in any other mode than receiving soul, life, and form, direct from the hands of his Creator. M. Guizot lays great stress on this conception of the sense of the passage in Genesis where the creation of man is mentioned. The Duke of Argyll scarcely gives as much importance as it deserves to what M. Guizot terms the "Supernatural in Creation," as distinguished from the operations now visible in nature. The profound French scholar asks, "In what manner and from what power has the human race commenced on the earth?" and proceeds to show that spontaneous generation, if it ever existed, could only give birth to infancy and weakness, unable to sustain or prolong its life in the beginning. "The human pair must have been complete from the first, created in the full possession of their powers and faculties. It is on this condition solely that in appearing for the first time on earth, man could there live, perpetuate his kind, and found the human race. Evidently the other origin of the human family is merely admissible, merely possible. The supernatural mode of creation alone, effectively accounts for the apparition of man here below."

Our authority while pronouncing M. Guizot's line of argument not *thoroughly* safe, says of the suppositions made by the learned section, of which Dr. Darwin and Professor Huxley are prominent members;—

"These hypotheses are indeed destitute of proof, and in the form which they have as yet assumed, it may justly be said that they involve such violations of, or departures from all that we know of the existing order of things, as to deprive them of all scientific basis."

Were the darling hypothesis of the Modern Philosophers,—the theory of development well founded, the human intellect and the bodily faculties of man would be a true work of creation. Whether the Creator works out His designs by the (so called) laws of nature, or by modes of which we have no conception, all He does is effected in a supernatural manner. On the difficulty of drawing a distinction between natural and supernatural modes of carrying on the economy of creation, we copy some sentences of the "Reign of Law."

"The language of Scripture nowhere draws, or even seems conscious of the distinction which modern philosophy draws so sharply between the natural and the supernatural. All the operations of nature are spoken of as operations of the Divine Mind. Creation is the outward embodiment of a Divine idea. It is in this sense apparently that the narrative of Genesis speaks of every plant being formed before it grew. But the same language is held not less decidedly of every ordinary birth. 'Thine eyes did see my substance yet being imperfect. In thy Book all my members were written, which in continuance were fashioned, when as yet there were none of them.'"

PURPOSE EVIDENCED IN ADAPTATIONS.

We cannot better introduce this section of our article than in the words of our authority.

"The new discoveries which science is ever making of adjustments and combinations of which we had no previous conception, impress us with an irresistible conviction that the same relations to mind prevail throughout. It matters not in what department of investigation inquiry is conducted, it matters not what may be the philosophy or theology of the inquirer. Every step he takes, he finds himself face to face with facts, which he cannot describe intelligibly either to himself or others except by referring them to that function and power of mind, which we know as purpose and design."

Dr. Darwin's work on the Fertilization of Orchids, furnishes our author with curious illustrations of the presence of purpose in their original construction. These flowers cannot be fertilized except by the conveyance of the pollen to them by means of insects, and contrivances are wonderfully made to effect this object. In the words of the text "the complication and ingenuity of these contrivances almost exceed belief.

"'Moth traps and spring guns set on these grounds,' might be the motto of these orchids. There are baits to tempt the nectar-loving *Lepidoptera* (insects with scale-covered wings) with rich odours exhaled at night, and lustrous colours to shine by day. There are channels of approach, along which they are surely guided, so as

to compel them to pass by certain spots; there are adhesive plasters nicely adjusted to fit their probosces, or to catch their brows; there are hair triggers carefully set in their necessary path, communicating with explosive shells, which project the pollen-stalks with unerring aim upon their bodies. There are in short an infinitude of adjustments, for an idea of which I must refer my readers to Dr. Darwin's inimitable powers of observation and description—adjustments all contrived so as to secure the accurate conveyance of the pollen of the one flower to its precise destination in the structure of another."

It must be stated to Dr. Darwin's credit that however zealous he is for the glory of mere nature without reference to Nature's God, he never tires of pointing out intention and design in the structure of these beauteous wonders of creation,—flowers. Indeed he is so naïve and frank on this point, that he has been blamed by a sympathizer, Alfred Wallace, who thus aired his discontent in the *Quarterly Journal of Science*, Oct. 1867.

"Dr. Darwin has laid himself open to much misconception, and has given to his opponents a powerful weapon, by his continual use of metaphor in describing the wonderful adaptations of organic beings."

In Madagascar there are orchids with very deep nectaries which require longer probosces in the moths to come at the sweet drop in the bottom. Such moths exist in their neighbourhood, without which the fertilization of the flowers could not be effected. Dr. Darwin would however have it that the length of the nectary has on the principle of "natural selection" caused an elongation in the probosces of the insects, mayhap the long nose lengthened the nectary, mayhap there were mutual action and reaction.

No true naturalist can avoid seeing endless variety in the means used towards the same ends, and generally these ends worked out by the almost infinite number of living things acting according to an instinct, in the blind obedience to which, seems to consist their enjoyment of existence. The same objects might be attained without imparting enjoyment to a single living creature, but the merciful dealings of the Creator with His creatures would not be manifested.

In speaking of the universality of law and the difficulty of drawing a distinction between the natural and supernatural, the Duke of Argyll will find many dissentients from his opinion of the Saviour's Incarnation and Death being in some sense matters of necessity. It was not in obedience to any law distinct from those ordained by Providence that Christ suffered for the salvation of His creatures. There was nothing but the exercise of free will and an exhibition of infinite goodness and pity in the whole scheme of redemption.

### SENSES IN WHICH THE TERM LAW IS UNDERSTOOD.

The author of the "Reign of Law" carefully defines the different senses in which the word LAW is used. He adduces five of these, but three will be sufficient to quote for the purposes of this paper. In the first it simply expresses an observed order of facts, of which we may be in complete darkness as to the cause. A striking example is furnished by the discoveries of Kepler,* the brave scholar who spent his life in the service of science, and yet was left to struggle all along with conditions of sordid want.

He found out by intent study and observation (1) that the planets move in elliptical not circular orbits, the sun being placed in one of the foci; (2), that if a line be drawn from the point in the orbit where the planet is

* Johann Kepler was born at Magstatt, in Wurtemburg, 27th December, 1571. He owed his early education to the monks of Maulbrunn. In 1593 he was appointed mathematical professor at Gratz. In 1599 he joined Tycho Brahe at Prague, and lived there for eleven years in great poverty, though enjoying a Government appointment which the authorities forgot to pay. His subsequent mathematical appointment at Linz, and final situation fifteen years later at Rostock University, did not add much comfort to his condition. He died at Ratisbon, 15th November, 1630, a striking example of the neglect of struggling genius by the great and the influential.