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SIBYL: A FANTASY.

By Henry Pride.

They stood beneath an oak-tree spreading wide:
Her hands in his, downcast her brimming eyes;
His face, to hide his grief, half turned aside;
To break the stillness only heart-heaved sighs.
The moonlight through the twisted foliage fell,
In silver threads, and wove a ghostly spell.

Theirs was the bitter pain of those who part
And know not if they e'er again shall meet;
Each path led henceforth to a broken heart,
And each must falter on with woe-worn feet:
What wonder that they loitered by the way,
When such a journey's end before them lay?

"Good-bye, earth's best! Sibyl, Sibyl, good-bye! —
O, how I love to dwell upon thy name!—
Sibyl!—to see thee nevermore—ah, why—
Yet peace!—'tis only fools who destiny blame."
So Conrad, struggling in a passion-storm,
Broke forth, half-overcome, in rugged form.

"Yet hear me, Sibyl: this has ever been
Our trysting-tree; if death shall call to me,
Swift from the land mysterious, unseen,
On such a night as this I'll come to thee:"
And these he spoke in strangely altered tone,
With far-off look as though he were alone.

And Sibyl clung to him, in sudden fear,
And bade him think of her who lived for him;
Called him her love, her darling—only dear,
Haply to lure him from his boding dream:
But something deadly cold between them passed,
And o'er her heart an icy tremor cast.

Then he upon her wildly flashed, and said,
"Give me thy promise, thy most sacred vow
By all the tears for sorrow ever shed,
To come whene'er the moon shines forth as now!"
His mien like one new-risen from the grave,
More to command he seemed than aught to crave.

So Sibyl promised, in a quivering voice
Nigh buried in the deep of her despair;
For Conrad's frenzy left no other choice,
And for his love could she not all things dare?
But now her love was shadowed o'er with fear;
Past joys unheeded in the horror near.

He lingered but till from her pallid lips
The binding words had issued, one by one;
She opened them as one who poison sips,
In mortal dread, yet wishing all were done.
And then he rushed in furious haste away;
She fell upon her knees and strove to pray.

Her tear-smirched face pressed to her trembling hands,
As whelmed in awe of soul she lowly cowered;
Her sweeping hair all loosened from the bands,
In whose soft trellis-work she knelt embowered;
Her every flowing line meekness and grace,
Yet not a holy thought could find a place.

She sprang up with a terror-laden cry,
And fled from underneath the fearful tree;
But yet some ghastly thing was ever nigh,
She could not from her hope-reft spirit flee:
O where was now the love that lately beamed,
Life of her life, as she so lately deemed?

Arrived at the little garden-gate,
She panting paused awhile to frame her look
And form excuses, for the hour was late;
Then down the flower-fringed path her way she took:
Her vow unholy sullied-o'er her mind,
The peace of innocence aye left behind.

The moonlight sadly came upon her bed,
And showed her once again that clammy brow;
She saw the dark leaves looming overhead,
And listened to the echo of her vow:
For every rustle of the trees without,
Did seem to spell the awful promise out.

How sweetly sang the birds at wakening morn!
What fragrant incense waved upon the air!—
But Sibyl mourned the day that she was born;
The hopeless see no beauty anywhere.

She watched the dewdrops glister in the sun,
And pass away for ever, one by one:

She said, "O dewdrops, silly drops of dew,
To prank you in the glittering sunny ray!
You change it to a lovely rainbow-hue,
But in a while it drinks you all away:
So by the love that I delighted in,
My false-true heart lies withering in sin."

She wandered wearily beside a stream,
And said, "So should my tears for ever flow!"—
Athwart her brain there fell a meteor-gleam,
For sorrow's tears were mingled with her vow:
She hated then the river flowing on,
And all the flowing streams o'er which light shone.

The measureless expanse of sky above
Weighed down upon her, crushed into her soul;
Her eyes earth-turned yet everywhere did rove,
And no place found they where to lay their dole:
The silver cord of union was snapped;
A shrivelled plant she was, completely sapped.

The breezes swelling o'er the clover fields,
Swept soothingly about her beating brows;
Hers was the inner fire that never yields,
Feeds on itself and ever fiercer grows:
She sighed drearily, and said, "I would
The day were done; for me is nothing good!"

But what to Sibyl now are days and years?
Ah! what avails it to divide her grief?
Each moment concentrates decades of fears,
To sum up all her woe an age too brief:
"O God, let me go by and cease to be,
Eternity knows not my misery!"

So bowed her spirit down till evening came;
But as the shadows deepened, darker power
Possessed her; every sound moaned forth her name;
From every bush a fearful face did lower:
She thought the myriad infernal host
Were triumphing that she with them was lost.

She pealed out shriek on shriek, and madly sped
She knew not whither; while the voices swelled
Around her like a surging sea of dread
About a ship whose doom the storm has knelled:
"Sibyl! Sibyl! thy vow! thy vow!" they cried;
"Take heed thou break it not! Woe, woe betide!"

She reached, she knew not how, the still churchyard;
Sank heavy down, and cried, "O save me! Save!—

Ye blessèd angel hosts draw nigh to guard!—
O God of good!—it is my mother's grave!"—
They found her there, far on into the night,
Like spirit sleeping in the pale moonlight.

Deep-sorrowing, they bore her to her home,
And laid her softly down, and thought her dead;
Then passed into the night, for tears would come,
And sobs deny what consolation said:
They felt a nearer meaning in the stars;
The soul in sympathy peeps through its bars.

But Sibyl's doubtful spirit lingered yet
In some mysterious, gloomy, midway land;
Earth's many joys still powerless to forget,
Wistfully gazing towards the unknown strand:
And yet the smile upon her faded lips,
Was like the sun on buds which winter nips.

Erelong there came a flush upon her face;
A light unearthly darted from her eyes;
She saw strange forms in seeming empty space,
Absorbed in wondrous voiceless colloquies:
The man of science said 'twas fevered brain;
Words only, for the mysteries remain.

Sometimes she spoke that those around could hear,
But random was her speech, and meaningless;
And yet her spirit's voice rang loud and clear,
And echoed in a realm of blessedness.—
O man, how vain thy words of false and real!
Thy real is thy disguise for the ideal:

For all thy upward acts are beautiful,
The Soul's expression in thy present state;
Through all the forms by which the earth is full,
The Spirit, One and All, doth permeate:
Thine eyes are dazzled with excess of light;
Thou criest, "Day!" when, lo, for thee 'tis night.

In Truth's own temple ever dwellest thou,
And know'st it not: the crystal walls, and dome
The farthest stars o'crarching, and below,
Eternity's foundations—this thy home—
And yet thou wilt not lay thee down to rest,
And fold thee in the Love whereby thou'rt blest.

O, Living Love, the universal Soul,
O Love who only art, and art alone,
In whose effulgence still the ages roll,
In every atom of creation shown,—
Thou, Love of Love, direct our thoughts to Thee,
For Thou hast made us thine eternally!—

While with the watchers silently the hours
Went by, far from a desert land a voice,
God-like in tone, revivified her powers:
" Child Sibyl, hearken, that thou may'st rejoice!"
A voice that filled the earth, yet, oh, so sad,
So sweet, so tender-mournful 'twas that bade!

And Sibyl's inner sense grew clear, and, lo,
She knew a heavy gloominess around;
And high-reared rocks did deeper shadows throw
Upon the desolation of the ground:
It was a place of utter loneliness,
The seeming dwelling of obliviousness.

The sweet, sad tones came aching to her heart,
As motionless and wondering she stood:
" Blessed are they who find the better part,
The way of sorrow is the only good;
For all beside is coiled about with fears,—
Nor past nor future knows the heaven of tears!

" Weep on, weep on, cease not your bitter moan;
Break hearts, in overwhelming agony;
True prophets, in a heedless world unknown,
Proclaiming thus your immortality!
Mourn, mourn, among the myriad stars that shine,
'Tis sorrow only shows ye are divine!

" For none may sever Love and sorrowing;
And love is not, where sorrow cannot be:
Love loving lends to sorrow borrowing,
Love, sorrow, each is each and unity.
Mourn, mourn, among the myriad stars that shine,
'Tis sorrow only shows ye are divine!"

The thrilling accents dying fell, till like
A sigh they breathed upon the withered land;
A numbness to her being seemed to strike;
Her awe-strained thoughts, like writing in the sand
Beneath a swelling billow, disappeared,
And all oblivion was she hoped and feared.

And, suddenly, there came a flash of light,
That rent the curtain of the dark in twain:
A rapid-flowing river met her sight,
That leaped above his banks in wild disdain,
And whirled and seethed among a chain of stones
That crossed his breast, provoking angry groans.

And Sibyl looked, and saw a little child,
That on the nearest stony link was sat;
That weeping sat, of joyousness beguiled,
The onward-foaming torrent gazing at:

"I cannot cross, I cannot cross!" it cried;
"What shall I do to reach the other side?"

And Sibyl sorrowed for the child, as though
Its grief were hers and she would pass the flood;
Her eyes grew dim; she said, "Ah, me, the woe!—
The other side!"—then, in despairing mood,
She turned away, her wet cheeks covered o'er,—
The child sang to her from the farther shore.

The darkness closed again, and Sibyl sank
Into forgetfulness; but none may tell
The peace ethereal, when from the blank
She woke, that o'er her changèd spirit fell:
Existence in itself was ecstasy,
And all her thoughts were perfect purity.

Like music wafting down a silvery stream,
God's sunlight softly shining on her face;
As incorporeal as an infant's dream,
A dream herself, pure beauty, perfect grace,
Down-gliding ever in the golden light,
The solemn-flowing waters gleaming bright.

Still onward with the river's ceaseless flow,
Still radiant in the everlasting beams,
Distinction from the stream she cannot know,
One with the heavenly brilliance she seems.
The watchers said, "How angel-like she sleeps;
Assuredly there liveth God who keeps!"

THE ORIGIN, FORMATION, AND ULTIMATE DESTINY OF THE UNIVERSE.

By Guy Bryan, M.A.,

A clergyman of the Church of England of thirty-four years standing, being the substance of communications written through his hand by the Spirit Thomas Clowes, *who was formerly his tutor in earth-life.*

"This universe was formerly *Spirit*, in the form of Purusha. Looking intently, he saw nothing but himself or Spirit or Soul. He said, 'This is I.'"—*Brihad-aranyaka Upanishad* 125.

"The lord of creatures throughout the whole continuance of the world, remains fixed, the *Universal* Soul or Spirit, self-sustained, the supporter of the Earth."—*Varaha Kalpa, Book the First, Cap. IV.*

"There was *then* (the point of time which separates eternity from time, or unconditioned time from conditioned) neither (material) nonentity, nor entity: there was then no atmosphere, nor sky above. Death was not then, nor immortality; there was no distinction of day or night. That Being (self-existent) the ONE, breathed calmly, in self-dependence; all was absorbed in it, for all was *Spirit* or Soul, there was nothing *different* from It."—*The Taittirya Brahmana, Rig Veda* x. 129.

The proposition put forward by the Spirit Thomas Clowes is that

the materials of which the universe was constructed, which we designate by the general term "matter," were created or produced out of spirit.

As there may be some of my readers who suppose this too great an assumption to make, and who may even deny the very existence of spirit, I will offer a few considerations which appear to me to be strongly in favour of this proposition.

First, then, I will define Spirit to be Love in its essence. Will, I consider to be its active, energizing principle; Wisdom, its regulating principle. If there was no such thing as wisdom, then are we all fools; if there was no such thing as will, then we are mere machines; and if love were not a reality, then life were not worth the having. We are as certain of the existence of love, will, and wisdom as we are of our own existence, although we cannot, even in imagination, weigh them in a pair of scales, or measure them by the yard.

Of the existence of matter we cannot be so positive, as our experience of it is not internal, as is that of spirit, but external. However, we may define it as all that which is cognizable by the senses.

Now, it must be evident that the origin of all things—their first cause—must be either (1) spirit, or (2) matter, or (3) spirit and matter conjointly. This last is, at the first thought, the most acceptable to our minds, as we do not usually see spiritual qualities manifested, except through the mediumship of matter. But if we assume that there were from all eternity two self-existent independent principles, we cannot conceive how they should act upon each other, except in the way of repulsion. At least, it is contrary to our experience that things which are very dissimilar should blend together, as we know spirit and matter do. Where dissimilars do unite, they can only do so at a point of similarity that they have in common between them. If two principles are dependent one on the other for their existence, they cannot be both self-existent, And the hypothesis of *two* first causes is a greater assumption than the hypothesis of only *one*. We should assume as little as possible in all investigations into the truth.

Let us assume, then, either spirit or matter to be the first cause of all things. It seems more reasonable to suppose that *spirit*, the active principle, should have originated all things, than that *matter*, the inactive principle, should have done this; for matter could only have accomplished such a work by changing its own nature, and passing into the active principle. Besides, it is contrary to all experience—and we can only judge from our experience—that anything does of itself change its own nature, or that matter of itself has become active and intelligent. Suppose we took a block of granite, for instance, and secluded it from all external influences, how long would it be before it began to show signs of life? We know that there are forces which utterly elude our senses, and which we cannot, therefore, term material—if we do not like to call them spiritual—constantly at work upon matter, breaking it up, forming

it, and re-forming it into an infinite variety of shapes. And there is no intelligent observer of nature who would be so senseless as to assert that there is nothing but blind force at work to produce all the liveliness and beauty that is seen on the face of the earth at this season. All this exhibits love and intelligence in operation upon it. It may be said, "This is all produced by the rays from the sun." Then there is love and intelligence in the solar rays, and the sun itself becomes a god! But this must have been produced by another god of like nature; and this by another, and so on. What is the primal source, will be the problem we shall try to solve. I cannot conceive how it has got to be the fashion now with philosophers to ignore the argument for *design*. If we survey the earth, and consider the wonderful adaptation of each part or department to the whole, and to one another, we must arrive at the conclusion that it is the manifestation of the thoughts of the scheme of *one mind* similar, but infinitely superior, to our own. This does not exclude the idea that this mind should have other minds under it to carry out its designs. And that there are disembodied minds—minds that is without such bodies as are cognisable by the senses—that can move material objects, and give intelligent answers to questions, has been well established by the careful experiments of scientific and painstaking men who, before commencing their investigations, were strongly opposed to the possibility of such a thing. Evolution, or development, is no argument against design, but a strong argument in favour of it. No one doubts for a moment that a watch is constructed by an intelligent being. But would it not argue much greater skill and intelligence if it was developed from an imperceptible beginning out of substances so utterly dissimilar in appearance. Does it not argue a greater amount of intelligence to produce a blade of grass out of such, at first sight, unlikely materials as air, earth, and water, than to construct the most ingenious mechanism ever devised by man? Is there not much greater skill and wisdom shown in the formation of vegetables and animals and human beings, by the process of growth and development from an imperceptible germ, than would be by the clumsy process of putting them together piecemeal? And this, apart from the consideration of the pleasures of social existence, and the various amenities of life, arising out of the interdependence of individuals upon one another. As regards all works of art, there is no one so stupid as not to perceive that the idea the work represents, or manifests, must have existed in some intelligent mind before the existence of the work itself. And matter itself has been observed by thoughtful men to have all the appearance of being a manufactured article. Take any material substance we will, we find it is composed of other substances which are *put together*. And this implies a putter together. Thus air and water, which appear so simple, are in fact each composed of two gases in proportions the most suitable for the support of vegetable and animal life. And because we cannot find out what these gases are

composed of, it by no means follows that they always were in the form of those gases. The very fact of the oxygen and hydrogen having united to become water, would argue that some other substances might have been put together to become oxygen and hydrogen. And the puzzle would be how the first insignificant little atom of matter came into existence of itself.

I will proceed, then, to submit to you my Spirit-tutor's theory to account for the existence of the material atoms, and their formation into worlds.

I think I have adduced sufficiently cogent arguments in favour of the hypothesis that spirit is the source of everything, the only primordial substance; that it never had a beginning, and therefore, we may reasonably suppose, never will have an end. And, indeed, what is there to put an end to it? Nothing but itself, or what itself has created.

This, then, is the spirit-theory to account for the origin of matter, and the formation of the Universe.

Before matter, as such, existed, spirit, which never had a beginning, wanted something to work with, and to work upon.

First, then, the ether, which pervades all space, was created. This was done by spirit partially materialising some of its particles, that is, by putting them under a certain degree of constraint or confinement. This served as a medium through which the movements of both matter and spirit could be conveyed, or communicated, with great rapidity.

The elements of matter were formed by spirit putting some of its particles, at a distance from each other, into a much greater degree of restraint, or confinement.

The powers of these particles were not destroyed or annihilated, but only held in abeyance. And there was still left them both the desire and the ability to associate with particles similarly circumstanced. Hence they came together with accelerated velocities. The shock of their impact produced vibrations in them, which vibrations were communicated to the ether around them, and to spiritual beings presented the appearance of fiery vapour.

In like manner the particles of vapour clashed together, and became liquid fire. These came together, and formed still larger masses. And these again, larger still, until at last they were all condensed into one immense mass of unimaginable extent and inconceivable heat.

This was all done not by any extraneous force exerted upon matter, but by the power of association that was inherent in matter owing to its spiritual origin.

The worlds were formed from this mass by the Infinite Spirit acting upon it, and throwing out portions of the molten mass, and causing them to revolve around it. The mass had been previously made by spirit to rotate upon its axis. The portions were ejected by spirit setting free a sufficient number of particles immediately

beneath the mass to be ejected, and their powers were at once exerted to project the superincumbent mass.

There were $1{,}000{,}000^{100}$* stars projected from the great central mass. These were projected at different times, and to different distances. The first projected were sent to the furthest distances, the second to the next furthest, and so on, all in order of distance, according to the order of their time of projection.

From each of these $1{,}000{,}000^{100}$ stars there were projected others. From those which had been longest projected, there were projected the most. From those which had been the shortest time projected, there were projected the fewest. But the average number projected from each of the $1{,}000{,}000^{100}$ was $1{,}000{,}000^{99}$ a million times less than the first set of projections. Hence it is very evident that $1{,}000{,}000^{199}$ will be the *whole* number of the second series of projections. Each of these $1{,}000{,}000^{199}$ projected on the average a million times less than the average of each of the second series of projections, which was $1{,}000{,}000^{99}$. Each of the $1{,}000{,}000^{199}$ comprising the second series of projections will have projected on the average $1{,}000{,}000^{98}$. Therefore the whole number of the third set of projections will be $1{,}000{,}000^{199\times98} = 1{,}000{,}000^{297}$.

This process was repeated more than a hundred times; and by calculation $1{,}000{,}000^{4933}$ will be the number of stars of the hundredth set of projections.

These numbers are not given as approaching anything like mathematical accuracy, but for the purpose of giving some idea of the immense number of the heavenly bodies, and of the way in which they were generated. The first set being thrown off from the great central mass, the second set from the first, the third from the second, and so on; each individual star of one generation giving birth, on the average, to a million times less than the average that each star of the preceding generation gave birth to. But in the succeeding generations after the hundredth there was less difference between the projections of the individuals of one generation from those of the preceding, those of one generation having, as it were

* For the benefit of those who are not accustomed to mathematical expressions, it may be as well to state that this figure, $1{,}000{,}000^{100}$, means a million multiplied by itself a hundred times. Let N represent any number, and n any other number; then N^{n} represents $N \times N \times N \times$, &c., n times. Suppose N represents $1{,}000{,}000$ and n 199, then $1{,}000{,}000^{199}$ means $1{,}000{,}000 \times 1{,}000{,}000 \times 1{,}000{,}000$, &c., a hundred and ninety-nine times. $1{,}000{,}000^{4933}$ will, in like manner, represent $1{,}000{,}000 \times 1{,}000{,}000 \times 1{,}000{,}000$, &c., four thousand nine hundred and thirty-three times.

the thousandth part of the productive powers of the preceding one, instead of the millionth. Then the difference was gradually lessened, till the bodies projected becoming smaller and smaller, and consequently soon parting with the heat that kept them in a fluid state, they became unfit for having worlds projected from them.

The different sets of projected stars may be appropriately termed "generations," since each set of projected worlds was produced from the preceding set.

The greatest number of generations of the heavenly bodies is one hundred and seventy-five. These were in lineal descent from the first that were projected from the great central mass.

The law of decrease in what may be termed the productive power of each generation, as according to results, is that each possessed only the millionth part of the productive power of the preceding one. That is, that each individual star of that generation produced only the millionth part of what each individual star of the preceding generation produced, taking the average of each. But as regards those generations which were lineally descended from the bodies that were latest projected from the central mass, the law of decrease varied—there being less difference in the productive powers of these generations. Thus, our sun being descended from one of these latest projections, the law of decrease in his generations was the thousandth, instead of the millionth, part of the productive power of the preceding generation. And the projected star from which he descended being probably of a much inferior size to those of the first projections from the central mass, the generations were the sooner run out. There were only ten generations between our sun and the great central mass from which all the other heavenly bodies were descended.

That the largest bodies are the first projected from any star may be inferred from what we know of our own solar system; those planets furthest from the sun, or first projected, being of a much larger size than those which are nearest the sun, or last projected.

The same numerical law which regulates the number of the heavenly bodies in the order of their generations, applies to their magnitudes and distances.

Thus each of the first set of projections would be on the average a million times the size of all the projections proceeding from it. Each of the second generations would be on the average a million times the size of all those proceeding from it, and so on, till we come to the hundredth, when the law varies, as in the case of the numbers of projections.

The stability of the whole universe is insured by the great central mass being a decillion ($1{,}000{,}000^{10}$) times the amount in mass of all the other heavenly bodies put together. Its name is Octagonal, and it is visible with the aid of a telescope.

And the distances of the stars from their primaries must evidently be proportioned to the size of those primaries, as the greater

the size of a body the greater the distance to which its influence could extend. Each heavenly body is the centre of systems of the same character as that of the whole universe; so that the same proportions which obtain for one of the countless millions of systems which revolve around the great central mass, must obtain for all the systems.

The wisdom, and indeed the necessity, of these proportions being preserved throughout must be evident; for, unlike the law that regulates animal production, where the smallest are the most prolific, the productive power of a molten mass must depend upon its size, since the loss of material projected from it is not adequately supplied in any other way, and its capacity of retaining its heat, and thus preserving its fluid state, on which its productive capabilities depends, must also be proportional to the magnitude of the mass. We all know how much longer a large mass takes to cool than a small one. This is exemplified in the solar system, where we see that the number of the satellites or moons is proportional to the size of the planets from which they were projected.

From this law of proportions we see that as the number of the heavenly bodies is utterly inconceivable to our undeveloped faculties, so as we approach the great central mass their magnitudes and distances become inconceivable also. Our sun itself, though a million times larger than this earth, yet, when compared with the vast central sun around which the whole universe of universes revolves, fades into insignificance.

But though these numbers, magnitudes, and distances are inconceivable, yet they enable us to form a more definite idea of the immense power of the Infinite Spirit. And as we proceed we shall see that all this wonderful power is regulated by Infinite wisdom and goodness.

The *modus operandi* of projecting a star from its primary is very simple. Let it be borne in mind that matter is simply *spirit* in a *state of confinement*. Spirit put it into this state of confinement, therefore spirit can release it. When it is required to project a portion of matter from the central mass, or from one of those bodies that have been already projected from it, spirit, by releasing certain portions of the mass from which the projection is to be made, forms a hollow tube, extending straight down into the interior of the molten mass to be operated upon. The portion to be projected lies at the bottom of this tube. A sufficient quantity of matter at the innermost end of the portion to be projected is suddenly converted into spirit by being released from its confinement, and is stimulated to exert all its expansive power to propel the superincumbent portion through the tube to the required distance. As soon as the projected portion escapes from the mass in which it was embedded, being released from all surrounding compression, its intense heat causes it to expand into vapour. During its rapid flight, its attraction to its parent body gives it a tendency to return to it again, and at length this attraction is sufficient to over-

come the motion that was imparted to it, and it commences its descent to the mass from whence it came. But, owing to movements of that body, it misses it in its descent, and by its accelerated velocity is carried to about an equal distance beyond it. Then the same causes operate to make it return again, and thus to describe a very eccentric ellipse around the body from which it was projected. Spiritual forces are constantly at work to reduce the eccentricity of its orbit, and bring it nearer and nearer to the circular.

As it cools, it passes from a state of vapour into that of a molten mass of intense heat, caused by the concussion of the particles, precisely in the same way as the great central mass was formed. Spirit projects bodies from it in the same way as it was projected from its parent body. These bodies are first vaporised, then condensed into molten masses and used to project other bodies, and so on, until, in some cases, there have been as many as one hundred and seventy-five generations of projected bodies. Not quite all the vaporised particles return to the molten mass before projections from it commence. There are stray whiffs and puffs which float about, as it were at random, and eventually become comets, or shoals of meteors and other small bodies, which come in very useful in supplying to the habitable worlds the loss by evaporation. Thus the comets and meteors belonging to our solar system were external portions of the sun when it was in a state of vapour, the absence of compression having kept them longer in a vaporised state.

In some cases this is insufficient, and whole planets have to be broken up for this purpose, of course, before they have become inhabited worlds. Such was the case with the planet that was formerly between the orbits of Mars and Jupiter, the larger fragments of which form now four inhabited planets.

If these losses by evaporation were not supplied to the planets, the internal forces would often not be held in check by the external pressure, and disastrous explosions would be the result.

These planets were broken up by the same kind of forces which were made use of in projecting the stars and planets from their parent bodies. A planet is but a star in a certain stage of cooling, and all matter is but spirit in confinement. When, therefore, it is required to break up a planet and use its materials for other purposes, all that is necessary is to release a portion of its interior particles from their state of confinement; then the latent powers of the released spirit-substance are exerted to part asunder the required materials of the planet.

The question will naturally occur to the mind, Who is the intelligent being or beings that undertake this operation? (for they are manifestly done for a *purpose*, and therefore denote *intelligence*).

In the beginning, before there were any individual spirits sufficiently acquainted with the laws which regulate matter, the Infinite Spirit must have been himself the direct cause of the projections.

It would have been no greater effort to Him to project a body a billion times the size of our sun from the great central mass, than that of releasing a portion of himself from restraint. It would be, in fact, but a *relaxation* of effort. But, whether the projection of the heavenly bodies is always His direct and overt act may be questioned from the following consideration:—Evidently, the object of the Infinite Spirit in creating matter was not only to manifest Himself to Himself, but also to enable His *offspring*—the finite offshoots from the Infinite Spirit—to manifest themselves to themselves also; in fact, to *provide work* for them by which they should know what their real powers were. Apart from this consideration, we cannot suppose that it would be any gratification to Him to project stars from their primaries.

Hence, we may surmise that as soon as His children had advanced sufficiently in the knowledge of material things and the laws by which they are governed, He would allow these operations to be performed by them, both as a business and a pleasure, and as a stepping-stone to works of still greater utility.

If, as my Spirit-tutor informs me, our solar system is one of the latest formations of the universe, and our earth one of the latest of the planets projected from the sun, there must be worlds, and, consequently, spirits, in an inconceivably more advanced state of development than any we have yet had any cognizance of. And, therefore, it is highly probable that there are spirits sufficiently advanced in their knowledge of matter, and the laws by which it is governed, to undertake the operation of projecting planets and stars from their parent bodies.

The Spirit Thomas Clowes thus explains the way this is done—When spirit is required to be set free, powerful movements take place in the heavenly bodies. These movements cause very powerful magnetic currents. Spirits direct these movements very powerfully to produce magnetism towards the particles of spirit they wish to release from confinement. And these particles are powerfully influenced to exert their forces to propel the substance that the spirits wish to project. They, previously to projecting a portion of the molten body, direct the magnetism to those particles over it (*i.e.*, between it and the surface) sufficiently to cause them to exert enough force to form a hollow tube over the portion they wish to project. This process is similar to that of expelling a projectile from a gun, either by gunpowder or steam. The spirits who perform these operations are those who have perfected themselves in a knowledge of all the properties of matter, and who dwell in the sphere that encircles the sun from which the planet is projected.

It is in this way that a new planet is to be projected from the sun in the first part of the next century.

The laws which regulate the relative distances of the heavenly bodies from their primaries, and the periodic times of their orbits, are precisely the same as those laws which astronomers have ascertained by observation to apply to the planets of our solar system,

such as Bode's law of distances, and Kepler's law of periodic times. The Spirit Thomas Clowes informs me that the first heavenly body that the great central mass gave birth to was projected to a distance of 1,000,000 miles. The distances of all the succeeding projections from the central mass may be calculated by the laws that are known to apply to the planets of the solar system, according to the order of their projection.

Thus we see that although the numbers, magnitudes, and distances of the heavenly bodies that compose the universe are inconceivable to our finite minds, yet there is a beautiful simplicity in its structure and arrangement. The laws on which its stability depends are few and simple. True, science is powerless to detect their application beyond our own solar system. But this being a universe in miniature—a system which is perfect in itself—we shall not be far wrong if, reasoning from analogy, we apply those laws which modern science has shown to govern our solar system to the systems of systems, which compose the whole fabric of the universe. And from the analogy of what we see does take place on this earth, we may conclude that the state of progress of a world, or system of worlds, would, other things being equal, depend upon the *length of time* that it has been developing. Hence it is sound analogical reasoning to suppose that those planets that had been projected the longest time should be the most advanced as habitable worlds.

The stage of progress then, of the planets and their inhabitants, must be in order of their *distance from the sun*; the furthest removed being the most advanced; and the nearest to the sun the least advanced.

But as this is assuming their order of projection, a fact which scientific men will tell us we have no possibility of determining, it would be as well to consider if there are not some good reasons for giving credence to what those spirits who have turned their attention to the study of astronomy tell us on the subject.

In the first place it must be considered that it would take about twice as much force to project a body a hundred million miles as it would to project it fifty million. And since the capabilities of projection in a molten mass must depend on its heat, evidently that which required the greatest effort should be performed when its heat was the greatest. This must be at the time of the *first* projection. I mean its heat would be greater at that time than at the time of the succeeding ones.

And an immediate loss of heat must be occasioned by the loss of the projected body. Moreover, if the later projections were projected beyond the earlier ones, their movements might be interfered with by those bodies they must pass near to. This would be an additional reason for the first projected being sent to the furthest distance. But it might be objected that the theory of projections is altogether hypothetical, and unsupported by scientific observation. Doubtless this is the case as regards scientists in the

flesh; but this is not a sufficient reason for altogether rejecting the testimony of those who have ascended to a higher plane of observation. It is analogous to the way in which animal and vegetable life is multiplied on this earth. And the perfect unity and harmony that prevails in the material universe seems to point to a *unity of origin*.

If *one* primordial mass is sufficient for this purpose, why should we suppose there to be several? And the late discoveries by means of the spectroscope of like elementary constituents in the sun and some of the stars to what there are in the earth point to a common descent.

I think, then, we may accept the above theory of the universe till a more probable hypothesis is advanced. Therefore we may, for the present, assume that the progressive stages of the planets, and, consequently, of their inhabitants, is directly proportional to their distances from the sun.

But as so eminent an astronomer as Richard Proctor, in his very interesting work, "Other Worlds than Ours," supposes, from telescopic observations of Jupiter, that "processes of disturbance must be at work wholly different from any taking place on our earth, . . . if analogy is to be our guide, . . . we seem led to the conclusion that Jupiter is still a glowing mass, fluid probably throughout, still bubbling and seething with the intensity of the primæval fires," pp. 139, 140. If the view he has here put forward be indeed correct, "we must," he says, "of course dismiss the idea that the giant planet is at present a fit abode for living creatures." And yet, according to our view, Jupiter being the fourth in order of greatest distance, and therefore the fourth in order of projection from the sun, should be considerably more advanced than our earth, which is only the seventh in order of greatest distance, and therefore seventh in order of projection from the sun.

Upon seeking information of my Spirit-friend and tutor, he informed me that "the active movements that are apparently at work on the surface of Jupiter are occasioned by currents of electricity within the atmosphere of the planet, which are generated by spiritual influences. The spirits that cause these currents are those of the inhabitants of the planet who have made themselves masters of the laws of electricity, and who produce these currents for the benefit of the planet's inhabitants.

"These currents of electricity produce light; and there are currents of magnetism which produce heat. The light is of the same character as that of the Aurora seen in the polar regions of this earth, and which is caused by spirits who once lived upon it." Thomas Clowes tells me that the north polar region has been inhabited for forty thousand years. That the inhabitants are a superior race of beings. They make these lights, by directing to the required localities the electricity which is constantly being generated by currents of air passing from the equatorial regions

towards the poles over currents of air moving in an opposite direction.

This accounts for the very rapid changes Proctor describes as taking place in the atmosphere of Jupiter in a much better way than by the internal heat of the planet. He speaks of "intermediate belts, thousands of miles in width," being "closed up in a single hour."—"Other Worlds than Ours," p. 140.

These constant auroras that occur over so large an extent of Jupiter's surface would account for his reflecting so "much more light than a planet of equal size constituted like Mars, the moon, or the earth could possibly reflect to us if placed where Jupiter is" (p. 143).

And if, as he surmises, "the outer layer of clouds must be regarded as for the most part aqueous" (p. 142), how is the light arising from the supposed heated state of Jupiter to penetrate "the enormous masses of vapour" with which he supposes his atmosphere is loaded (p. 139)?

What Proctor calls "the singularly small density of Jupiter, and of the other planets outside the orbits of other asteroids" (p. 138), is accounted for by their having become more spiritual, and consequently less dense. Having been a much longer time in existence as planets, they have lost much more than the others by evaporation. This will account for the whole difference in density.

My tutor informs me that, even as regards inhabited planets, there is a constant evaporation going on from the vapour of the fluid mass in the interior filtering through the external crust or shell, and that, in this way, a planet's density, towards the close of its existence as a planet, becomes only one half what it was at first.

I can imagine that both the scientific man who acknowledges no law but what has been established by inductive reasoning, and the orthodox believer, will object to this frequent interference of spirits in the affairs of the universe. The former, on the ground that the machinery of the universe being once set in motion by the All-wise Artificer, no further interference is necessary. True, that might be the case if mere mechanism was all that was required, but I think it will be conceded by everyone that, as I observed before, the providing work by which the godlike faculties of immortal souls should be manifested would be the grand aim that the loving All-Father had in view. And this end would be best promoted by making them "workers together with Him," according to their state of advancement in their knowledge of His laws, and this, where the work is not only sublime in itself, but having for its object the happiness and advancement of beings of kindred nature to themselves, the whole being under his direction and superintendence.

Thus I am told that the phenomena of "variable stars" are produced by the intervention of spirits. The planets belonging to these stars are in incipient stages of progress. Spirits periodically intercept their suns' rays by condensing the gases around them,

thus causing great alternations of heat and cold on the planets. This has the effect of breaking up their surface crusts more rapidly, and thus hastening the time when they will be in a fit state for the habitations of human beings.

And, doubtless, it denotes a higher order of intelligence to control and supervise intelligent beings, than to construct the most complicated machinery so perfectly that it never should require to be meddled with.

We must be aware what great climatic changes are unconsciously brought about upon the earth by human operations as the human race advances in civilization.

If so much can be done by agents not having that object in view, how much might be accomplished when directed by angelic intelligence.

Although in causing these changes man may have regard only to the wants of the hour, and, perhaps, be governed merely by selfish considerations, yet we Spiritualists have every reason to believe that his actions are completely under the supervision and control of superior intelligences which overrule all for the benefit of humanity at large. Besides, those who will allow that the soul of man is of the essence of Deity—of His very nature, in fact—must admit that God could be no more content to be for ever without employment than we could. And, indeed, we cannot conceive how any spirit, whether the Infinite Spirit, or finite spirits like ourselves, could have possessed any consciousness of being without the existence of matter which should act as a foil or *pièce de resistance* to it. For instance, we could have no consciousness of *motion*, though we were moving with the velocity of light, unless we were made aware of it by some external object. And, indeed, it is actually the case that most human beings are perfectly unconscious that they are moving through space at the rate of 60,000 miles an hour, although the soundest deductions of reason point to such a conclusion. And, since a living body is but a congeries of motions, if we had no consciousness of motion (which I don't see how we could have without matter), how could we have a consciousness of life—know that we exist?

Having disposed of the above objection, I think, then, we may assume that the state of progress of the inhabitants of planets of the same system will depend upon their distance from the sun from which they were projected, the outermost being the most progressed; our Earth being the seventh in order of distance out of nine, would be among the least advanced.

But the time will come when this Earth and its inhabitants will have become so spiritual that there will not be much difference between those in the flesh and those that have put off the flesh. The inhabitants of Neptune, the outermost of the solar system, and the first in order of projection, have very nearly arrived at this state, the Spirit Thomas Clowes informs me. When there ceases to be any difference between them, all the inhabitants will be

removed to the Spirit-worlds, and the deserted planet, having fulfilled the object of its existence as a planet, will return to its parent-body, the sun, as our cast-off physical bodies return to mother-earth.

The return of the planets to the sun will be caused by the withdrawal of the magnetic currents in which they move. The necessity for these magnetic influences will be seen from the circumstance of there being a *resisting medium*, the ether of space, in which all the heavenly bodies move. If there was no resisting medium the planets would be maintained in their orbit by the equipoise of the centrifugal and centripetal forces. But the resisting medium being in constant opposition to the centrifugal force, the centripetal force gains an ascendency over it, and would draw the planet nearer and nearer to the sun till at last it fell into it if there was no counteracting power. Hence when it is desired that a planet should return to the sun, all that is required is to withdraw the magnetic current in which it moves, and the resisting medium would gradually effect the object required.

Our object is to take a view of the universe as a whole, and of some of those universal principles which come within the scope of our intelligence. And as my Spirit-friend defines a universe to be "A system of planets revolving round a common centre," we may consider our solar system as a universe, and those laws which we find applicable to it will be applicable to the whole universe. I wish to show the inter-dependence of the whole.

As far as the planets are concerned, the solar system is complete in itself. To all human seeming our sun would be sufficient of itself (always assuming the immanence of the Infinite Spirit in all things) for the developing human beings upon the planets that revolve around it. This might take place independent of the rest of the heavenly bodies. The sun, with its attendant planets, might wander far away into the pathless deserts of space, apart from all astral influence, and yet the work of developing human life would proceed till all the planets had fulfilled the purposes of their being and had returned to their solar centre. They would bring to the sun accessions of heat with them. But the heat of the sun must gradually diminish; the few meteors, &c., that are constantly falling into it not being sufficient to maintain its temperature, and, indeed, having no planets to vivify, its warmth would be no longer wanted. It will, one day, have quite lost its brightness, and have become as cool as our earth. Then, in its turn, it will become a planet, and, of course, it will want a sun. Its sun will be Alcyone, round which it is now revolving.

Love is the weapon which Omnipotence reserved to conquer rebel man when all other weapons failed. Reason he parries; fear he answers blow to blow; future interests he meets with present pleasures; but love, that sun against whose melting beams winter cannot stand, there is not one human being in a million whose clay heart is hardened against love.

DO SPIRITS INFLUENCE SOMNAMBULISTS AND CLAIRVOYANTS?

A Letter from Deleuze to an M.D. in Answer to the Question.

[Dear Editor—It may be interesting to your readers to make acquaintance with the opinions about spirits of Mr. Deleuze, one of the prominent followers of Mesmer. I have, therefore, translated from the *Bibliotheque du Magnetisme*, 1818, the most interesting parts of a letter from Deleuze in answer to questions by an M.D. in respect to the influence of spirits over somnambulists and clairvoyants.—J. N. T. Marthèze.]

The doctor alludes in his letter to some remarks of Deleuze condemning the theory of mesmerists who accept the influence of spirits on somnambulists, observing that they were Protestants, and, so far, opposed to the belief in guardian spirits professed by Roman Catholics. The doctor, who appears to have been converted by somnambulism from materialism to the belief in the existence of a spiritual or magnetic body within our material body, mentions the case of a somnambulist who, being in trance, said she was guided by the spirit of her mother.

Deleuze, in his answer, admits that somnambulism clearly proves the spirituality of the soul, and infers from this the immortality of man. He says: The immortality of the soul once accepted, the possibility of communications from souls separated from the body with souls still united with the body is a necessary consequence. It is evident that those who deny this possibility are not convinced of the immortality of the soul, or that they listen to the voice of prejudice, refusing, without a motive, to examine a fact resulting from the principle they do accept. . . . . I accept with you that our soul continues its existence after death. That, instead of losing its faculties which it enjoyed during earthly life, it acquires new faculties, or, at least, that it has more power, more liberty to use them, not finding any longer obstacles in the way—not being any longer limited by space, and the future not being so much veiled as before. I do accept that our state after death will be happy or unhappy, according to our doings here; that our souls can retain affections and sensations as they retain memory; that they can influence other souls *embodied* in human form; suggest thoughts, make revelations, hear our wishes, and read our thoughts.

Now, let us see under what circumstances this communication between the disembodied and embodied takes place. We must examine the facts. There are many I know. They are at the bottom of nearly every religion. In every history we find records of them; and in mesmerism we meet them very often

Those philosophers who reject these facts did not give themselves the trouble of examining them,—they treat them as ridiculous, as materialists will ever do. I agree that this is not the way to truth, but still I entertain doubts. I will give my reasons. I leave to theologians the facts related in the Scriptures, as many of them are diametrically opposed to the laws of nature. Still, many facts remain, for those which are admitted equally in every religion have their origin outside of Christian revelation. But have those facts sufficient authority to establish a system? Some are not duly tested; others are perhaps the results of physical causes, yet unknown to us. Most of those recorded by history have been accepted in epochs of credulity and superstition; those related in society are nearly always forthcoming from people endowed with a strong imagination, and might be reduced to physiological and psychological facts, perhaps very extraordinary, but not supernatural.

The most remarkable facts are those which have been observed since mesmerism has been investigated. A great many somnambulists have affirmed that they held converse with intelligences; that they were inspired and guided by them. This at first seems very clear, but on reflection we find still reasons for doubt.

1. Why should the state of somnambulism—which generally is the result of a disease, and ends with the cure—be one of the conditions favourable to communicate with spiritual intelligences?

2. Why is not every somnambulist amongst those who give the best proofs of lucidity, and most isolated, susceptible to this communion? Why have they different opinions about this subject?

3. Why do the opinions and ideas they have in the state of somnambulism often appear the consequences of those they have in their natural state, while in other cases they are quite different?

4. Why do different somnambulists say that they obtain their knowledge by different ways? Some see the objects appear as if they were shown to them; others hear an interior voice; some seem to be certain of what they say, and if questioned answer—"I know; I am sure of it." Others believe themselves inspired by a saint, an angel, or by several intelligences. Others, again, are inspired or guided by the spirit of some deceased person who controls them, and speaks through their organs; whilst some declare they have seen the devil, have been frightened, and have asked for prayers, and other means, to deliver them from this power.

5. Why does it happen that those opinions belong to certain

classes, or to certain society, whilst they are different with somnambulists belonging to another order of society? Thus a great many somnambulists at Stockholm* have exhibited these phenomena, whilst they are quite unknown amongst the disciples of Mesmer.

6. Why do we find with some somnambulists a great development of a certain faculty, while others are inactive? Why do certain ideas and affections attract the attention of the somnambulist almost exclusively, whilst he remains indifferent to other ideas and affections, so much so, as to render him only lucid on certain points? and why does the mode of perception vary with the state of health and nervous disposition?

Here follows an enumeration of different states of insensibility and isolation of somnambulists which are interesting; but he concludes in saying with Socrates—"I don't know."

Deleuze, in fact, assumes that our soul, in the state of somnambulism, acquires, or appears to possess, the same power of vision and motion as those who have passed the gate of death. On this account Spiritualists will find him quite correct. He repudiates the theory of influence of spirits merely for fear that the acceptance of it might lead to insanity and practices of magic, forgetting that even mesmerism is magic, and has been in former ages as much prosecuted as witchcraft and sorcery—(by priests, of course). The opinions of Deleuze are scarcely consistent with his facts.

Deleuze explains himself in this way:—If we use mesmerism to read the future, we will come to abuse it; if we use it to have communion with spirits, we shall renovate the extravagances of magic, and expose ourselves to the dreadful consequences of these practices—[we wonder what the spirit of Deleuze would say now]. There exists in some Northern countries a predisposition to *Illuminism* (Spiritualism). This new philosophy leads us to reject the notions based on the experience of several centuries, and to substitute the opinion that such phenomena are produced by an exalted imagination; and if you consider how many *reveries* have been proposed by honest, faithful men, you will mistrust many of those pretended inspirations. Somnambulism is a new instrument which we may use when other means fail, but we must not use it as a guide when other well-known instruments are sufficient for our direction. I do not deny the existence of the spirit-world; but during this life we do not yet live in that spiritual world. Our soul is in the earthly body: if the bands were broken, we should not be any more *en rapport* with the beings who are around us. Our prin-

* We hope to give an account of these facts in our next number.

cipal relations are with those dwelling on earth; we have duties to fulfil with them. We have not always the power to discover the truth; we seldom feel sure of having grasped it. Our life is better fitted for action than for meditation. We have always the power of doing good: let us use this power as much as we can during our earthly life. Our knowledge will, perhaps, be of no use to us hereafter, when we shall have more light. Good actions will be like a treasure, and ensure us a good place in the hereafter!

THE SKULL AND BRAIN.*

In the "Skull and Brain," &c., phrenology is divested as far as possible from its psychological bearings, and appears merely as a science of character reading; not, however, *predicting* what a man *will* do, but simply *predicating* what he may be capable of. This distinction, a very important one, is often lost sight of by phrenologists, who thereby reduce the science to the level of astrology and fortune-telling, or, as Mr. Morgan names it, bumpology.

The first portion of the work is occupied by refutations of Mr. G. H. Lewes' criticisms on phrenology in his "History of Philosophy." One of his accusations is, that Gall annulled the discovery of four organs, and changed the places of the remaining twenty since 1802. This charge requires facts to refute it, and, fortunately, Mr. Morgan is able to produce one which entirely overturns the assertion; he gives a drawing of a skull in the Edinburgh Phrenological Museum, which was marked by Spurzheim in 1806 or 1807, in which the localities of the organs are precisely the same as at present, blank spaces being left where the organs of hope, conscientiousness, individuality, continuitiveness, form, size, and weight are now marked, these not being at that time discovered.

Mr. Morgan reviews the recent investigations of Dr. Ferrier, and says: "After much experimental research and repeated verification of the phenomena, Dr. Ferrier arrived at the conclusion that the individual convolutions are separate and distinct organs." We have ourselves heard Dr. Ferrier observe in one of his lectures on the "Functions of the Brain," that he thought there was a great deal of truth in phrenology, and considered that its evidence could not be disregarded. We quote from memory, and are not responsible for verbal accuracy. We cannot refrain from giving some observations of Mr. Morgan's on what

* "The Skull and Brain: their Indications of Character and Anatomical Relations." By Nicholas Morgan, author of "Phrenology and how to use it," &c. Longmans & Co.

may be termed the balance of opinion; the ideas are exceedingly well expressed, and contain truths, which, if properly appreciated, would go far to breed that desirable spirit of toleration, of which there is, unfortunately, at present so deplorable a deficiency. "We are greatly indebted to scepticism and conservatism, notwithstanding they often appear to retard the progress of truth. Conservatism is to radicalism what a drag is to a vehicle; and while the sceptic checks the precipitate movements of the over-credulous and incautious, the radical goads on the slow-paced adherent to antiquated things, principles, and notions, and all in turn receive a shock in the encounter, and thus act and re-act beneficially on each other, and on the ultimate well-being of the community. Once let us fully realise this grand fact, and we shall be inclined to judge more leniently of those who are not at one with us in thought."

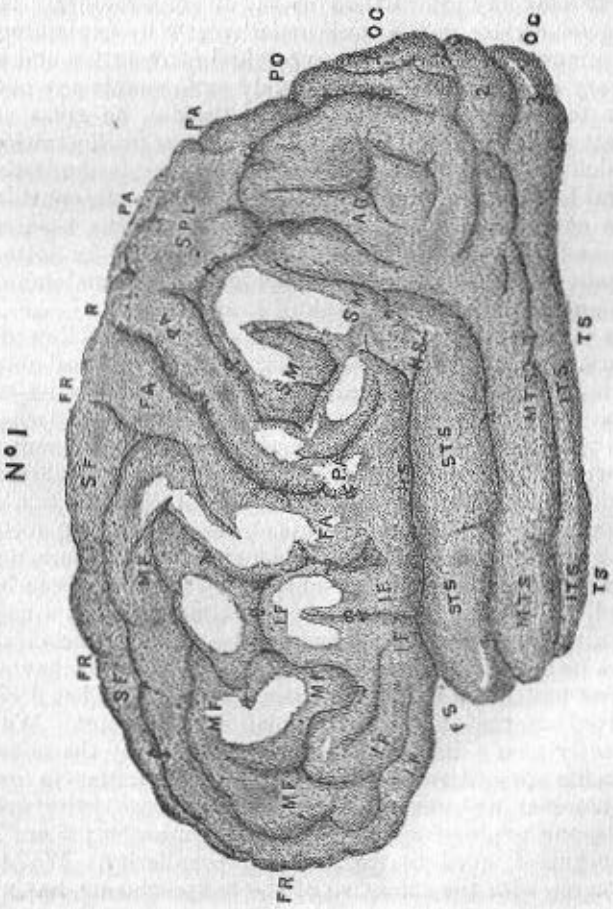
There is a suggestive chapter on the Will, which is defined as "a mode of operation of the mind, the actions of which are determined by motives. . . . The will is not a self-determining, self-controlling power, and, therefore, not absolutely free; but its freedom consists in the choice of motives. We have the power to some extent of altering the circumstances that give rise to our motives, but to exercise this power effectively, and to a good end, knowledge is necessary." If we may judge from this, Mr. Morgan is opposed to the free-will theory; but while he considers that voluntary acts result from a preponderant motive or motives, still he does not advocate the dogma of necessity, inasmuch as we have a limited power over the motive-producing forces. The following extract will give some idea of his teaching on this point:—

"The Will seems to be no more self-determining and capable of over-riding the judgment than the hangman is to over-rule the judgment of the court in a criminal trial. But, as the office of the latter is to carry out the law, so is it the office of the Will to execute the decisions of the judgment. Yet the parallel does not hold throughout; for, whilst the hangman cannot alter the evidence on which the condemned is convicted, we can, by efforts of the Will, alter the circumstances which give rise to the motives that influence our judgments. But here, again, motives take the precedence, for we must have reason for altering the circumstances, so as to induce such volitional control, which pre-supposes motives as the basis of our reasons. For example, a 'fast young man,' brought to consider the error of his ways, by affliction or some other sudden calamity, resolves upon a thorough reformation of conduct, and he puts forth all his might to retrieve his character. But he finds the giving up of old habits and the breaking off of long-established connections hard work. Yet, being thoroughly impressed with the necessity of saving himself, and of doing it at once, he summons all his powers to do battle with the enemy. He no longer strives with him; conquer or die is his motto. Then old opinions are given up, and new ones sought more in keeping with his altered state of mind. The library and the lecture-room are substituted for the drinking-saloon; works

of fiction and romance are replaced by treatises on science and morals; literature and religion, sociology, self-discipline, self-reformation, and the good of society, form subjects for thought and topics of conversation; and by concentrated and persistent effort, he ultimately extricates himself.

"This person has altered the circumstances which influenced his motives of action, his surroundings, trains of thought, and general habits; but the starting point was the stronger motive—the offspring of the sudden awakening from the slumber of passional thraldom." ("The Skull and the Brain," p. 61-2.)

We now come to the most distinctive feature of the work, that is the use of anatomical knowledge of the correlation of the skull and brain in practical phrenology. Professor Morgan gives a chapter on the relation of the external surface of the skull to the outer surface of the brain, in which he follows Professor



Turner of Edinburgh, who, in his cranio-cerebral map, divides each lateral half of the cranium into ten regions; Mr. Morgan, however, increases the number to seventeen. His directions for purposes of manipulation as regards the situations of the organs are very precise. As a sample we quote the following: "Self-esteem is at the top of the back head, at each side of the median line, in the posterior portion of the upper parietal lobule area."

The anatomical part of the work is carefully written, and deserves full attention. Phrenologists are charged with being ignorant of the anatomy of the brain, and, perhaps, generally speaking, not without some reason. Our author, however, cannot fairly be held guilty in this respect. He displays considerable knowledge of the outer surface of the brain, and does not seem to lack any information of the entire structure. He has done good service in the work under review by explaining with great minuteness of detail every cerebral convolution and fissure in a very lucid manner, and so simply as to enable any ordinary reader to understand the subject. Besides, he gives several accurate and beautifully executed engravings in illustration, one of which we have pleasure in reproducing. It shows the left cerebral hemisphere, from which it will be seen the convolutions of the outer surface are lettered, and so are the fissures and sulci; and we refer the reader to the work itself for letterpress explanations in the contents and context on the anatomy of the brain, and the relation of the skull to the brain.

The same classification of the temperaments is followed as in the former work, "Phrenology," &c., namely, that of nutritive, sanguine, mental, and muscular, a system which has its advantages over the old one of bilious, nervous, lymphatic, and sanguine, as the two first terms are sometimes taken in a different sense from what it is intended they should be. We have observed to a friend that he was an excellent type of the nervous-bilious temperament, thereby exciting his choler and calling forth the remark that he was never considered nervous before, and his liver was always in capital condition, never having been bilious in his life. The term lymphatic, too, almost implies a negation of quality, and is anything but precise; and precision should always be aimed at in any system of classification having the slightest pretension to completeness. Mr. Morgan has decidedly improved on the old fashioned plan in this point. We have frequently seen a difference in persons of exactly the same temperaments quantitively, but yet vastly dissimilar in quality. This, however, requires a fifth term, as do most existing systems, that is, one expressive of quality of organisation; there seems no recognised word to express this peculiarity. We do not quite agree with the colouring of the temperaments, having met

with persons, for instance, of the nutritive temperament who are decidedly dark, while Mr. Morgan describes them as fair. Before an exact description of the complexion of the temperaments can be written, there must be a modified classification, and observations of a much greater number and extent must be made. We should have much wished to notice Mr. Morgan's former work above referred to, but its scope is so different, and its treatment of the subject so unlike the present one, it seemed better to defer it; the latter treating of the organs as mere external signs of character, and the former psychologically and analytically—besides which, we hear a new edition will shortly appear. Mr. Morgan, in the present work, treats the subject in an original and able manner, throwing out many valuable suggestions, which deserve consideration by all phrenologists; his style of composition, too, has materially improved since he last appeared in print. There are some good illustrations, showing the relation of the convolutions of the brain to the outer surface of the skull, of which a specimen is subjoined; for explanation we beg to refer our readers to the book itself, as it is inexpensive, and, happily, of convenient size for reading.

We so entirely agree with Professor Morgan's opinions as expressed at the end of the last chapter, that we prefer giving them in his own words, as being those of a liberal-minded and earnest truthseeker. "At the present time, phrenology has no legitimate claim to be a complete system of mental science. It only forms a part. The science takes in the whole man, and embodies anatomy, physiology, phrenology, and psychology, and to get a knowledge of man he must be studied in his abnormal as well as in his normal condition; hence, pathology must be included. The science of mind, then, is the science of man, and the science of man comprehends the forces of his surroundings—in fact, of the universe,—a very comprehensive study. Gall and his disciples have possibly fallen into the common error of partisan propagandists, and hoisted their colours too high, and so they may have to lower them a little; but the time for pooh-poohing phrenology is past, and that for investigation is present. Phrenology is not dead, nor does it give any sign of decay, but manifests a vigour and hardihood that portend a long life. Its nomenclature has permeated the languages of all civilised nations, and its principles are more believed in and practised than they ever were at any former date."

Although there is apparently a considerable amount of opposition yet to be overcome regarding phrenology, still a great change is evidently taking place respecting it in the minds of the learned scientists of the day. Some time since a leading contemporary gave Dr. Carpenter the credit of giving the death-

blow to phrenology, nevertheless, it seems curious that so determined an antagonist should express himself so phrenologically, as in the extract below from the *Contemporary Review* for May, 1875 :—

"The recent experiments of Dr. Ferrier have proved, by ocular demonstration, what was antecedently probable on other grounds, that a great dilatation of the blood vessels may take place in a certain limited part of the brain, and that they, further, seem to me to indicate that a state of nervous tension may be induced by this hyperæmia, which rises to the degree of discharging itself in the special action of the part. If this be the case, the functional activity of any particular segment of the brain, one segment ministering to purely intellectual operations, another to emotional conditions, another to the expression of mental states in bodily action, each of these segments again consisting of vast numbers of component groups of cells and fibres, which may act separately or in any variety of combinations, being determined by the supply of blood it receives by the vaso-motor nerves; and thus, while the whole amount of actual energy put forth, whether in mental or muscular activity, is limited by the capacity of the mechanism and the amount of potential energy furnished by the blood supply, the direction of that energy, its manifestation in one form of action rather than another, is determined by the influence exerted by the ego on the vaso-motor system of nerves."

Dr. Carpenter seems to be coming round very gradually to the much-abused system of Gall: we may congratulate ourselves on having so powerful an auxiliary in the opposite ranks of the schoolmen. Mr. Morgan, in this present work on the skull and brain, frequently quotes Dr. Carpenter, and had the above been printed soon enough he would, no doubt, have used it.

UNDER THE DAWN.*

In the preface to the volume before us, Mr. Barlow repudiates the charges of certain critics who have accused him of too tamely imitating the examples of Swinburne and Rossetti. Certainly, it is hard that a poet should be set down as destitute of the freshness of originality, because his rhythm has a ring in it, something resembling that of a predecessor, or because he employs rhymes that the other has before pressed into service. But Mr. Barlow will pardon us, we hope, if we assert that, as regards Mr. Swinburne, he has scarcely judged correctly, and is somewhat more deeply influenced by that poet than he will admit himself to be. "Under The Dawn" is decidedly not the "echo of 'Songs Before Sunrise,'" a few have decried it as; but neither is it a revolt against the pantheistic creed. Rather, it may be termed, the offspring of a union between Theism and the worship of Nature—the production of a mind wherein materialistic and

* "Under the Dawn." By George Barlow. Chatto & Windus.

purely spiritual ideas are blended—perhaps in a manner not far divergent from the truth. The author probably does not quite share the spirit of Pope's apostrophe to that

"Stupendous whole,
Whose body Nature is, and God the soul;"

but, at least, while passionately reverencing the beauty of the material garment, he forgets not the living Deity whom it clothes. Unlike the singers who hymn that species of annihilation in which the individual shall be merged in the universal, the Future is for him as thickly peopled as the Present.

"I saw the dead begin to move,
I saw their forms awake—
On mount, in forest, and in grove,
By many a silent lake;
Their faces all did shine with love,
So that I did not quake.

"Their faces all were sweet to me,
I recognised my friends."

The last four lines are beautiful. It is in an address to "The Spirit of Beauty," that they occur, and beauties there are many in this poem. Of man's future existence the singer takes a roseate view. Beauty, he tells us, in impassioned stanzas, shall, when the tomb is passed, become

"Ours wholly: yea, no more in part,
But wholly; more than we,
With straining, feeble, earthly heart,
Can yet attain to see;
Beyond the power of poet's art
Is Love as it shall be."

Mr. Barlow has a wonderful command of language; and this fluency, with the influence of A. C. Swinburne, betrays him into his chief error. Like Swinburne, he is too prone to sacrifice meaning to melody, and where most richly musical is also sometimes the most obscure. Take the following passage. The poet is hymning the goddess, Love.

"But Love, as for Love, in the splendour and petulant pulse of her feet,
On the waves that surround her, and render a tuneful homage and sweet,
As for Love, with her white hands holden on the wings and the arms of the airs,
She shall not wax feeble nor olden; her beauty increases and bears
The future and past and the present, and huddles them close to her breast,
And to each for a season 'tis pleasant, and to each in the end 'tis a jest."

The lines we have quoted are sounding, but the sense is somewhat difficult to arrive at. If Mr. Barlow will take only the greatest poets for exemplars, and strive, above all, to be graphic in his energy, he will accomplish high things. There are lines in some authors brief as a lightning-flash, and like that disclosing

a far prospect at a glance. How concisely, yet vividly, do the often-quoted words in which Milton describes Mammon, bring before us the sordid character of the fallen seraph.

> "Even in Heaven his looks and thoughts
> Were always downward bent; admiring more
> The riches of Heaven's pavement, trodden gold,
> Than aught divine or holy."

Mr. Barlow has noble poetic fire, and the diffuseness, and indistinctness of expression, which occasionally mar his stanzas, are faults that the author of the following sonnet (Italy's Answer to England's Charge Respecting Keats), should be able to vanquish.

> "He was too fair! I loved him overmuch.
> Sweet sister, is it altogether ill
> That he no more can feel the wintry chill,
> No more be pierced by sorrow's icy touch?
> That he has, once for all, escaped the clutch
> Of poverty, and loneliness, and scorn,
> And that another poet has been born
> Into Elysian fields, made fair with such?
>
> "I laid a tender hand upon his head—
> Alas! the love and passion in it slew;
> Now is he numbered with the gifted dead;
> Whose wings divide the unfathomable blue
> Of my bright heaven; and their fame is shed
> Upon me in remembrance ever new."

What the poet has to say in this piece is said clearly and tersely, without any overloading of ornament, or breaking away from the strain of thought in which the sonnet commences. Looking at this, and similar compositions, we should say that Mr. Barlow is better calculated to succeed in the lyric than the epic. He does not possess the art of narrative; nor is he equal to a sustained flow of song. Inspiration comes to him by flashes, and thus his briefest pieces are also his brightest. "Thou could'st not watch with me," is an instance in point. We like the third stanza extremely.

> "Thou could'st not watch with me, my lady white!
> Thine are the roses, and the pleasant meads,
> And the good simple crowns of former creeds;
> But not the ecstatic rapture of the fight,
> And the endless garland of the soul that bleeds:
> I would not change my part with thine to-night.
> Though thy rich kisses led my coward's flight."

But the piece must be read as a whole to be thoroughly appreciated. The same may be said of "To Mazzini Triumphant," "Christ's Sermon in the City," and "The Spirit of Beauty." Quotations would not give a perfect idea of these poems, and to

describe them is difficult. We must, however, give the opening stanzas of the second-named piece.

"Beneath our haze of London smoke
Christ stood in human garb again,
Bearing once more the fleshly yoke
Of sorrow, and of fiery pain;
And this world's fiery blows that rain
On strongest rowers, as they strain
Broad heaving chests at every stroke:

"Hurling the world's slow vessel through
The palpitating seas of Time,
And sundering the flashing blue,
In harmony to sweet-voiced rhyme,
In harmony to Progress' chime,
Watching her full-mouthed chant sublime,
Most ancient, yet ever new."

The thought expressed in these two verses is a very fine one, and finely wrought out; but it is provoking to see the effect marred by the lameness of the last line. Careless rhymes may be pardoned to a poet; but a limping metre every bard should shun. This, however, is not a frequent fault with Mr. Barlow, for, as we before remarked, he has a masterly command of language. A redundancy and careless choice of words are his primal errors, and he cannot be too earnestly warned against them. It is true that these blots are common to all the poets of the present day. In the reaction from the formal but sparkling versification of Pope and Goldsmith, men have rushed to the other extreme. Worse models than Mr. Swinburne and Mr. Browning no neophyte can adopt. Neither has yet succeeded in coining a poem which bears the stamp of immortality. Mr. Browning especially, has of late years grown intolerable. "Red Cotton Night Cap Country" is a work that may be wondered at, but not criticised. To praise or abuse it is equally safe, for to understand it is impossible. Let Mr. Barlow shun our living poets, and also Shelley; who, gifted though he was, too often veils his thoughts in obscurity, instead of clothing them in words; and sit in preference at the feet of Shakespeare, Milton, and Byron. The greatest poets are the best of teachers. He will learn from them that Pegasus may be guided even in his swiftest and highest flights; and that sense and passion fused into glowing harmony are better than passion solitary and uncontrolled. He gives many proofs in this book before us that his language can be at once powerful and restrained. Here is a verse from the "Ode to Mazzini Triumphant"—a composition which we think disputes with "Christ's Sermon" the praise of being the finest poem in the volume.

"Upon the earth thou wast a lonely man,
Thou art not, I am certain, lonely now,

A solitary honour is the van
Of battle, or of thought! a lonely brow
For certain that which doth allegiance vow
To purposes unfathomed by the frail
And fickle herd, who understand not how
One passion, vast, imperishable, pale
With its most intense life, may garb a man in mail."

We like the words; we like the whole tone of this ode. It is the work of one who has himself vowed allegiance to "purposes, unfathomed by the frail and fickle herd." Mr. Barlow is evidently an earnest thinker, and one who works out for himself his creed: taking nothing upon trust. He can perceive the falsehood of the perishing formulas of the churches; and heralds with joyous anticipatory notes the great time about to be, when those well-matched harpies Priestcraft and Intolerance shall have fled for ever from the face of the earth. Every verse of this "Ode to Mazzini" is redolent with the hope of a golden age of liberty and peace; in which the brotherhood of man shall be a vision accomplished; and, Ignorance having died, War shall also die. In the great Republic of the Future, Jew and Turk, Christian and Infidel, shall be able to clasp hands and recognise that in each of their creeds there lived a portion, and but a portion, of the truth. Socrates and Jesus, Savonarola and Luther—all the noblest of the "Sons of God," shall look down then from that higher sphere to which they have attained, upon an earth redeemed indeed. The Christ of this fair harvest, Mr. Barlow thinks, stands already upon the threshold of the age, and the last years of the 19th century may be made immortal by his presence. It is to be hoped that the forecast is prophetic, and that a millennial season of progress and peace draws nigh, when the bear of Russia shall lie down with our own lion, and the eagles of Germany and France may fly quietly together.

To sum up our ideas of these poems. The Dedication (which we have thus far omitted to speak of), is a truly exquisite piece, and although nothing in it rises to the level of certain stanzas in "Christ's Sermon," and the "Ode to Mazzini," it is, as a whole, freer from faults than either of the loftier compositions. In a number of charming verses, Mr. Barlow sings the truth that no philosophy of religion is eternal, and that as, when the Grecian mythology was waning, Christianity arose, so something still nearer the truth now is dawning upon man. The "Hymn of Love" that follows, we scarcely like so well. As a composition it deserves high praise, for the metre is excellently managed, and the rhythm has a peculiar voluptuous melody; but it lacks vigour, and, though the topic be broad, the narrowness of the treatment renders this "hymn" something monotonous. Yet there occur, especially towards the close, charming passages, at

once clear and sweet; passionate and well-expressed. "Heaven, A Psychological Study," is a curious and interesting piece. A man, just passed from earth into the life beyond meets two women, the first, one whom he had loved, yet not wedded; the other, his wife, whom he had not loved. The contest between the two for his possession, and the pleas advanced by each, are finely worked out. "A Lament" has beautiful passages; the opening lines being especially good.

> "Before I lose Love's being, and my heart
> Ceases to feel the pressure of his dart,
> I would return, once only, to my love,
> As to the sweet nest of a mountain dove
> Her amorous mate returns with eager cries;
> So would I once more gird me, and arise,
> And seek, rejecting fiercely milder pleas,
> Th' unaltered and imperishable seas,
> Where, with that soft-haired woman for my bride,
> I dreamed upon the silver-flowing tide."

"Lost Voices" is sweet, and the "Planet's Boat Song," which follows, is a musical chant. In "Man's Protest" we have an earnest cry, opening in the following strain:—

> "Against the God who forged despair and thunder,
> I, Man, protest;
> Who gave us love, and hid his poison under
> Love's snow-white breast;
> Who gave us life, and cleaves that life in sunder
> When it seemeth him best."

The "Hymn at Man's Nativity" is a poem in honour of that triumphant advent of an all-embracing theism, which Mr. Barlow ardently looks and longs for. The metre is the metre of Milton's "Ode on the Morning of Christ's Nativity," and is handled in a manner not unbefitting the great Puritan. Two stanzas in this poem well express the author's faith.

> "The thunder of new things
> Around, and in us, rings,
> The heavens are rent, the temple's outer veil
> Is torn, the thick clouds break,
> On many a hill and lake,
> Clear lustrous suns the impurpled past assail;
> The deities of Greece return,
> Their bright looks reappear from many a tomb and urn:
>
> "Their glad looks reappear,
> For in Man's coming year
> All truth he recognises for his own,
> Whether in Greece 'twas born,
> Or where at early morn
> By faint airs the Norwegian pines are blown,
> Or where in China's teeming house
> Strange yellow-mantled priests and deities carouse."

One of the sonnets which conclude the volume we have already quoted; and we may add that the remainder are fit companions of "Italy's Answer to England." We now take leave of "Under The Dawn." It has been pleasant to read and to criticise it, and though we are not blind to its faults, and have not spared to point them out, we feel that its merits far outweigh them, and are confident that earnest and thoughtful labour on the author's part will result in the ripening into a glorious summer of that genius whose spring-time promises so fairly. Let him strive after quality, rather than quantity, and eschew all gaudy obscureness of style, in favour of vigour and simplicity. Let him constantly keep in remembrance that the poet's supreme duty is to say what he has to say, clearly; and he will take, and maintain, a high position among the bards of this age.

J. L. VEITCH.

THE PHILOSOPHY OF LAUGHTER AND SMILING.*

LAUGHTER is one of the diverse phenomena of human nature, and Mr. Vasey shows that it may be made to express various emotions or states of feeling. He attributes to the laugher, however, a preponderance of folly and empty-headedness, and thinks the habit is an induced act, stimulated by "tickling" of a physical or mental kind. Babies are tickled, grinned at, and prompted into the meaningless convulsions called laughter, and children of a larger growth excite their minds with ridiculous jokes and egregious nonsense to the same end. All this the author deprecates in the strongest language. He gives the physiology of laughter as an involuntary action of the pectoral muscles and diaphragm, caused by an unnatural and improper stimulus. Into the act no reason or thought passes but it is uncontrollable as a fit of coughing, surcharging the brain with blood, and, if persisted in, tending to a suspension of the vital functions.

With these views we can scarcely agree. We think the author has not gone deep enough into the anatomy and physiology of the subject. The soul of man expresses itself through the organism in two ways—by what are called voluntary and involuntary actions. The former are rational, and under man's control, and yet not absolutely so, for the processes of the intellect are defined by as strict rules and necessities as those of the involuntary system. Tickle or excite one portion of the mucous membrane and the patient will sneeze; another, and he will cough: another, and he will swallow; another, he will vomit. This catalogue might be very much extended, and yet in all of them no reason can be assigned for the

* The Philosophy of Laughter and Smiling. By G. Vasey. London: J. Burns, 15 Southampton Row, W.C. Price 5s.

act. They are phenomena which defy reason to control them otherwise than by avoiding the causes. But they are none the less unreasonable or unnatural on that account; nor are they less necessary for the safety of the individual than the functions of the mind proper are. Indeed, the intellect is swayed into action by the very same means. One kind of mental stimulus excites to arithmetical calculation; another, to musical measure; another, to the defining of individual objects; another, to reasoning, analysing, constructing, or improving. The patient can assign no better "reason" for these mental processes than he can for the acts which follow the excitement of the mucous membrane. In both cases he is forced by circumstances to perform certain acts, to avoid which is beyond his control while he submits himself to the exciting causes.

Let us look at laughter a little closer. We find it to be a peculiar combination of cerebral and thoracic action. In this respect it resembles the shedding of tears, which may be caused to flow from a physical excitement or a mental emotion. Laughter may also be occasioned by tickling the body, or by exciting the mind. There are a series of incongruities, not necessarily degrading, which excite the propensity to laugh. But the result will much depend on the organisation of the individual. If brain action predominates over ganglionic action, then the amused one will not laugh, but enjoy the incongruity inwardly; in other words, he will lack the power to give the natural expression to that which he experiences. Or he may be idiotic in the mirth-perceiving organs, and not be amenable to the ridiculous, even as some cannot be moved by music or by sympathy. The man, however, with the fun-provoking brain organism, and a full development of the vital generative ganglia, will laugh. Like kissing, caressing, weeping, shaking hands, &c., laughter gives a natural expression to the state of mind which no words can convey. This is the point in which we differ from Mr. Vasey. We think he has not dived sufficiently deep into this department of his subject, but has passed too sweeping judgment upon the whole tribe of laughers.

We cannot join with him either in the low estimate which he places on the intellectual powers of the laughing individual. He is often intellect *plus* emotion; or in common phrase, heart as well as head. Many of the most indomitable and humanitarian toilers for the welfare of the race have been and are hearty laughers. This is a concomitant of their warm, passionate impulses to do good, and their fellow-feeling for all sentient things. Not that laughing makes a man good, but it proceeds from the deep source which gives rise to inexpressible and unextinguishable impulse, it may be to do good or to do evil. The laugher is probably a person of very contradictory characteristics, alternately the sphere of conflicting passions, as circumstances may stimulate.

With these qualifications we can keep Mr. Vasey close company throughout his thoughtful and well-meant labours. There are no

doubt vulgar, coarse, idiotic laughers, just as there are persons of the same objectional characteristics who do not laugh. Laughing is, however, a pretty true key to the character, and there is more safety with the laugher than with his sealed-up companion. The former is more open in his manner, and lets the world know what a boor he is, whilst the more politic specimen hides his crudeness by a thick upper crust of hypocrisy and reticence.

It is quite possible that there is too much random emotionalism in the world, and that self-control and definiteness of purpose have too little scope in the lives of many persons. To such Mr. Vasey's book teaches valuable lessons. The aim is pure and wholesome throughout, and yet it is by no means heavy reading. The subject is so well divided that the path is kept remarkably clear before the mind's progress. In the course of the work there are about three dozen pages of illustrations, for the most part indicative of various kinds of smiling, of which the author very highly approves. At the same time, he points out that of the smile there are many varieties which indicate very undesirable types of character. In this respect the cry against smiling may be as loud as against laughing. But why smile any more than laugh? Neither of them are "rational" processes, and yet they are both modes of expression, and have more or less a diffusive tendency, relieving the interior mental organism from a pressure or fulness which words could not accomplish. For this purpose we consider laughter invaluable as a hygienic agent. The cares and duties of life have a tendency to concentrate the mind too much. The comic, ridiculous, and incongruous elements are just as much parts of the Grand Design as are the eyes, stomach, or limbs. Genuine wit, fun, or laughable acts, as performed in some of our best theatres, are truly recreative, if not too long protracted. A hearty shake up, which points a barb at no one, nor drags the mind down to any gross allusion, is truly a refresher, which, like a stretch of the muscles between the parts of an awkward occupation, enables the mind to return to its task again with renewed elasticity. We must say that, notwithstanding Mr. Vasey's depreciation, we enjoy this sort of thing amazingly, and thank God for it just as truly as we do for the air we breathe.

It may be that, in a more purely mental state, or in examples of men who are of a higher type than we are, laughter may be needless, even hurtful; but we speak entirely from experience, and not from any theory.

The volume is one of the most handsome we have seen for some time. It is an object of beauty for the table, and it cannot be opened without affording entertainment and instruction to all classes of mind, whether they laugh, smile, or remain serenely indifferent.

THE RESTITUTION OF ALL THINGS.*

In these days of sectarian bitterness and sceptical thought, when men seem to strive who can render the aspect of religion most hideous, and the ideas of the Deity most repulsive, it is pleasant to meet with a work which, instead of trying to confuse matters more, attempts to reconcile, not ineffectually, opposing ideas, and to throw light on a subject of vast importance to members of nearly every existing sect.

Professor Jukes, in the "Restitution of All Things," deals with the question of Eternal Punishment in as logical a manner as he possibly can, considering the mystical character of the subject he has under consideration.

Amongst other arguments, he asserts that the doctrine limits the powers of Christ as a Saviour who came not to save some, but *all*, particularly those who were lost. The author contests that the Atonement is efficacious throughout all ages, but if the penal state were never ending, some could not ever be saved.

One of the chief points insisted on is the erroneous translation of the Greek words now rendered as everlasting, or various synonymous terms.

"The passage in Ephesians, chap. iii. ver. 21, which in our version is rendered 'throughout all ages, world without end,' is literally to all generations of the age of ages. . . . It will, I think, too, be found that the adjective formed on the original Greek word (everlasting, &c.), whether applied to life, punishment, redemption, covenant, times, or even God himself is always connected with *remedial* labour, and with the idea of 'ages' as periods in which God is working to meet and correct some awful fall."

The meaning of the word "death" is defined as entirely opposed to annihilation, and "as simply an end to, and separation from, some given form of life which man has lived."

The doctrine of Eternal Punishment was never held as universally true by the Catholic Church at any time, and extracts are given from the early Fathers and others to prove this assertion. Spiritual punishment is considered to be severe in proportion as the soul has sinned, and that we must either judge ourselves here or be condemned elsewhere to a proportionate punishment of a retributive and purifying nature.

We think all who wish to see religion less contradictory and dogmatic, and, above all, less sorrowful, will be deeply interested in, and agree, to a great extent, with the views expressed in "The Restitution of All Things."

In printing "Errata" at page 288 of this volume of Mr. Barlow's poem "Ode to Man Triumphant," which may be found at page 220 of the present volume of *Human Nature*, the following errors occur:—"Refiner" is printed instead of "Refinger," and "bran" instead of "brass."

* "The Second Death and the Restitution of All Things." By Andrew Jukes. 3rd Edition. 1873. Longmans.

THE NEW UNFOLDING.

What great results from small events may spring
The future yet unknown will still reveal;
When to old earth new denizens will bring
To light some truth on which to place their seal.

For ever onward is the mighty cry—
The barque of progress sails the shimmering main;
Truth takes the helm—the hurricane goes by
Of palsied error with its wild refrain.

The frenzied battles of each blundering age
Are but as bubbles gathering on the foam;
The overweening scroll of priest or sage
Shall yield its figments to some newer tome.

Though bold in thought the human mind is still
A puling infant nursed in folly's arms;
Through life the victim of a wrong trained will,
Distraught by passion and its rude alarms.

But light is breaking through the veil of thought,
Awhile by clouds of ignorance concealed;
And, though through spell-bound ages past unsought,
Man's higher missions shall become revealed,

When health's bright glow shall deck the human cheek,
And grace and beauty all their charms shall fling
On forms of earth whose tongues alone shall speak
The truthful utterance of a holy thing.

And then shall vanish all the fell disease,
That made of life a wilderness of wrong;
And souls attuned shall echo on the breeze
The sacred cadence of an angel song.

And earth and heaven shall glow in mutual sheen,
As, hand in hand, compassionate and wise,
The triumph of the Maker's work is seen
Ascending in its glory to the skies.

The chrysalis, encased in humble clay,
Shall burst its bonds and rise with teaming will,
And gain the regions of eternal day,
And God's design immaculate fulfil.

Worcester. GEORGE CRACROFT.

SPIRIT-PHOTOGRAPHY.

To the Editor of Human Nature.

DEAR SIR,—Bearing on the subject of Spirit-photography, and especially on the photographing of the spirit of a person still in the body, permit me to call the attention of your readers to the subjoined extract from the *Banner of Light*, July 31, 1875. The account is written by Judge Carter, and bears so directly on the photographing of my own spirit, that I quote it with very considerable satisfaction.

The late miserable fiasco in Paris has pressed hard upon timid and unstable Spiritualists. I was told that Spiritualism had received its death-blow, and that I had wasted my time in making a rope of sand when I wrote about Spirit-photography. Just in the same way, I have been told before that such and such a testimony would carry Spiritualism triumphant over all obstacles, and that its success was *now* assured. I have not the faintest belief in one assertion or the other: not the least. Buguet—a thousand Buguets—cannot crush it; and the whole Royal Society cannot help it much. It will go on, all the better, perhaps, if it be relieved from fussy meddling, as well as from impudent deceit and imposture. The time—any competent observer might know—the time must come when evidence such as Buguet's would recoil on the heads of those who brought it into court. The poor wretch was bribed by promises of immunity, and told his tale. His judges had not even the honesty to keep faith with him, and he found himself in a dungeon, spite of his false swearing. And so now he is turning round, as might be expected. Before me lies a letter written on his behalf, in which there are thrown out feelers for mercy. The temptation is alleged, the promise that he should be held free, and so on. By and bye the miserable story will receive its final chapter, and then the whole thing will drop into oblivion.

Will Spiritualism then be any the worse? Yes: just so much the worse as any subject is which is degraded by those who represent it—just so much the worse as the British army is because it numbered in its roll a Colonel Baker, or the British aristocracy because some of its members have been rascals—just that, and no more. You must eliminate human nature before you can provide against such contingencies. Meantime the facts will remain; and as one more contribution to that solid edifice of truth, which no amount of fraud can overthrow, I ask you to reproduce the annexed statement.

August 20, 1875. M. A. (Oxon.)

TAKING OF A PHOTOGRAPH OF THE SPIRIT OF A LIVING MORTAL ON THE SAME PICTURE WITH THAT OF ANOTHER LIVING MORTAL.

Some months ago, during cold weather, Mr. Demarest of this city went to the rooms where Mr. Evans is to be found, to procure, if possible, a photograph of some spirit friend. The spirit photographer told him he would do what he could for him, and abide the pleasure of the spirits in co-operation. A glass plate for a negative was accordingly prepared, and Mr. Demarest took his seat in the chair before the lens of the camera. Mr. A. C. Maxwell, the proprietor of the photographic rooms, was present, and feeling tired and drowsy took a seat by the warm stove, and fell into a sort of doze. The stove was quite a distance—some eight or ten feet—back of the camera, and thus the situation was: Mr. Demarest before the camera, getting his picture, and what spirit faces might appear, taken; Mr. Evans, the spirit-photographer, at the camera, with his right hand upon it, between Mr. D. and Mr. Maxwell, who was sitting dozing at the stove. In a few moments the curtain was turned over the lens, and the plate and holder taken to the chemical-room, and there for some moments prepared and washed, to bring out the picture. The negative was then brought out, and lo and behold! there upon it were the distinct full form and features of Mr. Demarest, and *the plain and distinct lineaments of the form and face of Mr. Maxwell, or of the spirit of Mr. Maxwell, beside him.*

The picture was printed, and Mr. Demarest was not only disappointed, but chagrined, and suspicious of it, saying to Mr. Evans: "It would not do to have that picture go out of his rooms, for it seemed a fraud; that that spirit beside him was no more nor less than the picture of Mr. Maxwell, produced no doubt by some hocus-pocus on the plate." Mr. Maxwell at this blushed and reddened much in the face, but said that he had nothing at all to do with it; that he could not at all account for his profile face and figure being on that picture; that Mr. Demarest himself knew that he (Mr. M.) was sitting *dozing* at the stove, entirely behind the camera, at least twelve feet from Mr. Demarest, when the picture was taken; and that he could not have had anything to do with it. Mr. Maxwell took the picture to an adjoining room to his wife, and, that he might be sure, asked her whose likeness was that beside Mr. Demarest. His wife replied at once, "Why, yours, to be sure," and, thus assured, and more confused and confounded about how his likeness got on that plate, he returned the picture to Mr. Demarest, saying: "He knew nothing at all about it." It seems that Mr. Demarest took the curious phenomenal picture and showed it to his friend, Mr. Fanshaw, the artist, and an experienced Spiritualist of this city, who after hearing the particulars, at once recognised it as a repetition in New York of the remarkable phenomenon of taking the picture of the *double* in photograph in the city of Paris, about which so much was said in the French and English papers some time ago.

I have a copy of this singular photograph, so illustrative of the fact that *while we are yet living upon earth, we have a dual existence—a two-being existence*—and I have particularly compared the profile lineaments and features of the spirit with those of the normal mortal Mr. Maxwell, *and they are just alike.* So that I am compelled to pronounce it the figure and face of Mr. Maxwell; and I am also impelled to the conclusion on the evidence of Mr. Evans and Mr. Maxwell, the circumstances, and the nature of the case, *that while Mr. Maxwell, the mortal, was dozing at the stove, his dual existence—his spirit—was having his likeness taken, with that of Mr. Demarest, on the photographic negative.*

As a part of the intrinsic evidence of this conviction, I must mention that the background used in taking the picture was painted canvas, and the spirit-likeness of Mr. Maxwell appears upon the picture absolutely between the painted figures on the canvas and the painted frame of the canvas—a fact, or feat, that could not possibly be accomplished by any natural laws known to us, and can only be accounted for by the fact that it is the work of the spirits. I wish readers might see this curious picture, and examine it for themselves.

We have, then, performed here in the city of New York, right before us, what created so much sensation as a performance some time ago, in the city of Paris—a photograph of the spirit of a mortal while he was asleep or in a doze—a proof, beyond peradventure, of the saying of Paul—so little understood—that "there is a natural body, and there is a spiritual body;" *and further, that we have them both while yet on earth.*

New York, July 8th, 1875.

THE CELTIC RACE—FRENCHMEN.

(*From "Ethnology and Phrenology," by the late* J. W. JACKSON, F.A.S.L.)

The model Frenchman is still in the main, that is, in feelings, affections, sympathies, and impulses, a Celt, and this, too, of the old rather than the new school, of the pre rather than the post Teutonic era, being in this the racial contrast and antithesis of his neighbour and rival, the thoroughly fused Anglo-Saxon, in whom Celt and Teuton have been effectually commingled and amalgamated. Hence, the modern Gaul is still, with some intellectual modifications, a being of the past rather than the present—a man of war rather than of work—his passional impulsiveness ever urging him to the former, while somewhat disqualifying him for the latter. Speaking nationally, he still prefers a raid upon his neighbour's grounds to the more effectual cultivation of his own, and inclines to become rich by the rapid and easy process of appropriation and annexation, rather than the slower and more laborious means of industry and accumulation. He is by nature an admirer of the Horatian maxim, *carpe diem*, and can with difficulty

postpone the pleasure of to-day for the comfort of to-morrow. He accomplishes his feats by a sudden display of overwhelming energy, rather than the unyielding persistence of repeated and unfailing endeavour. In war, as was long since observed, his soldiers in the first charge are more than men, in the second less than women, and it is the same in matters civil. Acute, clear, vigorous, and discriminating in intellect, but, except under excitement, feeble in purpose, he is brilliant in design, but deficient in execution. He is vain rather than proud; and, with a prodigious strut in prosperity, is wonderfully crest-fallen in adversity. As a warrior, he can conquer rather than retain, and talks more of glory than duty, being occupied, indeed, about the passing shows of triumph far more than the lasting advantages of victory. He cannot live without praise, and, in education, inclines to brilliant accomplishments rather than solid attainments. With considerable secretiveness in the obscuration of small matters, he has, in reality, no depth of character, and lives ever upon the surface, being voluble of his loves, and communicative of his emotions. He likes display, and is theatrical, not only in his private manners, but in the affairs of State. To be governed he must be impressed, his beau-ideal of a ruler being a grand tragedian who fills the stage and brings down thunders of applause. He has tact rather than judgment, and is nearer to truth in his brighter intuitions than in his more laboured excogitations. He is great in finesse, and was the founder, if he be not the master, of modern diplomacy. He excels in the decorative rather than the useful arts, and yet, with considerable taste, never rises into the creative power of reproducing the faultless models of classic beauty. The reason is, he wants the moral elevation which could conceive of purity, and hence the unseemly intrusion of some low, passional element ever mars his finest efforts and noblest conceptions. There is some fatal want of breadth and solidity in his nature, which seems never to have thoroughly emerged out of the immaturity of youth. He is lively, witty, subtle, ingenious, and penetrating; in short, he is clever, but not wise. He cannot ripen, his mental constitution is not rich enough for that. Hence, he strikes the heavier but more massive Teuton and Anglo-Saxon as something boyish, if not childish, while comparative anatomists tell us his frame is not so fully unfolded, having withal a somewhat feminine tendency in its general aspect and proportions.

The organic source of these peculiarities is easily seen by a Phrenologist. The French brain is only of moderate volume, and by no means calculated to give either individual or national weight of character. The temperament, from its intensity, affords some compensation; but then its excitability is so great as to materially interfere with the exercise of self command, and thus the tendencies arising from structure are reinforced and aggravated. There is a powerful development in the basilar region; and the organs in this direction exhibit unusual and disproportionate strength. Amative-

ness, Combativeness, and Secretiveness, are especially marked, and cannot fail to exercise an undue influence over the character. The general proportion of the Passions to the Affections is much larger than in the Teutonic race, and as a result, domestic life has not attained to the same degree of development as in this more favoured family. The Love of Approbation is inordinately large, and cannot fail to produce a susceptibility to the opinions of others unbefitting masculine maturity. Vanity will predominate over self-respect, for there is not enough of Self-esteem for the latter. The Governing Principles are deficient. There is neither a sufficiency of Caution for the prudential formation of plans, nor the requisite amount of Firmness for their persistent execution. The result of this combination will necessarily be precipitation in the commencement, with vacillation in the effectuation of "enterprizes of great pith and moment." A people so constituted may abound in physical but must be wanting in moral courage, and will be distinguished by an impulsive impetuosity rather than sustained energy; and their general force, while great for a passing occasion, will soon lose its vigour from not being duly sustained by a powerful will. The radical defect is want of supremacy in the Moral Sentiments, whereby the passional impulses, instead of being used as subordinate motor forces, become, under excitement, the predominating element of the nature.

The Intellectual Faculties approximate to, but do not equal, the Grecian type, their power being that of appreciation rather than origination; while there is, at the same time, a want of that harmonious balance which characterises the superior Hellenic cranium. Nevertheless, with all its defects, this Intellect is the strong side of the Gallic mind, and by its astuteness, readiness, and taste, often gives its active and showy possessor a temporary superiority over the slower but far more powerful Teuton. The Perceptives are prominent, and cannot fail to give accuracy of observation and quickness of apprehension. Except in a few favourable instances, however, they are unequal in development, and seem more suited for the scientific investigation of natural phenomena than for the higher pursuits of art. They will eminently conduce to delicacy and precision in mechanical manipulation, and as they are usually combined with considerable Constructiveness and Ideality, much ingenuity will be manifested in the finer trades which are devoted to the production of ornaments and the decoration of either persons or buildings. With all this, however, there is, as we have already observed, good taste, rather than creative power, the volume of brain not being sufficient for the latter. Hence a people so constituted may lead the fashion in dress, jewellery, household arrangements, and even manners, and yet never attain to the highest rank in Poetry, Music, or Art; and while pre-eminently excellent in toys, will fail to endow the world with those great mechanical inventions which change the destiny of nations and inaugurate a new era for humanity.

From the powerful development of Combativeness, combined with Destructiveness and a Love of Approbation, the pomp and circumstance of war will have almost resistless attractions for them, and accordingly much of their mechanical ingenuity and administrative ability will be devoted to the improvement of drill, strategy, and the details of military equipment and organisation. Not that even here the very highest genius will be manifested, as the range of faculty amounts rather to a mastery of details than a command of first principles; and thus even in war, their favourite pursuit, such a people will scarcely be supreme, but tend in great emergencies to fall under the native ascendancy, and submit to the more vigorous guidance of minds more powerfully constituted and capable of a larger grasp in the management of vast and comprehensive affairs. And accordingly we find that the marshals of France, under the old regime, were of the Frankish nobility, while in the wars of the Republic it was no Gaul, but a despised and semi-barbarous Corsican, who, by native force of character, and the urgent necessity of events, arose to supreme power, called, as if by universal acclamation, to the exercise of an authority for which no other was competent. Perhaps no more fatal indication of inherent incapacity for self-government was ever shown by any nation than that which has been recurrently manifested by the French in their successive revolutions. Thirty millions of human beings aroused to the utmost pitch of hope and enthusiasm, and exposed to the influence of events eminently calculated to evoke latent ability, could produce no man of their own blood equal to the demands of the time. Dreams of liberty eventuating in reigns of spasmodic terror, produced by feebleness frightened at its own shadow, was the history of the first revolution. Mighty purposes that never advanced beyond eloquent orations was the history of the last. Under such circumstances the Buonapartes were a political necessity, and assumed the purple as by a fiat of destiny.

Public liberty is impossible where there is neither private independence nor individual self-command. He who is not prepared to think and act for himself, will very soon find that others think and act for him. He who cannot stand without leaning, must not complain if, eventually, submission be exacted as a return for protection and support. The slave of his passions is ever ready to become the tool of a tyrant, for he who cannot control himself from within must be restrained by another from without. Vice and corruption are more potent aids to despotism, than all the Prætorian bands ever organised; nor has freedom a greater friend than virtue. Manners and morals have more to do with the welfare of states than either placemen or patriots are willing to admit. It is not enough that we wish for liberty, or that we are even willing to fight or die for it, we must, in addition, be prepared to live for, if we would enjoy it. Now this is the great defect of the Gaul, he wants freedom without being willing, or perhaps even able, to pay for it. He would unite the political forms of a re-

public with the private vices of a despotism, not seeming to understand that liberty and licence are wide as the poles asunder, that one is the hardly earned privilege of him who is a law unto himself, while the other is the miserable saturnalia of a slave, whose fetters have been loosened for a season. He does not comprehend the golden mean, which by avoiding excess is saved from the evils of reaction, and thus tumbles in pitiable confusion, from anarchy and social disorganisation, into the iron grasp of a military despotism. The fact is, he must have a chief, without whom the clan dissolves into chaos. The nation instinctively feels that it wants, before all things, a strong government, unfortunately so strong, that occasionally the sceptre has to be exchanged for the sword, which is drawn in the name of law and order.

This unhappy state of things has been greatly aggravated by two important and lamentable events, the one religious and the other political in origin, but both racial in their effects. We allude under the first to the massacre of the Hugonots, and the revocation of the Edict of Nantes, by which the Protestants, who constituted a very important part of the middle and industrious classes, were largely either destroyed or expelled. Now, as Protestantism, as we shall hereafter show, is a Teutonic movement, there is every reason to believe that in a mingled race it would tend to most readily and powerfully influence minds of a Teutonic constitution, whose loss in such numbers, therefore, could not fail to prove injurious both socially and racially. In fact, it left the debased and vitiated remains of the Frankish nobility alone in their weakness, without a shield between them and their exasperated serfs, the outraged, and therefore ferocious Sansculottes—Gauls without chiefs, Celts dissolving into chaos. And now came the Nemesis of this infamous transaction, the natural and providential retribution of this great State crime, or rather series of crimes, for the commencement dates from the persecution of the Albigenses. The court and aristocracy were in turn destroyed by their own fierce democracy, and the guillotine, the noyades, the September massacres, and a forced emigration, completed the terrible parallel to their own cruel persecution of the Protestants. The just award of a Divine vengeance was carried into effect, they were made to drink of the cup of their abominations to the utmost dregs, and racially, the nation once more offered up a priceless holocaust of its best and purest blood. There is nothing in modern history that approaches these extirpations and expatriations, except the expulsion of the Moors from Spain, and even that was by no means so injurious racially, though sufficiently disastrous socially. The Iberian peninsula has not yet recovered from her unwise indulgence of a persecuting orthodoxy, and France is still in the convulsions attendant upon hers. Whether Celtic Gaul will ever be able to establish a free yet stable government, is a problem which the future alone can solve. If not, another conquest and colonisation inevitably impend, when a racially victorious immigration will inaugurate the epicycle of Frankish invasion and possession.

PROFESSOR NEWMAN ON BUTCHER'S MEAT AND TOBACCO.

At a meeting of the Dietetic Reform Society, (which is composed of young men who are not only vegetarians, but tectotallers and anti-tobacconists), recently held in London, Professor F. W. Newman delivered an interesting address. He commenced by referring to the hurtful effect which habit had on human life. Old countries, like England, suffered from it far more than their colonies. Our old institutions rose out of barbarous times and mere conquest, and, therefore, cannot help being barbarous. The enormous evils of our land tenure, caused not by any wrongfulness of existing landlords, but by the history of eight hundred years, were only beginning to be generally understood. The evil of closely built towns was in like case. Of old, the aim was to put a wall round habitations, and live packed tight like a Roman camp. Indeed, very many of our towns were originally Roman camps. In the present day the most dangerous thing that an army in the field can do, is to pass the night in dense masses. So, too, a great thickly populated city is dreadfully exposed both to bombardment and to famine from an enemy. Yet we continue, helplessly and thoughtlessly, the mischievous institutions—nay, go on making bad worse—solely because they are traditional. Just so is our habituation to butcher's meat. Such food is necessary to barbarians in a new country. It is the easiest thing to an army on march, and to roving tribes; but no nation can become populous except by raising crops. Civilisation and feeding on the fruits of the earth had always gone on side by side. To live by tame cattle was better than by hunting. To raise crops for cattle was better than to let them feed on wild grass. But to feed on the crops ourselves is vastly more economic. We have for nearly thirty years been trying to reverse the historical course of civilisation, and go back towards an increased use of flesh meat. At the same time we have imported from a barbarous people the stupefying influence of tobacco. I rejoice, Mr. Chairman (said Professor N.), that your Society has added abstinence from tobacco in its profession! More than forty years ago, when in Turkey, I used to smoke, as everyone else there, never suspecting anything wrong; but on quitting the soil of Asia I at once abandoned the practice, and never experienced cravings for it. Indeed, the strength of a cigar always disgusted me, and its smoke offended my eyes. On the contrary the Turkish tobacco is mild, the pipe is a long cherry stick, cleaned every morning with a ramrod, so that the noxious oil of tobacco, containing the deadly poison nicotine, is kept aloof. But about 1855 the late eminent surgeon, Sir Benjamin Brodie, aroused us by his vehement attack on smoking. Great numbers of medical men now confess its deadly results. The late Mr. Solly attests that leeches, when applied to the body of an inveterate smoker, fell down poisoned. We can all see that opium-smoking and tobacco-smoking must be close akin—each drug is narcotic; each is said to *soothe;* each certainly *stupefies.* Smokers throw down burning material in the midst of combustibles, and cause countless fires by sea and land. Every year women are burnt to death in the streets by smokers throwing pipe ashes on their dress. Literary smokers complain of dimness of sight and loss of appetite, unaware or thoughtless that these are among the results of smoking denounced by Sir Benjamin Brodie, Mr. Lizars, and others. Dr. Augustus Murray, who praises tobacco smoking as excellent for elder persons, deprecates it for the young. But evidently, in our present freedom, the young will

emulate and imitate the elder. Fathers cannot stop their sons if they will set the bad example. Therefore, I rejoice when a Society stands up for that triple abstinence which quickly enriches the poor, abstinence from intoxicating drink, narcotism of the nervous system, and (in our present civilisation) from flesh meat. Now, as for myself, under medical advice I used to eat flesh meat largely, in fact, from the age of 41 to 62 always twice a-day, and often three times; but, when led to study the cattle murrain, I came to the conviction that it was caused by our population demanding more flesh food than was to be had naturally and healthfully. I then could not be happy without trying to go without it myself, though I did not believe I could dispense with it; but on suddenly giving it up I soon found myself the better, and I now know the reason why. It is intrinsically better, and for eight years since I am entirely confirmed in it. Now, also, I am carried on to ask, as did Mr. John Smith, of Maldon, author of the classical work on fruits and farinacea, what *right* we have to take the lives of harmless animals when it is not necessary to our life? Indeed, all the cruelties of sport are probably traced to the habit of feeding on wild birds and beasts, which makes it seem lawful to disregard all the miseries inflicted by mangling or crippling them to gratify our pride of skill. Moreover, when an economist tells our poor people that they have no right to raise large families he seems to overlook that men have a right to multiply, prior to that of cows, and sheep, and swine. Economical science is misdirected. Instead of denouncing excess of men, it ought to denounce excess of brute animals and waste of human food. Waste! why, one may almost say the essence of our received high cookery is wastefulness. The topic might engage us for a long speech; but in a few words it may be shown that, so long as it is thought hospitable to make your guests eat of twenty dishes, your cook is bound to be wasteful on principle. Fancy a dinner party beginning their meal on a sound, farinaceous dish, just as nourishing as nature makes it. Their stomachs would be so satiated that they would be unable to eat more than three or four of the other twenty nice dishes. Therefore the cook has to take nourishment out of everything, and whatever is nutritious is scolded down as *heavy*. Bread, for instance, the staff of life, is deprived of its *gluten*, which Baron Liebig and Dr. Lyon Playfair declare to be the very same chemical element as white of egg, which is the substance of the human muscle. This cordial element is taken and given to pigs, while before the rich guest is placed a roll, tea cake, or Sally Lund—light, very light, that is, very empty of nourishment. Now, under the circumstances, this is quite right. Better to eat twenty meagre dishes than twenty nutritious ones, if twenty must be eaten. Only, I do protest, those who connive at such a mismanagement of food material have no right to turn round upon us and maintain that farinaceous food *cannot nourish* us, and that it is *deficient in albumen*.

BREAD.

(From Dr. T. L. Nichols' Herald of Health for July.)

Bread is the staff of life. Good bread contains the best food for man, in the proportions required for the healthy nourishment of the system. We tire of many kinds of food; but we eat bread every day (so it be good bread) with the same relish. A certain variety is desirable; but if we could have but one kind of food, we should choose bread. In a certain sense, we must consider all kinds of farinaceous food as bread.

Wheat is the king of grains—the most perfect food of man—but we have bread also of rye, oatmeal, barley, maize, rice, &c. Even a baked potato is closely allied to bread, and the bread-fruit of the tropics is a nourishing substitute.

We do not know why it is, but the fact is observed by every traveller, that while one finds good bread in France, Belgium, Germany, Italy, and best of all, perhaps, in Austria, good bread in England is very rare. As a rule the bread of English bakers is bad, and consequently unhealthy. It is dry, chippy, flavourless, or sour, or bitter. English rolls are doughy and indigestible. Much of this bread is made of the flour of damaged or inferior wheat, or flour that has turned sour. This is doctored with alum, and alum makes the flour absorb a third more water, and so adds to the profits of the baker.

The sweetest, the most nutritious, the healthiest bread in the world is that made from unbolted wheat flour—*brown bread;* not the dry and tasteless stuff sometimes made by bakers by mixing bran with their ordinary dough, but bread made of the "whole meal" of good sound wheat, and containing all its nutritive elements. Chemists have found by analysis that the nitrogenous or flesh-forming portion of wheat resides chiefly in its outer layer—the very portion thrown away, or given to cattle; and physiologists have also discovered that it is this portion which keeps up a healthy action of the bowels. No person who lives chiefly or largely on genuine brown bread, or its equivalent, in perhaps a better form—porridge made of coarse wheat-meal—ever suffers from constipation, and long-standing cases are speedily cured by a diet of pure wheat and fruit. I have never known a case, even of years' standing, and constant use of aperients, that did not soon yield to such a diet.

From the earliest known ages brown wheat bread has been famed as a most healthy, invigorating food. Hippocrates, the father of medicine, prescribed it; the hardy Spartans lived on it; the Romans of the heroic ages lived on it, and their armies conquered the world on a diet of brown bread. The most healthy peasantry of central Europe eat it as their common food. Baron Steuben said the peculiar healthfulness of the Prussian soldiery a century ago was owing to their living almost entirely on unbolted wheat bread. During the naval glory of Holland, her sailors ate the same kind. During the wars of Napoleon, when wheat was dear in England, the army, from motives of economy, was supplied with brown bread. The soldiers at first refused to eat it—threw it away—all but mutinied; but in a few days they liked it better than the white; and their health so much improved that in a few months disease was almost banished. Many of the nobility adopted it, and physicians began to prescribe it. An orphan asylum in New York was cured of epidemic ophthalmia by the use of brown bread in place of white.

And this brown bread, with its equivalent preparations, is the purest, the healthiest, the best form of human food. The model food for childhood and youth; the food of growth, purity, beauty, intellect—in one word, of HEALTH, is brown bread, milk, and fruit. There is absolutely no need of any other. A pound of wheat has more nutritious value than three pounds of beef or mutton. Lean beef or mutton is 75 per cent. water to begin with. The remaining elements—fibrine, gelatine, albumen—are identically the same as in wheat, but mingled with animal impurities, and the wheat is superior in heat-forming elements. Bread and fruit are the natural food of man; the flesh of animals is an artificial substitute.