

VIVISECTORS AND THEIR VICTIMS.



DURING the last two or three years, the words "Physiological Laboratory" have become familiar to most of us, but we find comparatively few who understand their meaning. We frankly confess that till within the last six weeks we were ourselves as ignorant of their

meaning as the rest. We have even good reason to believe that more than one Metropolitan Hospital have permitted Physiological Laboratories to be added to their Schools of Medicine, without in any manner understanding to what particular uses these buildings should be applied. Assuming then the possibility of the reader being as ignorant of the meaning as, till lately, we were ourselves, and at the same time desirous of understanding the merits of a subject coming daily more prominently before the public—that of vivisection—we would refer him, for fuller information than we are inclined to give, to a work sold at most medical booksellers—the "Guide to the Physiological Laboratory." We do this the more readily as we are not only persuaded that before he has half finished the volume he will close it, solely from horror at the terrible details it contains, but also from the possibility that it may arouse him to join in the movement now afloat to put a stop to the cruel *and, in ninety-nine cases out of a hundred, utterly useless* experiments and operations on living animals. Should however (and we must be excused for thinking this very probable) the reader object from humane principles to study the pages of the "Guide," we may still refer him to extracts from it, lately brought under the notice of the public by many of the most influential of the daily and weekly newspapers.

Possibly we may be accused of presumption when we say that the advantages science derives from these experiments are infinitesimally small, and this the more likely when we state that many of the grand discoveries said to have been made by operating on the living animal are extremely doubtful. Let us quote one or two examples in proof. It is said that Harvey discovered the circulation of the blood through the experiments he made on dogs and other living animals, when a student at the University of Padua. An English medical writer of eminence, when passing through Padua not long since, stopped some days in that city for the purpose of collecting some memorials for a Life of Harvey; but in spite of all his researches he could not find, either in the archives of the University or from any other source, a line to prove he had ever been there. Nor must it be supposed that it was an omission caused by any jealous feeling on the part of the authorities, for none admit more readily than

the Italians that the honour of the discovery belongs to our countryman.

Again, we are informed by the advocates for vivisection that Sir Charles Bell, than whom a more humane man never lived, discovered the practicability of the operation for the cure of Strabismus (squinting) from experiments he made on the eyes of living dogs. This statement is simply absurd, as it is impossible to find a dog that squints—at least, that is the reply the late Mr. Anthony White, when President of the College of Surgeons, received from the Veterinary College, when he applied to them for a dog to try the experiment on, many years before Sir Charles Bell is stated to have made the discovery. Again, Sir Charles is reported to have obtained from experiments on live animals the valuable discoveries he made of the mechanism of the human hand, but at the same time the discoveries alluded to are never particularised, or at least we have never met with them. We have read his book, and with great pleasure and admiration, but we have failed to find the "discoveries." The great merit of the work appeared to be the clear and lucid manner in which Sir Charles brought under the notice of the reader a great masterpiece of the Creator's constructive wisdom. Other "discoveries" derived from vivisection, which are much vaunted by the upholders of this cruel system of instruction, would, if carefully investigated, be found to have been known before; and even of those undisputed, we are not aware of one that has conferred a benefit on humanity equivalent to the torture occasioned in the experiments to obtain them.

Among other advantages claimed by the supporters of vivisection from their experiments on living animals, is that of proving that the lower we descend in the scale of animated nature, the less is the susceptibility to pain, till at length the line is reached which divides the animal from the vegetable kingdom—a mathematical line so fine that at present it is hard to say where the one ends and the other begins, although we know that this line of division does exist. For example, let us take the sponge, in which it would be impossible to detect the slightest evidence even of sensation. All this is perfectly true, but let us also bring under the reader's notice another fact equally indisputable—that in starting from the lowest and least sensitive grade of the animal kingdom, in proportion as we rise, the sensation of pain becomes keener until we reach the dog, which after man will perhaps show the most perfect organisation, and is therefore more particularly sought for in the Physiological Laboratory. But the reader should bear in mind that, if rightly considered, the very value of the dog in these experiments consists in his sensibility to bodily torture being scarcely, if any, less than that of a human being undergoing a similar operation; and in that case, whether, if not from a fellow-feeling, certainly from one of common humanity, we are not under a moral obligation to lift our voices against the practice of vivisection?

For one interesting discovery we are certainly indebted to vivisection, but whether the interest it has developed is a reason for the continuance of the practice, we will leave to our readers to decide. We have already pointed out that the lower the animal stands in the scale of animated nature, the less perfect is its organisation, till at last it is impossible to state where animal existence ends, and vegetable life begins. In like manner as the scale ascends the sensitiveness to pain becomes the more acute; but in proportion as sensitiveness to pain increases among animals, instinct and intelligence also become the greater, till at length—as in the dog—it appears impossible to say where instinct ends and reason begins. In fact in many cases the intelligence of the dog seems positively to pass the line which separates instinct from reason. We will submit to the reader two cases in point.

Last winter the captain of an East Indiaman was tried at the Old Bailey for the murder of some Lascar seamen serving on board his ship. Among the different atrocities brought forward, was that of a poor fellow being beaten over a wounded shoulder with a belaying-pin. The poor wretch, utterly defenceless, by way of beseeching the ruffian to spare him, threw himself on the deck and, clasping his assailant round the knees and looking imploringly in his face the while, unable to speak English, in his own language begged for mercy. None was granted him, and he died shortly afterwards from the wounds he had received.

Let us now contrast the behaviour of the Lascar seaman with that of a dog undergoing some useless and cruel experiment in vivisection. When brought into the operating theatre he looks anxiously in the faces of those he finds there. Although there is not the slightest distinguishable appearance of ill-feeling towards him, the dog is an excellent physiognomist, and in a moment detects that there is some danger hanging over him. He now tries to escape, but that is impossible, for the door is closed. He attempts to conceal himself under the table, but all in vain—he is caught and placed upon it. Although not an expression or word has been uttered to alarm him, he now makes the most violent efforts to escape, and in his struggles attempts to bite the hands of those who hold him. Chloroform or some narcotic is now generally (but not always) given, and the operation commences. We will not attempt to describe any one in particular—the task would be too painful—but merely beg the reader to imagine it is a serious one on the nervous system. For a satisfactory conclusion to the experiment, it is necessary that the effects of the narcotic should be over, and the dog recovers his instinctive faculties to find his body lacerated in the most fearful manner. From the faces of those around him he judges that his torture is not yet over. In a moment a most pathetic and imploring expression is visible on his face, which he supplements with a low whine, totally apart either from anger or pain, but evidently to raise pity in the breasts of his tormentors. He further displays his knowledge of his helpless condition, and submits it as a

plea for mercy, by licking the hand of the demonstrator that before the operation he had attempted to bite. Is the reader able to point out the line which separated the reasoning of the Lascar and the instinct of the dog? But admitting the intelligence of the dog to have been nothing more than instinct, when it assumes a semblance so closely allied to the reason of man, ought it not to rouse in our breasts a strong plea for our interference in his behalf?

Many years since, we called with a letter of introduction on Professor Majendie in Paris. He received us with great courtesy, but candidly told us that he was then particularly engaged, but if we would call another day he would with great pleasure receive us, and show us every assistance in his power—"or," he continued, "if you please, come with me now into my laboratory, where I am at present engaged in trying experiments on two dogs."

"It has often struck me," he replied, "that a dog, when suffering under the effects of the poison strychnine, exhibits symptoms so closely allied to hydrophobia, that it is difficult to tell one from another. It therefore appears to me a perfectly natural conclusion, that if I can devise any means of reducing the spasmodic action of the poison, the same remedy may be applied with success in calming the terrible spasmodic convulsions in hydrophobia; and as I have now two dogs, to each of whom I have given a strong dose of strychnine, and which are now labouring under its effects, you can, if you please, witness my effort to relieve them from the pain they are suffering."

We now accompanied the professor below into his laboratory, where we found some half-dozen medical students gathered round a couple of dogs, that certainly exhibited many symptoms strongly resembling hydrophobia—for example, the haggard expression, dilated eyes, foaming at the mouth, &c. They did not attempt to bite, or to escape from the room—in fact, remaining almost stationary; but this, perhaps, might have been caused by the strength of the dose they had swallowed. The professor now explained that he hoped, by rapidly reducing the vital powers by bleeding from an artery, he might be able at the same time to reduce the spasmodic action under which they were suffering, and that the "inherent power of life"—the *vis vitæ*—they would still possess, would be sufficient to save them from death. If he succeeded in his object, it would be a justifiable reason for adopting the same remedy in man when suffering under that most terrible of all maladies, hydrophobia.

The professor now placed one of the dogs on the operating table, and in less than a minute had succeeded in opening the femoral artery of the leg. The dog bled rapidly, and shortly afterwards the artery was tied, and the dog placed on the ground. The other dog was now subjected to the same operation, the artery was opened, and we stood by to watch the effect of the experiment. All spasmodic action, every symptom resembling hydrophobia, had certainly ceased, and the two dogs lay for more than an hour tranquilly on the floor. Then one died; and about

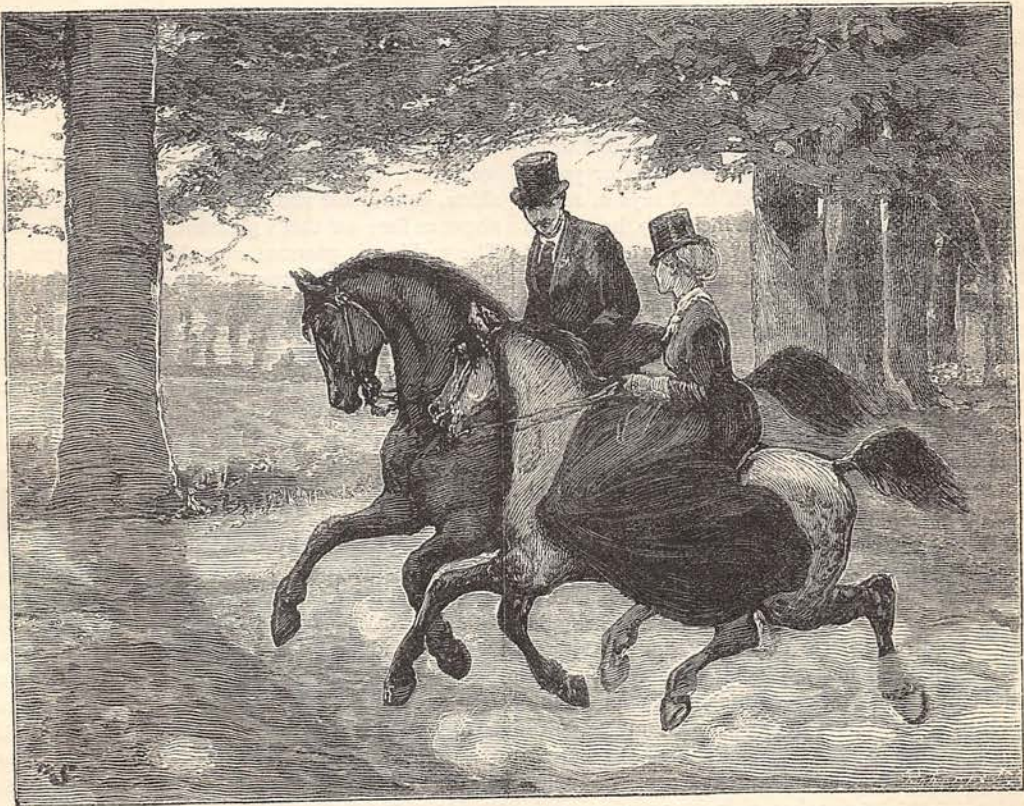
twenty minutes later, the other. Altogether the results of the experiment seemed encouraging, the deaths of the animals having evidently been caused by excessive depletion.

The experiment over, the professor on our quitting him invited us to be present at another, of a totally different nature, which he intended to perform next morning in the School of Medicine; and, without inquiring the nature of it, we promised to attend. On our arrival we were shown into an amphitheatre, with a table in it ready for the operator. There might have also been present at the time some thirty or forty pupils. After waiting for a few minutes, the professor entered, followed by an assistant carrying in his arms an Italian greyhound. The professor then shortly informed us that the experiment he was about to perform would be on the nerves of the jaw and ear, and

described the results which would follow. He then commenced, but after a few minutes the yells of the poor animal were perfectly heartrending. That this is no exaggeration may be judged by the fact that the whole of the students present—gentlemen by no means liable to any morbid sympathy for the brute creation—raised a unanimous shout of disapprobation, and the professor was obliged to submit to their decision.

We have now given two examples—the former we consider a justifiable experiment, the latter unjustifiable; and we trust that the reader will agree with us in our conclusion, and join energetically with those who would restrain, by the action of the law, all experiments on living dumb animals from which no *immediate* benefit to humanity is likely to occur.

W. GILBERT.



SECOND THOUGHTS.

WHERE the wood-paths broke in twain,
 Doubting, Dolly checked her rein.
 "If I take that path," mused she,
 "I shall meet with somebody.
 Nay, but that would never do;
 Maidens should be wooed, not woo!"
 So the other path she prest,
 Saying, "Second thoughts are best."

Who is that with Dolly there?
 What has made her ride so fair?
 "Somebody," most strange to say,
 Rode the self-same way to-day;
 And there, among the greenwoods dim,
 Dolly told her choice to him,
 Whispering what her heart confest—
 "Truly, second thoughts were best."

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