart's assertion, "We built" the temple, it may be explained in more than one way. This daughter of Eshmunazar I. and priestess of Astarte may well have co-operated with the young King Bod-Ashtart in this undertaking, or even have been the moving spirit in it. More probably, however, Bod-Ashtart died before the work was finished, whereupon the queen-mother and her son completed the building and inducted the god Eshmun into his new abode.

It is thus an established fact that the date of our temple-ruin is that of the Eshmunazar dynasty. Unfortunately, the latter has not yet been accurately fixed, but scholars are divided between the fourth century and the third century B. C. It would be a great gain to science if this all-important date could be determined; and it is quite possible that something may yet be found in the extensive *débris* of this temple which will give the desired information.

Thus far, no thorough work of excavation has been attempted, but the things which have already been brought to the surface give interesting promise of further results. The native workmen who made the discovery of the inscriptions found also fragments of marble columns and other similar objects, mostly unimportant in

<sup>1</sup>For a full presentation of the argument at this point, as well as for an extended discussion of the inscription itself and of the problems which it introduces, I may refer to my article, "A Phœnician Royal Inscription," in Vol. XXIII. (1902) of the *Journal of the American Oriental Society*, pages 156-173.

themselves, but giving some hint of the former splendor. The one thing of more than ordinary importance which they unearthed from



THE GLASS PAVEMENTS.

the interior of the ruin, so far as I could learn, was a fragment of a mosaic pavement made of glass. The pieces (now in my possession) were of different colors, dark blue, light blue, green, orange, and all of the same arrow-head pattern formed by intersecting parabolas. Each single piece was about two inches long, an inch and a quarter wide, and three eighths of an inch thick; not cut, but cast in a mould of a rather elaborate form. The pavement must have been a beautiful one.

The ruin has, however, been partially excavated by experts. The news of the discovery soon reached Constantinople, and in the latter part of April, 1901, Macridy Bey, of the Imperial Ottoman Museum, who was overseeing the German excavations at Baalbek, came down to Sidon to investigate. He saw the importance of making some further examination of the site at once; moreover, the Government officials were anxious to skim the cream of the find as soon as possible, for they had very good reason to fear that it might otherwise be lost to them. So in the early part of the summer work was begun with a good force of men, under the direction of Macridy Bey himself. Unfortunately, he had but a small sum of money at his disposal, and was pressed for time into the bargain. What he accomplished was hardly more than a skilful preliminary examination. He laid bare the whole of the upper wall, and nearly all of the lower; and followed both of the end walls for a short distance. He also cut two deep trenches through the centre of the ruin, parallel with the walls. In the course of this investigation he found one more inscribed block, similar to those previously unearthed and bearing the same legend. He also found a small and imperfect inscription on marble; numerous statues and statuettes (none larger than half life-size, and all more or less fragmentary), mostly terra-cotta, but some of marble; many specimens of pottery—lamps, jars, vases, household utensils, and the like—for the most part not well preserved.

It is very much to be hoped that some report of the excavation, with a full description of these objects, may soon be published. Our knowledge of Phœnician pottery and statuary is still very meager and inexact, to be sure; yet the expectation is not unreasonable that even here something may be found to aid us in

solving that perplexing riddle, the date of the Eshmunazar dynasty, of which Bod-Ashtart, the builder of this temple, was a member.

Of course, a very important work of excavation remains to be done. The greater part of the ruin is still unexplored; many more antiquities, large and small, and among them doubtless some of considerable importance, await discovery; much is yet to be learned about the most interesting object of all, the temple itself. It would be no small gain for our knowledge of Old Phœnicia if this great ruin could be thoroughly and carefully excavated, and measures



PHENICIAN ANTIQUES, FROM SIDON.

then be taken to preserve intact all that remains of this sole monument of its kind. Possibly our own recently established American School of Research in Palestine may have the good fortune ultimately to perform this task; in any case, and by whatever agency the work is undertaken, it is to be hoped that it may be done soon. In the meantime, a good deal of digging is likely to be done in a more quiet way. Many of the natives of modern Tyre and Sidon are excavators, by birth and by choice, and treasures must be buried deep to escape their hands.

## THE RELIGIOUS BELIEFS OF ABRAHAM LINCOLN.

BY R. C. ROPER.

A Methodist minister once said that Abraham Lincoln was too great a man to belong to any Church. This sentiment is far more charitable than some of the printed speculations on the simple faith of our martyred president. But it is preeminently true. Lincoln was too great a man to belong to any sect whose creed would force a single soul outside its fold; too broad a man to confine his religious life within denominational barriers; too simple to enjoy the pomp and show of forms and ceremonies; too sympathetic to affiliate himself with any Church less inclusive than the brotherhood of all men.

No sooner had death sealed his lips, than Lincoln became the victim of a spirited religious controversy. While he said very little himself about his own beliefs, and wrote still less, some men have tried to meet the deficiency by manufacturing opinions for him.

Because Lincoln was the standard bearer in a great struggle involving questions of a moral and religious nature, in which orthodox Christians joined with all their hearts, some thought that he must have been a technical Christian himself. Because he believed with them on some great questions, Church people thought that he stood with them on other questions in which they were almost as vitally concerned. Because he believed that slavery was wrong, he must have believed that Christianity was right. Because he believed in God, he must have believed that Christ was God. Because, on grave occasions, when the nation seemed trembling in the balance and his very soul was wrought with fear, when, bowed down by gloom and despondency, he called upon the people for prayers to the "Divine Being who determines the destinies of the nations," Christians were satisfied that he was one with them in all their doctrinal beliefs. They longed to believe him a Christian



with them. They craved something to satisfy this desire—to know that he “believed.”

To some people, Christianity is always the cause, and not the result of a righteous life. To such it is difficult to account for the goodness and greatness of the great Lincoln in any other way than by proving him to have been a disciple of orthodoxy. There are those who believe that we cannot be good or great unless we are doctrinal Christians; that we cannot live an upright life unless we believe something; that to be something is to believe something; that character consists in believing, not in being; that a man is not what he is, but what he believes he is, and calls himself.

Lincoln's beliefs, therefore, have been greatly distorted, not only by Church zealots but by extreme liberals as well. The former have considered it their Christian duty to bring him within the gates of orthodoxy in order to secure his immortal reputation from the attacks of defaming heretics, while the latter have tried to build upon him a defense for their own opinions.

Some dogmatists declare that he believed everything; the atheists tell us that he believed nothing. A certain Rev. Dr. Smith asserts that he once converted him; Lincoln's two law partners, Stuart and Herndon, ridicule him for his failure. One Bateman states that Lincoln once said “Christ was God”; a personal friend of Lincoln affirms that he denied the very existence of God. Noah Brooks says that “any suggestion of Lincoln's skepticism is a monstrous fiction—a shocking perversion”; Mrs. Lincoln declares that Mr. Lincoln had “no faith and no hope in the usual acceptance of those words.”

What, then, did Lincoln believe?

When a boy—his biographers all agree—Lincoln was practically without faith or piety. It is stated that his closest friends at New Salem were freethinkers and he accepted Volney, Paine, and Voltaire as his text-books in the frequent religious discussions in which he engaged. Lincoln was then at that age in young manhood when reason is apt to run rampant; when the boy spirit will not tolerate persecution without at least making a bold fight in self-defense.

Lamon in his *Life* states that Lincoln when a boy had a very poor opinion of the “article”—religion; that, “when he went to church at all, he went to mock and came away to mimic” (p. 487).

Considering the narrowness of Church-life it is not strange that Lincoln, urged on and encouraged by his atheist associates, became so imbued with the spirit of antagonism that he too be-

came unreasonable when he thought he was reasonable, illiberal when he thought he was liberal, intolerant and scoffing to the sacred beliefs of others. We must excuse the boy and blame the environment for the extreme to which Lincoln was actually forced in self-defense.

It is interesting to know that Lincoln went so far as to write a book on the Bible. Mr. Herndon, in his biography, tells us that the purpose of this book was to demonstrate, first, that the Bible was not God's revelation, and, second, that Jesus was not the Son of God. The pamphlet was similar, in its treatment, to Paine's *Age of Reason*. One day while Lincoln and his usual friends were discussing its merits around the old wood stove, one Hull, who was just then more anxious to protect the future of the young Lincoln than Lincoln was himself, seized the manuscript and threw it into the stove. It had been Lincoln's intention to publish and circulate this pamphlet, which, fortunately, thus went up in a cloud of smoke.

Thomas Paine wrote the *Age of Reason* and the managers of the Centennial Exposition at Philadelphia refused to allow his bust to be placed among the heroes and patriots of the Revolution. Abraham Lincoln wrote a similar book and fate decreed that it should be destroyed and he should live in the hearts of his countrymen.

During his life, Lincoln's views, little as they were known, had some influence in his political career. The following extract is from a letter written by Lincoln to his friend Morris in 1843, when he was running for Congress:

"There was, too, the strangest combination of Church influence against me. Baker is a Campbellite; and therefore, as I suppose, with few exceptions, got all that Church. My wife had some relatives in the Presbyterian Churches, and some with the Episcopal Churches, and, therefore, wherever it would tell, I was put down as either the one or the other, while it was everywhere contended that no Christian ought to go for me, because I belonged to no Church, was suspected of being a deist, and had talked about fighting a duel." (*Works*, ed. by Nicolay & Hay, Vol. 1, 79.)

During the struggle of the Civil War, Lincoln placed great dependence upon the Churches, for they were heart and soul in the cause. Mr. Lamon in his *Life* says that Lincoln was a "wily politician," that, aspiring to lead Christian people in a cause, he was wise enough not to appear to be an enemy among them; that he even allowed himself to be misrepresented by some ministers with whom he came in touch. He was suspected of being an un-

believer in many of the prevailing dogmas and there were those who would turn this to his injury. Preachers frequently tried to convert him. Intriguing political enemies, seeking to discredit him with the people, tried to work out some expression from him that would aid them in their sinister work. But in vain. He refrained from expressing his inmost convictions to any curious seeker who applied. Yet to his friends he was frank and honest. But he grew more and more cautious as the responsibilities of the nation pressed harder and harder upon him. Hon. David Davis, a personal friend, is quoted by Herndon as follows :

"The idea that Mr. Lincoln talked to a stranger about his religion or his religious views, or made such speeches and remarks about it, is to me absurd. I knew the man so well; he was the most reticent, secretive man I ever saw or expect to see. He had no faith in the Christian sense of the term."

Lincoln understood human nature well enough to know that it is not always best nor always right to tell what one believes. It is not courageous to place one's self in unnecessary danger when there is nothing to be gained by the risk. Lincoln was so situated that to give utterance to his religious views, in so far as they were unpopular, would have been a grave mistake. He improved every opportunity to express those views which he held in common with the Churches, but he kept to himself those opinions on which he and the Churches disagreed. It may have been mere policy on his part, but it was not wrong, and good policy under the circumstances.

And so Lincoln depended upon the Churches. In a response to a Methodist delegation, May 14, 1862, he said :

"Nobly sustained as the government has been by all the Churches, I would utter nothing which might appear invidious against any. Yet, without this, it may fairly be said, that the Methodist Episcopal Church, not less devoted than the rest, is by its greater numbers, the most important of all. It is no fault in others that the Methodist Church sends more soldiers to the field, more nurses to the hospital, and more prayers to heaven, than any. God bless the Methodist Church. Bless all the Churches, and blessed be God, who, in this our great struggle, giveth us the Churches." (*Works*, II., 522.)

In a response to a delegation of Evangelical Lutherans, May 16, 1862, he used these words :

"You may all recollect that in taking up the sword thus forced into our hands, this government appealed to the prayers of the pious and the good, and declared that it placed its whole dependence upon the favor of God. I now humbly and reverently, in your presence, reiterate the acknowledgment of that dependence, not doubting that if it shall please the Divine Being, who determines the destinies of the nations, this shall remain a united people, and that they will, humbly seeking

the divine guidance, make their prolonged national existence a source of new benefits to themselves and their successors, and to all classes and conditions of mankind." (*Works*, II., 148.)

Lincoln was an extremely religious man, though not a technical Christian. He thought deeply, and his opinions were positive. His seriousness was a characteristic trait, showing itself even in his genuine good humor. His very jokes were a part of his seriousness. In all his native wit and humor we see some lasting good, and in his hours of gloom and despair we often find a vein of mirth and cheer. So changeable, so vacillating, so varied in all his moods,—he was above all things else a moody man. Now cheerful and hopeful, now gloomy and despairing; again, laughing off his cares and trials in good-natured jokes and jollity, only to return to that gloom which so often hung over him,—despondency. Such was his peculiar nature.

Lincoln was an extremely practical man. He believed not for belief's sake, but for his own sake. He made a practice of religion. He used it. His religion was his life, and his life was his religious service. It was his only public profession. Religion was a part of him. He accepted nothing unless he could use it. He believed in prayer because he found use for it, and when the fate of the Union seemed to waver, when doubt and despair hovered over the land and the future was uncertain, Lincoln often shut himself within his room and offered up his prayer to God. "So many times," he said, "I was forced upon my knees, not knowing where else to go." His faith in God was most implicit and real. Thus far he was truly orthodox. In fact, he held views of God which probably a majority of orthodox people to-day have outgrown. From his own statements it would seem that he believed in a real personal God, though this is denied by Mr. Herndon, his law partner and biographer :

"No man had a stronger or firmer faith in Providence—God—than Mr. Lincoln, but the continued use by him late in life of the word God must not be interpreted to mean that he believed in a personal God. In 1854, he asked me to erase the word God from a speech which I had written and read to him for criticism, because my language indicated a personal God, whereas he insisted no such personality ever existed." (*Herndon's Life*, II., 150.)

But, as we shall see later, Mr. Lincoln did believe in a directing Providence, if not, indeed, in a prayer-hearing God, and we have the best proof that he not only asked for prayers from the people but that he himself believed in and used prayer many times when the burdens of the nation were pressing hardest upon him.

His writings indicate that he believed in a God who actually controlled human affairs ; a God who was working in the very struggle then being waged. There is much evidence in his letters, writings, responses, and addresses to bear out this conclusion.

His Thanksgiving proclamations, full of expressions of faith in God, show also his dependence upon a higher power in the struggle through which he passed. In a proclamation of May 9, 1864, he uses these words :

"Enough is known of the army operations within the last three years to claim an especial gratitude to God, while what remains undone demands our most sincere prayers to, and reliance upon, Him without whom all human effort is vain. I recommend that all patriots, at their homes, in their places of public worship, and wherever they may be, unite in common thanksgiving to Almighty God." (*Works*, II., 522.)

Again, October 3, 1863 :

"No human counsel hath devised, nor hath any mortal hand worked out these great things. They are the gracious gifts of the most high God, who, while dealing with us in anger for our sins, hath nevertheless remembered mercy." (*Works*, II., 418.)

Writing to A. G. Hodges in 1864, Lincoln says :

"I claim not to have controlled events, but confess plainly that events have controlled me. Now at the end of three years' struggle, the nation's condition is not what either party, or any man devised or expected. God alone can claim it. Whither it is tending seems plain. If God now wills the removal of a great wrong, and wills also that we of the North, as well as you of the South, shall pay fairly for our complicity in that wrong, impartial history will find therein new cause to attest and revere the justice of God." (*Works*, II., 418.)

Again he says :

"That the Almighty does make use of human agencies, and directly intervenes in human affairs, is one of the plainest statements of the Bible. I have had so many evidences of this, so many instances of being ordered by some supernatural power, that I cannot doubt this power is of God." (*Whitney's Life*, 267.)

Still again :

"I do not consider that I have ever accomplished anything without God, and if it be his will that I must die by the hand of an assassin, I must be resigned. I must do my duty as I see it and leave the rest to God." (*Whitney's Life*, 267.)

As to his beliefs concerning other points in the Christian faith, there is not as convincing authority. The best authority is his own words, and while there is considerable in his writings to indicate a strong faith in God and prayer, there is very little to indicate his beliefs regarding Christ, the Bible, etc. But the very absence of anything on these points is good evidence that he did not hold the views which some have attributed to him.

Lincoln accepted the practical teachings of the Bible, especially the New Testament, and was fond of the Sermon on the Mount. The best authorities seem to hold that Lincoln never substantially changed his earlier views regarding the inspiration of the Bible and the divinity of Christ, although there are some who claim he changed in later years.

In an article in *Scribner's Monthly* (Vol. VI, 333) Rev. J. A. Reed contends that Lincoln was converted in 1848 by the Rev. Dr. Smith, whom he styles "Mr. Lincoln's Pastor." He states in the same article that it was Mr. Lincoln's intention to make a "public profession" later and unite himself with the "visible Church on earth." "It does not appear," says Mr. Reed, "that he had ever seen, much less read, a work on the evidences of Christianity till his interview with Rev. Dr. Smith in 1848."

In a letter to Mr. Herndon written in 1867, the Rev. Dr. Smith states that it was his "honor to place before Mr. Lincoln arguments designed to prove the divine authority and inspiration of the Scriptures," and that Mr. Lincoln, after a careful examination, pronounced them "unanswerable."

But no explanation why he never joined a church.

Mr. Bateman, once superintendent of public instruction in Illinois, claims that Lincoln once used these words in a conversation: "I know I am right because I know that liberty is right, for Christ teaches it, and Christ is God."

Concerning this alleged statement of Lincoln Mr. Herndon says a word:

"Mr. Bateman if correctly represented in Holland's *Life of Lincoln*, is the only man, the sole and only man, who dares say that Mr. Lincoln believed in Jesus as the Christ of God, as the Christian world represents."

Mr. Reed, in his article before referred to, quotes Noah Brooks and others to prove that even if Lincoln was not "converted" in 1848, as claimed, he at least changed his views after he went to Washington. But Mr. Herndon in 1870 denied this, and Mr. J. G. Nicolay, Lincoln's private secretary at the White House, and later his biographer, who would probably have known of Mr. Lincoln's conversion, if true, states:

"Mr. Lincoln did not, to my knowledge, in any way change his religious views, opinions or beliefs from the time he left Springfield to the day of his death."

And now let us look at the words of his own wife. Mrs. Lincoln in 1866, in a letter to Mr. Herndon, stated:

"Mr. Lincoln had no faith and no hope in the usual acceptance of those words. He never joined a Church; but still, as I believe, he was a religious man

by nature. He first seemed to think about the subject when our boy Willie died, and then more than ever about the time he went to Gettysburg; but it was a kind of poetry to him, and he was never a technical Christian."

According to Mrs. Lincoln, he first began to "think about the subject" about the time his boy Willie died, and not, strange as it may seem, when the Rev. Dr. Smith "converted" him in 1848.

Why did Lincoln never join a Church? We find an answer in his own words:

"When any church will inscribe over its altar, as the sole qualification for membership, the Saviour's condensed statement of the substance of both law and Gospel, 'Thou shalt love the Lord thy God with all thy heart and with all thy soul and with all thy mind, and thy neighbor as thyself,' that church will I join with all my heart and with all my soul." (Carpenter's *Life*.)

I have examined quite carefully Lincoln's works in two volumes, and though I find many references which prove clearly and conclusively his abiding faith in God and prayer, yet I have failed to find one single instance where he ever used even the mere words "Jesus" or "Christ," a fact which I take to be quite significant. If he did entertain such views of Christ and the Bible as are attributed to him by some orthodox Christians, is it not reasonable to believe that he would have expressed those views as he did his beliefs of God and prayer? Mr. Herndon also states that he never once saw in print the words "Jesus" or "Christ" as used by Lincoln.

When his father was on his death-bed, Lincoln wrote a letter to his brother-in-law, J. D. Johnston, which contained the following words of hope and comfort:

"You already know that I desire that neither father nor mother shall be in want of comfort either in health or sickness, while they live. . . . I sincerely hope that father may recover his health, but at all events tell him to remember to call upon and confide in one great and good and merciful Maker, who will not turn away from him in any extremity. He notes the fall of a sparrow and numbers the hairs of our heads, and He will not forget the dying man who puts his trust in Him. Say to him that if we could meet now, it is doubtful whether it would be more painful than pleasant, but that if it be his lot to go now, he will soon have a joyous meeting with many loved ones gone before, where the rest of us, through the help of God, hope ere long to join them." (*Works*, I., 165.)

If Lincoln really did entertain such ideas of Christ as some would have us think, is it not reasonable to presume that he would have so expressed himself on this occasion and offered such comfort to his dying father who really did believe this way? But instead, as is characteristic of the man, Lincoln spoke honestly and said what he really did believe when he affirmed his confidence in

one "great and good and merciful Maker" and in the "joyous meeting with many loved ones gone before," but not even a hint that he believed Christ to be God.

There are many of Lincoln's best and closest friends, those who worked with him and knew his life, whose statements bear out this conclusion.

Mr. J. T. Stuart, once Lincoln's law partner, is quoted by at least two of Lincoln's biographers as follows:

"Lincoln always denied that Jesus was the Christ of God—denied that Jesus was the Son of God, as understood and maintained by the Christian Church." (Herndon's and Lamon's *Life*.)

Mr. Lamon says in his *Life*:

"Mr. Lincoln was never a member of any Church, nor did he believe in the divinity of Christ, or the inspiration of the Bible in the sense understood by Evangelical Churches. His theological opinions were substantially those expounded by Theodore Parker." (Lamon's *Life*, 486.)

Mr. J. W. Fell, a close friend in Illinois, is quoted by Lamon thus:

"If from my recollections on the subject, I was called upon to designate an author whose views most clearly represented Mr. Lincoln on this subject, I would say that author was Theodore Parker." (P. 490.)

It is interesting to note in connection with these statements of Lincoln's fondness for Theodore Parker's writings, that in one of Parker's lectures on "The Effect of Slavery on the American People," Lincoln found this sentence which pleased him:

"Democracy is direct self-government, over all the people, for all the people, by all the people."

And so to Theodore Parker is due the inspiration of that oft-quoted phrase first used by Lincoln in his Gettysburg address, "of the people, for the people, and by the people."

As to other opinions held by Lincoln, Mr. Herndon adds:

"He believed in no hell and no punishment in the future world.

"He held many of the Christian ideas in abhorrence, and among them was this one, that God would forgive the sinner for a violation of his laws. Lincoln maintained that God could not forgive; that punishment was to follow the sin; that Christianity was wrong in teaching forgiveness; that it tended to make man sin in the hope that God would excuse, and so forth. Lincoln contended that the minister should teach that God had affixed punishment to sin, and that no repentance could bribe him to remit it. In one sense of the word, Mr. Lincoln was a Universalist, and in another sense he was a Unitarian, but he was a Theist as we now understand that word."

In conclusion, then, we may sum up his beliefs about like this: He was a firm believer in the "great and good and merciful" God,



but not in a revengeful and cruel God who would consign men to an eternal hell when nothing good to those who suffered could possibly come from such punishment. He believed in and used prayer as a means to bring himself in closer relations with Right in everything. He did not believe that it is best or safe to rely upon death-bed repentance, but that every act will surely reward itself with good or evil. "He believed in universal inspiration and miracles under law," and that all things, both matter and mind, are governed by law. He believed that all creation is an evolution under law, not a special creation of the Supreme Being. He hoped for a joyous meeting in the world to come with many loved ones gone before. He believed that Christianity consists in being, not in believing, in loving the "Lord thy God with all thy heart and thy neighbor as thyself." He believed that the Bible is a book to be understood and appreciated as any other book, not merely to be accepted as a divine creation of infallibility. He believed in the man Christ, not in the God Christ. He believed that it is nobler to be a man and grow to be a God than it is to be a God and descend to be a man.

He was once an admirer of Volney, Paine, and Voltaire; later of Theodore Parker, Emerson, and Channing. He was once a scoffer of religion; later, a supporter.

Lincoln was a man. The stimulus which his life gives to us is greater because we know he was like us; because we know he had his faults and his virtues; because we can comprehend him. His sympathy, simplicity, and humor give us an insight into the secret of his greatness. We see in him some of the requisites and possibilities of human success.

"He knew to bide his time,  
And can his fame abide,  
Still patient in his simple faith sublime,  
Till the wise years decide.  
Great captains, with their guns and drums,  
Disturb our judgment for the hour,  
But at last silence comes;  
These all are gone, and, standing like a tower,  
Our children shall behold his fame,  
The kindly-earnest, brave, foreseeing man,  
Sagacious, patient, dreading praise, not blame,  
New birth of our new soil, the first American."

Lowell, *Commemoration Ode*.

## JOHN WESLEY POWELL.

BY MRS. M. D. LINCOLN (BESSIE BEECH).

[CONTINUED.]

### III. THE PROFESSOR.

THE establishment of peace left the soldier without an occupation. He had willingly followed a life of toil and danger, when great national issues were at stake, but he could not be a soldier in time of peace. He therefore speedily sought some new occupation. After considering many different plans, he was prevailed upon to accept a nomination for the office of County Clerk of Du Page County, Illinois.

A few days later he received a letter from the President of the Illinois Wesleyan University, at Bloomington, offering him the professorship of geology in that institution. This he accepted at once, although the salary was but \$1,000 per annum, while that of the County Clerk was worth from \$5,000 to \$6,000. This university had previously given him the degree of A. B. and then of A. M., but the offer of the professorship was entirely unexpected. He left for Bloomington at once and entered upon his new duties.

The institution was more prosperous than had been supposed, and his salary, even for the first year, was better than had been promised. For three years he there led the quiet life of a professor of geology.

It was agreed when he accepted the position that a part of his time should be devoted to field geology and natural history, and that the greater part of his duties should be the organisation and building up of a museum.

During his life as a soldier, Major Powell did not forget the pursuits in which he had previously been so deeply interested, and often while in camp he applied himself to the study of natural history. During the more quiet pursuits of camp life, he found op-

portunities for studying the botany of the country in which he was sojourning. While in Kentucky and Tennessee, he made large collections of land and fresh-water shells. But the study in which he most interested himself was geology; and it was his custom to carry in his camp chest the geological reports of a district through which he travelled. There is now in the State Museum, at Normal, Illinois, a fine collection of fossils from Vicksburg and the region round about which he made while encamped in that region the winter after the fall of the city. In the same manner he made large collections of fossils in Tennessee, especially around Nashville, in the region made classic by Troost and Safford. Altogether, his notes on geology and natural history made during the war are quite voluminous.

On entering upon his duties at the Illinois Wesleyan University, his entire energies were directed to the development of methods of instruction in his favorite field of learning. It was his theory that the study of science should include much more than the textbook literature of the subject; that the student must be made familiar with the phenomena of nature; that the principles of any branch of natural science should be constructed by the pupil himself from observed facts; and that the function of the teacher should be chiefly that of guide. With this end in view, his time was largely devoted to the creation of a museum and the organisation of laboratories for instruction. In mineralogy his pupils were led to study the minerals themselves, and thus to become familiar with their characteristics; and many of them became skilful in blow-pipe analysis. His students in botany were at once introduced to the world of plants, and became collectors, and assisted him greatly in the gathering of plants for a fine herbarium. In zoölogy his pupils were taken to the woods and fields, and became collectors of mammals, birds, reptiles, fishes, and insects, and by the study of natural objects were trained in comparative anatomy.

He seems at this time to have found great difficulty in teaching geology, because it was almost impossible to introduce the students immediately into the presence of the facts, and he deeply lamented that they were so greatly dependent upon text-books. To correct this evil, even to a limited extent, he organised field excursions, and, as far as possible, adopted object-studies of rocks and fossils.

In this manner the days and years of professional life were passed, training students by research in field and laboratory and by courses of lectures; and it may be well understood that his classes rapidly increased in size, and that he gathered about him

a large number of young men who, inspired with his own enthusiasm, became earnest and successful scholars.

At the same time, the Professor took an earnest affirmative part in the public discussions of the importance of enlarging and perfecting the general college curriculum by the introduction of more science studies,—a question then fairly begun and not yet ended. In public lectures and addresses throughout the State, he did much toward creating a sentiment in favor of the opinions so earnestly embraced by himself.

During this time he was still secretary of the Illinois Natural History Society. This society was located in the hall of the Normal University at Normal, a suburb of Bloomington, and in that institution he delivered a course of lectures on geology. At the request of the officers of the institution, in the winter of 1866–1867, he went to Springfield and secured from the legislature a small endowment for the museum of the Normal University. On his return he was elected to the curatorship, with the understanding that he should be called upon to deliver a course of lectures on geology during each winter.

During the next spring, Professor Powell organised an expedition, from the members of the graduating class in the Wesleyan University and students in the Normal University, for the purpose of crossing the Great Plains and visiting the mountain regions of Colorado to make collections and studies in natural history and geology. This excursion was one of the earliest of its kind in this country, and inaugurated a practice of the highest value to science, for it has now come to be recognised that field-study is a necessary part of a course of instruction in any branch of natural science.

Early in May the Professor organised his party, on the Missouri River near Council Bluffs. It was composed of sixteen students and himself, and was outfitted with two waggons and the necessary teams, and also with a number of riding animals. The equipment for natural history collection was very thorough, especially for the collection of vertebrate animals, insects, and plants, and to each member of the party was assigned a specified share in the work for which the expedition was organised.

The journey across the plains was slowly made, the party occupying itself from day to day in the collection of natural history materials found along the route. Some were chasing wild animals, some capturing butterflies in nets, some gathering plants to be pressed; and the Professor himself, while directing all of these operations, was also engaged in making geological examinations

and collecting fossils. It was a busy merry party, and at night the camp was made hilarious with song and story.

At that time the Pacific railroads were not built, and in the wilderness of plains lurked Indian tribes, for which the party had to keep up a constant watch. As they moved by day, outriders guarded their little trail, and at night guards were established. Sometimes they camped on the same ground with other travellers pushing westward,—“pilgrims,” as they were called in those times,—and common guards were established over large camps. For much of the distance they travelled in sight of the Platte River, a broad stream of shallow, muddy water, on the banks of which, at rare intervals, cottonwood groves were seen. At last, in crossing the Bijou Basin, about fifty miles from Denver, the party came in sight of the Rocky Mountains, and were filled with enthusiasm as the highland to which they were destined came into view. Ten days later the whole party were engaged in crossing the Rampart Range, as it is now called, sixty miles south of Denver, taking with them their waggons and animals, by a route explored by themselves. The college boys were teamsters, cooks, and laborers, as well as students, and with good cheer and great skill they climbed the mountain range, opening their way through forests with the axe, and sometimes finding it necessary to take waggons to pieces in order to get them up the rocks.

But days of great labor, endured with the utmost good-will brought them into Bergen's Park, on the western side of the divide. This is a long valley, with a mountain range on either side, enclosed at the north by a group of lofty crags known as Devil's Head, and at the south by Pike's Peak.

In Bergen's Park they camped for nearly a month, and made a great variety of natural history collections. Thence the party moved to the foot of Pike's Peak, which they essayed to climb. At that time there was no Signal Service station at the summit, and no trail led up its steep sides as at present. The Professor explored a route up the north side. The ascent was at that time one of much adventure, and required great labor; but at last, about three o'clock one afternoon, the whole party reached the summit. Nobody in the party had ever before been above the timber line much less on a mountain's summit, among perpetual snows, and unfortunately, having had little experience, the descent was commenced too late in the afternoon; night came on with terrible cold, and in the darkness they had to make their way down rocks and over steep places, until they could reach the timber line. At last

this was accomplished, when a great fire was built and they camped for the remainder of the night, with no other shelter than rocks and logs, and preserved from perishing with cold by the huge fires which they built.

Mrs. Powell, the Professor's wife, was one of the party, and she spent eight happy summers in this way, enlivening the monotony of the life as only a woman's presence can. For six months at one time she never saw a white woman; and "she could ride all day on horse-back like a veteran," says the Major. Her dress on such occasions consisted of a plain water-proof cloth reaching to the top of stout boots, and an English felt hat with a blue or green veil completed a costume intended and adapted to service. They dwelt in tents or under shelving rocks; and the mess-kettle held savory "stews" that were eaten with appetites not too refined for even "squash sauce" on one occasion, without anything but salt to season it!

It took the party some six weeks to pass over ground that the screeching trains now fly over—on wings of steam, in three days.

But these latter-day travellers do not become acquainted with every grand or lovely spot; they do not study the "topography," the "geology," the "fauna," and the "ornithology" as did our explorers on horse-back, or by canoe. They sometimes saw Indians with birds and flowers of species unknown to modern scientists, and they then enjoyed all the joys of discovery.

The Major's policy towards the Indians was always conciliatory. He generally explained as best he could the object of his party, and they eventually smoked a pipe of peace, exchanged presents and dwelt together ever after on friendly terms.

Mrs. Powell is the first white woman known to have crossed Pike's Peak.

The next day they returned to their camp at the foot of the mountains. Altogether, three days had been filled with the ascent and descent of Pike's Peak, probably by a route never before and never since taken.

From Pike's Peak the party went round to South Park, and although it was midsummer, two days of the trip were through a blinding snow. They camped in South Park for two or three weeks, and from the rendezvous which was established many of the mountain regions round about were climbed. One of the most noteworthy excursions was the ascent of Mount Lincoln, a peak 14,297 feet above the level of the sea.

From South Park they went to Denver, where the party was

broken up, and a number of the young students returned to their homes in the East. But Professor Powell, with his wife and two or three young men and a couple of hardy mountaineers, went from Denver over into Middle Park, where another month was spent in exploring the mountains around that beautiful valley. One of the most interesting expeditions made from Middle Park was around the head of Grand Lake and up into the high Sierras to the east, in the region of Long's Peak, and from thence around Mount Sumner, on the divide between Middle and North Park. On this trip the Professor made some very interesting collections of bear, elk, wolverine, and other animals; but finally the snows came on and they were driven out of the mountains.

In going from Middle Park back to Denver, they had to cross the range once more, at Berthod's Pass, during the latter part of November, after the snows had accumulated several feet in depth.

On arriving at Denver the results of the expedition were gathered, to be shipped to the East, embracing the skins and skeletons of many mammals, and a collection of many hundreds of birds, many reptiles and fishes, and many bottles and boxes of insects, and especially a large collection of plants. The party had also gathered a great store of fossils, minerals, and volcanic rocks; all of which were taken East to enrich the museums at Normal, at Bloomington, and other institutions.

Professor Powell spent the winter of 1867-1868 in the arrangement and study of his collections and in lecturing. In the spring a new expedition was organised, designed primarily to enrich the museum at Normal, of which he was now in charge; but other institutions gave him assistance. A small grant was made by the Illinois State Agricultural College, but the most important assistance secured was the aid of the Smithsonian Institution, which furnished him the apparatus and outfit necessary for natural history collections and instruments required for geographical reconnaissance. Through the influence of General Grant, Congress authorised the Commissary General of the Army to furnish Professor Powell and his assistants with rations wherever they might call for them at military posts in the far West.

With all of these additions to his equipment, the Professor again organised a party, chiefly of students, for a natural history expedition into western Colorado, with the design of ultimately exploring the canyons of the Colorado. Early in the summer of 1868 with this newly organised party of naturalists he established a rendezvous camp in Middle Park, Colorado. To the party here he

added a number of hardy mountaineers who were expert trappers and travellers. For more than three months our naturalists were pursuing their studies and engaged in making collections in various departments through the region round about. At one time, Professor Powell, with a part of his men, crossed the Colorado or Front Range and ascended Long's Peak, which was thus climbed for the first time. During the whole period he was himself chiefly occupied with studies at high altitudes, and he traversed the entire Colorado Range from Long's Peak to the South Platte. While engaged in this part of the work they usually camped at the timber line, and the days were spent among the crags and peaks of the great Colorado Range. In this manner the study of the general structure of the mountains was made. Thence he went to Mount Lincoln and studied the great mountain masses at the head of Blue River, thence southward he passed to the Gore Mountains. In this region a longer delay was made and the whole system of mountains carefully explored.

The Gore Mountains are a group of wonderfully picturesque crags and peaks, and previous to this time had been entirely unexplored. The account of them published by the Professor greatly attracted the attention of travellers, and later his name was given to the highest peak of the group by the people of Colorado.

During the two summers of study the mountains extending about Middle Park, and the whole country within, had thus been carefully studied so that the general geology of the district was now well known by the Professor, and large collections of minerals, fossils, and rocks had been made. The naturalists of the party had also collected rich stores of plants and animals, and at the close of the season they found themselves well rewarded. The material thus gathered was sent to Denver and thence shipped east to the museum at Normal, from which it was to be distributed to the several institutions contributing to the expense of the expedition.

But Professor Powell did not return to the East himself. With a part of his scientific corps and a number of mountaineers he crossed the mountains to the westward of Middle Park and went down to the valley of the White River, where he established winter quarters. Here three small log houses were built on the margin of a great cottonwood grove not far from the banks of the river. Just before the train reached this camping-ground, the Professor with two men were riding in advance when two grizzly bears were seen. These were killed and besides obtaining two good robes for cold weather, sufficient oil was secured to light their cabins during the



long nights of the following winter. From the Inter's camp as a base all the region round about was explored.

It had been previously arranged that early in the winter some members of the party should leave, so in December while the main party remained behind at winter quarters he went with these persons who were to return to the East and with three or four hunters northwestward to where the Union Pacific railroad now crosses Green River. The whole journey was through a region at that time unknown and without roads and trails. When within about fifty miles of Green River they encountered a severe snow-storm and went into camp at the foot of Aspen mountain until the storm had subsided. This is a wild and desolate region and of great interest to scientific travellers, and the mountain was the center of a district of country which subsequently became the theater of an elaborate geologic study by the Professor, the results of which were published in his report on the Uintah mountains. On the third day the storm subsided, and the party toiling through deep snows soon found its way to Green River Station.

Professor Powell having parted with his friends who were coming east, loaded his pack animals with supplies at Green River to return to winter camp. His route back was down the valley of the Green to the Uintah mountains, thence eastward to what has since been called Brown's Park. From this beautiful valley in the heart of the mountains he explored the upper canyons of Green River and a large part of another canyon lying farther south, then passed eastward exploring the Yampa River where it canyons through the Uintah mountains, and from the Yampa river he passed southward to winter camp on White River, arriving there on New Year's day. During the late winter months the canyons of White River were explored and excursions were made far up and down Green River especially for the purpose of studying canyon geography. During the previous summer the Professor had explored the canyons of the Grand River where it passes through and out of Middle Park, having constructed small boats for this purpose. He had also made a careful study of some of the canyons of the Blue River. All of these examinations were made for the purpose of determining the best methods of exploring the canyons of the Colorado.

The winter spent on the White River was one of great interest to the Professor and his party, which again included Mrs. Powell. The entire winter was one of great activity in making explorations and collections. During the greater part of the time the Ute In-

dians were encamped in the same valley, and the Professor spent the long winter evenings in studying the Ute language and collecting the myths and noting the habits and customs of these interesting Indians, in which work Mrs. Powell took great interest. The presence of the Indians added greatly to the entertainment of the party, for all winter long they were engaged in festivities, and often at night were found performing their weird ceremonies of magic,—their “medicine rites.” The hunters of the party abundantly supplied the camp with game; at one time they brought down twenty-three deer from a mountain about twenty miles from camp.

This valley, now known as Powell's Valley, is a beautiful stretch of meadow glade, about ten miles long and from one to two miles broad, inclosed by mountains and steep cliffs on every side. Here the horses and mules, about twenty in number, roamed through the winter, but were brought up to the camp every night by a herdsman, and from their number the animals necessary for next day's ride were caught each night.

During this winter, as during the previous summer, extensive scientific collections were made.

Late in March winter camp was broken up, and through deep snow, with great toil, the party found their way over the mountains into Brown's Park, in the heart of the Uintah Mountains. From Brown's Park they went to Fort Bridger. Arriving at Fort Bridger, new operations were to be inaugurated, for the Professor had determined to explore the canyons of the Colorado. He at once shipped all his collections to the East, and leaving his party encamped on Green River, with Mrs. Powell he went to Chicago, for the purpose of constructing boats to be used in the exploration of the Green and Colorado Rivers. It had been his plan to construct boats in the field, and for that purpose he had brought with him the necessary tools; but at that time a great rivalry had sprung up between the two great railroads, the Union Pacific, starting from Omaha and building westward, and the Central Pacific, starting in California and coming eastward. This rivalry resulted in the building of the transcontinental railroad with much rapidity, and already a track had been started as far westward as the Green River, and the Professor determined to take advantage of this fact and to have his boats built in Chicago, where the work could be more skilfully done, and have them shipped out by rail.

Having thus decided to enter upon extensive explorations, Powell's life as a college professor ended.

[TO BE CONTINUED.]

## CRITIQUE OF THE CONCEPT OF TEMPERATURE.<sup>1</sup>

BY DR. ERNST MACH.

IT appears from what has preceded that the *volume* of a body may be employed as a *mark* or *index* of its *thermal state*, and that consequently change of volume may be looked upon as indicating a change of thermal state. It stands to reason that the changes of volume here involved are not such as are determined by alterations of pressure or electric force, or by any other circumstances inducing change of volume though known from experience to be independent of the thermal state. Concomitantly with the thermal sensation which a body provokes in us, other properties of the body also undergo alteration,—as, for example, its electric resistance, its dielectric constant, its thermoelectric motive force, its index of refraction, etc. And not only might these properties be employed as indices of the thermal state, but they actually have found such employment. In the preferment of volume, therefore, as a test of states of heat, there is involved, despite the manifest practical advantages of the choice, a certain *caprice*; and in the general adoption of this choice, a *convention*.

A body employed as a thermoscope initially indicates only its *own* state of heat. But observation informs us that two bodies, *A* and *B*, which at the start provoke in us unlike sensations of heat, after prolonged contact excite in us precisely the *same* sensations, that is, equalise the difference of their thermal states. Transferring this empirical discovery by analogy to volumes as indices of thermal states, we assume that a thermoscopic body indicates not only its own state but also that of any other body with which it has been sufficiently long in contact. But in so summarily proceeding we are acting without warrant. For sensation of heat and volume are two entirely disparate elements of observation. The

<sup>1</sup> Translated from Mach's *Principien der Wärmelehre* by Thomas J. McCormack.

fact of their connection has been determined by experience; the manner and extent of their connection it also remains for experience to determine.

We may convince ourselves easily that volume and sensation of heat are indices of widely different *sensitiveness*, and generally of different *character*. By means of volume we can perceive changes of state that utterly escape our sensations of heat. And owing to the dissimilar properties of the thermoscope and the sensory organ of heat, these instruments may give not only different, but even diametrically opposed, indications. The instances adduced on page 643 of the November *Open Court* amply illustrate this fact. But the indications may also be different with respect to equalised thermal states. Two pieces of iron after sufficient contact give the *same* sensations of heat. A piece of wood and a piece of iron after contact also show on the thermoscope the same indications. But if both *feel warm*, the iron will feel the *warmer* of the two, no matter how long they have been in contact; and if both feel *cold*, it will feel the *colder*. This, as is well known, is due to the greater conductivity of the iron, which imparts its thermal state to the hand more rapidly than the wood.

Volume being a more sensitive index of the thermal state than sensations of heat, it is more advantageous and rational for us to resort for our empirical results to observations on volume, as it is also to base upon these our definitions. Observations based on sensations of heat may serve us for guidance, but to employ them outright and uncritically is, as we now know, inadmissible. We assume with this perception an entirely new point of view, and one which is essentially different from that occupied by the original founders of thermometry. The defective separation of these two points of view, which owing to the gradual transition of the one into the other was unavoidable, became, as we shall subsequently see, the occasion of many obscure speculations.

The fact that a thermoscope shows an increase of volume when in contact with a body that is perceptibly warmer, and a diminution of volume when in contact with one that is perceptibly colder, is indisputable. But it is without the power of our *sensations of heat* to inform us whether this continues so until the thermal states are completely equalised. On the other hand, we can, consonantly with our new point of view, arbitrarily lay down the following definition: *Those thermal states are to be regarded as the same in which bodies produce in one another no alterations of volume* (mechanical pressures, electric forces, etc., excluded). This definition may be

applied immediately to the thermoscope, which indicates the thermal state of the body it touches the moment mutual alteration of volume by contact ceases.

If two bodies  $A$  and  $B$  are, as the common phraseology goes, both as *warm* as, or, both provoke the same sensations of heat as, a third body  $C$ , then is  $A$ , in the same sense, *just as warm as* the body  $B$ . This is a logical necessity, and we are incapable of thinking it otherwise. The contrary would involve our holding two *sensations* to be at the same time *alike* and *different*. But we are not permitted by our definition to assume outright that if  $A$  and  $B$  both do not produce alterations of volume in  $C$ ,  $A$  likewise will produce none in  $B$ . For this last result is an *experience*, the outcome of which we have to await, and which is not co-determined by the two first-mentioned experiences. This is a simple consequence of the position above assumed.

But experience shows that if there be a series of bodies  $A$ ,  $B$ ,  $C$ ,  $D$ , . . . each of which has been sufficiently long in contact with that which follows, the thermoscope will give the same indication for the one as for the other. And, furthermore, we should be led into singular contradictions with our daily thermal experience, were we to assume that the equality of the physical condition of  $A$  and  $B$ , and  $B$  and  $C$ , conformably to the above definition, did not likewise determine the equality of the physical condition of  $A$  and  $C$ . Inverting the order of the bodies, which now do not induce alterations of volume in one another, would result in new alterations. But as far as our thermoscopic experience extends, this nowhere occurs.

To my knowledge, Maxwell is the first who drew attention to this point, and it may not be amiss to mention that Maxwell's remarks are quite similar to those which I advanced respecting the concept of mass.<sup>1</sup> It is extremely important to note that whenever we foist a definition upon Nature, it is imperative to wait and observe whether it accords perfectly with her constitution. We may indeed frame our concepts as our caprice dictates, but with the exception of pure mathematics, we are bound, even in geometry, and far more so in physics, to investigate minutely the extent to which reality conforms to our concepts.

Any conception, therefore, of the *experiences* familiar to us, if

<sup>1</sup> Maxwell, *Theory of Heat*, 9th edition, London, 1888. I surmise that the remarks cited were contained in the first edition of 1871; but I am unable to verify my conjecture, as I have had access only to Auerbach's translation of the fourth edition (1877). My considerations on the concept of mass were published in 1868 in the fourth volume of *Carl's Repertorium*, again in 1872 in my tract *Erhaltung der Arbeit*, and finally in 1883 in my *Mechanics* (Eng. trans., Chicago, 2nd edition, 1902).

it is to be free from contradiction, demands the assumption that two bodies  $A$  and  $B$  which are in the same thermal state as regards a third body  $C$  are in the same thermal state as regards each other.

The stronger the thermal sensation, the greater the volume of the thermoscopic substance. Hence again, by analogy, the following arbitrary definition may be set up: *Those thermal states are to be regarded as the more intense in which bodies produce in the thermoscope greater augmentations of volume.* After the analogy of the thermal processes observable by sensation, we should then expect that of two bodies  $A$  and  $B$  that which produced in the thermoscope the greater augmentation of volume would on contact also induce in the other an augmentation of volume, but in itself a diminution. But while the analogy holds generally true, it may fail utterly in special cases. Water furnishes an example where the analogy is misleading. Two masses of water at  $+3^{\circ}$  C. and  $+5^{\circ}$  C. both show a diminution of volume on contact. Two masses of water at  $10^{\circ}$  C. and  $15^{\circ}$  C. present the normal case. Two masses at  $1^{\circ}$  C. and  $3^{\circ}$  C. present a case diametrically opposed to the analogy.

It will be seen from the foregoing that water as a thermoscope could, under certain circumstances, give the same indication for two thermal states for which other thermoscopes would give different indications. The use of water as a thermoscope, at least in the thermal field under consideration, is accordingly to be avoided.

Our *sensations of heat*, like the thermoscopic volumes, form a simple series, a *simple continuous manifold*; but it does not follow from this that *states of heat* form also such a manifold. The properties of the system of symbols we employ are not decisive of the properties of the states symbolised. If we were to take, for example, as our criterion of the state of a body  $K$  the pull exerted by  $K$  on an iron ball suspended from a balance, these pulls, the aggregate of which as symbols likewise constitute a *simple manifold*, could be determined indifferently by the electric, magnetic, and gravitational properties of  $K$ , and would be the symbolic corre-

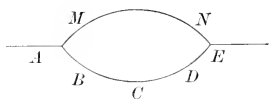


Fig. 28.

spondent consequently of a *threefold manifold*. Inquiry must determine in each case whether the symbolic system chosen is the appropriate one.

Let  $A, B, C, D, E$  be a series of bodies, of which each exhibits a more intense thermal state than that which follows. (Fig. 28.) As far as our experience goes, a body can be transported from the state of  $A$  to that of  $E$  only by way of the states  $B, C, D$  and

the states intermediate to them. There is nothing in the domain of experience to suggest that this could also be effected through a succession of conditions *MN* situate outside of the series *B, C, D*. The assumption of a *simple continuous manifold of thermal states* is sufficient.

It was remarked above that there was an *arbitrary convention* involved in the choice of *volume* as a thermoscopic index. There is a further arbitrary choice involved in the adoption of a thermoscopic *substance*. Yet if the substance selected were universally adopted, the resulting thermometer would substantially accomplish everything that could be demanded of it. The thermometer would be exposed to the greatest possible number of thermal states, established as invariable by cessation of change on the part of the thermometer, and these points of cessation would be distinguished by *marks and names*; such as the freezing-point of mercury, the melting-point of ice, the congealing-point of linseed-oil and aniseed-oil, the melting-point of butter, blood-heat, the boiling-point of water, the boiling-point of mercury, etc. *These marks would then enable us not only to recognise a recurring state of heat, but also to reproduce a state already known to us.* But in accomplishing this, the essential function of the thermometer is achieved.

The inconveniences of such a system, which as a matter of fact long prevailed, would soon be manifest. The more delicate the inquiry, the more fixed points of this sort would be necessary; and ultimately they would not be attainable. Furthermore, the number of the names to be remembered would be annoyingly augmented, and it would be impossible to discover from the character of these names the *order* in which the thermal states under consideration succeeded one another. This order would need to be specially noted in each individual case.

But there exists a system of names which is *at the same time* a system of *ordinal symbols*, permitting of indefinite extension and refinement, viz., numbers. Substituting numbers for names as our designations of thermoscopic marks, the inconveniences in question are eliminated. Numbers may be continued into infinity without effort; between two numbers any number of other numbers may be mechanically interpolated; it is apparent immediately from the very nature of a number between what other numbers it lies. This could not have escaped the notice of the inventors of the early



Fig. 29.

thermoscopes; and the idea was actually applied, though to varying extent and with varying appropriateness.

For the introduction of this more appropriate system, a new convention was necessary,—a convention respecting the *manner* in which the numbers should be *coördinated* with the thermoscopic marks. And here new difficulties arose.

One of the methods proposed consisted in scratching on the capillary tube of the thermoscopic envelope *two* fixed points (the melting-point of ice and the boiling-point of water). The *apparent* voluminal increment of the thermometric substance (neglecting the dilatation of the vessel) was next divided into 100 parts (degrees), and *this* division was then *continued* beyond the boiling and melting-points. By means of these fixed points and the principle of coördination referred to, every number *appeared* to be *univocally* connected with a physically determined thermal state.

But this connection is immediately broken when some other thermoscopic substance or some other enveloping material is chosen. Laying off the volumes of any given substance as abscissas and erecting those of any other in the same thermal states as ordinates, we obtain, according to Dulong and Petit, by joining the extremities of the ordinates, not a straight line, but a *curve*, similar to that pictured in Figure 30, and differing for every two different substances. In point of fact,

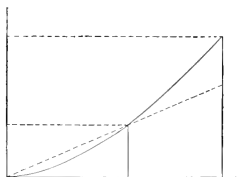


Fig 30.

substances do not expand proportionally to one another when subjected to the same thermal changes, as we have already learned. Hence, on the *same* principle of coördination, sensibly different numbers are assigned to the same thermal states for each and every thermoscopic substance.

Even adopting exclusively mercury as our thermal substance, the expansion of the glass of the containing vessel, which is not a vanishing quantity comparatively, exercises an appreciable influence upon the march of the apparent expansion, and this influence is peculiar to every different kind of glass. Therefore, even though the same principle of coördination be employed, strictly speaking the connection between numbers and thermal states is again peculiar to each thermoscope.

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When attention was directed to the like behavior of gases under the same thermal conditions, the choice of a *gas* as a standard thermoscopic substance was, by reason of this property, regarded



as *less conventional* and as having deeper roots in *Nature*. But while it will appear that this opinion is erroneous, yet there are other reasons which make for this choice, which was a felicitous one, though at the time it was made no one could have been aware of the fact.

One of the greatest advantages that gases offer is their remarkable expansibility and the consequent enhanced sensitiveness of the thermoscopes. Furthermore, the disturbing effect of the variable envelopes is very considerably reduced by this great expansibility. The expansion of mercury is only about seven times as great as that of glass. The expansion of the glass and the variation of this material find, therefore, very perceptible expression in the apparent expansion of the mercury. But the expansion of a gas is 146 times as great as that of glass.<sup>1</sup> The expansion of the glass, therefore, has only a very slight effect upon the apparent expansion of the gas, and a vanishing effect upon the variations in the different kinds of glass. In the case of gas-thermometers, therefore, when the fixed points and the principle of coördination have been determined upon, the connection between the numbers and the thermal states is far exacter than with any other thermoscope. The envelope selected, or more briefly, the individuality of the thermoscope, can have only a very inconsiderable influence upon this relationship; the thermoscopes are rendered in high degree *comparable*,—a point which confirms the critique of Dulong and Petit. We shall in the considerations to follow make tacit reference to an air-thermoscope.

That number which, conformably to any chosen principle of coördination, is *uniquely coördinated with a voluminal indication of the thermoscope, and consequently with a state of heat, is called the temperature of that state*. It will be generally denoted in the following by  $t$ . The temperature-numbers are dependent on the principle of coördination,  $t=f(v)$ , where  $v$  is the thermoscopic volume, and, consequently, for the same state of heat they will vary greatly according to the principle adopted.

It is instructive to note that different principles of coördination actually have been propounded, although only one has proved of actual practical scientific value and hence remained in use. One of these principles may be termed the Galilean. It makes the temperature-numbers proportional to the real or apparent voluminal increments from a definite initial volume  $v_0$ , corresponding to a definite thermal state.

<sup>1</sup>Cf. Pfaundler, *Lehrbuch der Physik*, II., 2. See also *Open Court* for November, 1902, p. 651.

To the volume:  $v_0, v_0(1 + \alpha), v_0(1 + 2\alpha), \dots v_0(1 + t\alpha)$ ,  
corresponds

the temperature: 0, 1, 2, . . . .  $t$ ,

For  $\alpha$  here we take the hundredth part of the coefficient of the voluminal increment from the melting-point of ice to the boiling-point of water (viz.,  $\frac{1}{273}$ ), the temperature-number 100 falling to the last-named point. The same principle admits of extension beyond the boiling and melting points, the temperature-numbers in the latter case being reckoned negatively.

An entirely different principle of coördination is that of Dalton. It is as follows:

To the volume: . . .  $\frac{v_0}{(1.0179)^2}, \frac{v_0}{1.0179}, v_0, v_0 \times 1.0179, v_0 \times (1.0179)^2, \dots$

corresponds

the temperature. . . -20, -10, 0, +10, +20 . . .

If we take with Amontons and Lambert the expansive force of a mass of gas of constant volume as our thermoscopic index, and make the numbers indicative of the temperatures *proportional* to the expansive force of the gas, we shall again have, strictly speaking, a different principle. But owing to the validity of the Law of Boyle and Gay-Lussac within wide limits, and the slight deviation of the coefficient of expansive force from the coefficient of expansion,—facts which at the time this scale was proposed were only imperfectly known,—it happens that the properties of Amontons's scale are not sensibly different from those of Galileo's.

Calling  $p$  the pressure of a mass of gas of constant volume,  $p_0$  the pressure at the melting-point of ice, and  $k$  a constant, Amontons's principle of coördination is expressed by the equation  $t = \frac{k p}{p_0}$ .

A second fundamental point is unnecessary on this scale.<sup>1</sup> Since  $p$  and  $p_0$  depend in the same manner on the thermal states that  $v$  and  $v_0$  do, the new scale has precisely the same properties as the old. For  $p=0, t=0$ . Putting  $k=273$ , the degrees assume their customary magnitude: for the melting-point  $t=273$ , for the boiling-point  $t=373$ . The new scale coincides absolutely with the old scale, if the zero-point be placed on the melting-point, and the temperature-numbers downward be reckoned negatively.

The employment of the air-thermometer involves, whether volumes or pressures be taken as the thermoscopic indices, a *defini-*

<sup>1</sup> See *The Open Court* for November, 1902, p. 647.

*tion of temperature.* Starting from the equations  $p = p_0(1 + at)$ , or  $v = v_0(1 + at)$ , we *arbitrarily* posit, that the temperature  $t$  shall be given by the equation.

$$t = \frac{p - p_0}{a p_0} \text{ or } t = \frac{v - v_0}{a v_0}.$$

Amontons's temperature, which is designated by way of distinction the *absolute temperature*, and denoted by  $T$ , is defined by the equation

$$T = \frac{273p}{p_0};$$

its relation with that first defined is indicated above.

[TO BE CONCLUDED.]

## MITHRAISM AND ITS INFLUENCE UPON CHRISTIANITY.

BY THE EDITOR.

**M**AZDAISM, the religion of Zarathushtra (Zoroaster or Zerdusk), is distinguished by its purity and high moral tone. The word is derived from Mazda, which means wisdom or omniscience, and occurs mainly in connection with Ahura, the Lord. Ahura Mazda (abbreviated by the Greek into Ormuzd) is now commonly translated Lord Omniscient.

The sacred books of Mazdaism, especially the Avesta, breathe the spirit of a lofty monotheism, which in the course of its further development was supplemented by the belief in a divine mediator, Mithra, born of a virgin and destined to be the ruler of the kingdom of God on earth, for the coming of which all good worshippers of Ahura Mazda were praying.

Mazdaism has on several occasions powerfully influenced the religious life of the Western world, first in the days of Cyrus, then in the time when the Apocrypha of the Old Testament were written, furthermore in the beginning of the Christian era when Mithraism became a rival of Christianity, and finally in its sectarian revival as Manicheism, after the suppression of which the very names of Ahura Mazda, of Zarathushtra, and of Mithra were forgotten. Though Mazdaism (with the exception of the small sect of Parsees) has disappeared from the face of the earth, some of its traditions have been preserved in its greatest rival religion, Christianity, and some traces of it are left even in the canonical books of the Old and the New Testaments. Isaiah regards it so much as the religion of his own people that he calls Cyrus, the king of the Persians, the Anointed One (Messiah) of the Lord. God says of Cyrus:

“He is my shepherd and shall perform all my pleasure: even saying to Jerusalem, Thou shalt be rebuilt; and to the temple, Thy foundation shall be laid.”

In the Greek text of Ezra we read that Cyrus had the symbol of Mazdaism, the eternal fire, transferred to the temple of Jerusalem (Septuagint Ezra vi. 24).

In the second book of Maccabees (i. 20) we read that the priests were requested by the King (of the Persians) to search for the holy fire which their fathers had hidden in a dry pit, and they found no fire, but thick water; and he ordered them to dip it out and pour it over the altar and the sacrifice. When they had done so, and when the clouds had dispersed and the sun shone, a great fire was kindled and they marvelled greatly (i. 22), and Nehemiah prayed (i. 24-29) and the King had the place fenced in, and the followers of Nehemiah called the water Nephthar, which is "cleansing."

The Jewish priests were dressed like the Persian priests, in linen garments.

The influence of Persian views in the Apocrypha is universally recognised and in the religious life of the Jewish people it resulted in the formation of sects, especially the Essenes, whose institutions were so similar to the Nazarenes and the Ebionites (the sect of the Poor) that they may have been different names for the same institution.

We know that Jesus came from the ranks of the Nazarenes, for not only is he called a Nazarene himself, but St. Paul, too, is called a ringleader of the Nazarenes.

A trace of Mazdaism left in the canonical Gospels is the story of the Wise Men of the East (Matthew ii.) who, guided by a star, came to Bethlehem offering gold, frankincense, and myrrh to the new-born king of the Jews. One of the Apocryphal Gospels, viz., "the Arabic Gospel of the Infancy," directly mentions that they came in obedience to a prophecy of Zoroaster, the venerable founder of Mazdaism;<sup>1</sup> and the names of the Magi still in use in the Roman Catholic calendar of saints are Caspar, which means "Splendor," Melchior, meaning "Light of Melech,"<sup>2</sup> and Balthazar, which means "he whom Baal protects."<sup>3</sup>

The pagan significance of the names has been lost sight of in later centuries; otherwise, the Magi would not have proved worthy of canonisation.

Many rabbis adopted the Mazdean invocation for the coming of God's kingdom, and Jesus deemed it worthy to be incorporated as the prayer which he taught to his disciples.

<sup>1</sup> See The Apocryphal Gospels translated by B. Harris (London: Norgate, 1874) p. 176.

<sup>2</sup> Another form of *Moloch*, which means "King."

<sup>3</sup> *Baal*, or Babylonian, *Bel* means "Lord."

The similarity of the Lord's Supper to the sacrament of Mithra was so striking that Justinus Martyr speaks of it as "the same ritual," which had been introduced among the pagans by the intrigues of Satan.

Man is more conservative in religious practices than in the common walks of life. So the Jewish priests even to-day use flint knives in preference to steel blades, and unleavened bread has remained in many instances the sacramental food of various rituals. We may assume that the Persian sacrament consisted of wafers which were called in Persian *myasda* (or in Hebrew *mazza*) and it seems probable that the very name of the Christian mass is nothing but a corruption of the Persian word that denoted the bread used in this mystical ceremony.

The last flickering up of the flame of Mazdaism under its own name is the revival of Manicheism—the religion of Mani, which spread from Persia and Mesopotamia over the whole East and penetrated even the Roman empire, where it gained its most numerous adherents in North Africa. The Manichees assert that the struggle between the two empires, that of light and that of darkness, is still going on, and that the duality of spirit and body enjoins a rigorous asceticism. They accepted Christ, but rejected the Church as a worldly institution. The main danger of Manicheism to Christianity lay in the moral earnestness of the Manichean movement, and yet it was the rigidity of its ethics that rendered it unacceptable as a universal religion. Manicheism was naturally limited to small numbers, and so it could easily be crushed. Pope Leo the Great took energetic State measures against it; Valentinian III. punished Manicheans with banishment and Justinian with death. In Africa the Vandals made an end of Manicheism.

Some Church historians, who see a doctrinary kinship in all heresies, regard them as the forerunners of the Albigenses, the Waldenses, the Hussites, and finally even the Reformers. And in a certain sense this may be granted. Though the Reformers, far from favoring asceticism, abolished monastic institutions, we cannot deny that Luther's conception of Satan (as represented in the famous battle-hymn of the Reformation) reminds one very much of Ahriman, the fiend, the enemy of God and man, and thus we may say that with certain modifications Luther may be regarded as Zarahushtia *redivivus*.

## JUDAISM AND CHRISTIANITY.

BY H. W. THOMAS.

**H**ISTORY and science have to deal with what has been, and is. Accepting the existential, philosophy and science essay the larger task of analysis and classification; of finding the nature and order of things; their places and relations, meanings, uses, and values.

The magnitude of such a task is immeasurable. Not strange that it has filled all the long past; nor strange that it has grown larger with each age, and never seemed so almost bewilderingly great as in these wonderful years of the present.

This does not mean that little if any progress has been made; the gains have been very great; but at each forward step the vision has expanded, the fields have grown larger, and are now seen as reaching on and out into the illimitable.

Such is man amidst his mighty surroundings. Man as a self-conscious being with improvable powers, conditioned in and related to the eternal order of the rational and the good. And what we call world-progress is the growth or progressive becoming of man in his power to know, to do, and to be.

In this slow process, the errors, mistakes, and prejudices have been many, and had to be eliminated; but beyond these has always been the reality of the real. The errors, mistakes of mankind have been about something, not about nothing. Beyond astrology were the stars; back of alchemy were the elements and forces of nature. Traditions, legends, and myths have a meaning; they did not rise up out of nothing. Cosmology and ontology are greater than mythology; the real transcends the imaginary; the laws of gravity and motion are greater than the mighty animals that stood beneath the earth.

Reason has come along and corrected the errors of the senses, and in this has immensely enlarged the vision of the soul. Science

has revealed the reign of law and the order of the heavens. The higher natural has taken the place of the old law-violating miraculous.

In all this, it would not be possible to write a history or a philosophy of our world and leave out the religious; and for the reason that religion has filled so large a place in the thinking and doing of mankind. In all lands and ages along with homes and industries, schools of learning and art and the temples of justice, are the temples of worship. Governments and religions, histories, literatures, and Bibles have moved along together; and philosophy has found the paths of thought leading on and up to the great questions of the soul and God. It is not possible to have a great literature or philosophy wholly apart from the thoughts and emotions of religion.

In the farther East, the Brahman, the Buddhist, and the Confucian religions were powerful factors in the civilisations of those lands. In the middle East, Judaism rose up and stood alone in its sublime conceptions of one God, of a religion of righteousness, and the brotherhood of man. Not perfect were these conceptions at first; but the germs were there, and the great prophets went forward and ethicised—put moral qualities into the very heart of the monotheistic idea. God was called the “Holy One of Israel”; “Ye shall be holy: for I the Lord your God am holy.”

These were the central ideas of Judaism; hence its power to make men holy; and in this is the explanation of the persistent life and power of this most wonderful of all the peoples of the world. And it was most natural that from such a race and religion the Christ should be born. And natural too, that Christianity should fill so large a place in the history of the later civilisations of Europe and America.

If what has been, had not been, we do not know what might have been; but we do know that Christianity has moved along as a mighty power in the affairs of our world. Romanism and the Holy Roman Empire; the long wars of the Crusades; the revival of learning, the Reformation of the sixteenth century; the growth of liberty and the rise of constitutional monarchies and republics, are epochs, events, and phases of our so-called Christian civilisation.

That Judaism was not perfect; and that in many things Christianity has been not only very imperfect, but in spirit and deed very unchristian, are not—cannot be denied. But the facts also remain, that these two forms of religion have lived and wrought



mightily through the long centuries of ancient and modern history. They have appealed to the deepest centres of thought and feeling; to the spirit-side of man and the universe.

Religion is not an anachronism; is not a survival of the slaveries and superstitious fears of a dark past; though it has been affected by them, and has not yet come into the full freedom and power of the divine truth and life. The foundations of religion are in the nature and needs of man and the answerings of his vast environments. In the last analysis it is the Soul and God; the life of God in the soul of man.

It is only in very recent years that the study of comparative religions has come into the foreground of thought; and the study of religion in the light of the universal has hardly yet found a place in the public mind. Ignorance and prejudice have held the field, have blinded and blocked the paths of progress. Great nations and peoples have been looked upon as pagans, and their religion denounced as little if any better than "devil-worship."

And not only this; Judaism and Christianity have stood apart as strangers, and often been arrayed one against the other as enemies. History has no sadder pages than the persecution of the Jews by Christians; and even to-day, outside of England and America, this ancient noble people must suffer the insults of race and religious prejudices and in many places are denied the common rights of citizenship. And this in spite of the fact that in all countries the Jews are generally among the most industrious, intelligent, economic, and law-abiding of all the people.

A most opportune, needed, and helpful work has just appeared from the pen of Harris Weinstock, entitled *Jesus the Jew*.<sup>1</sup>

The wonder is that this book, or something like it, was so slow and late in coming; that some one had not taken up the subject before. The explanation is that the time had not fully come. Many must "run to and fro and knowledge be increased" to prepare the way; the old ignorance and prejudices must be at least partially overcome by the growth of a larger intelligence and a more generous catholicity.

All thoughtful minds will rejoice that the better day has dawned; that the great subject of religion is finding its place and interpretation in the light of the universal. It means the beginning at least in our day of the end of doubt and negation; of the too common negative attitude of indifference or denial of the Divine

<sup>1</sup> *Jesus the Jew, and Other Addresses.* By Harris Weinstock. Funk & Wagnalls Company, New York and London. Price, \$1.

in the life of man. It means that henceforth religion will be looked upon, not from the narrow standpoint of names and isms and sectarian dogmas, but from the larger vision and thought of the real; of the soul and God; of brotherhood and righteousness.

And it means, thank God, that these two great religions, Judaism and Christianity—mother and daughter—shall be seen as one in spirit, and in the great law and life of love shall dwell together as one family, as brothers and sisters in the one Father's home for all the children of earth.

Our author emphasises the fact that Jesus was a Jew; that he observed the ceremonial forms of worship, and taught the great spiritual truths of One God, of righteousness and brotherhood, holiness of heart and life, and that he lived and died in the Jewish Church.

The place and value of Paul are also fully recognised; his vision of the spiritual as the essential, and the emancipation of religion from the burdens of the ceremonial, and in this way making it universal. But for this larger interpretation and the inspirations of a new life, Christianity, or Christianised Judaism, could not have gone forth as a vast and world-conquering power; and in this sense Paul gave shaping and potency, and by removing the narrowing limitations universalised religion.

And, it may be said, but for the accretions of the Latin theology that made the larger acceptance of Christianity impossible to Judaism, there would have been no ground for the wide separation between the two. But with these accretions, and the union of Church and State, the fall of the Empire and the decline of learning, came the dark night of ignorance, superstition, and persecution.

When the scattered Jews were banished from their homes, their property confiscated, every civil right denied and the most dreadful cruelties inflicted in the name of Christianity, it was only natural that they should hate the very name Christianity. And coming ages will more and more admire the unconquerable courage and fidelity of this suffering people, and gladly confess their great service to humanity in standing for the religion of monotheism and righteousness.

The accretions of the old Latin orthodoxy are dropping out of present beliefs. This is no longer a *lost* world to be redeemed in some substitutional way; but an imperfect world in the process of higher becoming. Man is at centre, Divine; is to be filled with God, as God was in the Christ. Our age is returning to the earlier

Greek interpretation; and there is the glad coincidence that the Jews are coming to see Christianity in this its real meaning; and that progressive Judaism and the new theology are finding they are substantially at one on this common ground, and hence are joyfully worshipping together as occasion may offer.

This does not mean that Judaism will cease to have its temples and special forms of worship, nor that Christianity will be Judaised. It means that they will be more and more one in the great law and life of love and in the larger faith and fact of the life of God in the soul of man as the one and only real religion.

It is of interest to note that the author is a layman, a business man, and not a Rabbi. It means that the people are beginning to think for themselves, and that the preachers must go forward with the growth of truth, or be left behind. Mr. Weinstock discusses the questions of present practical interest, such as: "What is the modern Jewish idea of Jesus? Do the Jews look forward to the coming of a Messiah? Do they continue to look upon themselves as God's chosen people? Does the modern Jew approve of inter-marriage?" He makes no pretention to great learning, but it is apparent that he is easily at home in the wide field over which he travels. His vision is large and clear and his spirit most reverent and beautiful.

I most earnestly wish that this timely and helpful book could be read by every Jewish Rabbi and Christian preacher in this land, and by the people in all the Churches. It would be a help to the religious life of all; there would be less prejudice and vastly more love.

## THE WATER OF LIFE.

BY THE EDITOR.

THE accompanying picture represents a piece of Chinese statuary which was imported to this country by Japanese traders. It was courteously sent me as a present by Mr. Joseph M. Wade, of Boston, Mass., the same gentleman who was recently honored by the Emperor of Japan with the decoration of the "Order of the Double Light Rising Sun," in recognition of the interest he has shown in Japanese art and manufacture. Mr. Wade took special interest in this piece of statuary, because when he saw it in the store, the little Oriental tradesman, who could scarcely speak English, explained to him the meaning of the group by saying: "It is the wise man who tells the youth going to the well to fetch water, that if he will listen to his words he will give him the water of life." Since the little pagan knew nothing of Christ's words addressed to the Samaritan woman at the well, we must assume that the nations of Eastern Asia possess a legend quite similar to our own tradition. Being interested in Oriental lore, Mr. Wade bought the piece and called my attention to this curious coincidence.

The porcelain group before us is indeed interesting on account of the idea incorporated in it; and I see in the sage seated near the well a Taoist philosopher. This is indicated by the garb of the venerable gentleman, which is Chinese in style, but late enough to show the Mongolian queue, which, however, is not visible in the reproduction here given. He is certainly not a Buddhist priest, and the subject of conversation renders it unlikely that we have a Confucianist before us.

Taoism is the oldest religion of China, and it has incorporated into its fabric all kinds of most ancient superstitions, a prominent place among which is held by the idea of the elixir of life. This notion is by no means limited to the Chinese, but may be regarded as an ancient heirloom from prehistoric ages. That the elixir of

life was originally considered as the water of life is more than probable, for we know that the Babylonians too, in their ancient religious poetry, speak not only of the tree of life and the fruits of the tree of life but also of the water of life.<sup>1</sup>

To us of the West, who are accustomed to the sayings of the New Testament, the term "water of life," at once reminds us of Christ, and to find the same or a similar expression used in the in-



"I WILL GIVE THEE WATER OF LIFE."  
(Chinese porcelain.)

terior of China seems to us perplexing; but it is only natural that these thoughts should be preserved and purified, here as well as there, into more or less philosophical or moral ideas. While the original conception of the water of life is to be understood as an actual well that would confer immortality, and while the foun-

<sup>1</sup>These traditions have been discussed in a special article in *The Monist*, Vol. X., Nos. 2 and 3, under the title: "The Food of Life and the Sacrament."

tain of youth, even at the time of the discovery of America, was still believed to be possible in the literal sense of the word, the thought was frequently understood allegorically, and this is obviously the significance in which the term is used in the New Testament. Jesus apparently alludes to the popular notion of the water of life, but he interprets the legend and merely utilises the myth to impress upon his hearer the blessing of his teachings.

The Taoist sage in Mr. Wade's porcelain group exhibits a similar stage in the development of the ancient myth. The Taoist sage is ready to impart to the youth the higher doctrines of a nobler life, and his method of addressing him, if not the same as, is yet analogous to, the words recorded in the Gospel of St. John, iv. 14. While the myths of "the water of life" and also "the elixir of life," "the fountain of youth," etc., both in China and in Europe, may have very easily been derived from one and the same ancient tradition, we need not assume that the artist who fashioned the present group ever heard of the story of Christ and the Samaritan woman. The parallelism, although surprising, is quite natural.

## MISCELLANEOUS.

### DR. RADAU'S CREATION-STORY OF GENESIS.<sup>1</sup>

Dr. Radau has written a stimulating little book. It is also a book which contains much information for the Assyriological specialist; indeed it may be feared that the long lists of divine names given in it with the copious references to cuneiform literature will terrify the "general reader." The latter, however, will find much to interest and instruct him in the main subject-matter of the book.

Briefly put, Dr. Radau's contention is that in the Creation-Story of Genesis I. we have a Hebrew adaptation of the Babylonian story of the Creation which unconsciously approaches very nearly the Sumerian original of the latter by representing the Creation as the result, not of a contest between the powers of light and darkness, but of a natural process of generation and perpetuation. The seven days into which the work of creation is divided he believes to be due to the Biblical writer, who also dealt "critically" with his authority, rejecting whatever in the Babylonian legend was inconsistent with his conceptions whether theological or otherwise. That in one important point the Hebrew and Babylonian stories differ entirely from one another has been recognised by all scholars; while the Babylonian account is polytheistic, the Hebrew is aggressively monotheistic. It is, in fact, the emphatic way in which certain polytheistic aspects of the Babylonian story are negated that seems to me the best proof of the dependence of the one upon the other. The Biblical author must have had the Babylonian version of the story before him when he made the Creator exist from all eternity like *Tehom* or Chaos itself, when *Tehom*, the demon-dragon of Babylonian belief was transformed into merely dead and formless matter, and when, as Dr. Radau points out, the names of the Sun and Moon were avoided in the history of the work of the fourth day on account of their polytheistic associations. *Samas*, *Sin* and *Istar* have become for him the "two great lights" and the "stars" of heaven.

I agree, therefore, with Dr. Radau in believing that the writer of Genesis I. had a Babylonian account of the Creation before him. Whether, however, it is the Assyrianised epic which we have recovered from the library of Nineveh, and which is really a pæan in honor of *Merodach*, is quite another matter. The author of the Epic drew his materials from older compositions, and it may have been one of these that was used by the Hebrew writer. On the other hand, the Creator in the Babylonian story was already *Merodach*; *Ea* of *Eridu* and *El-lil* of *Nippur* had already been dethroned in favor of the younger god of Babylon. Dr. Radau

<sup>1</sup>*The Creation-Story of Genesis I. A Sumerian Theogony and Cosmogony.* By Dr. Hugo Radau. Chicago: The Open Court Publishing Co. 1902. Pages, vi, 70. Price, Boards, 75 cents net (3s. 6d. net).

is clearly right in holding that the creation of the light on the first day in the Biblical narrative is the monotheistic rendering of the birth of Merodach the god of light at the beginning of the creation. But I am not so sure that he is equally right in saying that the creation of light was thus made to antedate that of the sun and moon in order to "make out" the requisite number of seven days. The vegetation which was created on the third day needed light, and the very fact that the creation of light is separated from that of the heavenly luminaries shows that in the author's mind light was independent of either sun or moon. Indeed such a belief would be natural to an Oriental familiar with the afterglow.

There will doubtless be plenty of discussion over the details in Dr. Radau's volume. I do not think, for instance, that the Hebrew word *arets* is used in different senses in Gen. i. 1, 2. The verb in verse two is a pluperfect and the translation is: "Now the earth had been"—not as yet the earth of the present creation, but—" *thohû* and *bohû*," whatever these words mean. Consequently it is not certain that the Tehom or "chaos" and "the breath of Elohim" are convertible. In the words "darkness upon the face of Tehom" we have the Babylonian conception; in the addition, which is a supplement rather than a parallel clause, "the breath of Elohim ever brooding upon the face of the waters"—we must see the Hebrew gloss. The "breath of Elohim" was the vital principle which when combined with the creative voice brought life and order into the world; the darkness, on the contrary, was devoid both of light and of creative power. In the Assyro-Babylonian Epic of the creation the "word" of Merodach creates and destroys; perhaps if we knew more about Babylonian cosmologies we should find that, in some schools at least, the animate creation was believed to have received its life from the inspiration of the divine breath.

Limits of space prevent me from entering into further details, and I can only add that Dr. Radau's book should be read by the theologian as well as by the Assyriologist. Both will find in it food for thought. And to the Assyriologist the pages in it devoted to Sumerian mythology will be especially acceptable.

CAIRO, EGYPT.

A. H. SAYCE.

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### MAURICE MAETERLINCK.

*Le Temple Enseveli*, by Maurice Maeterlinck, contains six essays on the hidden foundations of the Temple of Life. Descending into the heart of existence, he returns to point out the deep meanings hidden in common beliefs, common phrases. Throwing the search-light of his genius on these household words, of which, to paraphrase a famous line, it may be said, "custom makes stale their infinite variety," he flashes through the fog of environment and illumines once more the jewel obscured by its dull and time-worn setting.

The first essay is on that Justice, believed in by most men, but which, apart from the law and order maintaining the equilibrium of the world, conveys to the ordinary mind at best a vague greatness—something which must exist somewhere or somehow, unless all ancient faiths are to fall on the head of the believer. But on closer examination, where can this exterior Justice be found? "Ni la terre, ni le ciel, ni la nature, ni la matière, ni l'éther, ni aucun des forces nous connaissons, hors celles qui sont en nous, ne se préoccupe de justice, n'a la moindre rapport avec notre morale, avec nos pensées, nos intentions;" there is only the relation of cause to effect. The ignorant and unthinking mind may consider the catastrophes of nature—earthquakes, eruptions, and so forth—as the judgments of a ter-



rible, yet just, God : continuing to bring down this idea of deity to its own level, it may still endeavor to see His chastisements in those calamities which touch human life still more nearly, in the mysterious workings of heredity, of disease, or suffering, where the sins of guilty parents are visited on innocent children, where the good suffer equally with the guilty. But a vaster idea of nature, and of divinity in nature, is beginning to dawn on human intelligence, as we realise more and more our own littleness with regard to the great elemental forces which surround us. Blindly—and without any thought of involved responsibility—we sweep a fly off a window, nevertheless we are blind instruments in the fate of that fly : and does the thought never occur, that we, in our turn, may suffer in the power of forces as blind to, and ignorant of, our systems of morality, as we are to that of the fly ?

We shall not therefore find the justice comprehensible to our limited intellects in the vast cycle of creation, in which we human creatures can be compared to the insects which we carelessly crush ; both insect and man may be ascending through life and through death to perfection, but neither can form any conception of the justice involved in this vast evolution. And turning from any conceivable idea of justice in the physical world, Maeterlinck points unerringly to the true centre of human equity—the soul of man.

There may be other systems of justice above and below our comprehension, but this alone concerns our individual and collective life, and it therefore behoves us to make this "Eye of Justice," this "light of the body" increasingly clear-sighted and pure, "Il est diminué de tout ce que nous n'apercevons pas, de tout ce que nous regardons incomplètement, de tout à ce que nous n'interrogeons pas assez profondément" : its point of vantage appears continually changing beneath the lens of our interior clairvoyance, "à mesure que l'intelligence élève et s'éclaire, elle parvient à dominer et éclairer, à transformer nos sentiments et nos instincts ;" and at the same time, is menaced by curious distortion and oblivion, "nous ne croyions pas être injuste—et peut-être n'apercevons-nous à notre droite ou notre gauche, une injustice sans limite, qui couvre les trois quarts de notre vie."

For Maeterlinck would assure us that, not in the world around us, either physical or moral, but at the foundations of the interior life of every soul, is to be found the image of this incorruptible, invisible justice, which we have so long vainly sought in heaven, the universe, and humanity ; and there can be no justice without punishment, as those who have sinned before the tribunal of their own conscience, can very well testify!

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In "L'Évolution du Mystère" Maeterlinck endeavors to arouse us to an increased consciousness of that vast ocean of the unknown engirdling all human existence : its desolate waters stretch out to silent horizons, the human boats rock on its surface ; when the sun shines and the winds blow softly all is forgotten but the beauty and charm of the present ; but suddenly the waves rise, the storm sweeps down on the frail vessels, and the blind unreasoning souls are flung out to battle with the mysterious forces of life, death, and fatality ; what wonder that the wrecks in those waters are many ?

But there is always less terror in realised danger, and Maeterlinck would have us explore this mysterious ocean and awake to the presence of its invisible forces before they engulf us : "C'est la conscience de l'inconnu dans lequel nous vivons, qui confère à notre vie une signification qu'elle n'aurait point, si nous renfermions dans ce que nous savons, ou si nous croyions trop facilement que ce que nous savons est de beaucoup plus important que ce que nous ignorons encore." We

must confront this immense, irresistible, unknowable mystery, which surrounds us as the air we breathe, with sincerity, for it is worthy of a "patient, minute, and calm interrogation," and again Maeterlinck suggests the workings of blind forces, unconscious according to our consciousness, as a factor in our existence and fate : " Il est probable que l'invisible et l'infini interviennent à chaque instant de notre vie, mais à titre d'éléments indifférents, énormes et aveugles, qui passent sur nous, et en nous, nous pénètrent, nous façonnent, et nous animent, sans se douter de notre existence, comme le font l'eau, l'air, le feu et la lumière." In the midst of this impalpable, imponderable mystery is set the soul of man, beset by the problems and terrors of life and of death, surrounded sometimes with shut doors, sometimes with illimitable spaces more terrifying still.

All interpreters of humanity, its philosophers, its poets, and its artists, have endeavored to discover a motive power in this chaos, a dominant idea, frequently as mysterious as the influences it desires to control : the figure of fatality haunts the Greek tragedies; a faith as undefinable as its object, illumines the poems of Dante, the dramas of Calderon. But the goddess of destiny and her attendant fates have flitted like shadows as the will-power of the individual asserts itself more and more, and the old simple faiths have also faded in the twilight of doubt. In this century we witness the "death of the old gods;" shall we see the dawn of greater spiritual light break on the horizon of the future, in the ever-increasing consciousness of the ultimate perfection and divinity of the soul of man, slow—yet attainable through the ages, and ever calling up higher like a bell sounding clear through the fog? The tide of evolution sweeps onward and upward, bearing on its current an infinity of life systems, inconceivable the one to the other, though their workings seem to be inextricably interwoven. May not the blind interventions of these incognisable forces and elements account for much of the inexplicable tragedy of human life? which is thus not alone in its ascent towards divinity.

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We live in a material age, and what Maeterlinck terms "la règne de la matière," is even more dominant in England than elsewhere. It is in the literature and art of a nation that its soul should be reflected, and if we turn to the pictures of the last Royal Academy, or review, mentally, the latest play or novel, what shall we see in the mirror? "De beaux corps...de l'or des pierres, un palais, un grand parc...des ornements et des bijoux bizarres, qui représentent les rêves de la vanité, et formant le gros tas...des bons repas, des tables somptueuses, des appartements magnifiques:" but that inner mystery of things which, to the ancient Greek, was "the beautiful soul in the beautiful body," and of which Shelley sang with such ardent longing, is, alas! seldom to be found in modern English art, drama, or literature; the torch is reversed, the wings of the Psyche are broken! And if this spiritual oblivion is painfully noticeable in English art, and in the upper strata of English society, the same can be said in a greater degree of the mass of the people. As Maeterlinck clearly demonstrates, the condition of the one reacts upon that of the other, "aucune idée ne s'allume sur les sommets, si les inombrables et uniformes petites idées de la plaine n'atteignent un certain niveau." The mental attitude of the uneducated mass creates undoubtedly an atmosphere, hostile or encouraging, which only very powerful intellects can afford to dispense with.

And here Maeterlinck lays his hand on a grave and increasing problem with regard to the laboring classes, a far more difficult problem, in some ways, in Eng-

land, than on the continent, where in many countries, the climate and mode of life offer greater facilities for innocent pleasures.

In spite of the increased rush and hurry of modern life among certain sections of the community, it is nevertheless true that for the people existence is becoming more comfortable and less laborious, "grâce à une égalité moins illusoire, grâce aux machines, à la chimie agricole, à la médecine. . . le travail sera moins âpre, moins incessant, moins matériel, moins tyrannique." The discovery and control of the forces of matter have brought the human race a wider life, greater education, an increased leisure; and the powers contained in this development can be used for evil as well as for good: knowledge is power, and it is in the pleasures of a people that their mental and moral attitude can be ascertained. We approach "la première plaine des loisirs," and how to teach the people to enjoy their newly acquired leisure will be a future question with statesmen; for, as Maeterlinck rightly declares, it is the noble or ignoble use of this very leisure, "qui épuise ou récomforte, dégrade ou ennoblit."

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In "Le Passé," Maeterlinck places the present in a new and consoling attitude to the past, contending that, if the present is a consequence of the past, the past no less depends on the present in the everlasting circle of being. The past assuredly lays its heavy hand on the present, and who amongst us has not felt shamed—terror-stricken—confounded, beneath the touch of those cold ghostly fingers, pointing to that city of the dead, which we hoped lay in oblivion behind us, but which nevertheless is not dead but living! We must retrace our steps: "et selon l'esprit qui les y ramène, les uns en tirent toutes leurs richesses, les autres les y engloutissent."

According to the Eastern doctrine of Karma, the present is but a sequel to the past, "as a man sows, he must reap;" but Maeterlinck, although acquiescing to a certain extent in this inexorable law, contends that the past is in our hands to mould and to fashion as much as the present: for the importance of the past consists not in its exterior events, but in the moral reactions produced by those events. The past of every human soul contains crimes, errors, failures, the outward consequences of which it is impossible to efface, "ils ne sont pas pardonnés au dehors, car peu de choses s'oublient et se pardonnent dans le sphère extérieure," but whatever their effect on our material existence, their effect for good or for evil on our interior life depends on ourselves and our present attitude towards them: "une action malfaisante que nous regardons de plus haut que le lieu où il fut hasardée, est une action qui n'existe plus, que pour nous rendre la descente plus difficile."

For those whose past weighs heavily on their present, who, having by slow and painful degrees, risen to nobler planes of thought, are daily confronted by the consequence of errors and weaknesses, now foreign to their whole nature, this philosophy is the most consoling imaginable. Those sins and mistakes—those dead faiths and dead hatreds—those apparently wasted affections and deceived hopes—which "haunt the darkness of fate" like ghosts, may be transformed at our will from spectres into beneficent spirits, bringing to us with outstretched hands "counsels of perfection," "et au lieu des idées de révolte, de désespoir, de haine, au lieu de châtimens qui dégradent ou qui tuent, elles verseront dans notre cœur des pensées et des peines, qui ennoblissent, purifient, et consolent."

Maeterlinck declares we created our past, by ourselves, and for ourselves, in fact our past is ourselves—a spiritual garment woven in sorrow or joy, in shame or in glory, in misery or abundance, and it depends on the manner of wearing,

whether the tissue is magnificent or mean, brilliant or dull: "il n'y a point de passé vide ou pauvre, il n'y a point d'événements misérables, il n'y a que des événements misérablement accueillis." The same adventure, the same experience, which probes one soul to the depths of its being, revealing possibilities of greatness unknown before, may scarcely stir another, inferior and less sensitive: for again, it is the moral consequence, and not the event, which is of importance. From the heights of a nobler consciousness let us throw the light of the present on the gloom of the past, and thus find in that city of memories treasures of experience and wisdom for the future.

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Although on closer investigation much of what people term good or bad luck, chance, destiny, fate, fortune, etc., is in a measure the result of their own moral tendencies, the sphinx of destiny still crouches at the gates of all life, as apparently inscrutable to-day as it was yesterday, as it will be to-morrow! Nevertheless it is the riddle of the sphinx that the writer of this essay on "La Chance" dares to examine, and he finds the key to the enigma in the soul of man: "il y a en nous, sous notre existence consciente, soumise à la raison et à la volonté, une existence plus profonde, qui plonge d'une part dans un passé que l'histoire n'atteint pas, et de l'autre dans un avenir, que des milliers d'années n'épuisent jamais, . . . c'est dans notre vie inconsciente—énorme—inépuisable—insondable et divine—qu'il faut chercher l'explication de nos chances heureuses, ou contraires." Maeterlinck has thus reached the point to which all the great thinkers of East and West alike attain, that behind the earthly body of man, behind the forces of his material life, behind human intelligence, exists the true individual man, the self, "cognisable only imperfectly through the intellect"; "cet être inconscient vit sur un autre plan et un autre monde que notre intelligence. Il ignore le temps et l'espace, ces deux murailles formidables et illusives. . . . Pour lui, il n'y a ni proximité, ni éloignement, ni passé, ni avenir, ni résistance de la matière. Il sait tout, il peut tout." This spiritual force in man, which Maeterlinck designates as "ce véritable moi," communicates with the intelligence in a greater or lesser degree, subject to no conceivable laws; in some men it is indeed a "buried temple," unknown, undiscovered; in others it is the dominant force of life, permeating all things with its mysterious beauty.

And when those vast inscrutable powers within man are met by equally enormous imponderable forces without, also obscure to human intelligence, and it may be blind to, and unconscious of, our human systems, what we call chance, fate, destiny, luck, may only be the working out of immutable laws above the present conception of human intellect, but with which, what Maeterlinck terms "notre inconscient," or "le véritable moi," is in harmonious unity. "Parcourons donc, sans nous lasser, tous les chemins qui mènent de notre conscience à notre inconscience, "à mesure que nous avançons, nous découvrons que beaucoup des forces qui nous dominaient, et nous émerveillaient, ne sont que des portions mal connues de notre propre puissance;" and in setting our will and our intellect steadfastly towards the development of those delicate, intangible, undefinable, yet vast spiritual forces existing within us, we are only pursuing the path followed by the initiates of the oldest religions of the world. The inscription on the Temple of Delphi was "Know thyself and thou wilt know the universe and the gods!"

\* \* \*

In his essay on "L'Avenir," Maeterlinck reminds us that in ancient days the science of the future made part of the public and religious life of nations. We

have but to recall the Hebrew prophets, the Chaldean astrologers, the Greek pythonesses, the Roman sibyls, with their prophesies, their interpretations of dreams and of planetary influences, their divinations and auguries, to understand how intimately the future was connected with the present, in the life of ancient civilisations.

But in these days the present and the past are sufficient for most people: "absorbés par ce qui est, ou ce qui fut, nous n'avons à peu près renoncé à interroger ce qui pourrait être, ou ce qui sera." Nevertheless this venerable science still exists, though fallen into disrepute, and practised for the most part by ignorant and untrained practitioners. But, "s'il ne faut admettre aveuglément aucun miracle, il est pire d'aveuglément en rire," and M. Maeterlinck gives us an interesting account of the results of his researches among the astrologers, the palmists, the somnambulists, the clairvoyants, the mediums, who crowd the obscure quarters of Paris. He tells us that, in spite of much quackery and cheating, he yet had the opportunity of studying phenomena, at once curious and incontestable, and that these phenomena, although they do not solve the question, whether the human mind can or cannot under certain conditions probe the future, may, in their more conscious development, throw strange lights on the inner life of the soul and its mysterious spiritual forces. In fact Maeterlinck considers that clairvoyant intuition may reach, and does even now attain, a certain connection with "ce véritable Moi, l'être inconscient, le temple enseveli," translating, through a more delicate medium, the latent knowledge and comprehension of the subconscious self, which may be unable to reveal this knowledge through the coarser organisation of its own material principles.

The present writer once visited a *clairvoyante* of remarkable gifts, who was consciously endeavoring to develop her powers for the help of her fellow-men; this *clairvoyante* translated into words the highest aspirations of her visitor, pointing out a new and loftier road than that as yet traversed, and to the slow development of powers as yet dimly guessed at; according to M. Maeterlinck's hypotheses she was simply revealing, by her clairvoyant faculty, the latent knowledge of the subconscious self of the other soul, with which her greater sensitiveness had established a communication.

"En serait-il ainsi de toutes les predictions? Que chacun accepte la réponse ou l'hypothèse que lui suggère sa propre expérience."

It does not appear to make much material difference whether the clairvoyant faculty reflects or translates its own subconscious intuition or that of another soul: the fact remains that there is undoubtedly a remarkable development of these psychic powers in the present century, and it is presumable that in the future they will become a power for good or for evil, which will have to be reckoned with.

M. SYLVESTRE.

## ETHICAL IDEAS OF JAPANESE GIRLS.

### INTERESTING INQUIRIES IN OSAKA.

(From *The Japan Times*.)

Mr. Shimizutani, Director of the Osaka Girls' High School, has brought together some interesting facts bearing upon the trend of the ethical ideas held by schoolgirls ranging from twelve to sixteen. Certain queries were formulated to elicit replies from the girls. These were eleven in all, some of them touching the following points: (1) The most womanly virtue and its reverse; (2) the greatest

merit in women and its reverse : (3) the most fortunate situation for women and the reverse ; (4) the most praiseworthy act of woman and its reverse, and so on.

To the query, what constitutes the most womanly virtue? the first-year girls and the fourth, that is the graduating class, made the following replies, given in percentage :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Chastity .....	18.0	63.8	36.5
Manners.....	32.0	16.7	21.0
Obedience .....	9.0	7.6	17.0
Thrift .....	31.0	4.5	13.0
Benevolence .....	1.6	1.4	2.9
Sundry and unknown .....	9.4	6.0	9.6

The most unwomanly virtue was voted on as follows :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Unchastity.....	15.5	48.5	25.2
Jealousy .....	17.2	23.5	24.6
Rude behavior .....	25.4	10.3	15.2
Arrogance .....	5.7	10.3	10.0
Talkativeness .....	10.0	4.7	8.5
Sundry and unknown .....	37.2	23.7	16.5

The most notable merit in woman's character elicited the following figures :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Faithfulness .....	42.6	51.5	41.0
Carefulness .....	7.5	31.2	22.5
Benevolence .....	4.1	12.1	11.5
Grace .....	13.1	1.5	6.6
Household management.....	9.8	3.0	6.8
Sundry and unknown .....	22.9	10.7	22.6

As to the greatest defect of a woman's character the voting was :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Jealousy .....	16.4	28.8	22.1
Narrow-mindedness .....	6.5	21.2	21.0
Physical weakness.....	15.6	19.7	18.2
Talkativeness .....	10.4	9.1	7.6
Sundry and unknown .....	53.1	31.2	31.1

The query "What profession is most suited to woman?" evoked replies as follows :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Sewing .....	50.0	12.2	36.6
Household management.....	18.9	40.9	34.8
Sick nursing .....	4.1	24.2	11.4
Child nursing .....	5.7	10.6	5.3
Sundry and unknown .....	41.3	14.1	12.1

Women are believed to be placed in the most fortunate position when they are under any of the following conditions, according to the Osaka girls :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Happy home life .....	13.9	45.5	28.7
Literary attainments.....	25.4	15.7	18.0
Happy marriage.....	18.9	4.5	11.0
Good children.....	4.9	18.2	9.0
Longevity of parents.....	9.8	1.5	5.9
Sundry .....	27.1	14.6	27.4

The query as to the most praiseworthy act gave the following results :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Loyalty to sovereign and parents.....	32.8	36.4	36.6
Patriotism .....	13.1	21.2	15.7
Benevolence .....	5.7	7.6	10.0
Modesty .....	12.3	3.0	8.0
Public usefulness.....	0.8	4.5	4.0
Sundry .....	25.3	28.3	25.7

Lastly, we come to religious ideas, and as to these the girls gave interesting replies. First, as to their beliefs :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Buddhism.....	56.0	25.0	44.5
Shintoism .....	2.6	21.9	7.4
Christianity .....	2.6	9.4	6.5
No religion .....	2.6	11.0	8.0
Unknown.....	36.2	32.7	33.6

The query "What becomes of one after one dies?" elicited these replies :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
We die with the body .....	16.4	31.30	24.9
We go to heaven .....	31.0	20.30	25.2
We undergo transmigration.....	13.8	9.41	3.8
We remain somewhere.....	16.4	21.90	19.8
We remain at home or in the graveyard.....	12.1	1.60	6.7
Sundry .....	10.3	34.49	9.6

The last query was this, "Is deity omnipotent?" and the replies were as follows :

	FIRST YEAR.	FOURTH YEAR.	AVERAGE OF FOUR CLASSES.
Omnipotent.....	75.8	73.4	74.0
Not omnipotent .....	16.4	25.0	20.8
Unknown .....	7.8	1.6	5.2

It will be seen from the above how far the old ideas of loyalty and obedience still hold in the minds of Japanese girls.

## THE LAY CHURCH.

*To the Editor of The Open Court:*

I am greatly interested in your suggestion in the January *Open Court* for the "Foundation of a Lay Church." It seems to me that now is the time for

something to be done, in the way of missionary effort, for the thinkers. There are a great many men and women who bear the reputation of being irreligious, simply on account of scrupulous intellectual honesty. They do not attend church and are in danger of being entirely lost to religion. At the bottom man is a religious being, and the intellectual are not less religious than the ignorant. The ignorant and vicious classes have their missionaries, their mission halls and their "Gospel Meetings," and a great many Christian people are nobly devoting themselves, in increasing numbers, to the study of the problems which these classes present. But the thinkers, those who *seem* to repudiate religion, or repudiate the point of view of the "orthodox" Churches in whole or in part, are the subjects of no organised special effort at clarifying the religious problem. Here is a great field, demanding real piety and trained intellect.

Since you have originated the idea, the credit of it belongs, of course, to you. The work begun by the Parliament of Religions ought not to stop. Cannot some sort of systematised effort be set on foot? I would like to see at least one Lay Church established in every large city of the country. I doubt if anything can be done in the rural districts, at least, for a long time, but if the movement is set on foot in the centers of population, the thought will get into the air, and cannot but be beneficial to all who are interested in the betterment of the people. No higher theme than Religion can engage human thought, and I find, in my pastoral works, a great many men who never go to church, and yet are guided to some extent by religious ideas. And it is a mistake to assume that only the "cultured" members of society think profoundly on these themes. I have seen evidences of real interest in high matters among rough laboring men. The refusal of a worker in a lumbering camp to accept what is fondly called "the plan of salvation" is not always due to depravity of heart but often to a partially awakened intellect.

The foundation of lay churches will in my opinion not only serve the needs of those who are dissatisfied with religion and will quicken their interest in the deepest problems of life, but will also prove beneficial to the churches themselves.

OLIVER H. P. SMITH.

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### TOLSTOY'S NAME.

*To the Editor of The Open Court:*

I have read Mr. Aylmer Maude's admirable criticism on Frau Seuron and Mrs. Evans with interest and appreciation. He shows himself to be animated by the genuine love of Truth—fair and impartial—just as I should have expected from him.

He makes one statement, however, which is not strictly accurate. In the first paragraph he asserts that the spelling Tolstoi is wrong. "Wrong" is not the appropriate adjective. The last letter of the novelist's name in Russian is a "soft semi-vowel" forming a diphthong with the vowel which precedes it: transliterated into English it is fairly represented by *i* or *y* or *ï*. The *ï* with the diæresis most nearly corresponds with *i s kratkoï* as it is called in Russian; you find the same in *troïka*, and several other words that have been anglicised. As the public of France and England and America had become familiarised with the perfectly correct form Tolstoi, it seems to me unfortunate to have introduced the *y*, which will not be elsewhere used to represent the same Russian letter. The rules for transliteration recommended by the American Library Association are a safe guide.

NATHAN HASKELL DOLE.



## THE MANY BUDDHAS.

*To the Editor of The Open Court:*

I beg leave to crave indulgence of space in *The Open Court* for a few brief Notes *in re* "Buddha" and apropos of your very interesting article in your September issue called "Comments on the Story of Amitâbha."

In six instances, on p. 565, on pp. 566, 573, and 574-575 the Manuchi Buddha (human or earth-born) Sakya is termed "Buddha" without any qualifying title to distinguish him from the other Buddhas. This is common to most of the books on Buddhism, by missionaries and some others, in writing about the Buddhism of Ceylon, Burma, Siam, etc., where "Gautama" (variously spelled "Godama," "Gotama," etc.) is the usual designation. In Japan this name is not in general use, Sakya (or Shaka) Muni—the Sakya Sage—being the current style. What I venture to presume to call special attention to is, that in the present state of information made accessible to the world's general reading public now, the perpetuation of this use of the term is obsolete and inaccurate, as well as misleading. There are other Buddhas; some sects have lists of hundreds; and in the diagrams—or charts—called Mandala, these, together with the attendant Bodhisattvas, are arranged systematically. Sakya Gautama Buddha is placed in the North, Amitâbha Buddha in the West, as Lord of his paradise in that quarter; other Buddhas in the several directions, including the zenith and the nadir. In the Shingon system Maha Vairochana is the central Buddha, as the personification of the essential Bodhi and of absolute purity. Sakya is revered, but not worshipped, or invoked as a saving help, as Amitâbha is, and certain Bodhisattvas, e. g., Avalokitesvara, the Chinese (so called) Goddess of Mercy. Sakya is considered the Preacher of the Buddhist Gospel, who voiced the doctrines, and thus most of the material of the Sutra Pitaka of the Tri-Pitaka (three baskets—or collections—of sacred texts) is attributed to him.

The Taima Mandala—regarding which I wrote to you some time ago—is the illustration of Sakya's sermon on Amitâbha and the Western Paradise, preached to Queen Vaidehik (after the assassination of the king at Rajagriha) when Sakya was more than seventy years of age. This Sutra is No. 198 of the Catalogue of Tripitaka, and the title is, in Sanskrit, Amitayur dhyana Sutra,—in Japanese, Kwan mu ryo-jiu Kyo, and is one of the series of Sukavati—Paradise—texts.

The picture reproduced on p. 565 as "A Typical Representation of the Mahâyâna Faith" appears to me to be a not very ancient work, and bears evidence of being either a copy or an original by an artist who in either case has not followed the strict rules of the true "Butzu-gwa" canon. It is undoubtedly intended to represent Gautama Sakya Muni, as the Bodhisattvas and disciples are those usually grouped with him, and with him only, and not with other Buddhas; Amitayus and Sakyo usually being grouped thus:

AMITAYUS (Amida)

Mahasthana prapta (Seishi)                      Avalokitesvara (Kwan ze on)

SAKYA (Gautama)

Samanta bhadra (Eugen)                      Mandjusri (Monjiu)

The left hand of Sakyo is hidden by Manjusri; but the Mudra (Sign Manual or Seal) of the right hand fingers indicates the same sign as that of the ninth and last of the three times three series of signs and postures of Amitayus. This picture was probably intended to indicate Sakya preaching the Mahâyâna doctrine of sal-

vation and spiritual rebirth—not reincarnation (of Theosophists or others)—by the saving power of Amitayusu, as written in the Sukhavati vyuha class of Sutra.

Buddha is revered by all sects; but the Shin Shiu, who call themselves "The true Sect," do not enshrine his image or picture. Effigies and pictures of their founder, a Japanese courtier's son and son-in-law, receive the most respectful attention; and the Mon-shiu or Pope is treated like the Lama Grand Abbot as a living Buddha, not bound to observe any of the strict ascetic rules of Sakyas' Buddhist discipline, etc.

The other sects call the Shin Shiu by the original title of Sin Jo-do (New Pure Land); the Chinese original ideograph for New has in recent years been replaced by the sect by that for Shin translating true.

As a contrast, the Hokke (Saddharma pundarika sect, which claims as many adherents as the Shin Shiu) do not recognise Amitayus, and revile the idolatry of the Shin and other sects; at the same time they have superstitious practices which the Shin has not, which latter does not offer any consolation or help in mundane affairs.

The Jodo make Amida the chief, but not the sole, object of worship.

The Zen-shiu (Sanskrit Dhyana) quietist contemplative sects place Sakya and the trinity or five figures of your illustration in the highest place.

The Tendai and Shingon recognise Amida; but there are others as well as Sakya which share the honors, Maha Vairochana being the Supreme Buddha. Fudo, the Buddhist policeman (probably a composite personification of a group of Hindu old deities), represented by Akchobhya, etc. The ruddy-faced personification of Trichna, pure love, in Japan called Aizen Mio O, is an alter ego of the terrible Fudo; and they are not Buddhas: A bodhisattvas Kshiti gharba (Japanese Jizo) earth repository is to be seen at cemeteries, with shaven pate in the garb of a Bonze, holding a pilgrim's staff and the Jewel emblem of the soul, or human spirit.

The numerous groups of which the principal Buddhas are centres would occupy too much space to attempt to describe here and now.

C. PFOUNDERS.

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### BOOK NOTICES.

ESSAYS IN MEDICAL SOCIOLOGY. By *Elizabeth Blackwell*, M. D. London: Ernest Bell, York St., Covent Garden. 1902. Pages, Vol. I., 309; Vol. II., 251.

Dr. Elizabeth Blackwell has gathered together in the present work the various scattered essays and addresses which she has contributed in past years to the ethics of medicine and hygiene. There is a good deal of sound common sense and noble thought embodied in these papers, which deal largely with the problems of human sexuality, in their individual, sociological, and legislative aspect. The point of view of the author is that of the Christian physiologist, which holds that there is a wise and beneficent purpose in the human structure and "seeks to find out the laws and methods of action by means of which human function may accomplish its highest use." We concur with the author in the expression of the hope that her literary labors "may prove helpful to the younger generation of workers," with whom she is in hearty sympathy.

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A *Syllabus of Lectures on the History of Education* has been compiled by Ellwood P. Cubberley, Associate Professor of Education in the Leland Stanford Junior University, and is with its exhaustive bibliographies and statistics an im-

portant work of reference. The illustrations, of which there are a goodly number and which are a real adornment to the book, have been culled from the pictorial art and literature of both ancient and modern times. The maps exhibit the geographical and historical conditions of educational development and constitute a very helpful feature of the work, as do likewise the graphical charts. The titles of some of the maps are as follows: "Europe in the Fourth Century," "Europe in the Time of Charlemagne," "A Mediæval Map of the World," "Church Centers in the Time of Charlemagne," "The Mediæval University Towns," "Result of the Protestant Revolt," and "The Spread of Jesuit Schools in German Territory by the Year 1725." Large pictorial collections representing the history of the national civilisation and literature have been published in Germany, and a work of the same character containing such illustrated material as is here scantily given by Professor Cubberley would be very desirable. But even the little that our author has offered is inspiring, and it only remains for us to say that in the skeleton of subjects for study, dates, etc., the present work supplies with its complete bibliographies the fullest materials for the study of the history of education. (New York: The Macmillan Company. Pages, xii, 302. Price, \$2.25.)

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The University Library of Princeton, N. J. announces the publication of a new edition and translation of the Berlin Manuscript of *The Chronicle of King Theodore of Abyssinia* by Enno Littmann, Ph. D. Part I., containing the Amharic Text, is now ready; Part II. will give an English translation and commentary. The name of King Theodore of Abyssinia became known to the world chiefly through his conflict with England in the year 1868. When, in consequence of this conflict, he had to face the alternatives of submission or death, he did not hesitate to choose the latter; the history of this English expedition to Abyssinia is well known. The manuscript is an Amharic version of the history of Abyssinia previous to the reign of Theodore, from the beginning of the nineteenth century. It is a valuable document for the history of Abyssinia, and of great importance for the study of the Amharic language, being one of the very few pieces of natural Amharic prose known, and one of the earliest documents of the modern Amharic, which is now rapidly differentiating its literature from the older Ethiopic. (New York: Charles Scribner's Sons. Pages, 57. Price, paper, \$1.00.)

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A translation of the second edition of Dr. Arthur Pfungst's biographical sketch of *A German Buddhist* (Oberpräsidialrat Theodor Schultze) has just reached our table. The success of the first edition is itself sufficient evidence of the timeliness of Dr. Pfungst's little book. Oberpräsidialrat Theodor Schultze was a unique character, and standing aloof from the quarrels of the day he solved decisively, Dr. Pfungst thinks, the religious problems which have grown out of the relations of the Orient and the Occident to-day. (London: Luzac & Co. 1902. Pages, 79. Price, 2 shillings net.)

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One of the decennial publications of the University of Chicago, issued in commemoration of the first ten years of the University's existence, is *The Life and Repentance of Marie Magdalene*, by Lewis Wager, a morality play of 1566-1567. The play is edited with introduction, notes, and glossary by Frederic Ives Carpenter of the Department of English, and presents one of the few sixteenth century English dramas still inaccessible in modern type. It has a purely historical interest. (Chicago: The University of Chicago Press. 1902. Pages, xxxv, 91.)

Longmans, Green & Co. publish in two elegant volumes *The Life and Letters of the Right Honourable Friedrich Max Müller*. In view of the fact that Prof. Max Müller himself wrote two delightful works on his own life, viz., his *Autobiography* and his *Auld Lang Syne*, it would naturally seem that the present two volumes are redundant. But the present work has been published with a view of showing "the inmost character of the real man," and is made up of the letters of Max Müller and those of his friends arranged in chronological order and interspersed with explanatory comments. The whole thus furnishes a continuous record of the career of this great philological writer and a pleasing and enlightened series of comments upon contemporary history. The work of editing the book was done by Max Müller's wife. (Vol. I., pp. xiii, 534; Vol. II., pp. ix, 521. Price, 2 Vols., \$6.00 net.)

Selections from Shelley, Tennyson, Longfellow, Mrs. Hemans, Hogg, Helen Hunt Jackson, George Macdonald, and numerous other living writers, together with brief biographies of great artists and lessons on nature study, constitute the material by means of which H. Avis Perdue and Miss Sarah E. Griswold, of the Chicago Normal School, have endeavored to teach language and correct expression to young children. The book, which is entitled *Language Through Nature, Literature, and Art*, is an attractive one, printed in large type, and adequately illustrated. It is mainly in external features and in the selection of its material that the work differs from those now generally in vogue. (Chicago, New York, and London: Rand, McNally & Co. 1902. Pages, 238.)

Jacob A. Riis has supplied an introduction to a little book called *Constructive and Preventive Philanthropy*, by Joseph Lee, Vice-President of the Massachusetts Civic League. "Mr. Lee has written a good and useful book," says Mr. Riis, "though not half as good and useful as he is himself; and he has shown the faith that is in him by prophesying that school and playground will yet be drawn together." The author deals in an engaging and practical way with the problems involved in the moral and economic upbuilding of the submerged strata of human society, devoting his main attention to children. (New York: The Macmillan Co. 1902. Pages, x, 242. Price, \$1.00 net.)

Watts & Co. issue a cheap edition of the translation of Dr. Ernst Haeckel's very successful and widely circulated work, *The Riddle of the Universe* (price, 6d.). We are also glad to note that the same firm have published an English edition of Mr. Mangasarian's *Catechism*, which was originally issued for the Independent Religious Society of Chicago by The Open Court Publishing Company.

The Child of Light Publishing Company issue a useful little book on *Child Culture*, by Newton N. Riddell. Its method of dealing with children is mainly that of mental suggestion. While we cannot agree with the author in all the positions that he takes, many parents and teachers will find valuable hints in this booklet. (Pages, 129. Price, 65 cents.)

The November issue of *The Bibelet* is *The New Mysticism*, by Ernest Rhys, an appreciation of Fiona Macleod, the greatest exponent of the Celtic movement. The December number is: *Ballads and Lyrics*, by William Makepeace Thackeray. Price, 5 cents each.

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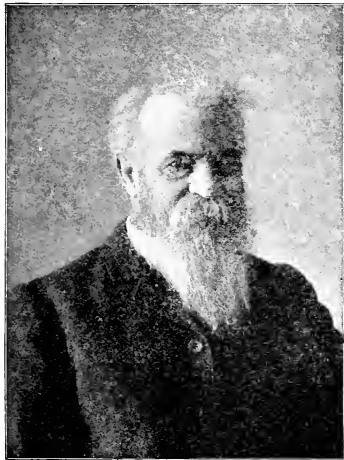
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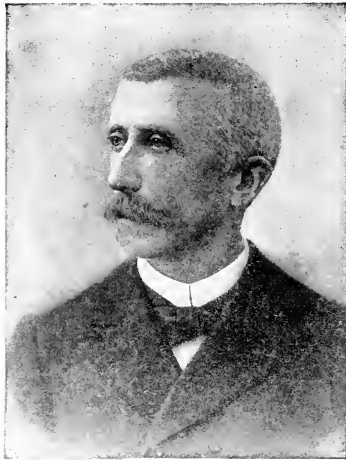
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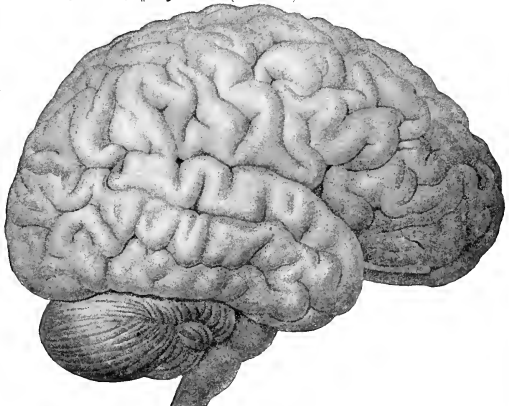
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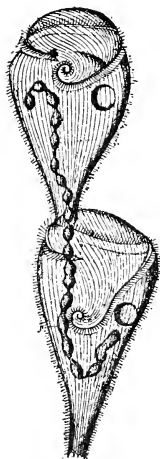
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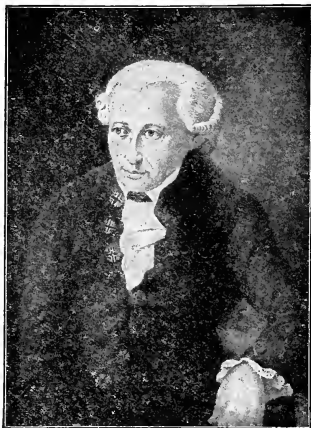
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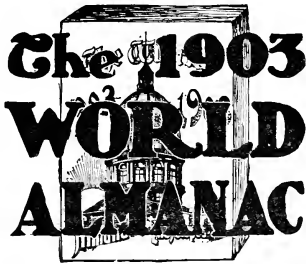
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