REVIEW.

Quid sit pulchrum, quid turpe, quid utile, quid non.-Hon.

A JOURNAL OF RESEARCHES INTO THE NATURAL HISTORY AND GEOLOGY OF THE COUNTRIES VISITED DURING THE VOYAGE OF H.M.S. BEAGLE ROUND THE WORLD, UNDER THE COMMAND OF CAPT. FITZ ROY, R.N. By CHARLES DARWIN, M.A., F.R.S.

*** This review was written by our lamented late colleague, Mr. Youatt, some time—we cannot say how long—before his death, and, no doubt, was intended for publication at the time. Circumstances intervened; and but now that appears which ought long ago to have been in print. We had thought of putting the MS. aside, as out of date. Still, we felt that the readers of THE VETERINARIAN would welcome, even out of season, a production —the last probably—from that pen which once delighted and instructed them; and so, at length, we came to the determination to publish it.—ED. VET.

THIS is one of the most interesting researches of modern times.

I know not any thing of its kind that is comparable to it. The natural history, the zoology, and the geology of the work cannot fail of possessing considerable and close attention from the general reader. The work is calculated for both popular and scientific readers. We have an account of the zoology of the fossil mammalia, by Professor Owen—the living mammalia of Waterhouse the birds of Gould—the fishes of Jenyns—the reptiles of Bell. As for ***, he displayed many illustrations—in the language of Darwin—of his "never-tiring zeal in the cause of humanity," and for the removal of pain from the various animals that came under his care.

274 REVIEW-THE VOYAGE OF THE BEAGLE.

We will first take a rapid sketch of the shepherd's dog.

"When riding," says Mr. Darwin, "it is common to meet a large flock of sheep guarded by one or two dogs, at the distance of some miles from any house or man. I often wondered how so firm a friendship had been established. The method of education consists in separating the puppy from the bitch while very young, and in accustoming it to its future companions. A ewe is held three or four times a-day for the little thing to suck, and a nest of wool is made for it in the sheep-pen. At no time is it allowed to associate with other dogs, or with the children of the family. The puppy is now castrated, so that, when grown up, it can scarcely have any feelings in common with the rest of its kind. From this education it has no wish to leave the flock; and just as another dog will defend its master, so will these the sheep. It is amusing to observe, when approaching a flock, how the dog immediately advances barking, and the sheep all close in his rear, as if round the oldest ram. These dogs are also easily taught to bring home the flock at a certain hour in the evening. Their most troublesome fault, when young, is their desire of playing with the sheep, for in their sport they sometimes gallop their poor subjects most unmercifully. "The shepherd-dog comes to the house every day for some meat, and as soon as it is given him he skulks away as if ashamed of himself. On these occasions the house-dogs are very tyrannical, and the least of them will attack and pursue the stranger. The minute, however, the latter has attacked the flock, he turns round and begins to bark, and then all the house-dogs take very quickly to their heels. In a similar manner a whole pack of the hungry wild dogs will scarcely ever (and I am told by some never) venture to attack a flock guarded by even one of these faithful shepherds.

"The whole account appears to me a curious instance of the pliability of the affections in the dog; and yet, whether wild or however educated, he has a feeling of respect or fear for those that are fulfilling their instinct of association."

THE BREAKING-IN OF WILD HORSES IN CHILI is an interesting sketch as depicted by Mr. Darwin. "One evening a domidor -a subduer of horses-came for the purpose of breaking-in some colts. I will describe the preparatory steps, for I believe they have not been mentioned by other travellers. A troop of wild young horses is driven into the corral, or large enclosure of stakes, and the door is shut. We will suppose that one man alone has to catch and mount a horse which, as yet, has never felt bridle or saddle. I conceive, except by a gaucho, such a feat would be utterly impracticable.

REVIEW—THE VOYAGE OF THE BEAGLE. 275

"The gaucho picks out a full-grown colt, and, as the beast rushes round the circus, he throws his lazo so as to catch both the front legs. Instantly the horse rolls over with a heavy shock, and while struggling on the ground the gaucho, holding the lazo tight, makes a circle, so as to catch one of the hind legs just beneath the fetlock, and draws it close to the front legs; he then hitches the lazo, so that the three are bound together. Then, sitting on the horse's neck, he fixes a strong bridle, without a bit, to the lower jaw. This he does by passing a narrow thong through the eye-holes at the end of the reins, and several times round both jaw and tongue.

"The two front legs are now tied closely together with a strong leathern thong, fastened by a slip-knot. The lazo which bound the three together being then loosened, the horse rises with difficulty. The gaucho now, holding fast the bridle fixed to the lower jaw, leads the horse outside the corral. If a second man is present (otherwise the trouble is much greater), he holds the animal's head whilst the first puts on the horse-cloths and saddle, and girths the whole together. During this operation the horse, from dread and astonishment at thus being bound round the waist, throws himself over and over again on the ground, and, till beaten, is unwilling to rise. At last, when the saddling is finished, the poor animal can

hardly breathe from fear, and is white from foam and sweat.

"The man now prepares to mount by pressing heavily on the stirrup, so that the horse may not lose its balance; and at the moment that he throws his leg over the animal's back, he pulls the slip-knot binding the front legs, and the beast is free. Some 'domidors' pull the knot while the animal is lying on the ground, and, standing over the saddle, allow him to rise beneath them. The horse, wild with dread, gives a few most violent bounds, and then starts off at full gallop. When quite exhausted, the man, by patience, brings him back to the corral, where, reeking hot, and scarcely alive, the poor beast is let free. Those animals which will not gallop away, but obstinately throw themselves on the ground, are by far the most troublesome. This first process is tremendously severe; but in two or three times the horse is tamed. It is not, however, for some weeks that the animal is ridden with the iron bit and solid ring; for it must learn to associate the will of the rider with the feel of the rein before the most powerful bridle can be of any service.

"Animals are so abundant in these countries, that humanity and self-interest are not closely united; therefore I fear it is that the former is here scarcely known. One day, riding in the Pampas with a very respectable 'Estaneiero,' my horse, being tired, lagged behind. The man often shouted to me to spur him. When I remonstrated that it was a pity, for the horse was quite exhausted,

276 REVIEW—THE VOYAGE OF THE BEAGLE.

he cried out, 'Why not?—never mind—spur him—it is my horse.' I had then some difficulty in making him comprehend that it was for the horse's sake, and not on his account, that I did not choose to use my spurs. He exclaimed, with a look of surprise, 'Ah, Don Carlos, que cosa!' It was clear that such an idea had never before entered his head.

"The gauchos are well known to be perfect riders: the idea of being thrown, let the horse do what he likes, never enters their head. Their criterion of a good rider is, a man who can manage an untamed colt, or who, if his horse falls, alights on his own feet, or can perform other such exploits. I have heard of a man betting that he would throw his horse down twenty times, and that nineteen times he would not fall himself.

"I recollect seeing a gaucho riding a very stubborn horse which, three times successively, reared so high as to fall backwards with great violence. The man judged with uncommon coolness the proper moment for slipping off—not an instant before or after the right time; and as soon as the horse got up, the man jumped on his back. At last they started at a gallop.

"The gaucho never appears to exert any muscular force. I was one day watching a good rider, and as we were galloping along at a rapid rate I thought to myself 'surely, if the horse starts, you appear so careless in your seat, you must fall.' At this moment a male ostrich sprang from its nest right beneath the horse's nose. The young colt bounded on one side like a stag; but as for the man, all that could be said was, that he started, and took fright with his horse. "In Chili and Peru more pains are taken with the mouth of the horse than in La Plata, and this is evidently in consequence of the more intricate nature of the country. In Chili a horse is not considered perfectly broken till he can be brought up standing, in the midst of his full speed, on any particular spot; for instance, on a cloak thrown on the ground; or, again, he will charge a wall, and, rearing, scrape the surface with his hoofs. I have seen an animal bounding with spirit, yet merely reined by a fore-finger and thumb, taken at full gallop across a court-yard, and then made to wheel round a post of a viranda with great speed, but at so equal a distance that the rider, with outstretched arm, all the while kept one finger rubbing the post; thus making a demi-vault in the air with the other arm outstretched: in a like manner he wheeled round with astonishing force in an opposite direction. "Such a horse is well broken; and, although this at first may appear useless, it is far otherwise. It is only carrying that which is daily necessary into perfection. When a bullock is caught and checked by the lazo, it will sometimes gallop round and round in

277 REVIEW-THE VOYAGE OF THE BEAGLE.

a circle; and the horse being alarmed at the great strain, if not well broken, will not readily turn like the pivot of a wheel. In consequence many men have been killed; for if the lazo once takes a twist round a man's body, it will instantly, from the power of the two opposed animals, almost cut him in twain. On the same principle the races are managed; the course is only two or three hundred yards long, the wish being to have horses that can make a rapid dash. The race-horses are trained not only to stand with their hoofs touching a line, but to draw all four feet together, so as at the first spring to bring into play the full action of the hind quarters. In Chili I was told an anecdote which I believe was true, and it offers a good illustration of the use of a well-broken animal. A respectable man riding one day met two others, one of whom was mounted on a horse that he knew to have been stolen from himself. He challenged them. They answered him by drawing their sabres and giving chase. The man, on his good and fleet beast, kept just a-head. As he passed a thick bush he wheeled round it, and brought up his horse to a dead check. The pursuers were obliged to shoot on one side and a-head. Then, instantly dashing on right behind them, he buried his knife in the back of one, wounded the other, recovered his horse from the dying robber, and rode home. "For these feats of horsemanship two things are necessary,—a most severe bit, like the Mameluke, the power of which, though seldom used, the horse knows full well, and large blunt spurs, that can be applied either as a mere touch, or as an instrument of extreme pain. I conceive that, with English spurs, the slightest touch of which pricks the skin, it would be impossible to break in a horse after the South American fashion. "At an Estaneia, near Dos Vacas, large numbers of mares are weekly slaughtered for the sake of their hides, although worth only five dollars, or about half-a-crown a piece. It seems, at first, strange that it can answer to kill mares for such a trifle; but as it is thought ridiculous in this country ever to break in or ride a mare, they are of no value except for breeding. The only thing for which I ever saw mares used, was to tread out wheat from the ear, for which purpose they were driven round a circular enclosure, where the wheat-sheaves were strewed. The man employed for slaughtering the mares happened to be celebrated for his dexterity with the lazo. Standing at the distance of twelve yards from the mouth of the corral, he has laid a wager that he would catch by the legs every animal, without missing one, as it rushed past him. There was another man, who said he would enter the corral on foot, catch a mare, fasten her front legs together, drive her out, throw her down, kill, skin, and stake the hide for drying VOL. XX.

TWO CASES OF EPIDEMIC.

(which latter is a tedious job): he engaged that he would perform the whole operation on twenty-two animals in one day; or he would kill and take the skin off fifty in the same time. This would have been a prodigious task; for it is considered a good day's work to skin and stake the hides of fifteen or sixteen animals.

"One circumstance may be added before we altogether quit our present subject. A tribe of Indians was located for awhile in one of the back settlements, when one of the divisions of our troops fell suddenly upon them, and all but annihilated them. The chief Indian has always one or two picked horses kept ready for any urgent occasion. On one of these, an old white horse, the cacique sprang, taking with him his little son. The horse had neither bridle nor saddle. To avoid the shots, the Indian rode in the peculiar method of his nation, namely, with an arm round the horse's neck, and one leg only on its back. Thus hanging on one side, he was seen patting the horse's head, and talking to him. The pursuers urged every effort in the chace. The commandant three times changed his horse, but all in vain. The old Indian father and his son escaped, and were free. What a fine picture can we form in our mind !--- the naked, bronze-like figure of the old man with his little boy, riding like a Mazeppa on the white horse, and leaving far behind him the host of his pursuers."

Y.

278