

Hengwrt,
Dolgelly,
N. Wales.

AL/1819

Feb 28th

Dear Mr Fawcett,

Thank you very much
for the trouble you have taken
to return Mr Sidgwick's
letter which is very strongly
permeated. The state of things
appears to me just the same
as it was ten years ago. The
poor witness a few expts
under anaesthetics find
much to value of my natural

error of the practice of so
misusing animals - in fact
just seeing the "Elephant
Extracts" of Minnietion; &
that is all - by law it ^{is}
be illegal for them to practice
without license, & ridiculous
to think of their applying for
licenses; and it does not
quite follow that the report
that they were privately repeated

experiments for themselves in
their own rooms, is untrue. Now
ever on this point I can say
nothing. This much more the
contumacious of the world
passion for this practice
which I dread for young
women; ^{rather} than any creature's
they were likely to perpetrate on
the world's just now - See
what the very Edinburgh students
say on this point in the
"Class room (see this
enclosed)

Surely no scientific acquisition
 can be required for a man
 against the mere chance of
 producing such moral effects
 on the mind?

I will ask you, also, does
 Mr. Prescott, to read the lectures
 on Anaesthetics with some cure
 ~~it~~ it will be so good. I will
 see what we might do
 to the present state of our country
 researches on Animals - I wish Mr. Lidgwick,
 for whom I have great admiration
 as a thinker, wd send also.
 I enclose £5. towards of support
 from which I was told you wd send
 ever & affectionately J. P. Colver

W. H. T. AL / 1819

MY DOCTOR TELLS ME

THAT,—

“*Experiments in England are only Performed on Animals under Anæsthetics.*”

THERE are few opponents of vivisection who have not been doomed many times to hear these words used as a complete and final reply to their earnest appeals for interference on behalf of vivisected animals.

It is a great responsibility which medical men assume when they hazard such assertions for the purpose of damping the natural impulses of humanity in those who look to them for instruction. That they are either totally ignorant of the facts on which they presume to speak *ex cathedra*, or are moved by professional spirit to state that which they know is not true, will appear from the three following considerations:—

1st. The Minutes of the Evidence taken by the Royal Commission on Vivisection contain, *inter alia*, these high scientific authorities for believing that a considerable proportion of the experiments in use cannot be made upon animals in a state of anæsthesia:—

162. SIR GEORGE BURROWS: “Some experiments, however, cannot be performed under the influence of anæsthetics.”

53 to 56. SIR THOMAS WATSON: “The use of anæsthetics would frustrate the objects of many experiments on the nerves.”

4,486-7-8. ROBERT McDONNELL, M.D.: “Anæsthetics cannot however be used in experiments with regard to the nerves of sensation” (gives instances).

1,241. DR. SWAYNE TAYLOR: “Has not heard much of anæsthetics in toxicological experiments. They would render it impossible to rely on results.”

556. DR. SHARPEY: “Chloroform, and chloral even more so, interfere with the action of the heart, and cannot be used in many experiments.”

1,077 to 1,085. SIR W. FERGUSSON: “Attached very little value to experiments made under anæsthetics, because an animal is no longer itself under such abnormal conditions.”

2923. PROF. RUTHERFORD, speaking of his own experiments on the

livers of dogs: "Chloroform or opium in any form would have retarded the action of the liver, and therefore could not be used."

5811. Dr. LAUDER BRUNTON, speaking of a very long and painful experiment on the secretion and circulation in the sub-maxillary gland, states: "I must say that you cannot do the whole experiment under chloroform, you cannot show it as you would under curare."

2nd. The Vivisection Act itself (39 & 40 Vict., c. 77) bears evidence in its 3rd clause (providing for certificates dispensing with the use of anæsthetics) that, in the opinion of the legislature and of the 3,000 doctors who memorialized the Government concerning this Act, numerous and important classes of experiments cannot be made compatibly with the use of anæsthetics. The original Bill (Lord Carnarvon's) had forbidden all experiments except under anæsthetics. The medical memorialists insisted that most important researches would be stopped unless the clause were nullified.

3rd. Of these certificates, there were granted according to the last Returns of the Inspector no less than 47; and 644 experiments are registered as performed under them.

4th. The following are classes of experiments which cannot possibly be carried out *to their conclusions* under anæsthetics, though some of them may be performed under them so far as the initial operation only:—

1. Those which concern the reflex action of the sensory and vasomotor nerves.
2. Those which concern the Glandular Secretions.
3. Those which concern the Liver and gall-bladder.
4. Many of those which concern the Digestion.
5. Many of those which concern the blood Circulation and the Heart.
6. Toxicological Experiments (poisoning); including stiffening a dog "like a piece of wood."
7. Starving to death, and feeding with noxious substances.
8. Baking and roasting to death.
9. Boiling to death, or injecting boiling water into the stomach.
10. Experiments which (like Mantegazza's) have the production and measurement of Pain as their direct object.
- ~~11. Those which concern the~~
12. Varnishing, and coating with plaster of Paris.
13. Bleeding to death.

14. Those which concern the Muscles.

15. Insertion of Broken glass into ears, muscles, intestines, &c.

16. Excising and extirpating such organs as the thyroid glands, portions of the liver, the mammæ, &c.

Finally we have the immense class of:—

17. Pathological experiments—*i.e.*, the artificial production of diseases (Rabies, Tuberculosis, Anthrax, Fever, &c.), either by inoculation, or by trepanning and squirting virus into the brain.

18. Mutilating the brain through a hole made in the skull.

When all experiments of the above 18 classes have been eliminated from the list, it would appear that the residue which can be performed, from first to last, on thoroughly anæsthetised animals, is not very large. Far from being applicable and actually employed in "all" experiments, anæsthetics cannot be used in a vast number of those at present specially in vogue.

Even for those experiments wherein anæsthetics are applicable, and do not vitiate the result, there are very cogent reasons militating against their regular and complete employment. The extreme difficulty of applying them to some animals; the cost of the chloroform or ether; and the danger (especially in the case of dogs) of killing the animal by the anæsthetic and so nullifying the experiment, are all weighty objections for men filled with the "joyful ardour" of research. Here are the well-known statements of Dr. Hoggan on this subject, after his long studies in the greatest laboratory in Europe:—

The incalculable advantages which mankind has derived from chloroform as a means of destroying the sense of pain have remained a dead-letter as regards the lower animals, in consequence of the very unsatisfactory state of our knowledge of the line which separates insensibility from death, especially in some of those classes of animals which are most generally employed as the subjects of physiological experimentation. Many of these die apparently before they can become insensible through chloroform, some of them, indeed, as soon as it has been administered. The practical consequence of this uncertainty is, that *complete and conscientious anæsthesia is seldom even attempted*; the animal getting at most a slight whiff of chloroform, by way of satisfying the conscience of the operator, or of enabling him to make statements of a humane character. Not only, however, are those numerous cases to be regarded with due suspicion in which a slight whiff of chloroform is recommended to be given, but we have also to bear in mind, that, even where complete insensibility has been produced at the beginning of an operation, this effect only endures at most for a minute or two, and

during the rest of the operation, extending perhaps to hours, the animal must bear its torture as best it may. Continued insensibility could only be maintained by continued careful administration by a special assistant, whose undivided attention would require to be concentrated upon this object. This, I believe, is seldom, if ever done. Personally, I may add, that the first experiments which I attempted to make as a student in my own private room failed, because in my anxiety to produce anæsthesia I found that the animal had died before the experiment could be commenced; this, too, at a time when I had much experience in administering chloroform in the operating-theatre of the hospital. I, therefore, gave up the idea of trying such experiments until I had had an opportunity of seeing how experienced vivisectors managed it. I have since then had ample opportunity of seeing this, and the result of my experience was embodied in a remark I made in a letter published three months ago, that "I am inclined to look upon anæsthetics as the greatest curse to vivisectionable animals."—Letter to *Spectator*, May 29th, 1875.

If we pass from *Anæsthetics* properly so-called (Chloroform, Ether, Nitrous Oxide, &c.), to *Narcotics*, and endeavour to reconcile the "Doctors'" reassuring *dictum* with fact, by supposing that the sufferings of the victims of vivisection may often be nullified by the use of opium and other strong stupifiers, we find the greatest of modern Vivisectors calmly stating that such drugs, though convenient to the vivisector for keeping the animal quiet, do not annul the agonies of the slow mangling to which it is subjected.

"Morphia is not an anæsthetic, but a narcotic (*stupéfiant*). When it has taken effect on a dog, he does not seek to escape; he has not the knowledge of where he is; he no longer notices his master. Nevertheless, sensibility persists, for, if we pinch the animal, he moves and cries. At the same time, morphia plunges dogs into a state of immobility which permits us to place them on an experimenting-trough without tying or muzzling them."—Claude Bernard, *Revue des Cours Scientifiques*, Vol. vi., p. 263.

We hope that any opponent of Vivisection who, in future, is told that a Doctor has asserted that "*Experiments in England are only performed on animals under anæsthetics*" will insist that the said Doctor shall be confronted with the statements in this leaflet, and be requested to disprove them.

F. P. C.

W. H.

AL/1819

CLASS-ROOM CRUELTIES.

THE following remarkable communication appeared in the *Scottish Leader*, of the 27th January, 1890 :—

“ I THINK it advisable to get publicity for an account of certain experiments carried on in our Physiological Class at the University during the past week, hoping that in this way I may aid in preventing the recurrence of what I consider an unnecessary sacrifice of life.

“ A few day ago Professor Rutherford told us of an experiment which he had been accustomed to perform before his class, but which, to use his own words, he had discontinued ‘in deference to so-called public opinion.’ I regret to say that, by vigorous scraping of their feet, certain of his audience signified their disapproval of the omission, and the Professor promised to remedy it.

“ Briefly, the experiment is to demonstrate that if a nerve called the chorda tympani, be stimulated—*i.e.*, irritated—the result is a great flow of saliva from the submaxillary salivary gland. It is shown by dissecting and laying bare certain parts of the head and neck of a living dog, which has been put under the influence of an anæsthetic, and which is killed after the experiment has concluded. A couple of lectures later the Professor was a little behindhand in meeting us, and explained the delay by saying that he had been preparing for the afore-said experiment, but that it had failed.

“ Result—a dog killed to no purpose.

“ On Friday last the Professor was so far successful as to bring dog No. 2 actually before us, but the saliva refused to flow in the desired direction, and at the end of the lecture, during which the dog lay before us, we were told that it would be used for other purposes. The Professor incidentally remarked that it was difficult to find a ‘suitable’ dog, but promised perseverance and ultimate success. Thus on this (Monday) morning we may expect to see dog No. 3 brought before us, if a ‘suitable’ one can be found.

“ What, I wonder, is the test of suitability? I will say nothing of the possible pain to the dog at one time or another during the experiment or preparation for it. I object on less sentimental grounds. The experiment is utterly unnecessary, for it is described in detail in Foster’s *Physiology*, Kirke’s *Physiology*, and in the Professor’s own fragmentary *fasciculus*, having been performed by Bernard years ago.

“ Let me emphasize the fact that this is therefore no experiment in the recognised sense of the word, the result being a

commonplace of physiology, stated, as I say, without dispute, in the text-books. Let me also point out that the operation is exceedingly delicate, and that of the four hundred and odd men in our class-room only the nearest score or so could possibly see what was being done. Also by seeing these frequent experiments of one kind or another on living animals we tend to become brutalised and degraded, callous and indifferent to death or pain in others, and unfitted for our present work in the Infirmary and for future private practice.

"I trust you will allow an opportunity for the expression of so-called 'public opinion' on this point, and permit me, since I do not wish my medical curriculum to be either unduly extended or abruptly terminated, to sign myself simply,

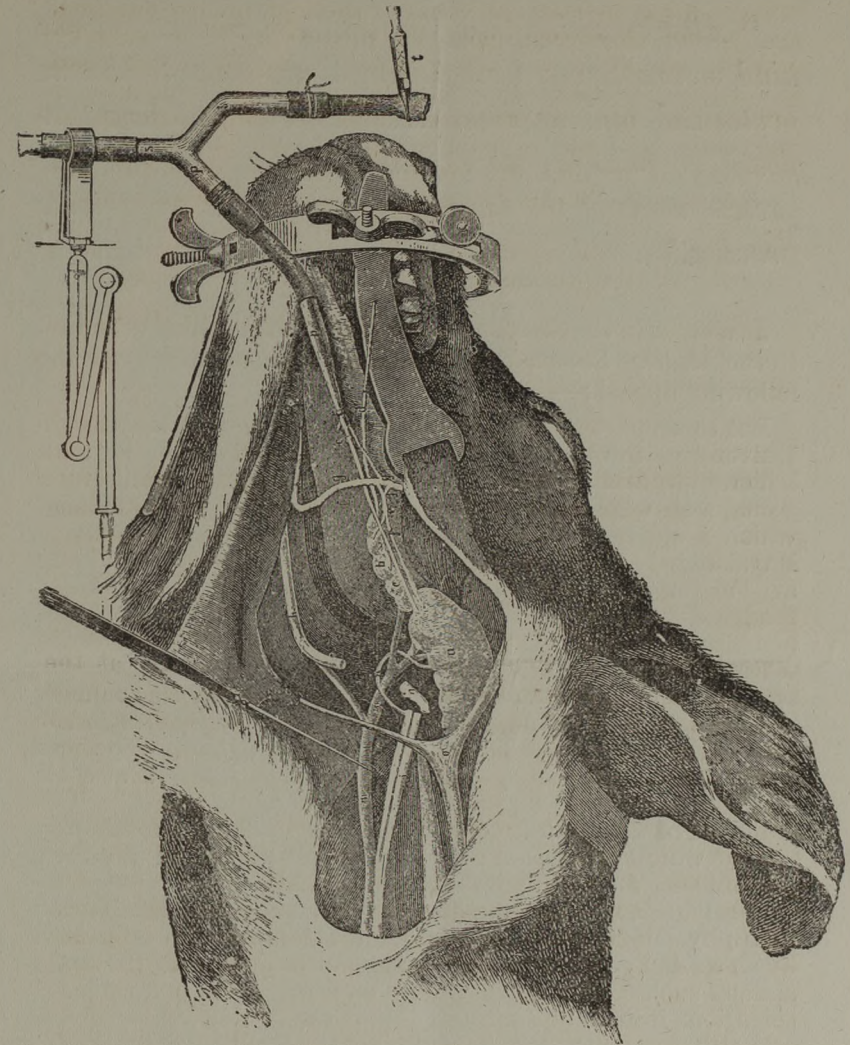
"A MEDICAL STUDENT."

NOTE.

The "Student" who has written the above Letter refers to the experiments carried on "in our Physiological Class at the University" of Edinburgh; *i.e.*, Professor Rutherford's. The experiment, as he describes it, is obviously the one represented in the large cartoons which the Victoria Street Society exhibited on the hoardings in London in 1877, which were denounced by many at the time as too hideous to be believed. It is also reproduced (from Cyon's *Atlas*, Plate XV.,) in *Light in Dark Places*, page 24; and in Miss Cobbe's *Modern Rack*, p. 202; where the reader will notice in the letter-press that Cyon observes, "if the experiment be made only for demonstration, one can drug the animal beforehand with chloral, chloroform or *curari* (!) . . . If, on the other hand, one wishes to use the experiment for purposes of observation, . . . it is better to avoid these drugs." Considering the excessive agony which must be involved in the slow picking away of all the tissues of the animal's jaw, laying bare the nerves and then "stimulating" them, this must be one of the most atrociously cruel of the stock experiments of physiologists. Even when performed under anæsthetics, (as required by law when used for demonstration), it must involve *torture*, if for one instant the anæsthesia fail from the beginning of the lesions till the victim is killed at the end.*

* In the case of the second dog mentioned by the *Student*, it would appear that after being "prepared" fully for this awful experiment the poor creature was to be kept over and "used" for some other purpose!

Here is Cyon's diagram of the experiment in question:—



From Cyon's *Atlas*, Plate xv. (See preceding page.)

So far we have been concerned with the *cruelty to animals* involved in these demonstrations. The most important part, however, of the *Medical Student's* excellent letter is the young man's frank and clear avowal of the effects *on the minds of the class*, of which he is a member, of witnessing these frightful demonstrations. His words ought to be

quoted by opponents of vivisection whenever they discuss the moral consequences of the practice.

“ Also by seeing these frequent experiments of one kind or another on living animals we tend to become brutalized and degraded, callous and indifferent to death or pain in others, and unfitted both for our present work in the Infirmary and for future private practice.”

In a letter in the *Scottish Leader*, Feb. 14th, calling attention to the *Medical Student's* communication, Miss Cobbe made the following appeal:—

Let those parents who are sending their sons to Edinburgh University, thinking to fit them for a profession at once honourable and humane, ponder these weighty words of a young man who has been himself submitted to the influences which reign in that unhappy class-room of the Professor of Physiology! The four hundred youths who crowd that room are undergoing a “brutalising” process. They are being rendered “callous,” and so “unfitted” for all that is good and beneficent in their chosen profession. Can any imaginable testimony be stronger than this? Recently I received a letter from an undergraduate at Cambridge, in which the remark was made that the effects of their training was visible in the very countenances and behaviour of the young men who there devote themselves to physiological studies; and that their characters seemed to grow “hardened to a point.” The Edinburgh “Medical Student” bears even clearer testimony to that which he feels and sees of such results in his own person, and among his immediate comrades.

Surely, Sir, no scientific knowledge, no acquired familiarity with physiological facts, no possible attainment to be gained by these 400 youths, can for a moment be placed in the scale against such deadly moral injury as this? Will not the conscientious fathers and mothers of Scotland arouse themselves, and either resolve never to send their sons to be “brutalised,” or—better far—combine to overmaster the *clique* which supports the professor in his practice, and reform at last the physiological teaching of Edinburgh University?—I am, Sir, yours,

FRANCES POWER COBBE.

Hengwrt, Dolgelly, February 9.