

sound or vibration proceeding from the earth. The beaver has the power, when diving, to fold its ears backward on its head; and the water-shrew, for the same purpose, has three distinct flaps, which close the orifice, in the same manner that any diving or burrowing animals are furnished with flaps to the nose, by which they close the entrance to all injurious bodies.

The hippopotamus, which remains for lengthened periods beneath the surface of the water, is also provided with a valve-like apparatus.—Hares and rabbits, which squat close on the ground, and which might be more readily discovered where any projecting point of their bodies to be visible, fold their ears flat backward. In all, this sense is remarkably keen; and with horses it is only exceeded by that of the smell; they hear sounds and are restless long before the rider can perceive an animal or a human being in the distance.—The carrier-horses in Switzerland bear the fall of an avalanche, and warn masters of danger by their terror, and by refusing to advance, and even by turning in an opposite direction. The acute sensibility of this organ is somewhat obstructed by the bushy hairs which grow in the outer sheath; and thus horse-dealers cut them out from horses they have for sale, in order that sounds, striking on the nerves with greater force, may, by exciting the animals, give them a more lively appearance. The flight of the bat, like that of the owl, is perfectly noiseless; and its ear equally acute detects the slightest humming of an insect, at a distance of several feet, and while it catches such as are in flight, it touches none which have settled or are silent.—*Ibid.*

HABITS OF INSECTS.—The assertion is altogether groundless that insects experience no sensations of pain, although transfixed with a pin, around which even a slight deposit of verdigris collects, and left till they perish from hunger; for, although in all probability they do not suffer pain during the latter period, there is no doubt but they feel acutely at the moment of the transfusion. It is only necessary to watch the effect when a needle is thrust through the back of an insect, and it will be obvious that it makes many powerful and convulsive movements, indicative of pain, and not of struggle for escape. Butterflies, pierced with a common pin exhibit these symptoms, and the spasms are repeated if a heated pin be afterwards introduced. But still, as said before, much depends on the perfection of the organization; and, besides, the formation of insects is so peculiar to themselves, that we have no parallel in any of the other classes. Some of the animals in the class *Vermes* may be cut and divided *ad infinitum*, and each part will eventually become a perfect animal. Some insects without this reproductive power will bear dividing, and still continue to live, and perform most of the various functions with which they are endowed. The common dragon-fly (*Libellula varia*) will live for days without its head; and if, instead of the head, the abdomen be taken away, the animal seems to feel no material injury.—This insect is of a most voracious nature, and has been known to feed under the following extraordinary circumstances. A gentleman being engaged in collecting insects, caught a specimen of the common dragon-fly, which he fastened down in his collecting box, with a large pin through its thorax; when, to his astonishment, he observed the dragon-fly hold in its forceps a fly, which was still struggling for liberty. This it soon devoured, without exhibiting any signs of pain, seeming wholly unconscious of its own unpleasant situation, being still secured by the pin before named to a piece of cork. When the fly was devoured the insect began to flutter, and made several attempts to regain its liberty. The gentleman, greatly surprised at this incident, and willing to improve the experiment still further, caught another fly, which he offered to it.

This was eagerly seized by the rapacious insect, and devoured with greediness; and when its meal was finished, it began to flutter again as before. It certainly is not derogating from the benevolence so conspicuous in all the works of Providence, to conceive it probable that it has, with infinite wisdom, withheld from some of the lower classes of animals, that degree of sensation so abundantly dispensed to others filling the higher ranks of creation, as, from the habits necessarily entailed upon them, they are more likely to encounter accidents that tend to mutilate than other individuals of higher powers of sensation.—*Ibid.*

SAGACITY OF THE DONKEY.—The ass is always esteemed the stupidest of animals, yet if one be shut up in the same enclosure with half-a-dozen horses of the finest blood, and the party escape, it is infallibly the poor donkey that has led the way. It is he alone that penetrates the secret of the bolt and latch; and he may be often seen snuffing over a piece of work, to which all other animals are incompetent.—*Thomson's Passions of Animals.*

RECIPES.

TO MILK COWS.—A cow should be milked clean. Not a drop, if it can be avoided, should be left in the udder. It has been proved that the half-pint that comes out last, has twelve times, I think it is, as much butter in it as the half-pint that comes out first. The udder would seem to be a sort of milk-pan in which the cream is uppermost, and, of course, comes out last, seeing that the outlet is at the bottom. But, besides this, if you do not milk clean, the cow will give less and less milk, and will become dry much sooner than she ought.—*COBBETT.*

THINGS TO BE FOUND OUT.—Nature is not exhausted. Within her fertile bosom there may be thousands of substances yet unknown, as precious as the only recently found gutta serena. To doubt this, would be to repudiate the most logical inference afforded by the whole history of the earth. Corn and the grape excepted, nearly all our staples in vegetable food are of comparatively modern discovery. Society had a long existence without tea, coffee, cotton, cocoa, sugar, and potatoes. Who shall say there is not a more nutritious plant than the sugar-cane, a finer root than the potato, a more useful tree than the cotton. Buried wealth lies everywhere in the bowels of the earth, which needs but the true divining rod of organized action for its discovery.—*ATHENÆUM.*

ECONOMY IN CANDLES.—If you are without a rush-light, and would burn a candle all night, unless you use the following precaution it is ten to one an ordinary candle will gutter away in an hour or two, sometimes to the endangering the safety of the house. This may be avoided by placing us much common salt, finely powdered, as will reach from the tallow to the bottom of the black part of the wick of a partly-burnt candle, when, if the same be lit, it will burn very slowly, yielding a sufficient light for a bed-chamber; the salt will gradually sink as the tallow is consumed, the melt d tallow being drawn through the salt, and consumed in the wick.—*Family Economist.*

TEA CAKES.—Take, of white flour, two pounds; bi-carbonate of soda, quarter of an ounce; sugar, two ounces; butter, two ounces; sour buttermilk, twenty ounces, or one pint. Rub the soda, sugar, and butter well into the flour, and mix with the buttermilk; roll out and make into cakes of any convenient size, and bake in a moderate oven twenty minutes.