

space. As soon as the wood was cut, it came out, and skipped away very alertly. No tree could be more found. No place, could be discovered through which it was possible for the animal to have penetrated; which led the recorder of the fact to suppose, that the spawn, from which it originated, must, by some unaccountable accident, have been in the tree from the very first moment of its vegetation. The toad had lived in the tree without air, and what is still more surprising, had subsisted on the substance of the wood, and had grown, in proportion as the tree had grown. This fact was attested by Mr. Herbert, ancient professor of philosophy at Caen.

In 1731, Mr. Seigue wrote to the Academy of Sciences at Paris, an account of a phenomenon exactly similar to the preceding one, except that the tree was larger, and was an oak instead of an elm, which makes the instance more surprising. —From the size of the oak, Mr. Seigne judged that the toad must have existed in it, without air or any external nourishment, for the space of eighty or a hundred years.

We shall cite a third instance, related in a letter, of the 5th of February 1780, written from the neighbourhood of St. Mexent; of which the following is a copy.

‘A few days ago I ordered an oak tree of a tolerable size to be cut down, and converted into a beam that was wanted for a building which I was then constructing. Having separated the head from the trunk, three men were employed in squaring it to the proper size. About four inches were to be cut away on each side. I was present during the transaction. Conceive what was my astonishment, when I saw them throw aside their tools, start back from the tree, and fix their eyes on the same point, with a kind of amazement and terror! I instantly approached, and looked at the part of the tree which had fixed their attention. My surprize equalled theirs, on seeing a toad, about the size of a large pullet's egg, incruised in a manner in the tree, at the distance of four inches from the diameter, and fifteen from the root. It was cut and mangled by the axe, but it still moved. I drew it with difficulty from its abode, or rather prison, which it filled so completely, that it seemed to be rather compressed. I placed it on the grass: it appeared old, thin, languishing, and decrepid. We afterwards examined the tree with the nicest care, to discover how it had glided in; but the tree was perfectly whole and sound.’

These facts, but particularly the memoir of M. Guettard, induced M. Herissant

to make experiments calculated to ascertain their certainty.

February 21, 1771, he enclosed three live toads in so many cases of plaister, and shut them up in a deal box, which he also covered with a thick plaister. On the 8th of April, 1774, having taken away the plaister, he opened the box, and found the cases whole, and two of the toads alive. — The one that died was larger than the others, and had been more compressed in its case. A careful examination of this experiment convinced those who had witnessed it, that the animals were so enclosed that they could have no possible communication with the external air, and that they must have existed during this lapse of time without the smallest nourishment.

The Academy prevailed on Mr. Herissant to repeat the experiment. He enclosed again the two surviving toads, and placed the box in the hands of the secretary, that the society might open it whenever they should think proper. But this celebrated naturalist was too strongly interested in the subject, to be satisfied with a single experiment; he made therefore the two following:

1. He placed, 15th April in the same year, two live toads in a basin of plaister, which he covered with a glass case, that he might observe them frequently. On the ninth of the following month he presented this apparatus to the Academy. One of the toads was still living; the other had died the preceding night.

2. The same day, April 15, he enclosed another toad in a glass bottle, which he buried in sand, that it might have no communication with the external air. This animal, which he presented to the Academy at the same time, was perfectly well, and even croaked whenever the bottle was shaken in which he was confined. It is to be lamented that the death of Mr. Herissant put a stop to these experiments.

We beg leave to observe on this subject, that the power which these animals appear to possess of supporting abstinence for so long a time, may result from a very slow digestion, and perhaps from the singular nourishment which they derive from themselves. M. Grignon observes, that this animal sheds its skin several times in the course of a year, and that it always swallows it. He has known, he says, a large toad shed its skin six times in one winter. In short, those which, from the facts we have related, may be supposed to have existed for many centuries without nourishment, have been in a total inaction, in a suspension of life, in a temperature that has admitted of no dissolution; so that it was not necessary to repair any loss,