

their own young. Bees are particularly subject to such insidious enemies, in fact, no concealment unless, perhaps, under water, seems sufficient toaffle the ichneumon, and nothing can surpass its perseverance until its eggs are safely placed in the condition suitable for its progeny.

#### 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 veridigris 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 transfexion. 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 struggles 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 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 of the class Vermes may be cut and divided almost *ad infinitum*, and each part will eventually become a perfect animal. Some insects with 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 vari*) 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 thrust through its thorax, when to his astonishment, he observed the dragon-fly held 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 his 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 prove 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 power of sensation.—*Thompson's Passions of Animals.*

### Agriculture.

#### PAVING FOR CATTLE STALLS.

At a meeting of the Highland Agricultural Society, held last week, Mr. Maxwell, before the commencement of the discussion, called the attention of the meeting to specimens of grooved bricks for laying the floors of cattle stalls, invented and manufactured by Mr. Forbes at the Newark brickworks, near Ellon, in Aberdeenshire. Their peculiarity consisted in the bricks being slit in the surface and grooved in the centre, the grooves communicating with a larger brick of similar construction, on the

principle of a main drain, which receives their contents, and forms the grip of gutter. He mentioned that he had received from Sir John Forbes, and various practical farmers in Aberdeenshire, statements certifying the advantages of the invention in point of cleanliness, economy of litter, and comfort, and that he understood that the bricks were sold at the kiln at 8s. per 100, 160 being sufficient for four animals.—*The Builder.*

#### DISEASES OF SHEEP.

The disease in sheep known as "starly," which is very prevalent in some districts, and has long baffled the skill of the veterinary art in effecting a cure with any amount of certainty, can now be treated with the greatest success through the perseverance and ingenuity of Mr. Neil Ballingal, Seggie Kinross-shire, who lately invented a set of instruments consisting of a trochar, cannula, and syringe. In perfecting these instruments Mr. Ballingal has devoted much time and attention, in conjunction with Messrs. Hilliards, instrument makers, Edinburgh. The operation is a very simple one, and a cure can now be reckoned on in eight cases out of ten. This mode of treating the disease having come rapidly into use throughout the counties of Fife and Kinross, a number of sheep farmers who have derived great benefit from Mr. Ballingal's invention presented a testimonial to him on Saturday last, consisting of a gold watch, guard, chain, and seal, to mark their appreciation of the value of his labours and the kind manner in which he had so readily placed his own successful experience before his brother farmers.—*Scotsman.*

### Oriental Sayings.

#### RABBI AKIBA'S MARTYRDOM, FROM THE TALMUD.

Under the tyrannical government of the Greeks, the Jews were at one time forbidden on the pain of death, to read their law. But Rabbi Akiba, notwithstanding the imminent danger in which he exposed himself, held daily public assemblies, and fearlessly instructed the people the same as he had hitherto done. Pappus, the son of Judah, found him one day thus engaged, and said, Akiba! what do you not fear the threatening of the tyrants?—

I will tell you a fable, replied Akiba, which much resembles our present condition. A fox was leisurely walking up and down by a clear rivulet, and saw how the little fish were timidly gathering together, sometimes here and sometimes there.—Why do you wander so disquietly to and fro? asked the fox.—Because replied the fish, the heartless men cast their nets into the water to catch us, and we endeavour to escape them. Indeed! said the fox, and why do you remain to be thus driven about day by day? I will offer you some advice, come away from this place of danger, where you are continually hunted from place to place, come up to me upon the dry land, and I will bring you to a place where you will have no longer to fear the fisherman.—What replied the fish, art thou the fox, which is esteemed the wisest of all animals? you must indeed be the most stupid, if you can give us such an advice, is the water not our element of life? and because we are not safe here, you would counsel us to flee to the element of death!

The application, thou son of Judah, is easy. The law of God is unto us the element of life, for it is written,—“It is to thee, life, and length of days.” Now though we are persecuted in this element, should we therefore flee into the element of death?

Shortly after, Akiba was betrayed, and cast into prison, and Pappus was also accused and imprisoned in the same dungeon.—What has brought thee to this place? asked the Rabbi.—Oh happy Akiba! exclaimed Pappus, thou art suffering because thou has faithfully continued to

read and teach the law, but not so to Pappus who has to suffer because he has neglected it.

Rabbi Akiba was led to death, but under the most excruciating tortures he faltered not, his scholars were astonished at the composure with which he bore his sufferings. Oh my beloved! exclaimed the Master, all my days have I longed for the opportunity to be able to keep the great commandment.—“Thou shalt love thy God with all thy heart, with all thy soul, and all thy might,” and now that I have the opportunity why should I shrink from it? Oh my young friends fear not the tyrant's threats, nor listen to his delusive words, to lead you from the paths of duty, but rather keep this great commandment continually before your eyes. Remember this last exhortation of your loving Master.

Having uttered these words he calmly yielded up his spirit to him who gave it.

R.

#### ALEXANDER THE GREAT IN SEARCH OF PARADISE.

It is said, that whilst Alexander the Great was in the remotest part of India, he came one day to a clear stream, and being very fatigued, and overcome by the scorching heat, he sat down on the banks of the rippling waters. One of his attendants, placed before him a salt fish which he had washed in the river, and some bread. The King was astonished at the unusually pleasant taste of the fish, which he at once ascribed to the water of the river in which it had been washed. In order to satisfy himself more fully of the peculiar excellency of the water, he went down and drank of it freely, which immediately imparted to him, a delightful freshness, such as he never before in his life had experienced.—Surely! he exclaimed with ecstasy,—surely, this must be a stream, proceeding from Paradise. I will follow it until I come to its source, it is the best guide that I possibly could have. And he followed it, through many a desert tract of land.

At last he arrived at the portal of Paradise and cried, somewhat authoritatively, let this gate be opened to me! for I am the conqueror of the world, and the king of all the earth. But instead of the gate opening to the monarch's command; a soft, yet audible voice, replied who is the king of all the earth, and the conqueror of the world? We acknowledge no human conqueror here, depart, thou art stained with the blood of human victims, this is the holy gate, where none but the just may enter. If I may not enter, said Alexander greatly disappointed, do give me at least some token to show that I have been here. And a human skull was presented to him.

Alexander stood aghast at the sight of it, and hesitated for some time to receive it but at last took it in his trembling hands. Whilst his eyes were yet gazing at the object of terror, he felt that the skull grew heavier and heavier, until he could carry it no longer, and finally obtained to such a weight, as to outweigh all the treasures that he had gathered in Persia and India.

Troubled at this wonderful spectacle, and having in vain inquired of all that were about him, what this strange sight could mean, he at last applied to a Rabbi. This human skull, Oh King! said the Rabbi calmly, is none other than thyself, as long as thine eyes are open, thou canst not be satisfied with gold and silver, but behold, I will strew a little dust upon this skull, and cover it with a handful of earth, and it shall become as light as any other.

And it happened as the Rabbi had said. Nor was it long before this significant declaration was accomplished. Alexander soon returned with his large army, and died at Babylon.—His empire, after his death, was divided, and the conqueror's head was laid in the grave like that of any other mortal.

R.