

nus and species of unknown animals, found in the gypsum quarries near Paris:—"When the sight of some bones of the bear and the elephant, twelve years ago, inspired me with the idea of applying the general laws of comparative anatomy, to the reconstruction and the discovery of fossil species; when I began to perceive that these species were not perfectly represented by those of our day, which resembled them the most;—I did not suspect that I was every day treading upon a soil, filled with remains more extraordinary than any that I had yet seen; nor that I was destined to bring to light whole genera of animals unknown to the present world, and buried for incalculable ages at vast depths under the earth. It was to M. Veurin that I owe the first indications of these bones furnished by our quarries: some fragments which he brought me one day, having struck me with astonishment, I made enquiries respecting the persons to whom this industrious collector had sent any formerly: what I saw in these collections served to excite my hopes and increase my curiosity. Causing search to be made at that time for such bones in all quarries, and offering rewards to arouse the attention of the workmen, I collected a greater number than any person who had preceded me. After some years I was sufficiently rich in materials to have nothing further to desire; but it was otherwise with respect to their arrangement and the construction of the skeletons, which alone could conduct me to a just knowledge of the species. From the first moment, I perceived that there were many different species in our quarries; and soon afterwards, that they belonged to various genera, and that the species of the different genera were often of the same size; so that the size alone rather confused than assisted my arrangement. I was in the situation of a man who had given to him, *pêle mêle*, the mutilated and incomplete fragments of a hundred skeletons, belonging to twenty sorts of animals, and it was required that each bone should be joined to that which it belonged to. It was a resurrection in miniature; but the immutable laws prescribed to living beings were my directors.\* At the voice of comparative anatomy, each bone, each fragment, regained its place. I have no ex-

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\* In the following passage Cuvier has more fully explained what he denominates "the immutable laws prescribed to living beings:"—"Every organized being forms a whole and entire system, of which all the parts mutually correspond and co-operate, to produce the same definite action, by a reciprocal re-action; none of these parts can change, without a change of the others also. Thus, if the intestines of an animal are organized in a manner only to digest fresh flesh, it is necessary that his jaws should be constructed to devour the prey, his claws to seize and tear it, his teeth to divide the flesh, and the whole system of his organs of motion to follow and overtake it, and of his organs of sense, to perceive it at a distance. It is necessary, also, that he should have seated in his brain the instinct to hide himself and spread snares for his victim: such are the general conditions of a carnivorous regimen: every carnivorous animal must infallibly unite them,—without them the species could not subsist. But, under these general conditions, there are particular ones with respect to the size of the species, and the abode of the prey, for which each animal is disposed.