SECOND VIEW OF NATURE.

INDIVIDUALS, whatever their kind or number may be, are of no value in the univerſe. Species are the only exiſtences in Nature; for they are equally ancient and permanent with herſelf. To form a diſtinct idea of this ſubject, we ſhall not conſider ſpecies as a collection or ſucceſſion of ſimilar individuals, but as a whole, independent of number and of time, always active and always the ſame; a whole, which has been reckoned one in the works of creation, and, therefore, conſtitutes only a unit in Nature. Of all theſe units, the human ſpecies holds the firſt rank: The others, from the elephant to the mite, from the cedar to the hyſſop, are in the ſecond and third orders. Though different in form, in ſubſtance, and even in life, each retains its proper place, ſubſiſts by itſelf, defends itſelf againſt the others, and the whole together repreſent animated Nature, who ſupports, and will continue to ſupport herſelf in the ſame manner as we now behold her. A day, a year, an age, or any given portion of time, conſtitutes no part of her duration. Time itſelf relates only to individuals, to beings whoſe exiſtence is fugitive. But the exiſtence of ſpecies is conſtant; their permanence produces duration, and their diffe-

rences give riſe to number. Let us conſider ſpecies in this light; let us give to each an equal right to the indulgence and ſupport of Nature. To her they are all equally dear; for, on each of them, ſhe has beſtowed the means of ſubſiſting, and of laſting as long as herſelf.

Let us now ſuppoſe the ſpecies to change places with the individual. We have already ſeen what Nature is in relation to man; let us next conſider in what light ſhe would appear to a being who repreſented the whole human ſpecies. In the ſpring, the verdure of the fields revives, the buds and flowers expand, the bees recover from their torpid ſtate, the ſwallow returns to our land, the nightingale chants the ſong of love, the ram friſks, the bull lows with deſire, and all animated creatures are eager to join and to multiply their ſpecies; we have then no idea but that of reproduction and the increaſe of life. On the other hand, when the dark ſeaſon of cold and froſt approaches, animated beings become indifferent, and even avoid each other; the inhabitants of the air deſert our climates, thoſe of the water loſe their freedom under vaults of ice; many animals grow torpid, and dig retreats for themſelves in the ground; the earth hardens, the plants wither; and the trees, deprived of their foliage, bend under loads of ſnow and hoar-froſt; every object excites the idea of languor and annihilation. But theſe ideas of renovation and deſtruction, or rather

theſe images of death and life, however great and general they appear, are only individual and particular. Man, as an individual, thinks in this manner: But the being whom we have ſubſtituted for the ſpecies, thinks and judges in a manner more ſublime and general. In this alternate deſtruction and renovation, in all theſe ſucceſſive viciſſitudes, he perceives only permanence and duration. The ſeaſon of one year is to him the ſame as that of the preceding, the ſame as that of millions of ages. The thouſandth animal, in the order of generation, is the ſame to him as the firſt. In fine, if man lived for ever, if all the beings which ſurround him exiſted in the ſame manner as they do at preſent, the idea of time would vaniſh, and the individual would become the ſpecies.

Why ſhould we not conſider Nature for a few moments, under this new aſpect? In truth, man comes into this world enveloped in darkneſs. The mind being equally naked with the body, he is born without knowledge and without defence. He brings nothing with him but paſſive qualities. He is obliged to receive the impreſſions of objects on his organs; the light ſhines long on his eyes before he can recogniſe it. At firſt, he receives every thing from Nature, and makes her no returns. But, as ſoon as his ſenſes have acquired ſtrength and activity, as ſoon as he can compare his ſenſations, he reflects upon the univerſe; he forms ideas, and retains,

retains, extends, and combines them. Man, eſpecially when he has been inſtructed, is not a ſimple individual: He repreſents, in a great meaſure, the whole human ſpecies: He begins with receiving from his parents the knowledge which had been tranſmitted to them from their fathers: Thus, by means of the divine arts of writing and printing, the preſent age is, in ſome meaſure, identified with thoſe that are paſt. This accumulation, in one man, of the experience of many centuries, extends the limits of his being to infinity. He is no more than a ſimple individual, born, like other animals, with the capacity of attending to preſent ſenſations alone: He is nearly the being we ſuppoſed to repreſent the whole ſpecies. He reads what is paſt, ſees the preſent, and judges of the future; and, in the torrent of time, which carries off and abſorbs all the individuals of the univerſe, he perceives that the ſpecies are permanent, and Nature invariable. The relations of objects being always the ſame, to him the order of time appears to be nothing. In his eyes, the laws of renovation only counterbalance thoſe of permanence. A continual ſucceſſion of ſimilar beings is, in effect, equivalent only to the perpetual exiſtence of one of theſe beings.

What purpoſes, then, are ſerved by this vaſt train of generations, this immenſe profuſion of germs, many thouſands of which are abortive for one that ſucceeds? Does not this perpetual propagation

propagation of beings, which are inceſſantly deſtroyed and renewed, uniformly exhibit the ſame ſcene, and occupy neither more nor leſs of Nature? From whence proceed thoſe alterations of life and death, thoſe laws of growth and decay, all thoſe individual viciſſitudes, and all thoſe reiterated repreſentations of one and the ſame thing? They are derived from the very eſſence of Nature, and depend on the firſt eſtabliſhment of the univerſal machine; the whole of which is fixed and ſtable; but each of its parts being capable of motion, the general movements of the celeſtial bodies have produced the particular motions of this terreſtrial globe. The penetrating forces by which theſe immenſe bodies are animated, by which they act reciprocally upon each other at a diſtance, animate at the ſame time every particle of matter; and this mutual propenſity of all the parts toward each other, is the firſt bond of beings, the principle of conſiſtence and permanency in Nature, and the ſupport of harmony in the univerſe. The great combinations give riſe to the ſmaller relations: The motion of the earth on its own axis having divided the portions of duration into day and night, all its animated inhabitants have their times of light and of darkneſs, of waking and ſleeping. The action of the ſenſes, and the motions of the members, which conſtitute a great part of the animal œconomy, are related to this firſt combination. Would there be ſenſes alive

to

to light in a world where perpetual darkneſs reigned?

The inclination of the axis of the earth producing, in its annual motion round the ſun, conſiderable changes of heat and cold, which we call *ſeaſons*, all vegetables have alſo, either totally or partially, their ſeaſons of life and of death. The fall of the leaves and fruits, the withering of herbs, and the deſtruction of inſects, depend entirely on this ſecond combination. In climates where it does not take place, the life of vegetables is never ſuſpended, and every inſect completes its peculiar period of exiſtence. Under the line, where the four ſeaſons make but one, the earth is always covered with flowers, the trees are in perpetual verdure, and Nature enjoys a continual ſpring.

The particular conſtitution of animals and of plants is relative to the general temperature of the earth, and this temperature depends on the ſituation or diſtance of the earth from the ſun. If removed to a greater diſtance, our animals and plants could neither live nor vegetate. The water, the ſap, the blood, all the liquors, would loſe their fluidity: At a ſmaller diſtance, they would vaniſh and diſſipate in vapour. Ice and fire are the elements of death; temperate heat is the firſt germ of life.

The living particles diffuſed through organized bodies are related, both by their activity and number, to the particles of light, which ſtrike and

and penetrate all matter with their heat. Wherever the rays of the ſun can heat the earth, its ſurface is covered with verdure, and peopled with animals. Even ice itſelf, as ſoon as it diſſolves into water, ſeems to be fecundated. This element is more fertile than that of the earth: From heat it receives motion and life. The ſea produces, every ſeaſon, more animals than the earth ſuſtains: But it produces fewer vegetables. Hence all the animals which inhabit the ocean, by not having, like thoſe on the land, a permanent ſtock of vegetable ſubſtances to ſupport them, are under the neceſſity of feeding upon each other; and to this combination their immenſe multiplication is to be referred.

Every ſpecies having been originally created, the firſt individuals ſerved as a model to their deſcendants. The body of each animal or vegetable is a mould, to which are aſſimilated indifferently the organic particles of all animals or vegetables which have been deſtroyed by death or conſumed by time. The brute particles, which formed part of their compoſition, return to the common maſs of inanimated matter. But the organic particles, whoſe duration is permanent, are reſumed by organized bodies: They are firſt extracted from the earth by vegetables, then abſorbed by animals which feed upon vegetables, and thus ſerve for the expanſion, ſupport, and growth of both. By circulating perpetually from body to body, they animate all organized

organized beings. The ſtock of theſe living ſubſtances is always the ſame. They vary only in form, or in difference of appearance. In fertile ages, during the times of the greateſt population, the whole ſurface of the earth ſeems to be covered with men, domeſtic animals, and uſeful plants. But, during the period of famine and depopulation, the ferocious animals, noxious inſects, paraſitical plants, and uſeleſs herbs, reſume, in their turn, dominion over the earth. Theſe changes, ſo ſenſible to man, are perfectly indifferent to Nature: The ſilk-worm, ſo precious to us, is to her only the caterpillar of the mulberry tree. Though this caterpillar, which miniſters to our luxury, ſhould diſappear, though the plants which nouriſh our domeſtic animals ſhould be devoured by other caterpillars, though others ſhould threaten with deſtruction the ſubſtance of our corns before the harveſt, in fine, though man and the larger animals ſhould be ſtarved by the inferior tribes, Nature would not be leſs full, nor leſs alive. She protects not one at the expence of another; ſhe equally ſupports the whole. But, with regard to individuals, ſhe knows not number, and views them only as ſucceſſive images of the ſame impreſſion, as fugitive ſhadows, of which the ſpecies is the ſubſtance.

There exiſts, therefore, in the earth, air, and waters, a determined quantity of organic matter which nothing can deſtroy, and, at the ſame time, a determined number of moulds capable of

of aſſimilating it; and theſe moulds are perpetually annihilated and renewed. This number of moulds, or individuals, though variable in every ſpecies, is, upon the whole, always the ſame, always proportioned to the quantity of living matter. If this matter were redundant, if it were not at all times equally occupied, and entirely abſorbed by the moulds which already exiſt, it would form others, and produce new ſpecies. Being alive, it never remains without action; and its union with brute matter is ſufficient to conſtitute organized bodies. It is to this great combination, or rather to this invariable proportion, that Nature owes her form and conſiſtence.

As the laws of Nature, regarding the number, ſupport, and equilibrium, of the ſpecies, are fixed and permanent, ſhe would uniformly exhibit the ſame appearances, and, in all climates and times, would be abſolutely and relatively the ſame, if her complexion did not vary almoſt infinitely in individual forms. The impreſſion of each ſpecies is a figure, the principal features of which are engraven in characters which can never be effaced. But all the acceſſory ſhades and touches are greatly diverſified; no individual has a perfect reſemblance to another; no ſpecies exiſts without a number of varieties. In the human ſpecies, which bears the ſtrongeſt marks of divinity, the impreſſion varies from white to black, from ſmall to great, &c. The

Laplander, the Patagonian, the Hottentot, the European, the American, and the Negro, though ſprung from the ſame parents, have by no means the ſimilarity of brothers.

All ſpecies, therefore, are ſubject to individual differences: But the conſtant varieties, which are perpetuated through ſucceſſive generations, belong not equally to every ſpecies. The more dignified the ſpecies, its figure is the more fixed, and admits of fewer varieties. The multiplication of animals being inverſely proportional to their magnitude, and the poſſibility of differences being in the direct proportion to the numbers they produce, there muſt neceſſarily be more varieties among the ſmall than the large animals, and, for the ſame reaſon, a greater number of ſpecies which make a near approach to each other. In large animals, the unity of the ſpecies is more fixed, and the diſtance which ſeparates them is alſo more extended. How many varieties and neighbouring ſpecies accompany, follow, or precede the ſquirrel, the rat, and other ſmall quadrupeds, while the majeſtic elephant walks alone, and without a peer, at the head of the whole!

The brute matter, of which the maſs of the earth is compoſed, is a virgin or untouched ſubſtance, that has undergone no alterations. But the whole has been more than once put in motion, and diſturbed by the hand of Nature. The globe of the earth has been penetrated by fire, and

and afterwards covered and diſordered by water. The ſand which fills the interior parts of the earth is a vitrified matter. The thick beds of clay which cover its ſurface, are only the ſame ſand decompoſed by the operation of the waters. Granite, free-ſtone, flint, and all the metals, are nothing but this ſame vitrified matter, the particles of which are united, condenſed, or ſeparated, according to the laws of their affinity. All theſe ſubſtances are perfectly inanimate: They exiſt, and will continue to exiſt, independent of animals and vegetables. But there are many other ſubſtances, which, though they appear to be equally inanimate, derive their origin from organized bodies: Marble, limeſtone, chalk, and marl, are compoſed of the ſpoils of ſhells, and of thoſe ſmall animals which, by tranſforming the water of the ſea into ſtone, produce coral, and all the madrepores, the varieties of which are numberleſs, and the quantity almoſt immenſe. Pit-coal, turf, and other ſubſtances, alſo found in the ſuperior ſtrata of the earth, are nothing but the reſidue of vegetables more or leſs corrupted and conſumed. In fine, there are other ſubſtances, though fewer in number, ſuch as pumice-ſtones, ſulphur, the ſcoriæ of iron, aſbeſtos, and lava, which have been thrown out by volcanoes, and produced by a ſecond action of fire upon the original matters. To theſe three great combinations may be referred

ferred all the relations of brute matter, and all the ſubſtances of the mineral kingdom.

The laws of affinity, by which the conſtituent particles of theſe different ſubſtances ſeparate from each other, in order to unite among themſelves, and form homogeneous maſſes, are the ſame with that general law by which the celeſtial bodies act upon one another. Their exertions are mutual, and proportioned to their maſſes and diſtances. Globules of water, of ſand, or of metal, act upon each other in the ſame manner as the earth acts upon the moon: And, if theſe laws of affinity have hitherto been regarded as different from thoſe of gravity, it muſt be aſcribed to the confined views we have taken of the ſubject. Figure, which, in the celeſtial bodies, has almoſt no effect upon their mutual action, becauſe the diſtance is immenſe, has great influence when the diſtance is very ſmall. If the earth and moon, inſtead of a ſpherical figure, were both ſhort cylinders, and equal throughout in their diameters, their reciprocal action would not be ſenſibly altered by this difference of figure, becauſe the diſtance of all the parts of the moon from thoſe of the earth would be very little changed. But, if theſe ſame globes were cylinders of great extent, and placed near each other, the law of their reciprocal action would appear to be very different; becauſe the relative diſtances of their parts would be greatly varied. Hence, whenever figure becomes a principle in diſtance,

diſtance, the law ſeems to vary, though, in fact, it remains always the ſame.

From this principle, the human intellect may advance one ſtep farther, and penetrate deeper into the operations of Nature. We are ignorant of the figure of the conſtituent particles of bodies. Water, air, earth, metals, and all homogeneous ſubſtances, are unqueſtionably compoſed of elementary particles, which are ſimilar among themſelves, but whoſe figure is unknown. Poſterity, by the aid of calculation, may diſcloſe this new field of knowledge, and aſcertain, with conſiderable preciſion, the figure of the elements of bodies. They will take the principle we have eſtabliſhed as the baſis of their reaſoning: *All matter is attracted in the inverſe ratio of the ſquare of the diſtance; and this law ſeems to admit of no variation in particular attractions, but what ariſes from the figure of the conſtituent particles of each ſubſtance; becauſe this figure enters as an element or principle into the diſtance.* Hence, when they diſcover, by reiterated experiments, the law of attraction in any particular ſubſtance, they may find, by calculation, the figure of its conſtituent particles. To make this matter more clear, let us ſuppoſe, that, by placing mercury on a perfectly poliſhed ſurface, we find, by experiment, that this fluid metal is always attracted in the inverſe ratio of the cube of the diſtance, we muſt inveſtigate, by the rules of falſe poſition, what figure gives this expreſſion; and this

figure will be that of the conſtituent particles of mercury. If, from theſe experiments, it appeared that the attraction of mercury was in the inverſe ratio of the ſquare of the diſtance, it would be demonſtrated that its conſtituent particles are ſpherical; becauſe a ſphere is the only figure which obſerves this law, and, at whatever diſtance globes are placed, the law of their attraction is always the ſame.

Newton conjectured, that chemical affinities, which are nothing but the particular attractions we have mentioned, were produced by laws ſimilar to thoſe of gravitation. But he ſeems not to have perceived, that all theſe particular laws were only ſimple modifications of the general law, and that they appeared to be different, only becauſe, at very ſmall diſtances, the figure of atoms which attract each other has a greater influence upon the expreſſion of this law, than the maſs of matter.

Upon this theory, however, the intimate knowledge of the compoſition of brute matter ſolely depends. The baſis of all matter is the ſame; and the form of it would likewiſe be the ſame, if the figure of its conſtituent particles were perfectly ſimilar. One homogeneous ſubſtance cannot differ from another, but in proportion to the difference of the figures of their primitive particles. A body, of which all the particles are ſpherical, ought to be one half ſpecifically lighter than another whoſe particles are

are cubical; becauſe the firſt, by touching each other only in points, leave intervals equal to the ſpaces they occupy, while the cubical particles unite without leaving the ſmalleſt void, and, conſequently, form a matter one half heavier than the firſt. Though figures may be infinitely varied, they ſeem not to be ſo numerous in Nature as might be imagined; for ſhe has fixed the limits of gravity and levity. Gold and air are the two extremes of denſity. All the figures admitted by Nature, therefore, are comprehended between theſe two terms; and all thoſe which would have produced heavier or lighter ſubſtances have been rejected.

When I ſpeak of figures employed by Nature, I mean not that they are neceſſarily, or even exactly, ſimilar to thoſe geometrical figures which exiſt in our imagination. We make laws by ſuppoſition, and we render them ſimple by abſtraction. There are, perhaps, neither exact cubes, nor perfect ſpheres in the univerſe. But, as nothing exiſts without form, and as, according to the diverſity of ſubſtances, the figures of the elements are different, ſome of them muſt neceſſarily approach to the ſphere, the cube, and all the other regular figures which we have conceived. The preciſe, the abſolute, the abſtract, which ſo often preſent themſelves to our minds, can have no real exiſtence, becauſe all objects are related, differ only by almoſt imperceptible ſhades, and are allied by proximation. In

the ſame manner, when I mention one ſubſtance as being entirely full, becauſe it is compoſed of cubical particles, and another of being only half full, becauſe its conſtituent particles are ſpherical, I ſpeak only comparatively, and mean not that ſuch ſubſtances really exiſt; for we know from experience, that, in tranſparent bodies, ſuch as glaſs, which is both denſe and heavy, the quantity of matter is very ſmall in proportion to the extent of the intervals; and it might be demonſtrated, that gold, which is the denſeſt ſpecies of matter, contains more vacuities than ſubſtance.

The conſideration of the powers of Nature is the object of rational mechanics; that of ſenſible mechanics is only a combination of particular powers, and is reduced to the art of conſtructing machines. Neceſſity and convenience have at all times inſured the culture of this art. The ancients excelled in it as well as the moderns. But rational mechanics is a ſcience invented in our days. All philoſophers, from Ariſtotle to Deſcartes, have reaſoned like the vulgar upon the nature of motion. They have uniformly miſtaken the effect for the cauſe. They knew no force but that of impulſion, to which they attributed the effects of other forces, and referred to it all the phænomena of the univerſe. If the notion had been plauſible, or even poſſible, this impulſion, which they regarded as the ſole cauſe, muſt at leaſt have been a general effect, which equally belonged

belonged to all matter, and which continually exerted itſelf in all places, and at all times. The oppoſite was daily demonſtrated to them. Did they not perceive, that, in bodies at reſt, this force had no exiſtence; that, in projected bodies, it ſubſiſted but a ſhort time, and was ſoon deſtroyed by reſiſtance; that, to renew it, a freſh impulſe was neceſſary; and that, conſequently, ſo far from being a general cauſe, it was only a particular effect, produced by more general effects?

Now, a general effect is what ought to be called a cauſe; for the real cauſe of this effect can never be known to us; becauſe all our knowledge is derived from compariſon; and an effect being ſuppoſed general, and belonging equally to all matter, we can compare it to nothing, and, of courſe, can know it only by the fact. Hence attraction, or gravity, being a general effect common to all matter, and demonſtrated by the fact, it ought to be regarded as a cauſe, and to it ſhould be referred all other particular cauſes, and even that of impulſion, ſince it is leſs general and leſs conſtant. The difficulty is to perceive how impulſion can be an effect of attraction. If we reflect on the communication of motion by impulſe, we will be perſuaded that it can only be tranſmitted from one body to another by elaſticity, and that all the hypotheſes concerning the communication

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of motion in hard bodies, are mere fancies, which have no exiſtence in Nature. A body perfectly hard or perfectly elaſtic, is a creature of imagination. Neither the one nor the other really exiſt; becauſe nothing exiſts abſolutely or in extreme, and the idea of perfection is only the abſolute or extreme of a thing.

If there was no elaſticity in matter, there could be no impulſive force. When we throw a ſtone, the motion which it acquires is communicated to it by the elaſticity of the arm. When a body in motion meets another at reſt, how can we conceive that the one ſhould communicate motion to the other in any other manner than by compreſſing the ſpring of the elaſtic particles it contains, which, by recovering itſelf immediately after compreſſion, gives to the whole maſs the ſame force that it received. We cannot comprehend how a perfectly hard body ſhould admit this force, or receive motion. Beſides, the inquiry is uſeleſs, as no ſuch body exiſts. All bodies, on the contrary, are endowed with elaſticity. Experiments on electricity prove that its force is elaſtic, and belongs to matter in general. Though, therefore, no other elaſticity exiſted in the interior parts of bodies but that of this electrical matter, it would be ſufficient for the communication of motion; and, conſequently, to this great ſpring, as a general effect, the particular cauſe of impulſion muſt be aſcribed.

Now,

Now, if we reflect upon the mechaniſm of elaſticity, we ſhall find, that its force depends on that of attraction. To obtain a clearer perception of this ſubject, let us ſuppoſe the moſt ſimple ſpring, a ſolid angle of iron, or of any other hard ſubſtance: What will be the reſult of compreſſing it? We oblige the parts adjacent to the top of the angle to bend, or to ſeparate a little from each other; and, the moment the preſſure is removed, they approach each other as formerly. Their adheſion, from which the coheſion of bodies reſults, is well known to be an effect of their mutual attraction. When the ſpring is preſſed, this adheſion is not deſtroyed; becauſe, though the particles are ſeparated, they are not ſo far removed from each other as to put them beyond their ſphere of mutual attraction. Of courſe, as ſoon as the preſſure ceaſes, this force is again exerted, the ſeparated parts approach, and their ſpring is reſtored. If, on the other hand, by a preſſure too violent, they are removed beyond the ſphere of their attraction, the ſpring breaks; becauſe the compreſſing force has been greater than that of coheſion, or than that of the mutual attraction which keeps the particles together. Hence elaſticity can exert itſelf only in proportion to the coheſion of the particles of matter, that is, in proportion as they are united by the force of their mutual attraction; and, conſequently, elaſticity in general, which alone can produce impulſion, and the impulſion itſelf,

are owing to the force of attraction, and depend on it as particular effects on a general effect.

However clear these ideas appear to me, I expect not to see them adopted. The people never reason but from their sensations; and natural philosophers judge from their prejudices. All these must, therefore, be set aside, and very few will remain to form a proper judgment. But this is the fate of Truth; she is content with a few admirers, and is always lost in a crowd: Though at all times august and majestic, she is often obscured by fantastic notions, or totally effaced by brilliant chimeras. This, however, is the manner in which I view and understand Nature; and perhaps she is still more simple: A single force is the cause of the phænomena exhibited by brute matter; and this force, when combined with that of heat, produces those living particles on which all the effects of organized bodies depend.

The GIRAFFE, or CAMELOPARD*.

THE camelopard is one of the most beautiful and largest quadrupeds: Without being noxious, he is at the same time extremely useless. The enormous disproportion of his legs, of which those before are double the length of those behind, prevents him from exercising his powers. His body has no stability; he has a staggering gait; and his movements are slow and constrained. When at liberty, he cannot escape from his enemies, nor can he serve man in

* The camelopard has short strait horns, covered with hair, truncated at the end, and tufted with hair. In the forehead, there is a tubercle about two inches high, resembling a third horn. The height, from the crown of the head to the soles of the fore-feet, is seventeen feet, and that from the top of the rump to the bottom of the hind-feet, only nine: The length of the body is seven, and from the withers to the loins, only six feet. The fore-legs are not longer than the hind-legs; but the shoulders are of a vast length, which give the disproportionate height between the fore and hind parts. The horns are six inches long. The head is like that of a stag. The neck is slender and elegant, and on the upper side there is a short mane. The ears are large, and the tail long, with strong hairs at the end. The colour of the whole animal is a dirty white, marked with large, broad, rusty spots; *Pennant's Synopf. of Quad.* p. 20.

Giraffe, a word derived from *Girnaffa*, *Siraphah*, *Zurnaba*, the name of this animal in the Arabian language, which has been