

messenger, what, at least, are they to do but make trial of the spirits themselves by such partial lights as they possess in respect to matters of fact, and the laws both of the physical and the moral universe? Taking the utterances of their messenger with the implicit confidence which disciples like Mr. White would have us repose in him, we are thus thrown upon what we are told is a higher moral and spiritual sphere than our own for evidence of what we know to be a revolting and scandalous falsehood touching the sphere of our own senses. What appeared in the eyes of Swedenborg himself, and, it may be, still appears in those of his biographer and similar privileged adherents, to be an angel of light, must, to eyes not accustomed to the same ethereal medium, stand out in the unmistakable character of the father of lies. It is somewhat odd to find ourselves in the position of arguing, even with a semblance of gravity, upon such preposterous notions as these. But the oddity is due to the still more curious paradox of men with the intelligence and culture of Mr. White being found to stand sponsors for such claims. If the outpourings of Swedenborg are to be taken as evidences of fact, we may reasonably hope to utilize the ravings of our asylums. If we want to know what the sun is made of, whether the moon is inhabited, or what is going on in the recesses of heaven or hell, we have but to keep up a class of Pythias of either sex, well grounded in physics or theosophy, with a good deal of what Mr. Emerson calls the "oversoul," an inordinate stock of self-confidence, and a high state of indigestion. There need be neither a problem in cosmical science nor a mystery in theology waiting its solution, had we only a supply of men qualified for service in Church or State by the natural gifts of a quick and teeming brain—developed enormously in the regions of wonder, imagination, and self-esteem—untiring animal energy, and a disordered liver.—*The Saturday Review*, May 11th.

*Dr. Forbes Winslow on Light.\**

Books could be named which prove that the results of strictly scientific inquiry possess an interest little inferior to the romance of life, by showing how the elements of energy and unity, of antagonism and harmony, may be observed in the material forms and forces without us in a mysterious intricacy almost as interesting as that play of human motive and action traced by the hand of the poet, novelist, or historian. Yet it is unnecessary that every work on a scientific subject should be strictly scientific in aim or even in method and detail; it is nevertheless necessary that every work of avowedly popular purpose should evince in its author that tone and habit of thought which will guide him to a consistent, if not a complete, view of the character and relations of his subject. Now, Dr. Winslow's book on *Light* is interesting as an example of what a work on the subject ought not to be. The first chapter, on the Solar Beam, is mainly derived from works on physical geography and botany; and it treats on the general influence of the sun on the distribution of plants and animals. Such discussions, or rather statistics, are very well in their proper place, but here they are beside the question. Physicists have shown, for instance, that light and heat are only different forms of one and the same physical agency, though they specially affect different senses and organic modes; and when we regard the sun as the centre of gravitating and magnetic influence, and of the heat, light, and chemical power which we are accustomed to distinguish in its emitted influence, it may fairly be asked why "Light" should be selected as the

\* 'Light: its Influence on Life and Health.' By Forbes Winslow, M.D. London: Longmans and Co., 1867.

title of a book relating to phenomena with which every science is concerned, and which are more closely related to other forms of solar energy.

The book is indeed a misnomer; and this must either be regarded as involving the discrimination of the writer, or it must imply that the title sets forth a theory that light is to be regarded as the physical cause to which we should attribute the various results which the author has narrated. If the former alternative had been clearly and exclusively applicable, we have already said more than enough, for in that case we should have said nothing at all; but the latter is rather curiously justified in the only two references to optical science or physical theory that occur in the volume. At the end of the first chapter Dr. Winslow refers to the important investigations of Bunsen and Kirchhoff on the nature of certain dark lines in the solar spectrum, and says he will recur to the discovery "for the purpose of ascertaining to what extent the development of the red blood cell and the iron found in the general circulation depend upon the mechanical or chemical effect of the solar beam—containing in its composition this metal—upon the portions of the body exposed to its operation." Kirchhoff proved the presence of iron, among other metals, in the solar "atmosphere," and by inference it may be supposed present in the incandescent surface or stratum beneath it; and accordingly we felt somewhat curious to know what was meant by the extension of the discovery implied by the mechanical effect of the iron contained in the solar beam. At the end of the work we came upon the following sentence:—"In the absence of any hypotheses of a more satisfactory character to account for the beneficial action of light, it is reasonable to suppose that the iron vapour detected in the sun's beam may have a physiological as well as a mechanical effect upon the composition of the blood by throwing into the general circulation through the vessels of the skin a most important vital constituent." Though in his preface our author disavows any claim to original experimental research, and does not purpose to weigh the relative values of the theories of light, he thus exhumes the corpuscular theory and revives it with a vengeance. That we have particles of iron drilled into our very blood in actual "showers" of sunshine is a bold theory, and dead against the art and mystery of wearing clothes. Surely the advantages of taking steel-drops *per cutem* never struck anybody in this light before; and though we are not told what are the therapeutic advantages of having particles of sodium, nickel, calcium, magnesium, barium, copper, and zinc pelted into us, some may fairly regret that no traces of gold are found in the solar atmosphere to act as an encouragement in laying oneself out for an easy method of accumulating that valuable metal. Any one wishing to defend this hypothesis will have to explain why solar "atmosphere" and solar "beam" are to be considered identical; how it is that while the dark lines of the sun's prismatic spectrum evidence the interference or absorption of certain forms of light, the spectra of the incandescent metals afford bright lines instead; and when done the insuperable objections to the theory are only beginning.

The chapters on lunar influences record effects attributed to the moon as matters of hearsay, which the reader may believe or not as he pleases. The author does not hold himself bound to investigate such questions, or even to trace any clear connection with the subject on hand. The moon must have been man's primitive guide in fixing periodic times and observances; and, apart from light, her relations to the earth, in a system of two bodies moving round their centre of gravity, undoubtedly affect other physical phenomena beside the tides. It is therefore not difficult to understand how almost all our more obvious and minor periods observed in natural phenomena have been attributed to lunar influence, though many are very remotely connected therewith; nor in the present state of science need we affect to be surprised should the moon be found to have important relations which are either denied or undiscovered. Besides, a rational view of the nature of causation shows us that since all cosmical

periods are interrelated, and since all physiological and physical effects which they conjointly determine cannot be specially attributed to one independent cause apart from others, it follows that much vagueness must always beset our popular method of tracing special causes and effects. Not only Dr. Winslow's book, but almost all our deductions from whole series of observations in kindred departments, are wholly vitiated from the universal disregard or ignorance of the principle that periodic *changes*, whether of the moon as a great neighbouring centre of influence, or of some small object, cannot be classified distinctly as "causes" or "effects," but merely as *signs* of the variation in special forms of an all-pervading and ceaseless activity.

Unfortunately, in the very department of inquiry in which Dr. Winslow ranks as a high authority, he merely tells us, after giving the conflicting opinions of others, that "placing but little faith in what has been said on the subject I have not kept any systematic register as to the effect of different phases of the moon on the insane." When, as we have hinted, *signs* rather than *causes* will be sought after in the study of physiological and other influences, systematic registration of phenomena will become the basis of a scientific method which will be proud to acknowledge that in these matters we must walk by sight and not by faith, nor by the want of it in any predevised theory.

Dr. Winslow's last and shortest chapter on the Hygiene of Light makes some approach to the subject on which the work ought to have treated; and it is not the less worth reading, perhaps, that extracts are drawn from the writings of Sir D. Brewster, from Miss Nightingale's admirable book on hospitals, and from the pages of this journal. If Dr. Winslow had kept to his subject his extraordinary diligence in collecting materials would have secured the value and importance of his book in relation to a subject on which people cannot read too much. It is necessary in every form to set forth known truth on the sanitary value of light and air, though that truth be backed up by no specious hypothesis, and be apparently addressed to some faint sense of justice in man rather than to an ignorant but keenly active selfishness too seldom disturbed by the power of the law, and which therefore cannot be too often assailed by the force of reason. It may be difficult to say whether ignorance or cupidity is more concerned in the opposition to sanitary reform; yet we shall be disposed to forgive much in an author who does something in any direction to advance the state of public opinion on such worldly interests as are concerned in the condition of our streets and lanes, the structure of schools, hospitals, and servants' apartments; and, in the aid of all who cannot, or do not, help themselves, to cherish in men that "unerring instinct" which attracts us to the wholesome light of heaven.—*Pall Mall Gazette*, June 20.

#### *Modern (Romish) Ideas of Hell.\**

MR. FURNISS'S book is one of a series expressly intended "for children and young people;" an extract from Father Faber, on the fly-leaf, gives us to understand that we are much too qualmish about mentioning "the scaring images of Hell, and that children are lost for want of being early smitten by terror!" Our readers will remember that M. Octave Delepierre recently edited for the Philobiblion Society a series of "Visions of Hell," all belonging to a mediæval period.† The editor, and the public generally who studied that stirring collection

\* 'The Sight of Hell.' By the Rev. J. Furniss, C.S.S.R. *Permissu Superiorum.* (Duffy.)

† See 'Journal of Mental Science,' October, 1866. NOTES AND NEWS.