Origin of Species.

There has been considerable discussion in reference to Prof. Owen's views on the origin of species. His position, so far as we can deduce it from a chapter on the subject in his forthcoming "Anatomy of Vertebrates," and copied into Silliman's Journal, is as follows. He expresses himself decidedly in favor of what is commonly called spontaneous generation. He believes that experiments show that the lower forms of *bacteriums* and *vibrios* are produced in infusions protected from the introduction of vital germs. According to his theory, one molecule of organic matter attracts another, forming *bacteriums*, and these by further union may form *vibrios*, just as inorganic particles unite to form crystals. He believes that "the same CAUSE which has endowed this world with power convertible into magnetic, electric," and other forms of force has also added the power of its conversion into vital force. Prof. Owen believes, with Darwin and most other naturalists of the present day, that species were not separately created, but have descended one from another. He rejects, however, the various theories of gradual development: such as that of Lamarck, that a want and longing for a power develops its necessary organ; or that of Saint Hilaire, that the conditions of the ambient medium—air, water, etc.—develops or dwarfs any organ; or that of Darwin, that natural selection preserves those individuals best adapted to compete in the conflict of life, and so gradually develop new species. His theory is that new and considerable variations by sudden leaps are produced by a power of the same sort which often suddenly originates six-fingered men or horses with three-hoofed feet. Thus in France a ewe gives birth to several lambs with a peculiarly silky wool, and the breed has been perpetuated. This theory obviates the objections of Agassiz urged in his writings on the Brazilian fishes. Prof. Owen believes that geology is bringing to light the missing links between ancient and modern species. Thus the teeth and feet of the *Hipparion* are intermediate between those of the *Palæotherium* and the horse. At the same time, he believes that these various modifications in animal forms are directed by an intelligent superior power, who has allowed, for example, the teeth to disappear which would interfere with the bit, and which appear in the ancient forms. "I believe," he says, "the horse to have been predestined and prepared for man." He seems also to assert his faith in a future life; but yet he takes what is called the materialistic view of the human soul, denying that it is anything more than the sum of brain impressions. On the whole, the opinions of this eminent comparative anatomist seem to lack the consistency of those of Agassiz on the one hand and of Darwin on the other