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THE MYSTERY OF SLEEP

BY

JOHN BIGELOW

The night-time of the body is the day-time of the soul

—IAMBlichus



NEW YORK

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1897

Biology

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TO MY READERS

I WISH to disclaim any pretension to have given in the following pages a solution of all the mysteries of sleep, or even a precise and scientific exposition of any of them. When, if ever, that shall be possible, they will cease to be mysteries. What I have aimed to do is, first to unsettle, if not dispel, the popular delusion that sleep is merely a state of rest ; of practical inertia of soul and body, or at most, a periodical provision for the reparation of physical waste in the sense that a well, exhausted during the day, fills up in the hours of the night. Second, to set forth some of my reasons for the con-

viction that no part of our lives is consecrated to nobler or more important uses than that usually spent in sleep ; none which contributes more, if so much, to differentiate us from the beasts that perish ; that we are developed spiritually during our sleeping hours as distinctly and exclusively as we are developed physically and intellectually during our waking hours, and finally that it is as much the part of wisdom to order our lives so as to avoid everything apt to interfere with or impair either the quality or quantity of our sleep, as in our waking hours it is to avoid whatever tends to interfere with the growth or impair the health or perfection of our bodies.

I should be sorry to incur the suspicion of having sought to penetrate mysteries which are impenetrable ; of having presumed to enter where

angels fear to tread, but I have yet to learn that the Great Creator has ever refused to disclose any of the mysteries of his creation to his creatures whenever they were in a condition to comprehend and profit by the disclosure. His secrets always cease to be secrets when their disclosure will not expose them to profanation, and I venture to express my belief that the mysteries of sleep, like the mysteries of godliness, of charity, of the domestic affections, will be revealed to us just so fast and far as we are prepared to receive, without profaning, them.

Were the mysteries of sleep studied with like incentives and by the same class of minds as the mysteries of electricity are now studied, the former would seem to us no more mysterious than the latter, and the results would be no more surprising.

It scarcely requires prophetic vision to foresee the time when the art of sleeping will be taught and studied as systematically in our schools of science as the physiology of our nutritive and nervous systems, and then much of the literature and pseudo-science now in vogue, relating to both, will find its way to the wallet "wherein Time puts alms for Oblivion."

HIGHLAND FALLS ON HUDSON,

August 1, 1896.

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THE MYSTERY OF SLEEP

CHAPTER I

Why Do We Spend One-third of Our Lives in Sleep?
The Common Theory Fallacious—Neither Soul, Mind,
nor Body has any Attribute of which Fatigue can be
Predicated—Recreation from Labor Found in Change
of Employment

WHY is it that the children of men are required by the inexorable laws of their existence to spend, on an average, eight out of every twenty-four hours, or one-third of their entire lives, in sleep?

Why are their memory and consciousness periodically suspended and so large a part of every day apparently wasted, that might be devoted to the prosecution of the duties which the Author of their being has imposed

upon them, or in such innocent indulgences as he has qualified them to enjoy?

Why is this apparent waste made one of the conditions of life, not only to those who are supposed to have been created in God's image, but to the animal and vegetable kingdom as well?

These are questions which pass through the minds of most thoughtful people at some time in their lives, and, to such as have grasped the great and pregnant truth, that in the Divine Economy there can be no waste, they are very puzzling.

Most people are content with the theory that the mind, like the body, gets fatigued with the labors of the day, and needs rest for the reparation of wasted tissue, as the soil needs fertilizing to maintain its productiveness;

and that one hour out of every three, eight hours out of every twenty-four, three months out of every year, and twenty-three years out of every three score and ten, are only a fair allowance for that purpose. Such in substance would be pretty uniformly the answer that would be made to these questions, and it would as uniformly go unchallenged. Such is the view which has been always taken of it by what is called Science. Yet such an answer assumes many things as facts which are not facts, and any reasoning upon them therefore must be fallacious.

In the first place it is not true, nor is there any substantial foundation for a suspicion, that the mind or the soul, the *animus* or the *anima*, the intellectual or the spiritual functions of our being, can ever be fatigued; that they

have any single attribute of which fatigue can be predicated. Neither would any one ever suspect such a thing if he reasoned only from what he knows or may know of the phenomena of sleep.

The faculties of memory and consciousness, which are suspended to a greater or less extent during sleep, are chiefly needed, so far as we have any means of knowing, for dealing with the affairs of this world in our waking hours. We need them constantly in the management of our business; in conducting our intercourse with our fellow-creatures; in providing for the needs and exigencies of our material existence, and more than all in appropriating the moral lessons which it is the providential purpose of our everyday phenomenal life to teach us.

In our sleep, however, we have little,

if any thing, to do with our worldly or phenomenal existence, and what we have is presumptive evidence of imperfect repose. But, says science, our bodies require rest from the fatigues of the day as a necessary preparation for the duties of the morrow; to repair the waste of tissues; "to knit up the ravelled sleeve of care." The notion, not less universal in old times, that the sun revolves around the earth was not more fallacious. Were it true, the need of rest of course would not be limited to any particular region or function of the body. Every particle and atom of it must share that necessity. But we find that so far from there being any such suspension of the energies of the body, it is impossible to name a single one of those functions that is absolutely suspended during sleep. Our eyes are closed, not

because the faculty of opening them or seeing with them is suspended, but simply because we do not will to open and see with them, and this is just what happens with all of us frequently in our waking hours, as when we close our eyes to exclude the light, to favor meditation, or in prayer. There is no visual faculty suspended in the one case more than in the other. That our hearing is generally less acute during sleep than at other times, is not the result of any suspension of the auditory functions, but, as in our waking hours frequently, from the lack of attention. Any unusual sound, such as would be likely to arrest our attention in our waking hours, is apt to awaken us from sleep. No one can have travelled much on our ocean steamers without remarking the prompt effect of any unusual noise,

though far less considerable than the familiar noise of the machinery, upon the sleeping passenger. Very few will sleep through even a pause in the operation of the machinery. A disagreeable or untimely odor will often awaken a sleeper as soon as it would be noticed by him when awake. Our hearts do not take a moment's rest from the hour of our birth until our decease. It is always in the effort to send our blood, laden with vital energy, through every vein, artery, and tissue of our bodies as well by night as by day, and whether sleeping or waking. The lungs too are equally restless in their endeavor to provide themselves with fresh air to purify this blood and qualify it for its appointed uses. The process of inspiration and expiration by the aid of an elaborate and complex system of muscular con-

traction and expansion, goes on with an unrelenting vigor. The same is true of our stomach, our glands, our kidneys, and of all our mysterious digestive apparatus. Even our nails and our hair are as tireless as our heart or lungs.

The student when he wearies of one subject seeks his recreation in another. He drops his law or his theology or his astronomy and takes up, mayhap, poetry or music or history. I knew a clever architect who diverted his mind from professional strain by the study of geometry, and always travelled with a copy of Legendre in his satchel. He did not want rest; he wanted change. Milton went to his organ for diversion. Dr. Franklin's favorite recreation was chess, and Jefferson's his violin. Whist is one of the popular recreations for professional men.

People whose brains are most severely exercised are apt to find their most congenial recreations in games of some kind which require a concentration of the mental powers, while no one of them finds it in mental inactivity. That kind of recreation seems to be the exclusive privilege of the idiot. There is a very large number of both sexes unfortunately who do little or nothing from one week's end to another to fatigue mind or body, who yet fall asleep just as punctually, and sleep quite as long, as the average laboring man.

All philosophers, I believe, are now agreed that matter can neither be increased nor diminished in quantity by any thing that we can do. How can that doctrine be reconciled with the idea of matter becoming fatigued or needing rest ; and how can we explain

the tireless energy of the countless planets, which have been dancing to the music of the spheres around their respective suns from the dawn of creation, and without relaxing their speed in the slightest degree or stopping a moment for repairs in all the myriads of years? If any particle or fraction of our bodies requires rest, the planets must need it incalculably more. We shall search in vain for any law, attribute, or property of matter or of spirit which prescribes for either rest as an end or subjective necessity under any imaginable circumstances. Then, why every night of our lives does sleep descend upon us like an armed man; prostrate us with barbarous indifference on beds of down or straw, and close up all our communications with the work-a-day world, as in death?

If, as it is no presumption to assume, there is nothing of Divine Ordinance that goes to waste, there must be a purpose in this periodical and universal change which we call sleep, conceived in infinite wisdom and for an infinitely important purpose.

What, then, is that purpose? Are we turning it to the best account? If we knew that purpose, might it not invite us to modify many of our habits of life? Can we contribute in any degree to the advantages it is designed to secure us?

If we will reason from what we know, or easily can know; if we will resist the propensity to confound material phenomena with mental and spiritual operations, and keep distinctly before our minds to the best of our comprehension the ends or final purpose of our birth and experiences

in this world, need we despair of obtaining a satisfactory solution of all these problems, without ascribing to matter or to spirit attributes which neither possess, and without any wayward interpretation of the ways of God to men? Let us begin by making a note of some of the things which we know or can learn of the phenomena of sleep.

CHAPTER II

Sleep Interrupts all Conscious Relations with the Phenomenal World—Induces a State of Absolute Unworldliness—Analogy of Sleep with One of the Fundamental Processes of Spiritual Regeneration—Nocturnal Darkness an Ally of Sleep—Our Transformation in Sleep—Grindon—The Morning Watch

THE first and most impressive fact of universal experience that we note as an incident of sleep is our sudden and complete dissociation from the world in which we live; the interruption of all conscious relations with matters which engross our attention during our waking hours. - No matter how much we are absorbed by private or public affairs, no matter how vast the worldly interests that seem to be depending upon every waking hour, with what cares we are perplexed,

what aspirations we indulge, they can postpone but a few hours at most the visit of this inexorable tyrant, while they cannot diminish in the slightest degree the lawful measure of his exactions. Sleep, like death, knocks at the doors of kings' palaces as well as poor men's cottages. It is no respecter of persons, and while it is levying its tribute we are unconscious of every thing we have done in the past; and of all we were planning to do in the future.

Here we have one of the universal conditions of sleep which is coincident and in harmony with one of the supreme behests of a Christian life: utter separation from the phenomenal world; an entire emancipation for these few sleeping hours, from the cares and ambitions of the life into which we were born, and to the indulg-

ence of which we are inclined by nature to surrender the service of all our vital energies. If it be a good thing to live above the world, to regard our phenomenal life as transitory, as designed merely or mainly to educate us for a more elevated existence, to serve us as a means, not an end, then we have in sleep, apparently, an ally and coadjutor—at least to the extent of periodically delivering us from the control of a good slave and a bad master. We here recognize an incontestable analogy at least, between the phenomena of sleep and the fundamental principle by which the regeneration of the human soul is to be begun, and by which only such regeneration can be successfully prosecuted. The very existence of such an analogy is a fact of immeasurable interest and importance, for such analogies in the

scheme of Divine government are not accidental ; are not without a purpose proportioned to the dignity of their august origin.

There is another provision of nature which may be justly regarded as an auxiliary to sleep, and which is quite as universal and extensive in its operation. At uniform intervals in every twenty-four hours of our life the sun withdraws its light and covers most of the habitable portions of our planet with a mantle of darkness. This not only invites sleep by withholding a stimulus which discourages it, but practically interrupts or modifies all forms of industrial activity ; it interferes seriously with locomotion ; like sleep it helps to interrupt most of the plans and occupations which engage our attention during the sunlit hours of the day ; it breaks the hold which

the world has upon us, and emancipates us from the dominion of our natural propensities, appetites, and passions, which engross us to so great a degree in our waking hours.

Why should the ploughman leave his plough in its furrow when the sun ceases to light his way? Can any other more satisfactory reason be suggested than that he may for a few hours be as one dead to the concerns of his farm and plough, and his soul for a time freed from their distractions? Whatever may be the final purpose of sleep, that also is obviously among the final purposes of nocturnal darkness.

The morning hour, says a German proverb, has gold in its mouth.

If our sleep has been undisturbed by indiscreet indulgences of the appetites or passions, by unwonted

anxieties or otherwise, we awake refreshed, with our strength renewed, our minds serene and clear, our passions calmed, our animosities soothed or forgot, with kindlier feelings toward our neighbors than at any other hour of the day. It is the hour, too, which from time immemorial has been consecrated by saint and savage to devotional exercises.

“Every one knows,” says one of the profoundest living interpreters of the phenomena of life,* “how sweet is the restoration derived from one’s pillow in health; more wonderful even yet is that which we derive when sleep occurs at the crisis of severe disease. The nocturnal refreshment of the

*“Life; Its Nature, Varieties, and Phenomena,” by Leo H. Grindon, Lecturer on Botany at the Royal School of Medicine, Manchester. Sixth American Edition. J. B. Lippincott Co., Philadelphia, 1892. P. 349.

physical frame induces a similar restoration of the spiritual. Relaxed from the tension in which it is held toward the outer world while awake, during sleep the mind sinks into a condition comparable to that in which it lay before consciousness commenced; all images and shapes it is cognizant of by day either vanish or appear only as reflected pictures; unexcited from without, it gathers itself up into new force, new comprehension of its purpose; much that crossed the waking thoughts, scattered and entangled, becoming thereby sifted and arranged. Hence it is that our waking thoughts are often our truest and finest; and that dreams are sometimes eminent and wise; phenomena incompatible with the idea that we lie down like grass into our organic roots at night and are merely resusci-

tated as from a winter when we wake. *Man is captured in sleep, not by death, but by his better nature*; to-day runs in through a deeper day to become the parent of to-morrow, and to issue every morning, bright as the morning of life, and of life-size, from the peaceful womb of the cerebellum."

Of this mysterious transformation no one has sung more eloquently than Henry Vaughan, the precursor of Wordsworth as the interpreter of the mystical and symbolical aspect of nature, in his lines entitled

THE MORNING WATCH

Oh Joyes! Infinite Sweetness! With what flowers
And Shoots of glory my soul breaks and buds.

And the long hours

Of night and rest,

Through the still shrowdes

Of sleep and clouds,

This Dew fell on my breast :

Oh how it blouds

And *Spirits* all my Earth! Heark! In what Rings
And *Hymning Circulations* the quick world

Awakes and sings!
 The rising winds
 And falling springs,
 Birds, beasts, all things
 Adore Him in their kinds.
 Thus all is hurled
 In sacred *Hymnes* and *Order*, the great *Chime*
And Symphony of nature. Prayer is
 The world in tune
 A Spirit Voice,
 And Vocall joyes,
 Whose Echo is heaven's blisse,
O let me climbe
When I lye down. The pious soul by nighte
 Is like a clouded starre, whose beames, though said
 To shed their light
 Under some cloud,
 Yet are above,
 And shine and move
 Beyond that mystic shroud,
So in my bed,
That curtained grave, though sleep, like ashes hide
*My lamp and life, both shall in Thee abide.**

*Quoted in "Life and Times of Kettlewell," by Frances Lee.

CHAPTER III

The Morning's Prophetic Visions—Pliny—Lucretius—
Voltaire—Dante—Ovid — Parsons—Dreams — Imper-
fect Sleep—Somnambulism—Artificial Sleep—Hyp-
nosis—Why Different Amounts of Sleep are Required
by the Human Race at Different Ages

WHY should our minds be so much more alert in the morning, and problems which puzzled and defied solution at night be solved without a struggle? Why should lessons we tried in vain to memorize in the evening come to us when we awake, with verbal accuracy?—a common experience with school children. So things we search for in vain at "shut of day," we will often know exactly where to look for after a night's sleep. It is then, too, that we feel the charms of nature most keenly ;

that we are most disposed to extenuate the misconduct of friends and neighbors. In fact, there seems to be an extraordinary welling up of charity in us during the hours consecrated to what Hesiod, the Greek poet, describes as the Brother of Death and Son of Night.

If on the other hand we are suddenly aroused from profound sleep, we are apt for a time to have a dazed feeling, not knowing exactly where we are, or the precise import of what is said to us. We act as though suddenly brought from more congenial and altogether different surroundings, from which we have been wrested reluctantly. Children are apt to cry, and adults to scold. We are made happy when permitted to close our eyes again and return whence we came and to the company we had left.

Every mother is familiar with the smile that at times comes over her sleeping infant's face, betraying as distinctly as ever when awake, its experience of pleasing emotions. The Elder Pliny takes note of the occasional habit of infants sucking in their sleep; and also of their sometimes awaking suddenly with every symptom of terror and distress. Lucretius in the noblest epic poem of the Latin tongue speaks of race-horses, while sleeping, becoming suddenly bathed in perspiration, breathing heavily, and their muscles strained as if starting in a race; also of the hunting-dogs while fast asleep moving their limbs and yelping as if in pursuit of the deer, until awaking they are sadly disabused of their delusions:

Donec discussis redeant erroribus ad se.

Voltaire tells us that in one of his dreams he supped with M. Touron, who made the words and music for some verses which he sang. Voltaire in his dream also made some rhymes which he gives :

Mon cher Touron, que tu m'enchantes
Par la douceur de tes accents.
Que tes vers sont doux et coulants.
Tu les fais comme tu les chantes.

“In another dream,” he adds, “I recited the first canto of the *Henriade*, but differently from the text. Yesterday I dreamed that verses were recited at supper. Some one remarked that they were too clever—*qu'il y avait trop d'esprit*. I replied that the verses were a fête given to the soul, and ornaments were required for fêtes. Thus I have in my dreams said things that I would hardly have said when awake; I have had reflections in spite of

myself, in which I had no part. I had neither will nor freedom, and yet I combined ideas with sagacity, and even with some genius. What then am I, if not a machine?*

In the same paper Voltaire made this important statement: "Whatever theory you adopt, whatever vain efforts you make to prove that your memory moves your brain, and that your brain moves your soul, you are obliged to admit that all your ideas come to you, in sleep, independently of you and in spite of you—your will has no part in them whatever. It is certain, then, that *you may think seven or eight hours consecutively, without having the least desire to think, without even being aware that you think.*"

* "Dictionnaire Philosophique," tit. "*Somnambuler et Songer.*"

Dante speaks of being vanquished
by sleep

Just at the hour when her sad lay begins,
The little swallow, near unto the morning,
Perchance in memory of her former woes,
And when the mind of man a wanderer is
More from the flesh and less by thought imprisoned
Almost prophetic in its vision is.*

This theory of morning dreams is in accord with, and no doubt an allusion to, what some call a superstition, but which would be more respectfully described as a conviction among the ancients that *Somnium post Somnum efficax est atque eveniet sive bonum sit sive malum*; a conviction which Ovid perpetuated in the following lines:

Namque sub Aurora dormitante lucerna
Somnia quo cerni tempore vera solent. †

The truth of morning dreams as affirmed in the lines above cited from

* "Purgatorio," ix. ii.

† Heroides Epist. xix. 195.

Dante, was the happy inspiration of the following lines of the late T. W. Parsons, written on the death of his wife's cousin :

PRESSO AL MATTINO DEL VOR SI SOGNA.—*Dante*

Love, let's be thankful we are past the time
 When griefs are comfortless; and, though we mourn,
 Feel in our sorrow something now sublime,
 And in each tear the sweetness of a kiss.
 Weep on and smile then : for we know in this, O
 Our immortality, that nothing dies
 Within our hearts, but something new is born ;
 And what is roughly taken from our eyes
 Gently comes back *in visions of the morn*
When dreams are truest. Oh, but death is bliss.
 I feel as certain, looking on the face
 Of a dead sister, smiling from her shroud,
 That our sweet angel hath but changed her place
 And passed to peace, as when amid the crowd
 Of the mad city, I feel sure of rest
 Beyond the hills a few hours farther west.

If sleep were merely a rest from fatigue, merely a suspension of vital functions, why these mental and moral changes; why are our thoughts more alert, our feelings toward our neigh-

bors, our sympathy with nature, in so many respects, different on waking from what they were before sleeping?

Dreams ordinarily imply more or less imperfect sleep; a partial interruption only of our relations with external objects; the twilight or dawn of the phenomenal world as we are just entering it in the morning or just leaving it at night. They are to the sleeper what the shore is to the swimmer when his feet get support from the earthly bottom. Of the dreams, or rather of the mental or spiritual operations we experience between this twilight and dawn, and while our sleep is profound, our memory takes no note. We are only conscious of dreams which occur when the phenomenal world is only partially excluded from our consciousness: when we are, as it were, mounting the shore from the deep

*all sleep
is dream*

waters in which our souls have been immersed. Hence, perhaps, the confused, inconsequential, and fantastic character of what we can recall of most of them. The presumption, therefore, is that what takes place in our profound sleep, which is not in the least degree adulterated by sensual influences from the phenomenal world, is entirely free from what seems often so improbable and fantastic in our remembered dreams—which are obviously a medley of emanations from two widely different worlds or states of being.

The sleep-walker, or somnambulist, exhibits at times even more vitality and energy than he would be capable of exhibiting in a waking state. He not only walks, runs, rides, and does other things which he has been accustomed to do, but with his eyes entirely closed

he seems to have in that state perceptions supernaturally acute. He walks with confidence and safety along the roofs of houses, on the banks of rivers, and other perilous places, where nothing could have tempted him to go if conscious of the danger. What is more marvellous, he will write with critical accuracy in prose and verse; he will compose music; he will choose from among many specimens those best adapted to the most delicate work, with a promptness and precision of which, when awake, he would be wholly incapable.

Though sleep, like the tax-gatherer, visits us periodically, and whether invited or not, there are kinds of sleep to which some people are subject which are purely voluntary. Steadily gazing at certain precious stones is said to induce the condition in which

the early soothsayers acquired their influence. Looking into crystals for purposes of divination has prevailed, we are told, for thousands of years in Persia and among the fakirs of the East Indies, who thus abstract their attention from all objects which provoke interest in the world around them. The Omphapsychics of Mt. Athos accomplished the like purpose by concentrating their gaze upon the umbilicus; others by looking fixedly at the tip of the nose, thus disengaging the attention from, or interest in, their environment and every thing tending to the world and its daily concerns.

It deserves to be noted here that neither mesmerism, animal magnetism, hypnotism, nor any of the modern forms of super-normal or voluntary sleep can with propriety be attributed

to fatigue or exhaustion. It is also to be noted that all are used to a greater or less extent in the treatment of disease, and as a part of the curriculum of the most important medical schools in the world. The therapeutic process is always through the psychical to the physical; from the higher to the lower, from the spiritual to the material; never the reverse.

May it not be through the study of the phenomena of voluntary or artificial sleep that we are to look for the key that will unlock the mysteries of involuntary sleep, and reveal to us more than we yet know, at least, of what goes on within our holy of holies during the hours of natural or involuntary slumber?

It is also to be noted that in artificial sleep there may be exhibited the same evidences of languor and fatigue

as that to which the average mortal succumbs at eventide, though the subject may have done nothing to weary him, and, previous to his hypnotization, had experienced no fatigue or sleepiness whatever. This is another evidence that sleep, languor, or fatigue may be an ordinary antecedent or condition precedent of sleep, but in no sense its cause.*

Hypnosis may be induced by presenting to the hypnotic any one idea or image either by speech or example, as by stimulating the organs of vision or of hearing or of touch; by the ticking of a watch, a monotonous song or lullaby, or by gently stroking the skin. In every one of these cases the attention of the hypnotic is concentrated to a single object, and gradually detached from all else of the

* "Hypnotism," by Albert Moll, p. 23.

phenomenal world. This is the one uniform characteristic, I believe, of all hypnotic, mesmeric, and lethargic conditions, whenever, wherever, and however induced.

The changes wrought in us while sleeping, as a rule, vary according to the amount of sleep we require, and that varies with our age. In our childhood we require far more sleep than at later periods of life, and the younger we are the more we need. Infants, in whom we are able to discern few, if any, traces of a moral sense, sleep most of the time. It is during this period, before their rationality is developed, and before they come under the influence of the world and its temptations, which are so necessary to our spiritual growth later in life—in other words, before the moral sense can be successfully appealed to, that the seed

is planted by parental love, which is destined to grow and shelter them from those temptations when they do assail. Are not the longer hours which infancy and childhood require for sleep providentially proportioned to their greater spiritual needs? An infant would perish in a few hours if allowed no more sleep than would suffice for an adult. As we mature, our need of sleep gradually diminishes.

Old people, whose ties to the world not already severed are daily weakening, spend fewer hours in sleep, as a rule, than the younger of any age.

Why these discriminations of nature between the old, the middle-aged, and the infant? It is not casual, but uniform and universal. Did fatigue create a need for repose, why should the octogenarian, trembling with weakness, sleep least? Why should the infant,

who does nothing to induce fatigue, and doubles its weight out of its overflowing abundance of life, in a few months, sleep more than twice as much as his grandparents? Obviously because we tend to become less active and more contemplative in our declining years. The world has been gradually losing its charm, its former allurements cease to distract; the mind feeds upon the spiritual experiences of a long life, less disturbed than during our earlier years by the temptations of the world, the flesh, and the devil. They therefore may be presumed to need less sleep for any moral purpose than either the stalwart adult or the puling infant.

Following this line of thought, we should pause to take note of the fact that one by one the several senses by which we hold communion with the

visible world cease to render their wonted service as we advance into the autumn of life. The eyes, to use Milton's expression, "their seeing have forgot," the ears their hearing, the skin its sensibility, and so on. Why, except that the messages which it is the function of the senses to bring to us from the external world are becoming less needful to us or more hurtful, or that the interruption of those messages is required to supplement the educational offices for which the hours of sleep, usual at that age, were inadequate? With some the senses are dulled earlier than with others. May not this impairment of sensibility reflect a corresponding spiritual or moral condition? Of course, this impairment is a result, not a final cause or purpose. Of what is it so likely to be the result as of a

Divine purpose, similar to that we are ascribing to sleep, of diminishing or checking the interference of the phenomenal world with our spiritual growth, and an aid to us in overcoming the world?

Why, and whence, the vital changes that are wrought in us, of whatever age, in a few hours of sleep? Rest implies inactivity, a suspension of effort and exertion, the substitution of idleness for labor. If, therefore, all our nobler faculties have been resting during the night, have been doing nothing, by the operation of what force or by what necromancy are we so transfigured in the morning?

CHAPTER IV

Changes Wrought During Sleep Psychical, not Physical—
Seclusion from the World most Perfect in Sleep—
Indescribable Importance of Events in which Sleep
was a Factor as Recorded in the Bible—Mohammed's
Dream

IT will be observed that of the changes which distinguish our condition in the morning from our condition in the evening, the most conspicuous are not physical, but psychical. The moral side of our being seems for the time to have been in the ascendant. Having ceased for some hours to be pre-occupied with what is purely personal, narrow, and narrowing, the world's hold upon our thoughts and affections having been temporarily broken, we are at liberty for a time to realize that we are a sub-

stantive part of the universal life; to feel the spirit of the ages of which we are a product; to look up from nature to nature's God, its author, and to his great world as a manifestation of him rather than a product of human ingenuity and pretension. All this undisturbed by the calculations and ambitions of our day-lit life.

It was thus "to overcome the world," or at least to assist us in it, that the Mosaic law set apart one day in seven for our spiritual refection, *and enjoined upon us to do no manner of work.* It was for the like purpose we were directed when we pray to enter into our inner chamber and shut our door, that we be not distracted by what the world may think or say or be to us while we commune with our Father in heaven. May we not—do we not have a more perfect seclu-

sion from the world in our sleep, to help us to such a direct, prolonged, and undisturbed communion, than is possible at any other time? Is it not necessary for all of us, or at least for much the larger proportion of the world who otherwise might never seek this closer communion with God, to be subjected to the operation of a law which for a portion of every day reduces them to a condition in which nothing operates to prevent their giving their attention to the divine messengers that are continually struggling for an opportunity to be heard? This idea appears to have been the happy inspiration of one of our as yet unpublished poets in the following sonnet :

If thou wouldst look life's problem in the face,
And comprehend her mystic countenance,
Seek, in the early morn ere yet the grace
Of dewdrops have been withered by the sun,

Some solitary glen or truant brook,
And scan, freed from results of yesterday,
The ill-deciphered pages of life's book :
And ere to-day's vicissitudes have cast
Their shadows o'er the judgment, thou shalt see
Thy blessings will confront thee then, and ask
A recognizing smile. The world shall seem
A higher fact,—the heart of man more wise,
The very universe on larger plan,—
The glamour of day-dawn within thine eyes.

The most considerable and imposing repository of facts from which we are authorized to infer anything of what may be going on in us while we sleep, may be found where, ordinarily, one would be least likely to look for it, and, if sleep be, as most people suppose, simply an interruption of activities for the purpose of repose and refreshment, where it would be most out of place. That is, in the sacred Scriptures. If these writings are what they purport to be, an inspired guide to assist man in leading a holy life, it is impossible to recon-

cile the prominence they give to the phenomena of sleep with the idea of its being merely a mode of rest from fatigue.

Even a hasty reference to its pages will satisfy the reader that sleep is never referred to in the Bible except with reference to some of the most vital processes of spiritual growth or degeneration. In reading the illustrations of this statement, to some of which I will now refer, the reader is requested to note the incalculably important consequences of which, in each case, sleep is uniformly the prelude.

The very first allusion to sleep in the Bible associates it with an event second in importance, perhaps, to no other in the history of our race:

“And the Lord God caused a deep sleep to fall upon the man, and he

slept ; and he took one of his ribs, and he closed up the flesh instead thereof : and the rib, which the Lord God had taken from the man, made he a woman, and brought her unto the man. And the man said, This is now bone of my bones, and flesh of my flesh : she shall be called Woman, because she was taken out of man. *Therefore shall a man leave his father and his mother, and shall cleave unto his wife : and they shall be one flesh.*" *

Thus it was during his sleep that man was first qualified to love something *outside of himself*, that our race received its first lesson in altruism ; experienced its first triumph over the tyranny of its selfhood, and that the institution of matrimony was established. Eve is man's first unselfish love—his first genuine charity.

* Genesis ii. 21.

Whether regarded as literal or symbolical the passage quoted is no less impressive and significant.

It was when the sun was going down and a deep sleep fell upon Abram, that the Lord made him the founder of nations; commissioned him to teach to a pagan world the unity of the Godhead and the errors of polytheism.*

When Jacob was sent to his grandfather to seek a wife among the daughters of his uncle Laban, on his journey "he lighted upon a certain place, and tarried there all night, because the sun was set; and he took one of the stones of the place, and put it under his head, and lay down in that place to sleep. And he dreamed, and behold a ladder set up on the earth, and the top of it reached to heaven:

* Genesis xv. 12.

and behold the angels of God ascending and descending on it. And, behold, the Lord stood above it, and said, I am the Lord, the God of Abraham thy father and the God of Isaac: the land whereon thou liest, to thee will I give it, and to thy seed; and thy seed shall be as the dust of the earth, and thou shalt spread abroad to the west, and to the east, and to the north, and to the south: and in thee and in thy seed shall all the families of the earth be blessed. And, behold, I am with thee, and will keep thee whithersoever thou goest, and will bring thee again into this land; for I will not leave thee, until I have done that which I have spoken to thee of.

“And Jacob awaked out of his sleep, and he said, Surely the Lord is in this place; and I knew it not. And he was afraid, and said, How dreadful is

this place! This is none other but the house of God, and this is the gate of heaven.

“And Jacob rose up early in the morning, and took the stone that he had put under his head, and set it up for a pillar, and poured oil upon the top of it. And he called the name of that place Beth-el: . . . And Jacob vowed a vow, saying, If God will be with me, and will keep me in this way that I go, and will give me bread to eat, and raiment to put on, so that I come again to my father’s house in peace, then shall the Lord be my God, and this stone, which I have set up for a pillar, shall be God’s house: and of all that thou shalt give me I will surely give the tenth unto thee.”*

One of the most pathetic and dramatic stories in all literature is that of

* Genesis xxviii. 11-22.

Jacob's son, Joseph, and his brethren, the machinery of which consists mainly of dreams. It was the recital of one of his dreams that provoked his brethren to sell him into Egypt. While in prison there, in consequence of a malicious accusation of his master's wife, he interprets correctly the dreams of the king's chief butler and chief baker, who were his fellow-prisoners. The fame of this achievement spread through the land, and when Pharaoh, the king, was perplexed by a dream, he sent for Joseph, and was so impressed with his skill in interpreting it that he at once gave him power second only to his own in the kingdom, made him lord of all his house, and ruler over all the land of Egypt. It was thus through dreams that he was enabled to save his brethren "alive by a great deliverance," to

prepare the way for the escape of the children of Israel from the bondage of spiritual darkness in Egypt, to wander forty years in the wilderness that they might be fitted for a home in a land flowing with milk and honey, and symbolize for all future time the several stages of the progress of man's spiritual regeneration.

Samuel was laid down to sleep in the temple of the Lord where the ark of God was when the Lord called him by name.

“Now Samuel did not yet know the Lord, neither was the word of the Lord yet revealed unto him.” The Lord called him three times before he knew who it was that called, and then he answered, “Speak, for thy servant heareth. And the Lord said to Samuel, Behold, I will do a thing in Israel, at which both the ears of every

one that heareth it shall tingle." At the close of the Lord's statement of what he proposed to do, it is recorded that "Samuel grew, and the Lord was with him, and did let none of his words fall to the ground." *

"And all Israel from Dan to Beersheba knew that Samuel was established to be a prophet of the Lord." †

Saul was asleep in his camp when Abishai said to David, whom Saul was pursuing, "God hath delivered up thine enemy into thine hand this day: now therefore let me smite him, I pray thee, with the spear to the earth at one stroke, and I will not smite him the second time." David replied, "The Lord forbid that I should put forth mine hand against the Lord's anointed."

When Saul awoke on hearing the voice of David from a neighboring hill,

* 1 Samuel iii. 19.

† Ib., verse 20.

whither he had taken refuge, reproaching Abner for not having kept better watch over the Lord's anointed, he said: "I have sinned: return, my son David: for I will no more do thee harm, because my life was precious in thine eyes this day: behold, I have played the fool, and have erred exceedingly. . . Blessed be thou, my son David: thou shalt both do mightily, and shalt surely prevail." *

When Elijah was a refugee from the persecutions of Jezebel, and, faint with hunger, had fallen asleep, an angel touched him and told him "to arise and eat." †

To King Solomon is attributed the memorable 127th Psalm, in which occur the following lines:

Except the Lord build the house
They labor in vain that build it:
Except the Lord keep the city,

* I Samuel xxvi. 12.

† I Kings xix. 5.

The watchman waketh but in vain.
It is vain for you that ye rise up early, and so late take
rest,
And eat the bread of toil :
For so he giveth unto his beloved sleep.

Among the proverbs of the same king, the most famous of all earthly kings for his wisdom, "sweet sleep" is held forth as one of the privileges of him who despiseth not "the chastenings of the Lord" nor is "weary of his reproof." *

While Daniel and his three comrades were living at the court of Nebuchadnezzar, "God gave them knowledge and skill in all learning and wisdom : and Daniel had understanding in all visions and dreams."

When two years later Nebuchadnezzar had a dream which he had forgotten, he issued a decree for the slaughter of all his wise men and magicians, because they could not make

* Proverbs iii. 11.

known to him the dream and its interpretation. Daniel saved their lives and his own by revealing to the king "the visions of his head upon his bed," and their interpretation. One of the results of this dream was that Nebuchadnezzar confessed to Daniel that his God was the God of gods and the Lord of kings, and he made Daniel himself to rule over the whole province of Babylon and to be chief Governor over all the wise men of Babylon.*

Nebuchadnezzar in due time had another dream, which Daniel was called upon to interpret. It was of painful import. The king was to be driven from men; his dwelling was to be with the beasts of the field; he was to be made to eat grass as oxen and to be wet with the dew of heaven, and seven times were to pass over him until he

* Daniel ii. 47.

should know "the Most High ruleth in the kingdom of men and giveth it to whomsoever he will." "At the end of the days," said Nebuchadnezzar in his official proclamation of this experience, "I lifted up mine eyes unto heaven, and . . . at the same time mine understanding returned unto me; and for the glory of my kingdom, my majesty and brightness returned unto me; . . . and I was established in my kingdom, and excellent greatness was added unto me. Now I Nebuchadnezzar praise and extol and honor the King of heaven; for all his works are truth, and his ways judgment: and those that walk in pride he is able to abase." *

The prophet Joel, speaking in the name of the Lord God, says: "It shall come to pass afterward, that I

*Daniel iv. 5.

will pour out my spirit upon all flesh ; and your sons and your daughters shall prophesy, your old men shall dream dreams, your young men shall see visions : and also upon the servants and upon the handmaids in those days will I pour out my spirit." *

The birth of the Messiah was foretold to Joseph while sleeping. "An angel of the Lord appeared unto him in a dream, saying, Joseph, thou son of David, fear not to take unto thee Mary thy wife : for that which is conceived in her is of the Holy Ghost, and she shall bring forth a son ; and thou shalt call his name Jesus ; for it is he that shall save his people from their sins. . . And Joseph arose from his sleep and did as the Angel of the Lord commanded." †

The Annunciation was made by an

* Joel ii. 28.

† Matthew i. 20.

angel directly to Mary, and not in her sleep, that she was to be the mother of our Saviour. The Magnificat which she pronounced when she visited Elizabeth, immediately after the conception, shows how conscious she was of the day star that had risen in her heart. Joseph, on the other hand, was minded to put her away privily because he had no comprehension of the significance and import of this new birth. An angel, therefore, was sent to him privily in his sleep "to tell him not to fear to take Mary for his wife." Mary was spiritually prepared for this new birth. Joseph was not. He judged as the world judged; as the apostles were judged by their hearers, and as Paul was judged by Festus. He had to be taught in his sleep what he would never have received while awake and under worldly influences. The

world may be presumed to have had no such hold, then, upon Mary.

The wise men who were sent by Herod to Bethlehem to search out carefully the young child, Jesus, and when found, report the place to him, *were warned in a dream* that they should not return to Herod, so they departed into their own country another way.

After the death of Herod an angel of the Lord appeared again *in a dream* to Joseph in Egypt, saying: "Arise and take the young child and his mother, and go into the land of Israel: for they are dead that sought the young child's life." Hearing, however, that Herod's son was reigning over Judea, he feared to go thither, and *in consequence of being warned of God in a dream*, he withdrew into the parts of Galilee, to a city called Nazareth.

When Jesus took with him Peter and James and John and went up into the mountain to pray, the fashion of his countenance was altered and his raiment became white and dazzling. There talked with him two men, Moses and Elias, who appeared in glory.

Peter, and they that were with him, were heavy with sleep, but *when they were fully awake they saw His glory*. Peter then said : " Master, it is good for us to be here : and let us make three tabernacles ; one for thee, and one for Moses, and one for Elijah, not knowing what he said.

" And while he said these things, there came a cloud, and overshadowed them : . . . and a voice came out of the cloud, saying, This is my Son, my chosen : hear ye him. And when the voice came, Jesus was found alone." *

Till then Jesus, Moses, and Elijah,

* Luke ix. 33.

in Peter's mind, were of equal dignity, and equally entitled to tabernacles. After receiving the message from the clouds they saw no one but Jesus.

The daughter of Jairus was given up for dead by her family. "Why make ye a tumult, and weep?" said Jesus, when he arrived, in response to a message from the father, "the child is not dead, but sleepeth. And they laughed him to scorn. But he, having put them all forth, taketh the father of the child and her mother and them that were with him, and goeth in where the child was. And taking the child by the hand, he saith unto her, Talitha cumi; which is, being interpreted, Damsel, I say unto thee, Arise. And straightway the damsel rose up, and walked, for she was twelve years old." *

* Mark v. 39; Acts xii. 6; see also Canticles v. 2; Hosea xii. 10; Jeremiah xxxi. 26; John xi. 11; Acts ix. 10.

While Pilate was sitting in judgment upon the accusations brought against Jesus, "his wife sent unto him, saying, Have thou nothing to do with that righteous man: for I have suffered many things this day in a dream because of him." *

The Apostle Peter was sleeping between two soldiers and bound with two chains, when "an angel of the Lord stood by him, and a light shined in the cell: and he smote Peter on the side, and awoke him, saying, Rise up quickly. And his chains fell off from his hands."

But the most definite and explicit statement of what doubtless deserves to be regarded as the most important—the vital—purposes of sleep that is given in the Bible, will be found in the rebuke administered to Job by

* Matthew xxvii. 19.

Elihu, the youngest of his comforters, for presuming to question the justice of the trials he was enduring.

“Surely,” said Elihu, “thou hast spoken in my hearing, and I have heard the voice of thy words, saying, I am clean, without transgression; I am innocent, neither is there iniquity in me: behold, he findeth occasions against me, he counteth me for his enemy; he putteth my feet in the stocks, he marketh all my paths. Behold, I will answer thee, in this thou art not just; for God is greater than man. Why dost thou strive against him? For he giveth not account of any of his matters. For God speaketh once, yea twice, though man regardeth it not. In a dream, in a vision of the night, when deep sleep falleth upon men, in slumberings upon the bed,” said Elihu to Job, “THEN HE OPENETH

THE EARS OF MEN, AND SEALETH THEIR INSTRUCTION, THAT HE MAY WITHDRAW MAN FROM HIS PURPOSE AND HIDE PRIDE FROM MAN; HE KEEPETH BACK HIS SOUL FROM THE PIT, AND HIS LIFE FROM PERISHING BY THE SWORD." *

Have we not here a plain and unequivocal statement,

First. That the processes of spiritual growth and development are not only not interrupted, but are more than ordinarily active during sleep?

Second. That while in that state man is withdrawn from his own purposes for much higher purposes than animate him during his waking hours? and

Third. That it is while sleeping that God openeth the ears of men and sealeth their instruction?

* Job xxxiii. 8-18.

How could the purposes of sleep be more explicitly stated, assuming the competence of the authority stating them? How could their importance be made more impressive?

What events are recorded in the whole range of secular history, I will not say of graver, but of equal, import to any one of these to which sleep is treated as a necessary, indeed, a preparatory incident?

There are some who affect to make light of the Bible story. Conceding for a moment that it is a work of the imagination, a tradition, a myth, why is the machinery of sleep so constantly introduced on occasions of such incomparable importance? Why, too, were not these several communications, or revelations, made directly to the imaginary parties interested, in their waking hours? Why were the hours

of sleep chosen, when only the Divinity could know whether the communications were received and whether the effect intended was to be realized? ✓

Regarded merely as a work of literary art, the Bible has scarcely less importance than is claimed for it by Bible Christians, in proving sleep to have been recognized through all the ages as a prime factor and an indispensable condition to man's spiritual evolution.

Tradition thus accounts for Mohammed's being among the prophets: While indulging in spiritual meditations and repeating pious exercises on Mount Hira in the month of Ramedan, the Angel Gabriel came to him by night, *as he was sleeping*, held a silken scroll before him and required him, though not knowing how to read, to recite what was written on the

scroll. The words thus communicated remained graven on his memory, and ran as follows :

“Read! In the name of the Lord who created man from a drop. Read! For the Lord is the Most High who hath taught by the pen, hath taught to man what he knew not. Nay truly, man walketh in delusion when he deems that he suffices for himself; to thy Lord they must all return.”

This brief announcement of the Angel Gabriel to Mohammed in his sleep, deserves to be regarded as the corner-stone of the religion of the most numerous of the monotheistic sects in the world to this day.

CHAPTER V

Privation of Sleep—Its Effects—How Availed of by Toussaint L'Ouverture in Defence of the Independence of Hayti—Causes the Death of the Last King of Macedonia—Lunacy—Difference in Sleeping Habit between Domestic and Predatory Animals—Low Average of Longevity among Savages Explained—Habits of Venomous and Non-venomous Serpents Contrasted—Prominence of Sleep in the Machinery of Shakespeare's Plays—Tendency to Sleep in Houses of Worship Explained—Dr. Wilkinson—External and Internal Respiration

THUS far we have studied the function of sleep from its effects, and some of its uses. Now let us learn what we can of the effect of its privation. Patients in a high fever get little sleep. In time, if the fever continues, they are apt to become delirious. If they recover it is almost uniformly after an unusually prolonged and quiet sleep. In their fever and delirium their thought and speech are almost

invariably of the world in which they live, its interests and concerns. If of the other life it is usually a selfish dread of eternal torment. Hahnemann, the founder of the homœopathic school of medicine, insisted that a patient under treatment should never be awakened even to take medicine. In the judgment of intelligent physicians there is no symptom they welcome so cordially in a patient as a natural sleep, and no change from which they expect more favorable results.

The effect of being awakened from a sound sleep is always unpleasant. It is apt to make one unsocial and irritable. Any such abrupt recall to worldly cares induces a feeling of discontent, such as usually accompanies all unwelcome changes of condition or unpleasant interruptions. It is quite customary in all parts of the world for

those who can thus indulge themselves, to breakfast in bed and linger there, as Charles Lamb expressed it, "to digest their dreams," or to read or pursue any other congenial employment for some hours after waking. I know a very accomplished lady—the mistress of a noble ancestral country home—who never sees her farm people or house servants till several hours after waking. She insists that the abrupt resumption of the cares of every-day life, upon awaking in the morning, took from her so much vitality that it unfitted her for any thing else the rest of the day.

It is not without significance that grown people pretty universally prefer to be left alone for some time after waking, while we rarely find any who have been immersed in worldly cares promptly on waking, whose friends are

not content to leave them alone. It is the struggle we experience in exchanging abruptly the society we have left in the land of dreams for that which we meet in the forum or on the exchange, that has brought some stimulating beverages, such as coffee or tea or beer, into such general use throughout the world early in the day. On waking, and before we experience any appetite for food, we are prone to welcome an exhilarant of some sort to overcome our reluctance to return to the disciplinary life into which we were born to be trained. The late Chief Justice Taney, I have been told, habitually smoked a pipe before his breakfast.

Most of the insanity in the world results from habits the indulgence of which is unfavorable to sleep.*

* The increase of lunacy in England and Wales between 1885 and 1893 has been recently stated by the

The length of time a man can preserve his mental faculties without sleep varies more or less with the constitution, but the inevitable result is delirium before many days. The wise physician will spare no effort to compose his maniacal patient to slumber. The Chinese punish a certain class of flagrant crimes by constantly teasing the criminal to

Hon. Mr. Hobhouse at 26 per cent. The Chancellor of the Exchequer has admitted that it was over 15.5 per cent. The latest annual return, 1893-94, shows an increase even on that average of 2.5 per cent. for England, and 2.3 per cent. for Wales. From Ireland we have a still more deplorable report. The increase, for the eight years above named was actually 21.8 per cent., and the rate of progress shown in the latest return was not far from double the average 5.7 per cent. The Commissioners of Lunacy name the immoderate use of tea as one of the chief causes of the increase. Had they named the loss of wholesome sleep, and the habits to which such loss was due, among which the immoderate use of tea, coffee, narcotics, and other drugs are to be included, their diagnosis would have been more scientific and comprehensive.

prevent his sleeping, and it is among the punishments regarded by them with most horror. Historians report that Perseus, the last king of ancient Macedonia, while a prisoner of the Romans, was "done to death" in this way by his guards. They would not permit him to sleep.

When the first Napoleon attempted the conquest of Hayti, Toussaint L'Ouverture, who had become commander-in-chief of the Haytians, could not venture a pitched battle with the battalions of Napoleonic veterans, but had recourse to a less risky though more effective method of warfare. As soon as the French troops got to sleep at night, Toussaint made a feint of attacking them, thus getting them all up and under arms. This was repeated so frequently as to effectually prevent their getting

any rest, and in a few weeks an army of thirty thousand veterans, without a single engagement in the field, was reduced to about five thousand effectives, through disease induced mainly, if not entirely, by want of sleep. It is reported that the policy of the Haytian patriot is now being prosecuted by the insurgents in Cuba. Evidently something goes on during sleep which is a preventative as well as an antidote to mania, and the two facts which we know and can safely reason from, are :

First. The maniac cannot separate himself from his environment in this world, and

Second. The only chance of effecting this separation is through sleep.

The logical inference is that some change is wrought in the hours of repose that could not be wrought until

the patient was liberated from the bondage of his worldly environment, and made accessible to influences of some kind which could not approach him while under such bondage, and those influences are soothing, civilizing, harmonizing, fraternizing, elevating.

The predatory animals, as a rule, seek their prey at night and their repose by day. They differ in this respect from all tamed or domesticated animals. It is also to be observed that they subsist chiefly upon the food of other animals, and are, therefore, ever at war with the whole animal kingdom, not always sparing their own progeny. Like the dangerous classes of human society, they take advantage of the darkness to better conceal their purposes, and for the greater chance of finding their prey asleep or off its guard.

To domesticate or tame a wild ani-

mal, it is necessary to win its confidence by protecting it from its predatory fellows, and accustoming it to sleep without fear. On the other hand, the domesticated animal soon becomes wild and dangerous if its sleep is disturbed; cows fall off in their yield of milk; hens will not lay; sheep will not fatten.

Wild beasts are always lean, or rather never fat, partly, no doubt, if not entirely, because of their precarious livelihood, which compels them to be constantly on the alert by night as well as by day.

The savage tribes, who for the most part lead predatory lives, are so much exposed to surprises that they rarely get regular or sufficient sleep, and take their rest as they take their food, when they can get it, but without periodicity or regularity. This goes far to explain

the fact that their average longevity is much less than that of civilized peoples. As they emerge from the savage state they begin to organize into societies for mutual protection, to share each others' burdens, and to secure social privileges, of which regular and abundant sleep is one to which all the others are secondary. That is the "pillar of fire by night" which guides them from Egypt to Canaan, from a life of barbaric selfishness toward a higher life of mutual forbearance and fraternity. The policeman's rattle is the authentic symbol of civilization, for upon the forces it rallies to the defence of order, we depend for our undisturbed repose during the hours when darkness offers a partial immunity to crime.

The venomous snake, which is the symbol of all which is most detested

and detestable in the animal kingdom, never closes its eyes. They are covered with a sort of scale, transparent, like glass, which allows perfect vision, and yet is strong enough to protect the eyes from the ordinary accidents of snake life. While warm-blooded animals shut their eyelids to exclude the light when they sleep, and the pupils relax or open, in the serpent this action is reversed, the pupil contracts like a cat's in the sunlight. It is a curiously suggestive and, I believe, a well-authenticated fact, that the most deadly serpents, the *Viperidæ* and *Boidæ*, are cat-eyed, and night prowlers. Except when thirsty, they will rarely be seen moving about in the daytime. The *Colubridæ*, or common, harmless snakes, on the other hand, have round pupils, sleep at night, and are active chiefly during sunlight hours.

Professor W. E. Leonard of Minneapolis has given a most interesting account of the pathogenetic effects of what is known in medical literature as lachesis, to which it seems appropriate to refer here somewhat in detail. The late Dr. Hering of Philadelphia and his brave wife are its hero and heroine. Lachesis is the common name of a deadly poisonous serpent named by Linnæus *Trigonocephalus lachesis*, partly from its lance-shaped head, and partly from one of the Greek Fates, and because of the swift and fatal effects of its bite. The story of the heroism exhibited in obtaining the original, and to this day I believe the only, supply of this venom, is a thrilling one, as told by Dr. Hering himself in one of his Saturday Evening Talks to groups of students, and reported by Professor Leonard, who was one of his audience:*

* *Homœopathic Physician*, January, 1896.

“When a young man of thirty-five he [Dr. Hering] and his wife were directing botanical and zoölogical collectors from a temporary dwelling in the edge of the tropical forests of the upper Amazon. The natives who were his sole assistants had told him much of this deadly serpent, and he offered a liberal reward for the capture of a living specimen. Finally a bamboo box was brought in hastily and placed in his room. Immediately, to his amazement, not only those capturing the serpent, but his entire native household fled precipitately from the place. They saw no hope for their master, or his wife, if he proposed to deal in any way with a living *Churukuku*, the native name for the reptile. He was left to obtain the venom from this creature with his wife’s aid alone, and at the imminent risk of his life. This was

done by stunning the serpent by a heavy blow as the box was opened, then holding its head in a forked stick and obtaining the poison by pressing it out from the venom bag upon sugar of milk. . . .

“ Thus handling and triturating the virus, with the natural fear and excitement of the adventure, threw the doctor into a fever that night, with tossing, delirium, and mania. His faithful wife anxiously watched over him alone in the forests, miles from a human being, and not daring to think of the probable issue of a struggle with such a mighty poison, and with no knowledge of an antidote. Toward morning he slept, and finally awoke, his mental horizon cleared from the passing storm. . . .

“ Before their native help, one by one, expecting to find only corpses, crept sheepishly back to camp, this

enthusiastic couple had prepared all the lachesis since used by the profession, and had begun a reliable pathogenesis of one of our greatest remedies."

Hering, in his "Condensed Materia Medica," enumerates *persistent sleeplessness* among the pathogenetic symptoms for which lachesis is a specific, on the homœopathic principle that the hair of the dog that kills, will cure. Also, "*children toss about, moaning during sleep.*"

In the same number of the *Homœopathic Physician*, we read on the editorial page :

"*Lachesis.*—The patient is roused from sleep by the aggravation of his complaint. The lachesis patient sleeps into an aggravation. The lachesis symptoms are all aggravated by sleep. This is Dr. Guernsey's keynote for lachesis.

“The editor once treated a baby for starting when on the point of falling to sleep. Several remedies were given without benefit. He resolved to watch the patient, and, if possible, discover the correct indications for a remedy. It was observed that the child, which was excessively drowsy, would fall to sleep, sleep for about twenty seconds, and then would be seized with a sort of general convulsion of the whole system, which would rouse it from sleep with much crying and weeping. Then it would again fall to sleep, with a repetition of the same occurrences, and so on during the entire day and night. Lachesis was now given, when the whole series of symptoms subsided in the course of an hour, the child slept peacefully the whole night, and there never has been any return of the trouble.”

I refer at so much length to the venom of the lachesis as a remedial agent, because it is, I believe, a rare, if not the only instance of any deadly serpent's venom having been tested, and its effects upon the human system carefully noted in minute detail, and classified by a professional man eminently qualified for such a task. It will be observed that the most conspicuous effects of this poison, "its keynote," to use a professional phrase, is hostility to sleep, and when sleep does intervene, to aggravate all other symptoms, as if it and sleep were the deadliest and wholly unreconcilable enemies. It achieves its victories over its victims more swiftly than mere privation of sleep induced by most other causes is supposed to, but in both cases, privation of sleep seems to be the one symptom without the concurrence of

which none of the others would necessarily be fatal.

When we reflect that the serpent in all ages has been the symbol of what was most fatal to man's peace; that it was the serpent that first brought temptation and disobedience into the world; that the head of Medusa, with its snaky hair, with the Greeks, was the symbol of the paralyzing influence of vice; that Mercury's wand was composed of the figures of two fighting serpents, and that he commenced his career as a divinity by stealing the oxen of Apollo; and when we reflect that serpent worship prevails almost universally among savages who fear the power and cunning of serpents, and try to propitiate them by paying them divine honors; if it be true, as there is ample warrant for presuming, "a reason more perfect

than reason, and influenced by its partialities, is at work in us when we sleep"; if, as the pagan philosopher affirmed, "the night-time of the body is the daytime of the soul"; if our Father which is in heaven, "giveth his beloved in their sleep," how naturally and instinctively we associate the serpent's deadly bite, so fatal to sleep and life, with the fearful curse denounced against the first of the reptiles of whom we have any record, through whose subtlety temptation and sin first came into the world: "Because thou hast done this, cursed art thou above all cattle and above every beast of the field; upon thy belly shalt thou go and dust shalt thou eat all the days of thy life: And *I will put enmity between thee and the woman and between thy seed and her seed*: it shall bruise thy head and thou

shalt bruise his heel." It would seem that the serpent in the Bible symbolizes every form of temptation to evil or sin, and that only in our sleep are the weapons forged with which we can successfully contend with them.

Shakespeare, who was no less unapproachable for his philosophic insight than as a poet, makes *Cæsar* say :

Let me have men about me that are fat ;
Sleek-headed men, and *such as sleep o' nights* :
Yond Cassius has a lean and hungry look ;
 . . . but I fear him not ;
Yet if my name were liable to fear,
I do not know the man I should avoid
So soon as that spare Cassius.

Seldom he smiles ; and smiles in such a sort
As if he mock'd himself, and scorn'd his spirit
That could be mov'd to smile at any thing.
Such men as he be never at heart's ease
Whiles they behold a greater than themselves ;
And therefore are they very dangerous.

So again *Brutus* was selected by the partisans hostile to *Cæsar*, and was set on to be the leader in the conspir-

acy against him because, as *Cassius* expressed it,

He sits high in all the people's hearts :
And that which would appear offence in us,
His countenance, like richest alchemy,
Will change to virtue and to worthiness.

After calling his servant, *Lucius*, several times without receiving any reply,—it is after midnight and the man is asleep,—*Brutus* exclaims :

I would it were my fault to sleep so soundly.

In the same scene *Lucius* is again caught napping. *Brutus* calls :

Boy ! *Lucius* !—Fast asleep ? It is no matter ;
Enjoy the heavy honey-dew of slumber :
'Thou hast no figures nor no fantasies,
Which busy care draws in the brains of men ;
Therefore thou sleep'st so sound.

When *Lucius* is gone and leaves *Brutus* alone he says :

Since *Cassius* first did whet me against Cæsar,
I have not slept.
Between the acting of a dreadful thing
And the first motion, all the interim is

Like a phantasma or a hideous dream :
 The Genius and the mortal instruments
 Are then in council ; and the state of man,
 Like to a little kingdom, suffers then
 The nature of an insurrection.

The pertinacity with which Shakes-peare dwells upon the sleeplessness of *Brutus* from the time he began to entertain the suspicion that the liberties of Rome depended upon the immediate death of *Cæsar*, is one of the marvels of this marvellous play. A little later in the piece, *Cassius* apologizes for entering and disturbing *Brutus'* rest, *Brutus* replies that he has been awake all night. In the same scene *Portia*, his wife, enters to remonstrate with him :

Brutus. Portia, what mean you . . . now?
 It is not for your health thus to commit
 Your weak condition to the raw-cold morning.

Portia. Nor for yours neither. You've ungently,
 Brutus,
 Stole from my bed : and yesternight, at supper,
 You suddenly arose, and walk'd about,

Musing and sighing, with your arms across ;
 And when I ask'd you what the matter was,
 You star'd upon me with ungentle looks : . . .
 But with an angry wafture of your hand,
 Gave sign for me to leave you : so I did ;
 Fearing to strengthen that impatience
 Which seem'd too much enkindled. . . Dear my
 lord,

Make me acquainted with your cause of grief.

Brutus. I am not well in health, and that is all.

Portia. Brutus is wise, and, were he not in health,
 He would embrace the means to come by it.

Brutus. Why, so I do.—Good Portia, go to bed.

Portia. Is Brutus sick ? . . .

And will he steal out of his wholesome bed, . . .

And tempt the rheumy and unpurgèd air

To add unto his sickness ? No, my Brutus ;

You have some sick offence within your mind,

Which, by the right and virtue of my place,

I ought to know of : and, upon my knees,

I charm you, by my once-commended beauty,

By all your vows of love, and that one great vow

Which did incorporate and make us one,

That you unfold to me, yourself, your half,

Why you are heavy ; and what men to-night

Have had resort to you,—for here have been

Some six or seven, who did hide their faces

Even from darkness.

I am still far from having exhausted
 all that Shakespeare has to teach us
 on the subject of sleep or its privation.

Whatever takes a deep hold upon a mind like Shakespeare's can always be studied with profit, and the prominence he gave to both, in his plays, warrants the belief that few of the phenomena of sleep or of sleeplessness escaped his incomparable powers of observation. No one familiar with his plays will often think of sleep as a condition of existence, without being reminded of that thrilling soliloquy of *Henry IV.*:

How many thousand of my poorest subjects
Are at this hour asleep !—O Sleep, O gentle Sleep,
Nature's soft nurse, how have I frightened thee,
That thou no more wilt weigh my eyelids down,
Nor steep my senses in forgetfulness ?
Why rather, Sleep, liest thou in smoky cribs,
Upon uneasy pallets stretching thee,
And hush'd with buzzing night-flies to thy slumber,
Than in the perfum'd chambers of the great,
Under the canopies of costly state,
And lull'd with sounds of sweetest melody ?
O thou dull god, why liest thou with the vile
In loathsome beds, and leav'st the kingly couch
A watch case or a common 'larum bell ?
Wilt thou upon the high and giddy mast
Seal up the ship-boy's eyes, and rock his brains

In cradle of the rude imperious surge,
And in the visitation of the winds,
Who take the ruffian billows by the top,
Curling their monstrous heads, and hanging them
With deafening clamor in the slippery shrouds,
That, with the hurly, death itself awakes?—
Canst thou, O partial Sleep, give thy repose
To the wet sea-boy in an hour so rude;
And in the calmest and most stillest night,
With all appliances and means to boot,
Deny it to a king? Then, happy low, lie down!
Uneasy lies the head that wears a crown.

Queen Margaret thus brings her
curse of the villanous *Gloster* to a
climax :

No sleep close up that deadly eye of thine,
Unless it be while some tormenting dream
Affrights thee with a hell of ugly devils !

The *Witch*, in enumerating the ca-
lamities in store for *Macbeth*, says :

Sleep shall neither night nor day
Hang upon his pent-house lid ;
He shall live a man forbid.

Lady Percy says to *Hotspur* :

Why hast thou lost the fresh blood in thy cheeks
And given my treasures and my rights of thee

To thick-ey'd musing and curs'd melancholy ?

Tell me, sweet lord, what is't that takes from thee
Thy stomach, pleasure, and *thy golden sleep* ?

Iago, after poisoning the jealous nature of *Othello*, says :

Not poppy, nor mandragora,
Nor all the drowsy syrups of the world,
Shall ever medicine thee to that *sweet sleep*
Which thou ow'dst yesterday.

With exquisite art Shakspeare makes *Macbeth* expatiate upon the blessedness of "innocent sleep" after his murder of *Duncan*, and after he had forfeited forever the capacity of enjoying it himself :

Methought I heard a voice cry "Sleep no more !
Macbeth does murder sleep,"—the innocent sleep,
Sleep that knits up the ravel'd sleave of care,
The death of each day's life, sore labor's bath,
Balm of hurt minds, great nature's second course,
Chief nourisher in life's feast.

Later on in the same play we read :

With Him above
To ratify the work—we may again
Give to our tables meat, sleep to our nights.

The *Abbess* in the "Comedy of Errors" says to *Adriana* :

The venom-clamors of a jealous woman
Poison more deadly than a mad-dog's tooth.
It seems his sleeps were hinder'd by thy railing :

In food, in sport, and life-preserving rest
To be disturb'd, would mad or man or beast.

I fancy it to be much less of a reproach than is commonly supposed to fall asleep in a house of worship. To the devout worshipper the tendency of every thing in the house of God is, or should be, as in sleep, to separate him from the world. In the degree in which our devotions are unmixed, undiluted with selfish, worldly, and personal considerations, our will is also quiescent as in sleep. "Rousing sermons," stirring pulpit oratory, may stimulate the intellect and keep even the devoutest people wakeful, but it does not follow that they make the

exercises of the Sabbath more profitable, at least, to all. The most wide-awake people in church may be in a closer relation with the world than with their Creator, who, in the language of the prophet, may be "near in their mouth and far from their reins."

It is not uncommon for those who have no habit or inclination to sleep during the morning hours of secular days, to be overcome with somnolency in church soon after the devotional exercises are begun, and who find it impossible to derive any edification from them until they have lost themselves for a moment or two in absolute unconsciousness. Then they have no difficulty, sometimes a lively pleasure, in attending to the exercises which follow. How is this change to be explained? It is true the worshipper is

then withdrawn from the familiar excitement of customary avocations, from the clatter of the street, from intercourse with busy men, but it is idle to suppose that in these few moments of repose, upright in his pew, he has rested enough, in the common acceptance of that word, to repair any waste of tissue that would explain the new sense of refreshment that ensues. He has received, in that brief retirement from the world, some reinforcements which manifestly are not dependent upon time or space for their efficacy—spiritual reinforcements, and spiritual reinforcements only. He has removed himself, or been removed farther away, out of sight or hearing or thinking, so to speak, of his phenomenal life, and nearer to the Source of all life. He awakes to find himself a changed man, less exacting, less critical about

the sermon or the preacher or the choir or the composition of the congregation, and more liberal to the contribution plate, while he finds in what he hears or reads much fruitful suggestion, for which he was but imperfectly prepared when he entered the church.

Perhaps if the worshipper, before leaving home, were to take more pains to get into a proper frame of mind to meet God in his holy temple, and to keep silence before him, these recesses during the service might be deferred until "shut of day," without prejudice.

A *quasi* physiological explanation of the spiritualizing function of sleep, from the pen of an eminent English physician, goes far to reconcile the views here taken with the teachings of modern science. Dr. J. J. G. Wilkin-

son, in a treatise on the human body, says :

“If all that is animal really died down to the surface of the earth in the seasons of sleep, the body, heavy mass as it is, and belonging of right to the ground, would be in the clutches of the grave, irrecallable from its congenial gravitation. To prevent this there are two brains, a constant and inconstant, but each corresponding to the other. The cerebellum does unconsciously and permanently whatever the cerebrum performs rationally and by fits. The cerebellum follows and adopts the states induced by the cerebrum on the organization, and holds the notes of the ruling mind. Thus, immediately after sleep, the motions of thought may begin at once, for they have not been organically, but only consciously, suspended.

We see this in an image in the lungs. If the latter were voluntary organs, the man would cease breathing so soon as he fell asleep. But they are voluntary and involuntary, the latter when not the former; and the movement is always proceeding, night and day, so that it has not to be created, but what is an easy matter, merely directed into the voluntary channels. Similarly so with the organic motions of thought and will; these are always going on, and merely require direction, not creation, by the cerebrum. Concordantly with this we can explain sleep and much that occurs in sleep: *e. g.*, the fact that our thoughts and judgments are marvellously cleared and arranged during that state; as though a reason more perfect than reason, and uninfluenced by its partialities, had been at work when we were in our beds. Thus,

also, that our first waking thoughts are often our finest and truest; and that dreams are something eminent and wise; which phenomena are incompatible with the idea that we die down like grass into our organic roots at night and are resuscitated, as from a winter, in the morning. And it must again be adverted to that this would not suit the Grand Economist; for after Nature has ascended to our plateau of life, represented by day, she will surely not tumble down into the valley because rest is needed, but will pitch her tent and make her couch on that elevation. We conclude, then, that the cerebrum is the brain of the mind, and the cerebellum the corresponding brain of the body; and, as during sleep the cerebrum is a body, the cerebellum at such time is the brain of the cerebrum also.

“Man,” then, as we see, “is captured

in sleep, not by death, but by his better nature; to-day runs in through a deeper day to become the parent of to-morrow; and the man issues every morning, bright as the morning, and of life-size, from the peaceful womb of the cerebellum." *


The distinction between our voluntary respiration and our involuntary respiration, during sleep, to which Dr. Wilkinson here directs our attention, and with which we are all familiar, harmonizes curiously with a doctrine which Swedenborg professed to have authority for teaching. We are all endowed, he has told us, with a faculty for two distinct kinds of respiration, one the external, with which we are familiar, and the other internal, of

* "The Human Body and its Connection with Man Illustrated by the Principal Organs," by James John Garth Wilkinson, Member of the Royal College of Surgeons of England. London, 1851, p. 51.

which very few are conscious. He tells us he was first habituated to insensible breathing in his infancy when at morning and evening prayers, and that for a number of years he was accustomed to internal respiration, mainly by intense thought, in which external breathing ceases.

We are all familiar with cases of more or less prolonged suspension of external respiration, in what we term the trance.

Before the Fall, Swedenborg adds, men whose lives were animated by love to the Lord had internal respiration only. External respiration took its place as one of the consequences of the degeneration of our race. When external respiration is suspended for any cause, consciousness is also suspended, as in sleep. Life may be presumed thereby to be continued by inter-



nal and unconscious respiration. In the Bible "spirit" and "life" are both expressed by the same word, *πνευμα* or wind. "The wind bloweth where it listeth," says John, "and thou hearest the voice thereof, but knowest not whence it cometh, and whither it goeth: so is every one that is born of the Spirit"—or wind. In the original the same word is used for "wind" in the beginning and for "Spirit" at the end of this sentence. Again we read in Job: "The Spirit of God hath made me, and the breath of the Almighty giveth me life." Swedenborg also tells us that it was given him to know the nature of that internal respiration by experience, and how since the Fall it vanished by degrees, and how angelic spirits, who are allotted to involuntary respiration, are present with man dur-

ing sleep, for so soon as he sleeps the voluntary principle of respiration ceases, and the sleeper receives an involuntary faculty of respiration.

Upon this subject of internal respiration, of which Swedenborg claims to have been the first to be advised, he is, unfortunately, neither as full nor as clear as one could wish. Perhaps greater clearness is not practicable in any spoken or written language.

CHAPTER VI

The Need for Sleep Diminishes as the Organization of Life Becomes More Complex—Buffon—Repose No More the Final Purpose of Sleep than the Gratification of our Palate the Final Purpose of Hunger—The Statue of Sleep in Honor of Æsculapius—Letter of Iamblichus

As we descend in the scale of organized life, the proportion of time spent in sleep seems to increase until we reach a point where life is apparently a continuous sleep. "An oyster," says Buffon, "which does not seem to have any sensible exterior movement nor external sense, is a creature formed to sleep always. A vegetable is in this sense but an animal that sleeps, and in general the functions of every organized being lacking power of movement and the senses, may be compared to the functions of an ani-

mal who should be constrained by nature to sleep continually.

“In the animal the state of sleep is not an accidental one, occasioned by the greater or less exercise of its faculties while awake ; it is, on the contrary, an essential mode of being, which serves as the base of all animal economy. Our existence begins in sleep ; the fœtus sleeps almost continually, and the infant sleeps more hours than it is awake.

“Sleep, which appears to be a purely passive state, a species of death, is, on the contrary, the first state of the living animal and the foundation of life. It is not a privation, an annihilation ; it is a mode of being, a style of existence as real and more general than any other. We exist in this state before existing in any other ; all organized beings which have not the

senses exist in this state only, while none exist in a state of continual movement, and all existences participate more or less in this state of repose." *

As we rise in the scale of organized life, on the other hand, we find that the time required for sleep diminishes, and the quality of life exhibits a corresponding increase of complexity, and a corresponding enlargement of function, until we reach the highest of organizations, our own species.

At the close of a laborious day we invariably, if in health, feel a languor which prompts us to take a position in which the weight of our bodies will be so distributed as to invite sleep—for which, if in health, we do not have to wait long. The interval between its

* "Discours sur la nature des Animaux." Œuvres de Buffon. Edition Flourens, vol. ii, p. 331.

arrival and our laying ourselves in a recumbent position is usually one of exquisite pleasure.

All our impressions of sleep are formed before it arrives, and after it ceases. We enjoy what we call going to sleep, and we enjoy the feelings we experience after we have slept, but we have no consciousness of any physical sensation which we have any right to attribute directly and exclusively to sleep, or of which our senses can take cognizance. While it is thus made pleasant for us to close our eyes and relax our hold upon the world for a portion of every twenty-four hours, we have no more right to infer that it is merely that we may remain in a pleasing state of inactivity and insensibility, than we have to infer that the final purpose of hunger is to secure us the gratifications of the palate, or the

final purpose of sexual attraction is merely to gratify our sensuality. As in both these cases the ends to be reached are of the most far-reaching character, and the desires are given that the means for the accomplishment of those ends should not be neglected, so our desire for sleep is manifestly designed to promote in us the growth and development of spiritual graces. Our Maker could have had no other design in our creation; he can have no other design in the perpetuation of our race. Why should Infinite Wisdom have assigned a less important function for the very considerable portion of our lives during which our consciousness is suspended in sleep, than to the function of hunger or lust? Why should we resist the obvious implication that in falling asleep we are being gradually separated from

the world of the senses—from the cares, passions, strifes, and struggles incident to incarnate existence, and, as they seem to recede from us, that something flows into us which yields a pleasure that grows more unmixed and absolute until consciousness of our external and natural life altogether ceases?

As angels in some brighter dreams
Call to the soul when man doth sleep ;
So some strange thoughts transcend our wonted
 themes
And into glory peep.

Pausanius, in his historic tour in Greece, describes a temple erected in honor of Æsculapius, in the court of which he found the figure of *Oneiros*, the god of dreams, and beside it another of *Upnos*, or Sleep, putting a lion to sleep. To this latter figure, says Pausanius, they had

given the name of Epidotes, or the Giver.*

So He giveth his beloved in their sleep.

From the writings of Iamblichus, at one time the head of the school of Neo-Platonists, it appears that the view here taken of sleep, as having a higher function than simply the reparation of waste, was shared some fifteen centuries ago by thoughtful men, who did not claim to speak by divine inspiration. In a letter compiled from his writings, and quoted by R. A. Vaughan in his "Hours with the Mystics," he says :

"There is nothing unworthy of belief in what you have been told concerning the sacred sleep and divination by dreams. I explain it thus :

*From the Greek word *ἐπιδιδωμί*, to increase, to fatten, to give freely, to give as a benevolence.

“The soul has a twofold life, a lower and a higher. In sleep the soul is freed from the constraint of the body, and enters, as one emancipated, on its divine life of intelligence. Then, as the noble faculty which beholds the objects that truly are the objects in the world of intelligence, stirs within and awakens to its power, who can be surprised that the mind, which contains in itself the principles of all that happens, should, in this, the state of liberation, discern the future in those antecedent principles which will make that future what it is to be? *The nobler part of the soul is thus united by abstraction to higher natures, and becomes a participant in the wisdom and foreknowledge of the gods.*

“Recorded examples of this are numerous and well authenticated; instances occur, too, every day. Num-

bers of sick, by sleeping in the temple of Æsculapius, have had their cure revealed to them in dreams vouchsafed by the god. Would not Alexander's army have perished but for a dream, in which Dionysius pointed out the means of safety? Was not the siege of Aphritis raised through a dream sent by Jupiter Ammon to Lysander. *The night-time of the body is the day time of the soul."*

CHAPTER VII

Swedenborg's External and Internal Memory—Coleridge's "Body Terrestrial" and "Body Celestial"—The Operations of our Non-phenomenal Life Presumably as Important as Those of our Phenomenal Life

WHENEVER we think, we abstract ourselves from the phenomenal world, and just in proportion to the profundity of our thought, or the degree of our interest in the subject of our meditations, will be the completeness of our abstraction.

The mind while acting takes note only of the facts before it. It has nothing more to do with the external world than a mill has to do with producing, shelling, or transporting the grain that is thrown into its hopper. The mill only grinds what is put into it. The rapidity of the mind's action

is so great that we have no faculties capable of perceiving when the several operations of the mind, memory, and will begin and end, in reaching any conclusion. The fingers of the musician seem to run over the keys of the piano with the rapidity of lightning, but the will, mind, and memory act independently at every note. The will indicates the note to be produced, the memory reports the key that produces that note, the mind selects the proper finger and directs that note to be struck. There the mind would rest if the will and the memory did not suggest another note. This process is repeated throughout the score, until the tune is finished. The mind is a servant of the will, of which the memory is a messenger. Through them the mind is occupied with phenomenal life. Suspend the action of

the memory, and then the mind works independently of the external or phenomenal world, and that we suppose to be its condition in sleep. How the mind is occupied in this condition I have already given some conjectures of my own, and such intimation as I have been able to gather from the sacred Scriptures. I venture now to quote here a few passages from the writings of one of the most eminent philosophers of the last century,—to whose writings I have already had occasion to refer,—which I cannot help thinking worthy of careful consideration by those who may have followed me thus far in this exploration.

Emanuel Swedenborg professed to have authority for affirming that we are endowed with two memories, one a natural or external memory and the other an internal or spiritual memory,

the functions of which, however, are in some respects quite distinct.

In the external memory are recorded the events of our every-day experience. In the internal memory are preserved not only those events to the minutest detail, but the motive, end, or moral quality of each shining through them. He says:

“It is scarce known to any one at this day, that every man has two memories, one exterior, the other interior; and that the exterior is proper to his body, but the interior proper to his spirit. . . .

“These two memories are altogether distinct from each other; to the exterior memory, which is proper to man during his life in the world, appertain all expressions by language, also all objects of which the senses take cognizance, and likewise the

scientifics which relate to the world : to the interior memory appertain the ideas of spirit, which are of the interior sight, and all rational things, from the ideas whereof thought itself exists. That these things are distinct from each other, is unknown to man, as well because he does not reflect thereupon, as because he is incorporate, and cannot so easily withdraw his mind from corporeal things.

“ Hence it is that men, during their life in the body, cannot discourse with each other but by languages distinguished into articulate sounds, and cannot understand each other unless they are acquainted with those languages ; the reason is, because this is done from the exterior memory ; whereas, spirits *

* Spiritus inter se loquantur per Linguam universalem, in ideas, quales sunt ipsius cogitationis, distinctam et sic quod conversari possint cum unoquovis

converse with each other by a universal language distinguished into ideas, of their thought, and thus can converse with every spirit, of whatsoever language or nation he may have been ; because this is done from the interior memory ; every man, immediately after death, comes into the comprehension of this universal language, because he comes into this interior memory, which is adapted to his spirit.

“ The speech of words, as just intimated, is the speech proper to man ; and indeed, to his corporeal memory ; but a speech consisting of ideas of thought is the speech proper to spirits ; and, indeed, to the interior memory, which is the memory of spirits. It is not known to men that they possess

spiritu cujuscumque linguæ et nationis in mundo fuerat.—*Arcana Cælestia*, § 1772.

this interior memory, because the memory of particular or material things, which is corporeal, is accounted every thing, and darkens that which is interior; when, nevertheless, without interior memory, which is proper to the spirit, man would not be able to think at all.

“Whatsoever things a man hears and sees, and is affected with, these are insinuated, *as to ideas and final motives or ends*, into his interior memory, without his being aware of it, and there they remain, so that not a single impression is lost, although the same things are obliterated in the exterior memory; the interior memory, therefore, is such, that there are inscribed in it all the particular things, yea, the most particular, which man has at any time thought, spoken, and done, yea, which have appeared to him only

shadowy, with the most minute circumstances, from his earliest infancy to extreme old age : man has with him the memory of all these things when he comes into another life, and is successively brought into all recollection of them ; this is the Book of his Life (*Liber ejus Vitæ*) which is opened in another life, and according to which he is judged ; all final motives or ends of his life, which were to him obscure ; all that he had thought, and likewise all that he had spoken and done, as derived from those ends, are recorded, to the most minute circumstances, in that Book, that is, in the interior memory, and are made manifest before the angels, in a light as clear as day, whensoever the Lord sees good to permit it : this has at times been shown me, and evidenced by so much and various experience, that

there does not remain the smallest doubt concerning it.*

“Men, during their abode in the world, who are principled in love to the Lord, and in charity toward their neighbor, have with themselves, and in

* Referring to a singular experience which fell under his own observation, while a student at Gottingen, S. T. Coleridge makes a comment which warrants us in supposing that he was consciously or unconsciously indebted to Swedenborg for the views I am about to cite. He says :

“This fact—it would not be difficult to adduce several of a similar kind—contributes to make it even probable that all thoughts are in themselves imperishable ; and that if the intelligent faculty should be rendered more comprehensive, it would require only a differently apportioned organization—the body celestial instead of the body terrestrial—to bring before every human soul the collective experience of its whole past. And this, perchance, is the Book of Judgment, in the dread hieroglyphics of which every idle word is recorded. Yea, in the very nature of a living spirit, it may be more possible that heaven and earth should pass away than that a single act, a single thought, should be loosened or lost from that living chain of causes, with all the links of which, conscious or unconscious, the free will, our only absolute self, is co-extensive and co-present.”—“*Biographia Literaria*,” *Coleridge's Works, Harper & Bros., 1853, vol. iii. p. 229.*

themselves, angelic intelligence and wisdom, but hidden in the inmost of their interior memory; which intelligence and wisdom can by no means appear to them, *before they put off things corporeal*; then the memory of particulars spoken of above, is laid asleep, and they are awakened to the interior memory, and afterward to the angelic memory itself.

“A certain spirit, recently deceased, was indignant at not being able to remember more of the things which he had knowledge of during his life in the body, sorrowing on account of the delight which he had lost, and with which he had formerly been particularly gratified; but he was informed, that in reality he had lost nothing, and that he then knew all and every thing which he had ever known, but that in another life it was not allow-

able for him to call forth such things to observation ; and that he should be satisfied to reflect, that it *was now in his power to think and speak much better and more perfectly, without immersing his rational principle, as before, in the gross, obscure, material, and corporeal things which were of no use in the kingdom to which he was now come :* and that *those things which were in the kingdom of the world, were left behind, and he had now whatever conduced to the use of eternal life, whereby he might be blessed and happy ;* thus that it was a proof of ignorance to believe, that in another life there is any loss of intelligence in consequence of not using the corporeal memory, *when the real case is, that in proportion as the mind is capable of being withdrawn from things sensual and corporeal, in the same proportion it*

*is elevated into things celestial and spiritual.”**

Speaking of the punishments of some of the evil spirits in hell, Swedenborg says :

“Wondering that they were so severely punished, I perceived that it was *because their crime was of so enormous a kind, arising from the necessity there is that man should sleep in safety, since otherwise the human race must necessarily perish.* I was also made aware that the same thing occurs, although man is ignorant of the fact, in reference to others, whom these spirits endeavor by their artifices to assault during sleep; for unless it be given to converse with spirits, being with them by internal sense, it is impossible to hear, and much more to see, such things, not-

* “Arcana Cœlestia,” vol. i. §§ 2469-2479.

withstanding they happen alike to all. *The Lord is particularly watchful over man during sleep*"—Dominus quam maxime custodit hominem cum dormit.*

We find in the passages here cited,

First. A recognition of the existence in man of two mnemonical functions, each quite distinct from the other; one which takes note of all our thoughts and acts having an apparent bearing upon our external or phenomenal life in this world; the other, which not only takes note of those events, but which takes note also of the moral quality; of the ultimate end in which such thoughts or acts originated.

Second. That while some of the impressions which are recorded in what Swedenborg calls the external memory are ultimately obliterated, all

*"Arcana Cœlestia," vol. i. § 959.

which are recorded in what he calls the internal memory remain, to the most minute particular and shade, from the earliest infancy, and are absolutely imperishable.

Third. That as in the spiritual world there are no limitations of time, space, or sense, all communication is, not by the language of words as in the phenomenal world, but by the ideas which phenomena express or represent, and as ideas are not subject to any of the limitations of time, space, or sense, the end or final purpose of our thoughts or acts are all that leave an impression, just as the story or the thought is all that is left on the reader's mind by the printed page. In the words of Swedenborg, "Actions have their quality from the thoughts, as thoughts have their quality from the ends purposed."

Fourth. That in proportion as man puts off "things corporeal"; as he is emancipated from his material, sensual, worldly thrall, he is awakened to a perception of the intelligence and wisdom stirred up in his interior memory.

As there is nothing in our Sacred Writings, nor I believe in any man's experience, which can be said to conflict with or render improbable either of these propositions, they incline our judgment to the belief that during our sleep our mind or soul is occupied with the stores of wisdom accumulated in the internal memory, and in assimilating it for our needs in our waking hours and worldly life. Be that as it may, from what we may fairly claim to know from our own experience and observation of the phenomena of sleep, and from what we are bound

to infer from the teachings of the sacred writings of all sects and nations of most considerable acceptance throughout the world, and especially from the Christian's Bible, it seems impossible to resist the conclusion that the final purposes of our creation and existence, of our *esse* and our *existere*, are not only as operative during our sleeping as during our waking hours, but that a work is being wrought in us, a process is going on in us, during those hours, which is not and cannot be wrought so effectually, if at all, at any other time ; that we are spiritually growing, developing, ripening more continuously, while thus shielded from the distracting influences of the phenomenal world, than during the hours in which we are absorbed by them ; that in the language of the pagan philosopher,

“the night-time of the body is the day time of the soul.” Our phenomenal life has its specific lessons for us. Why should not our non-phenomenal life also have its specific lessons for us? Why should we doubt that it is in sleep that God “openeth the ears of men, and sealeth their instruction, that he may withdraw man from his purpose, and hide pride from man”; and “that he may keep back his soul from the pit”? Does not all that we know of sleep, and of its effects upon character, tend to confirm every line and every word of this definite and unconditional and authoritative statement of Job’s sympathizing friend? If there is a single precept of our faith more frequently urged and insisted upon by the Christian Church than any other, it is the necessity of overcoming the world. The devil is called the prince

of this world. He boasted of the fact to Jesus. The "world" is a synonym for all sorts of sensual lusts and pleasures, and for all undue greed for wealth, dignities, and honors. To overcome the world, to rise superior to its temptations, so that they shall not corrupt our life or blind our judgment, is uniformly presented to us by the Christian Church, as it has been by the most enlightened pagan sects, as the supreme end and purpose of our life in the flesh. Is it not precisely the function of sleep to give us for a portion of every day in our lives a respite from worldly influences which, uninterrupted, would deprive us of the instruction, of the spiritual reinforcements necessary to qualify us to turn our waking experience of the world to the best account, without being overcome by them? It is in these hours that the

plans and ambitions of our external, worldly life cease to interfere with or obstruct the flow of the divine life into the will. Are not these the occasions in which God "openeth the ears of men and sealeth their instruction"?

CHAPTER VIII

Why We Are not Permitted to be Conscious of the Experiences of the Soul in Sleep—How We Should Order our Lives to Reap the Utmost Benefit from Sleep

IF by the immutable laws of our being, the hours consecrated to sleep are, as I have attempted to show, of such vital importance to our spiritual development, the ordering of our life, so far as it may affect our sleep, assumes a corresponding importance. No argument is needed to prove that we should make it our study to avoid as far as possible every thing calculated to interfere in the slightest degree with its completeness. All such disturbances may be presumed to come from our phenomenal life, and so far, at any rate, as they do, they impair the

completeness of our isolation from the world and its works, and violate the sacred mysteries to which it is the presumptive purpose of sleep to admit the soul,—our real self,—for the reception of such spiritual instruction as we may be qualified to receive there, and without bringing away with us any knowledge that can interfere with the freedom of our will or our personal responsibility for what we may do in our waking hours.

I say without bringing away any thing that would interfere with the freedom of our will, because what goes on within us in our sleep is a sacred mystery, and no such mystery is without a purpose, nor is it difficult to divine a sufficient purpose for that mystery. If we were as conscious of our sleeping, as of our waking life, and if our external memory, as Swedenborg

calls it, could bring away our experiences while in that state ; could bring away the treasures of our interior memory, it would interfere with our freedom in precisely the same way and degree, as if we could foresee the influence of our acts and plans of yesterday upon all the future stages of our existence. Such knowledge would be fatal to our spiritual growth and to the freedom of our will, through which only righteousness thrives ; would give place to a blind, senseless fatalism.

We may speculate about the purposes of Providence as revealed in the sequence of the events of our daily life, but we know nothing, and think little, if any thing, of them when they occur. It is only at, and long after, their occurrence that we begin to realize how much more profoundly they affected the tenor of our lives

than we then suspected; from what perils we had been protected by what we regarded as grievous disappointments; from what temptations, which we could never have resisted, we had been shielded by our ignorance, by our weaknesses, by discouragements, by poverty, by sickness, etc. If God in his providence makes us so blind to the consequence of what we do in our waking hours, the wisdom of which experience ultimately compels us not only to admit but to be thankful for, there is no reason to question the Divine Wisdom in concealing from us what it is trying to do for us in our sleep, and when the god of this world is disarmed and powerless.

It would be tedious to enumerate all the things done in what is called civilized society that consciously and unconsciously interfere with the qual-

ity and quantity of our sleep. A volume would not suffice for such a record. I may only speak of them by classes.

First in importance among these I would place what we take into our mouths. There is scarcely a table laid in all our broad land, if in any other part of the civilized world, on which will not be found more or less of the enemies of wholesome sleep; condiments selected primarily to stimulate the appetite, but provoking to gluttony and animal indulgence, regardless of the divine purposes for which we were endowed with these appetites, with the means of gratifying them, and with the power of controlling them. It is in fact worthy of the profoundest consideration that about every thing we take into our mouths not for the nourishment of our bodies,

but to provoke our appetites, and for the sole pleasure of gratifying them, discourages sleep.

Next to these in importance come the apothecaries' drug poisons. Of these there are very few, if any, the direct or secondary action of which is not hostile to sleep. The uncorrupted tastes and instincts of the beasts of the field reject them all, both in sickness and in health.

Then comes the strife for wealth, and power, and position, among men; the undue accumulation of cares and responsibilities, the result in most cases of unbridled ambition, vanity, or greed.

It is the middle-aged, and old, who suffer most from this infirmity.

Care keeps his watch in every old man's eye,
And where he lodges, Sleep can never lie;
But where unbruised youth, with unstuffed brain
Doth crouch his limbs, there Sleep doth reign.

Whenever a man has reached two score and ten, and, in railway parlance, is started on the down grade, he should study to simplify his life so as never to be required to draw upon his reserves, nor work under pressure, or with a conscious overdraft of nervous force. A neglect of this precaution is pretty certain to interfere with both the quantity and quality of our sleep, and sooner or later to compel a resort to stimulants of one kind or another, by which we borrow for the day the strength of to-morrow, thus speedily to become hopelessly indebted to nature, the most inexorable of creditors.

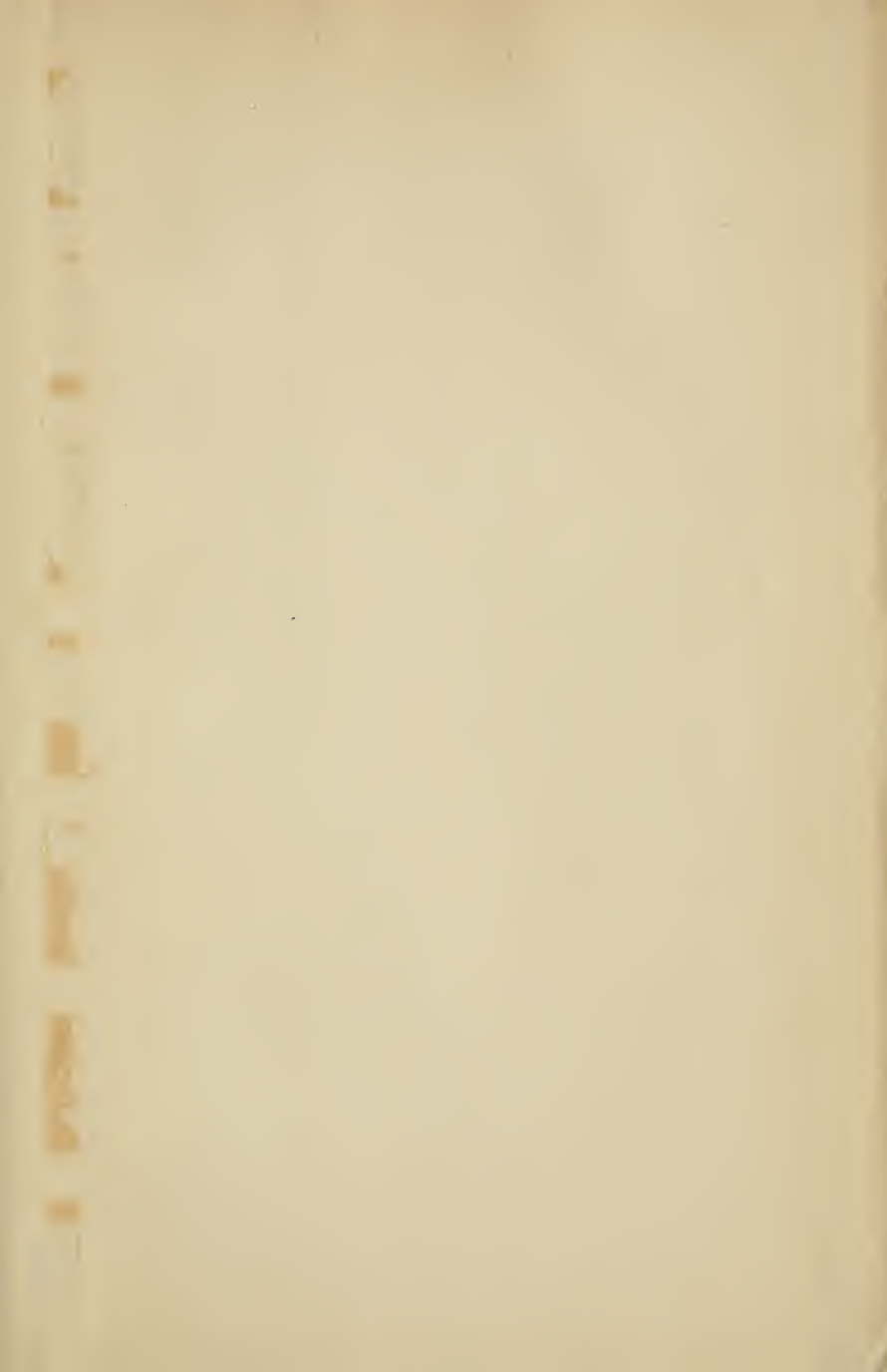
All the appetites, propensities, and passions which we cannot control, are incidental to and evidences of our unregenerate nature; are the weakness of the flesh which it is the end and

purpose of our probationary life on earth to subdue. It is a fact most important, early to learn and never to lose sight of, that all these appetites, propensities, and passions are unrelenting enemies of sleep. It is the most impressive illustration of the inflexible logic of Providence, that as they all, if allowed free rein, tend to impair the health, blunt the senses one by one, diminish, and finally extinguish the enjoyment they were designed to yield; they, in that way, like old age, are permitted to serve in a measure the purposes of sleep, in detaching man from the world by depriving him of the means of enjoying what he persists in abusing, and thus of "withdrawing him from his purpose, and in keeping him from the pit."

THE END.



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