

turn out only a few descriptions of goods. Hence, if the market for these is lost, the employment of the workman is gone. In one factory at Birmingham up to a recent date, only four different articles were manufactured. Upwards of a thousand different persons in this case produced perfect parts of complex machinery from which the perfect machine was built up. These were skilled workmen, who had acquired a precision almost equal to that of machines, by a constant repetition of the same work. It is by no means wonderful that some industries should have remained comparatively undeveloped in this manner. It is, on the other hand, rather to be expected that in a country like ours, devoted to labour rather than to experiment, long settled, wealthy, and generally able to find a market for its wares, some industries should content themselves with remaining as they are, without seeking the aid of mechanical appliances. On the other hand, to give an instance from America, the Singer Sewing Machine Works, near New York, employ only the cheapest labour and the most expensive and complete labour-saving machinery. By this combination a complex machine of extreme delicacy of construction is cheaply made. In the case of this factory it is stated that recently the demand for the article it was constructed to make having fallen off, the machinery has been employed to make others which were more needed and for which a ready market was found. It would seem from this that, little as it might be expected, the machine is more easily adapted to other uses than the man. Another example of the advantages arising from the construction of only one article is a manufactory in America in which sluice valves are produced by a simple system of division at such prices as to undersell other makers in this country as well as in that, although little special machinery is employed. We are far from thinking that our manufacturing supremacy is gone, but it may be seriously imperilled if we do not take a lesson from those who have had a sharp struggle to carry on manufacturing industries with dearer and less skilled labour than we, and who have successfully accomplished what they sought.

The skilled workman in England, sooner than produce more work for more money with the aid of machinery, will frequently waste time, for fear that the piecework price will be reduced, and the trades' unions always encourage higher wages and less production. In America the more frequent use of machinery puts different qualities of labour more on an equality, as an unskilled man can far more quickly be trained to direct a machine than to fulfil the varied duties of an English mechanic. A few years ago the Americans were competing successfully in all countries with their machine-made watches, notwithstanding the high rates of labour in their country. Now the French and Swiss are underselling Americans owing to the adaptation of machinery worked by the cheaper labour of the Continent. In rifle manufacturing and sewing machines the Americans have driven us from many markets, their better machinery compensating for our cheaper labour. If the British workman and the trades' unions come to their senses, our cheaper labour must with the aid of machinery give us the advantage in manufacturing.—*Economist*.

SCEPTICISM.

Those who have profoundly investigated the evidences of truth, have probably felt themselves for a moment at least, and perhaps for a longer time, on the brink of universal scepticism and have also felt that they were about to be launched, without a helm, on a wide waste of perplexity. This state of feeling is peculiar to intellectual men. And this for the reason that those who can best estimate and discern the proofs of any truth, can also best feel and appreciate the extent of the opposing or contrary evidence. And when there is added to this a gloomy or morbid temperament, the liability is increased. In these mental conflicts, sceptical objections have a great advantage, because generally speaking, great truths are the result of an accumulation of proof by induction or are perhaps dependent upon several lines of argument. Therefore, it is extremely difficult to group them mentally at one time and to feel their entire force—so that we are obliged to study them in detail. The existence of the Deity and the divine origin of Christianity are to be classed under this head. Pascal says "D'en avoir toujours les preuves présentes c'est trop d'affaire." i. e. "to maintain mentally a series of proofs, is beyond our power."

On account of this inability of the mind to retain a series of proofs, it is absolutely necessary that, in addition to having proved a truth by a process of reasoning, we should *feel* and *practise* it. Reason acts slowly and with so many views upon so many principles which it is necessary should be always present, that it is perpetually dropping asleep, and is lost for want of having all its principles present to it. The affections do not act thus; they act instantaneously, and are always ready for action. The transient doubts to which capable minds are liable, in spite of their strong convictions, are not subjects for blame but rather for sympathy; and it is their bounden duty to resist such thoughts, if they are dependent upon fluctuations of feeling or physical causes.

The fact is, that the most sincere belief is sometimes checkered with the passing clouds of doubt even when there is no disbelief, the reason for this being that the evidence for a truth has become so familiar as to be underestimated. So little inconsistent with intelligent belief are such doubts, that it

may be asserted that those only who have been troubled somewhat with them can be said, in the very highest sense, to believe at all. "He who has never had a doubt, who believes what he believes for reasons which he thinks as irrefragable (if that be possible), as those of a mathematical demonstration, ought not to be said so much to *believe* as to *know*; his belief is to him knowledge, and his mind stands in the same relation to it, however erroneous and absurd that belief may be. It is rather he who believes—not indeed without the exercise of his reason, *but without the full satisfaction of his reason*—with a knowledge and appreciation of formidable objections—it is this man who most truly may be said, intelligently to believe." It is considered very important by good parents that, in matters of education, their children should be taught to believe the assurances of their superiors in knowledge without any reason being given: it is certainly expected that they will believe as *facts* things which as yet they cannot fully understand, and which may appear to them paradoxical; it is also expected that they will rest satisfied with the assurance that it is vain to attempt to explain the evidence until they get older and wiser. It is sad to see a young person who has not learned to exercise thus much of practical faith, and who, because *he* cannot comprehend them, rejects truths of which he has greater and stronger proofs, though not *direct*, of their being truths, than he has of the contrary. Now, if we have given obedience and reverence to our fathers on earth, "shall we not much rather be subject to the Father of Spirits, and live?" If, then, this earth is the scene of moral education and discipline, it seems peculiarly appropriate that the proofs of the truths should be liable to objections, which shall not be of sufficient weight to force acquiescence, nor yet so secret as to disappoint our sincere investigation. *The Deity has afforded sufficient light to those whose object it is to see and feel, and has left sufficient obscurity to perplex those who have no such wish.* All that appears necessary to expect is, that as we are certainly not called upon to believe anything *without* reason, nor without a *preponderance* of reason, so the proofs shall be such as our faculties are capable of dealing with; and that the objections shall be only such as equally baffle us upon any other hypothesis, or are insoluble only because they transcend altogether the limits of the human understanding; which last circumstance can be no valid reason, apart from other grounds, either for accepting or rejecting a given dogma. It is in this just way that God has dealt with us as moral agents in relation to all the great truths which lie at the basis of religion and morals; and, we may add in relation to the divine origin of Christianity. The evidence is all of such a nature as we are accustomed every day to deal with and to act upon; while the objections are either such as reappear in every other theory, or turn on difficulties absolutely beyond the limits of the human faculties.

The evidences of Christianity occupy the same position. Whether a great amount and complexity of testimony are likely to be false; whether it is probable that not one, but a great number of men would endure persecution and martyrdom in defence of a lie; whether the fable of Christianity—if it be fable—is likely to have emanated from the brains of Galilean peasants; whether a belief so sublime and holy was to be expected from knaves and fools; whether any one could fabricate such a belief; whether infinite cleverness may be expected from stupidity and ignorance, or a perfectly natural "and successful assumption of truth from imposture;" these, and a multitude of similar queries, are exactly of the same *nature*, however judged and determined, with those with which the advocate, and historian, judges and courts of law, are every day required to deal. On the other hand, if the question arises as to whether miracles are to be believed or not, the reply can be made that it is absolutely necessary to possess a far greater and more comprehensive knowledge of the laws of nature than we do in order to justify an *a priori* decision. Many other difficulties confront us on other hypotheses, meeting us as frequently and with as much force in the "constitution of nature" as in revelation, and are fully as fatal to theism as to Christianity.

It is very remarkable, however, that a human being should be expected to believe any theory or mystery whether religious or secular, unless there is a preponderance of comprehensible proof, or on the mere assertion of another human being; or that he should refuse, when there *is* such proof, to accept a theory or mystery, solely for the reason that it is one.

This last is the most astonishing. When we consider that man—who stands sublimely between "two infinitudes" who is surrounded with miracles or mysteries, which he does not appreciate, because they are so familiar—when we consider this, we cannot fail to be struck with the absurdity that man should reject Christianity (otherwise well proved) on account of a difficulty common to all mysteries. And then when we reflect that that very *intelligence* which sets itself up as a standard of all things, is most perfectly ignorant of what it ought to know best—namely, itself—that it knows *nothing* of its mode of working or essence—or how the connection between mind and matter is maintained—or that it does not know whether to suppose that matter can think or the intelligence be material, or a sympathy exist between entirely different substances, and yet one of these conditions must be true—when we consider all these things, it is most certainly a ridiculous circumstance and is the most mysterious of all paradoxes, that a human being should refuse to believe a theory or mystery *solely because* it is above its comprehension. [Aggie Fern.]