

The merchant pays his private watchman for guarding his property every night; the whole of the minister's time is expended in enforcing those precepts which, and which only, can make, not only property, but even life itself, secure in any community. The Broadway merchant, or the Wall street broker, or the South-street shipper, would crimson with shame to have it known that his faithful night-watch had starved to death on the pitiful salary which he had accorded him; and yet there are rich men and women, who give so little toward the support of the clergymen of the neighborhood, that they would actually starve if others did no better by them.

## THE MIRACLES OF SCIENCE.

### HOW THEY ILLUSTRATE THE TRUTH OF RELIGION.

One little fact often furnishes a text for a large discourse. A trifling incident may suggest reflections on which a wise man shall ponder long, and which may lead him to great results. The apple that fell on Newton's head set him thinking, and led him to discover the laws of gravitation which hold the planets in their orbits. Perhaps, if Newton were living now, he would be led into a similar train of reflection by an item noted in our "scientific" column, namely; that a message had been telegraphed across the Atlantic *by a battery formed in a lady's thimble!* The statement is so extraordinary, that we should be slow to believe it, if we only saw floating about in the papers. But the fact is confirmed by a private letter, which we have been permitted to see, from the eminent electrician who made the experiment. He writes that he has been down at Valentia for a week repeating all the tests of the two cables at his leisure. He finds them both marvellously perfect. The old one is even a little better than the new one, but this is doubtless owing to its having been longer submerged, time improving the quality of gutta serena. But the new one has improved very much since it was submerged in July, and he does not know which will finally prove the better. It is as one of his experiments that he relates the following: "With a single galvanic cell, composed of a few drops of acid in a silver thimble and a fragment of zinc weighing a grain or two, conversation may readily, though slowly, be carried on either through one of the cables or through the two joined together at Newfoundland so as to form a loop; and, although in the latter case the spark, twice traversing the breadth of the Atlantic, has to pass through 3,700 nautical miles of cable, or 4,300 to 4,400 statute miles, the effects at the distant end are visible on the galvanometer in a little more than a second after contact is made with the battery. The deflections are not of a dubious charac-

ter, but full and strong, the spot of light traversing freely through a space of eighteen inches on the scale,\* and it is manifest that a battery very many times smaller would suffice to produce similar effects."

This little fact might be used with much effect by one giving a lecture on Electricity, as the latest proof of its incredible velocity. But it suggests also a beautiful analogy to see spiritual truth—the communication of the human soul with God. Thought is swifter than the lightning; and if in a second of time a spark may fly from continent to continent, why should it be thought a thing incredible that the desire of a human heart should thus be wafted to the throne of God?

The existence in nature of an agent so subtle and mysterious—unseen, yet dwelling in every object, developed by the slightest causes, and often flashing out upon us with terrific power—is perhaps the best illustration of the universal presence of that unseen power with which we come in contact every instant. Thus God is not far from every one of us. Like the air, which floats all over the round world, which stirs the leaves of the forest and the waves of the sea, so is the presence of God—it is all around us by night as well as day, and in him we live and move and have our being.

How easy then for man to commune with his Maker! He is not a God afar off, but very nigh, even to the lowliest of his creatures. And how slight a thing arrests his ear! It needeth not the voice of a great congregation, filling the arches of a cathedral, and rising up to heaven like the sound of many waters. Man may pray alone, in solitude and in weakness, and yet God can hear him.

Again the scientific fact helps us to understand the spiritual truth. A few years ago, when men first talked of telegraphing across the Atlantic, they thought at least that they had need to muster all the forces in the armory of nature; they must send out a current of electricity that should be almost like a flash of lightning from the thunder cloud. And so the electricians of that day ranged on the heights of Valentia a battery of five hundred cells, with which they fired off into the bosom of the ocean. Needless pomp and preparation! When now only a spark from a lady's thimble may traverse the whole breadth of the Atlantic!

So is it with prayer. It matters not how weak the voice which utters it, how lowly the source from which it comes, if it be a true spirit of devotion, it will reach its object. As the spark from the tiniest of galvanic cells flies across the sea, so the feeblest desire that trembles in a human breast may make its

\* Signals through the Atlantic Cable are not made by marks or by sound, but by light. The telegraph house is kept dark, and it is the flashes of light which issue from the end of the cable, which tell the messages which are coming up out of the sea.