

earth's history has been sought and found. Lower than these are laid the vast deposits of former vegetables, coal retaining the impression of palms and ferns, which show that even at those depths there was once dry land, although no bones of quadrupeds are found there; whilst lower still the naturalist traces the first forms of existence, the crustaceous animals, zoophytes, and mollusca, of a world yet almost inert and lifeless. . . . It is impossible to conceive any grander legitimate subject for the investigation of man than this, which has laid open the history of the earth almost from the moment when it was called into existence by the fiat of the Creator. . . . The strata called primitive, on which all the others repose, containing no remains of life, teach us by that circumstance that life has not always existed on our planet, and that there was a time when physical force alone acted on the land and on the sea, in which all the wonders of organization were subsequently developed. All organized substances were not created at the same time: vegetables seem to have preceded animals; molluscan animals and fishes appeared before reptiles; and reptiles before the mammalia. The species which formed the ancient animal population have been destroyed and replaced by others, and the present animal population is perhaps the fourth series. And it is no less interesting than important to remark how strictly these geological discoveries agree with the Mosiac record of creation. That record distinctly intimates the great antiquity of the earth, in a state of darkness and desolation, compared to the age of man; and amongst all the fossil remains of the ancient strata, not the slightest vestige of man or his works appears. Either man did not exist before several of the revolutions of the globe, or his bones lie yet unburied at the bottom of the present seas; yet that he existed before the last great catastrophe of the deluge, we know from the universal traditions handed down concerning it in every part of the earth, as well as from the oldest record possessed by man. This record, Cuvier observes, bears date about 3300 years before our own time, and it places the deluge 2000 years before its own date, or 5400 years since. No tradition affords man a greater antiquity than that to which our antediluvian records lay claim; and it is only after the time of that great event that we find men collecting into societies, and the arts and sciences springing up. Every where, and however interrogated, nature speaks the very same language, and tells us by natural traditions, by man's actual state, by his intellectual development, and by all the testimony of her works, that the present state of things did not commence at a remote period. If there be any thing determined in geology, it is that the surface of the globe was subjected to a great and sudden revolution, not longer ago than 5000 or 6000 years; that by this catastrophe was caused the disappearance of countries formerly the abode of man and of animals now known to us; that the bottom of the sea of that time was left dry, and upon it were formed the countries now inhabited; and that since that epoch, the few of the human race who were spared have spread themselves over the world, and formed societies; that the countries now inhabited, and which that great catastrophe left dry, had been at some former period inhabited, the abode at least of land animals, which were destroyed by some previous deluge; and that they had even suffered two or three such visitations, which destroyed as many orders of animals.—*Chamber's Edinburgh Journal*.

**CHEMICAL AND OPTICAL DISCOVERY.**—Certain chemical substances, such as chlorate of silver, have the property of changing their colour by the mere con-

tact of light. By a combination of this nature M. Daguerre has succeeded in fixing upon paper prepared with it, the rays that are directed on the table of the camera obscura, and rendering the optical tableau permanent. The exact representation of whatever objects this instrument is directed to, is, as every body is aware, thrown down with vivid colour upon the white prepared to receive them, and the rays of light that are thus reflected, have the power of acting in the way above alluded to, on chlorate of silver, or certain preparations of it. In this manner an exact representation of light and shade of whatever object may be wished to be viewed, is obtained, with all the softness of a fine aquatint engraving. By the help of a magnifying glass, we see the minutest folds of drapery, the lines of a landscape invisible to the naked eye. In the mass of building, accessions of all kinds, imperceptible accidents, which the view of Paris from the Pont des Arts is composed, we distinguish the smallest details, we count the stones of the pavement, we see the moisture produced by rain, we read the sign of a shop. Even the thread of the luminous tissue has passed from the object to the surface retaining it. The impression of the image takes place with greater or less rapidity according to the intensity of the light; it is produced quicker at noon than in the morning or evening, in summer than in a winter sun. M. Daguerre has hitherto made his experiments only in Paris; and in the most favorable circumstances they have always been too slow to obtain complete results, except on still or inanimate nature. Motion escapes him, or leaves only vague and uncertain traces.—*Paris Constitutional*.

## CHRISTIAN TREASURY.

**FELLOWSHIP WITH GOD.**—Who has not felt his heart enlarged, and his faith strengthened, and his spiritual affections ripened, by that communion with brethren in the Lord with which he has at times been favored. Has his intercourse with Christian friends not been at times to him like oases in the desert—as the sound of gushing waters in the sterile and howling wilderness? And as they sat and communed together talking of their common God, and fortifying one another in the faith, or kneeling together in social prayer, has he not felt that it was a blessed thing to be a Christian, and that the disciple of Jesus has enjoyments with which a stranger doth not intermeddle?

Oh! why is it not now with us, as it once was in the Apostles' day, when the multitude of them that believed were of one heart and of one soul, and grace was upon them all,—or, as in those succeeding days of primitive Christianity, when the Pagan reviler, as he lowered on the little band, was constrained to exclaim, How these Christians love one another! We read of such fellowship of heart—why may we not realize it? It may be encountered, I am told, in some of those dells of Switzerland, or the Vaudois, where luxury and pride have not contaminated the virgin heart, and persecution without the fold, has cemented union within it. And verily when I have read of these things, I have panted after such a green and blessed spot, and deemed that I should be glad to share the mountaineer's hardships and privations, to might partake his spirit. And then I have asked