loſs, the humidity of the ſurrounding matter preſerving that of the animal, who wanted only the component parts not to be dried up, to preſerve it from deſtruction.

But toads are not the only animals which have the privilege of living for a conſiderable period, without nouriſhment and communication with the external air. The inſtances of the oyſters and dactyles mentioned in the beginning of this article, may be advanced in proof of it. But there are other examples.

Two living worms were found in Spain, in the middle of a block of marble, which a ſculptor was carving into a lion of the natural colour, for the royal family. Theſe worms occupied two ſmall cavities, to which there was no inlet that could poſſibly admit the air. They ſubſiſted probably on the ſubſtance of the marble, as they were of the ſame colour. This fact is verified by Capt. Ulloa, a famous Spaniard, who accompanied the French Academicians in their voyage to Peru, to aſcertain the figure of the earth. He aſſerts that he ſaw theſe two worms.

A beetle, of the ſpecies called capricorn, was found in a piece of wood in the hold of a ſhip at Plymouth. The wood had no external mark of any aperture.

We read in the *Affiches de Province*, 17 June 1771, that an adder was found alive in the center of a block of marble, thirty feet in diameter. It was folded nine times round in a ſpiral line: it was incapable of ſupporting the air, and died a few minutes after. Upon examining the ſtone, not the ſmalleſt trace was to be found by which it could have glided in, or received air.

Miſſon, in his travels through Italy, mentions a craw-fiſh that was found alive in the middle of a marble, in the environs of Trivoli.

M. Peyſſonel, a king's phyſician at Guadaloupe, having ordered a pit to be dug in the back part of his houſe, live frogs were found by the workmen, in beds of petrifaction. M. Peyſſonel, ſuſpecting ſome deceit, deſcended into the pit, dug the bed of rock and petrifactions, and drew out himſelf, green frogs, which were alive, and perfectly ſimilar to what we ſee every day.

THOUGHTS on the SUBJECT of SHIPS FOUNDERING at SEA, with Directions how to prevent that fatal Diſaſter in many Caſes.

IN reading Dr. Franklin's letters, I found he had treated very ingeniouſly on this ſubject: but I think he did not give as full directions, as, perhaps, he would have done, had he been particularly treating on that ſubject alone; therefore, I have thought it not amiſs to add ſome thoughts of my own to thoſe of Dr. Franklin, and offer them to the public. Let us firſt conſider the principle, on which the ſhip floats on the water, which is ſimply this, that air is lighter than water. Thus if you fill any veſſel, ſuch as a caſk, full of air, and make it tight, it will float on the top of the water, and carry with it a weight exactly equal to the difference of the weight of air in the caſk, and the ſame caſk full of water, deducting for the weight of the caſk itſelf. Thus a ſhip will carry juſt as much weight as the difference between the weight of the air contained in ſaid ſhip below the ſurface of the water, and the weight of ſo much water, deducting the weight of the ſhip and ballaſt. A captain who perceives his ſhip at ſea ſpring a leak, in a deſperate manner, ſo as to gain faſt on his pumps, ſhould, in the firſt place, ſtart all his caſks full of any liquid, that he can get at in the lower tiers, and as faſt as they empty, or the water increaſes ſo that they will empty no more, ſtop them tight again, and throw overboard only ſuch things as will of themſelves ſink, carefully retaining every thing that will float on the water, for they may at laſt ſave the ſhip. If the caſe ſtill ſeem deſperate, empty every caſk that can be made tight, and put them in the hold, and contrive to force them under water, and keep them there by props from the deck; this will ſtill leſſen the preſſure, and the water will come in ſlower, as it riſes higher in the hold, and covers more of the empty caſks. Every wooden thing that can any way be ſpared, muſt be put in the hold, and forced under water, by props, not by weights, for this would deſtroy the effect. Even in caſe of great extremity, cut down the maſts, and cut them very ſmall, with every thing above, and force them into the hold, cabin, and ſcuttles, or any where, ſo that they can be kept under water. The ſalt proviſions, water, &c. that will be neceſſary to be kept for uſe, ſhould be firſt of all brought upon deck, and laſt of all be put into the hold or any where elſe, ſo that they will be immerſed in the water, and can be got at for uſe. I am of the opini-

on