THE WONDERS OF THE ANIMAL KINGDOM.

Perhaps in all the wide range of natural subjects there are none more interesting than those which relate to the wonders of the animal kingdom. Man is provided with brains, howbeit he may not always use them, and has organs of speech by which he can make known his wants. Animals also have brains but with them instinct takes the place of reason, and the satisfaction of their wants depends almost wholly upon their powers of offense and defense and the strength and development of their animal cunning.

In the animal kingdom we are often surprised and astonished by the exhibition of traits which are almost human in their attributes. The mute affection of the dog, the fidelity of the horse and the attachment of some of the amphibia to their masters. are examples in point; and, indeed, nearly every animal, no matter how wild and ferocious they may be in a state of nature, when subjugated by man, looks to him for the supply of food which maintains life. We may seriously question whether dogs, particularly, do not, in many cases, exercise their reflective functions; certainly they exhibit, in no small degree, powers of intelligence which are wonderful. To this assertion we may attach the doubt that intelligence has anything to do with the tricks and performances which dogs acquire by tuition. May we not inquire how far fear and starvation affect these particular members of the animal kingdom in the pursuit of knowledge under difficulties? If we admit that the lash and hunger do perform no unimportant part in their education, we may relinquish the supposition of the existence of reason. For our own experience in the matter, we take pleasure in saying that we are familiar with dogs, aye even puppies, and have never found the quadruped as rude and churlish as the biped of his cies; we have not found the lash necessa spe either with canines and their kind, 'or with other domestic brutes. This humanitarian principle is now very generally recognized, we believe, by all trainers, except only in the case of those beasts who cannot be conquered save by main force, and whom it is dangerous to approach until they have been cowed by fear. We have all heard of the story of Androcles and the lion-how the royal beast having run a thorn in his foot, suffered from it to such an extent that he was unable to bear the pain-how he made his way to the cave where Androcles was hiding, and by exhibiting the wounded paw made known his distress, which Androcles at once alleviated. In return for this office, the Ron hunted for his benefactor and kept him supplied with food. The story is valuable allegorically, and we quote it as affording some ground for our statement, that kindness, like virtue, is its own reward.

The ancients were very fond of attributing semi human qualities to animals, but the fables related of the latter are so often tinged with the fabulous that they fail to convey any good effect. If a modern lion, for instance, had run a thorn in his foot and some Androcles should extract it for him, the animal would doubtless exhibit the depth of his gratitude by swallowing the unlucky surgeon instantly. Just as the Spartans showed the folly of drunkenness to their sons by exposing their helots in that condition, so the Romans took advantage of their knowledge of natural history and the peculiar traits of beasts to satirize mankind as well as to point a moral. Æsop in particular leveled the shafts of sarcasm at the human family in his little tales with great effect. We need not, however, go back so far in the history of the world in order to arrive at the estimation in which mankind hold the animal kingdom, and the relations borne mutually. Save in the case of the monkey, who is regarded as a standing libel upon the animal-man, we think honorable consideration must be awarded to all the different tribes, races and families of animated nature on the globe; for each and all of them perform their several functions as nature intended they should. And though it may be deeply hidden why musquitoes are suffered to exist, yet we must accept their existence as being in some way conducive to our well-being morally and physically. Not through their existence alone are the beasts of the earth useful to its inhabitants. Man takes advantage of their wonderful instinct in many ways.

Only recently we read a paragraph in a paper which said that, as the muskrats had dug their burrows in the river banks much lower than usual this year, there would, in all probability, be a very mild season. Thus far the prediction has been verified, and the muskrats seem likely to remain undisturbed in their seclusion.

In forethought, too, some beasts and insects teach lessons which man would do well to emulate. The ant lays up a store of food against winter; the rodents, squirrels, rabbits, &c., secrete in the recen of old trees roots, bark, twigs and such choice edibles as will make the dreary darkness of the snow-clad forest pass cheerfully away. The bear roams the wilderness in autumn and gathers a thick coat of succulent fat from the acorn and frost-bitten buds that he may chance to fall upon. He retires to some upturned tree or rocky cave and there upon a red and purple couch of autumn leaves hibernates through the cold and gloom which is common to the season; subsisting meanwhile upon that burden of fat which he had previously accumulated upon his ribs. Man might profitably imitate even the bear; how much happier and better the world at large would be, if all human bears, who growl and anap their teeth in society, would bury themselves beyond the light of day until their ferecity had abated! The following instance of cunning on the part of "Bruin" is vouched for, as true, by the St. Paul Union. It is the narrative of some individual to us unknown :-

tive or some individual to us unknown .--Early last spring, while passing along the bank of Crow River, my attention was attracted to a huge black bear quietly seated in the river in the midst of a roaring eddy. Taking a stand behind a tree, I watched the course of events. There sat old Bruin flat on his rump, head erect, fore paws extended, looking for all the world like an an-tiquated specimen of an original African. Soon his eyes twinkled and his paws twitched nervously, then a quick grasp, and lo! up came a large sturgeon firmly clutched. Old Bruin reared himself aloft, and waddled off to shore, no doubt highly gratified with the result. Now the phil-osophy of the thing is this: Sturgeons, in common with other kinds of fish, ascend the different streams during the spring months, seeking suitable places to deposit their other kinds of fish, ascend the different streams during the spring months, seeking suitable places to deposit their spawn. While navigating the strong ripples that impede their ascent, they often grow so tired as to seek any con-venient eddy to rest. Bears seem to-understand this, and accordingly take a seat amid the rapidly-whirling waters, thus forming a temporary eddy. The tired-out fish unsus-pectingly shoots into the treacherous snare and is remorse-lessly gobbled up by Bruin.

The habits of beavers, otters and other amphibia are an extremely interesting study, and we append some account of those of the former animal :-

some account of those of the former animal :— The law of industry among working beavers is well attested to by hunters. Their dams or houses are built anew or remodeled every fall, and in a way to suit the hight of the water during the succeeding winter or spring. The object of the dam seems to regulate the hight of the water at their houses, where they sleep dry, but with their tails in the water, thus being warned of any change in the rise or fall of the water. Some houses stand six feet at least above the surface of the meadow covered with mud, and in the form of a round coal pit, but so in-tersected with sticks of wood as to be strong and the parental pair and the males of the next generation with their mates. When the tribe get large they colonize. Some time in the fall the single ones of both sexes con-gregate from considerable distances at the deepest lake in the vicinity where they choose their mates; how cere-monious the nuptials are we cannot say; then they all go to work, first putting the house and dam in order for winter, then laying in their stock of wood, the bark of which is their winter food. They go up the stream some three miles for their wood and float it down to their houses, and then in some mysterious way make it lie in a pile at the bottom

laying in their stock of wood, the bark of which is their winter food. They go up the stream some three miles for their wood and float it down to their houses, and then in some mysterious way make it lie in a pile at the bottom of the pond, outside of the house, where they may take it at any time in the winter foruse. It is said that no human hands can disturb it without itsrising and remaining afloat till the beavers have the handling of it. But we do not feel quite sure what is fact and what is conjecture respecting the beaver, whose works are so much in the night and deep under water. The fall of the year is a busy time with them, and it is interesting to see their new dams in process of building, as we sometimes find them across large boating streams, and not unfre-quently boatmen and river divers tear away their dams and get a good head of water for their use. They usually build at the outlet of natural ponds, and sometimes they flow large lakes and long pieces of dead water, but are always moving and reconstructing. How they keep their teeth in order for so much eating, when the best steel would wear out, is a mystery. [It is no mystery at all The teeth of the beaver, as of all rodents, are, by a beau-tiful provision of nature, kept as sharp as the keenest chisel in the carpenter's tool chest. The outer enamel of the tooth is very hard and the inner or bony part of it is comparatively soft; this wears away and leaves the front edge at an acute angle with the face of it; the tooth is then always the job, and never does a tooth get dull, as as far as we can see. Two winters ago some lumbermen encamped near one of their ponds. One afternoon they field a tree across a lumber road, and before morning it was cut up by the beavers and handsomely piled out of the road.— Exchange.

As we all know, some animals are offensive and some are innocent of any intention to offend: The former are abundantly able to care for themselves but the lesser animals must content themselves with "strategy." When bear meets bear then comes the tug of jaw; but when a bear meets a hedgehog aggressive resistance is useless and the assailed must resort to the passive means nature has provided for his safety. The hedgehog accordingly rolls himself up into a round ball and presents on all sides a spicular delicacy which Bruin very wisely declines. The hedgehog can remain in this position for a long timelong enough to wear out the patience of the enemy at least, so that he is forced at length to seek the satisfaction of his hunger in some other way.

We may also chronicle here the habits of the South American "glutton," who crawls out on a branch of a tree and there, awaiting his opportunity, drops upon some unsuspecting ruminator below and forthwith destroys him. When the fox is closely pursued by the bounds he throws them off the scent. for a time, by his cunning; for this, with his legs, is the only protection poor Reynard possesses; he retraces his steps, doubles back and forth, and has been known, on coming to a stream, to swim some distance down it till he could find a path which seemed to afford immunity from danger. By doing so he destroyed, for a time, the peculiar odor which animals exude when hunted, and which, nothwithstanding all their cunning and perseverance, furnishes the means of their destruction at last. The rabbit also doubles and tries to elude its pursuers in this way; he makes but a sorry hunt, however, and is soon overtaken and bagged. Wolves possess untiring energy and persistence in the pursuit of food; they have been known to lope on for a whole day, even when entirely distanced by their prey, certain in the end to tire them down; having for their guide the while the scent which the hunted quarry left behind it. Bears trust to "grit," long teeth and a strong hug, to disable their enemies. Lions crouch and spring and beat off nearly all other brutes by their tremendous strength and ferocity. Elephants go in droves or herds, and rely on their trunks, tusks and huge limbs for the means of repelling foes; and tigers sneak and crouch in thick jungles, only to bound out upon some poor native or some wandering ox that has crossed its path, and bear it away to death.

Someanimals prey only at night, while others roam the wilderness unchecked by any fear or apprehension of man or his devices. Those whose native haunts are among arid sands and hot open tropical countries, are supplied by nature with the means of resisting the heat and of securing their food. The tiger's feet are armed with a soft ball or cushion on which he steps as softly and as noiselessly as a child in its stockings. Even as these beasts pace up and down monotonously in our menageries, the human ear cannot detect a sound which would warn him of their approach.

The stately giraffe or camelopard, with its mild eyes and awkward steeple-like neck, moves off at a rapid rate when pursued and can find no safety from danger except in its legs. The food of the camelopard is the tender leaves of the mimosa tree, which grow at such adistance from the ground that the animal would starve but for the towering neck which nature has given it. Nature by her providence furnishes all her subjects with some powers of resistance by which they are able to defend themselves. In some cases, as for instance with predatory beasts, muscular strength and ferocity are allied; in other members of the brute creation—those which subsist on vegetable food-we find fleetness of foot or else strong and sharp hoofs and horns; she leaves nothing undone or unfinished but gives to every brute some qualification which enables it to protect itself.

Some of the most talented men in the country have thought it not beneath them to observe and chronicle the habits of the different species of beasts, birds and fishes ; and togratify their passion and subserve the interests of humanity and science they have undergone much personal hardship and discomfort. Every man cannot be an Audubon or an Agassiz, but we may modestly emulate those men by studying, so far as our opportunities permit, the wonders of the animal kingdom; by so doing we shall find that we receive many an instructive lesson which in someway or other has a good effect upon the heart and brain.