

Do the interests of mankind require experiments on living animals, and, if so, up to what point are they justifiable? : a paper read at the Church Congress, Folkestone, Thursday, October 6th, 1892 / by Samuel Wilks.

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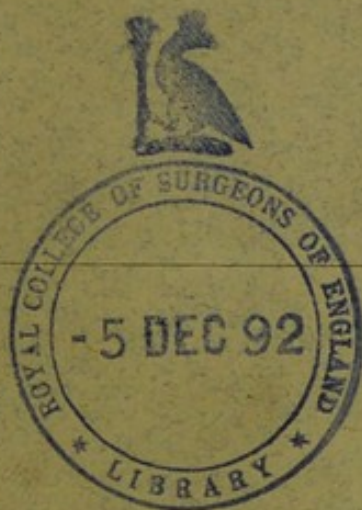
A Paper

READ AT THE CHURCH CONGRESS, FOLKESTONE,
THURSDAY, OCTOBER 6TH, 1892.

BY

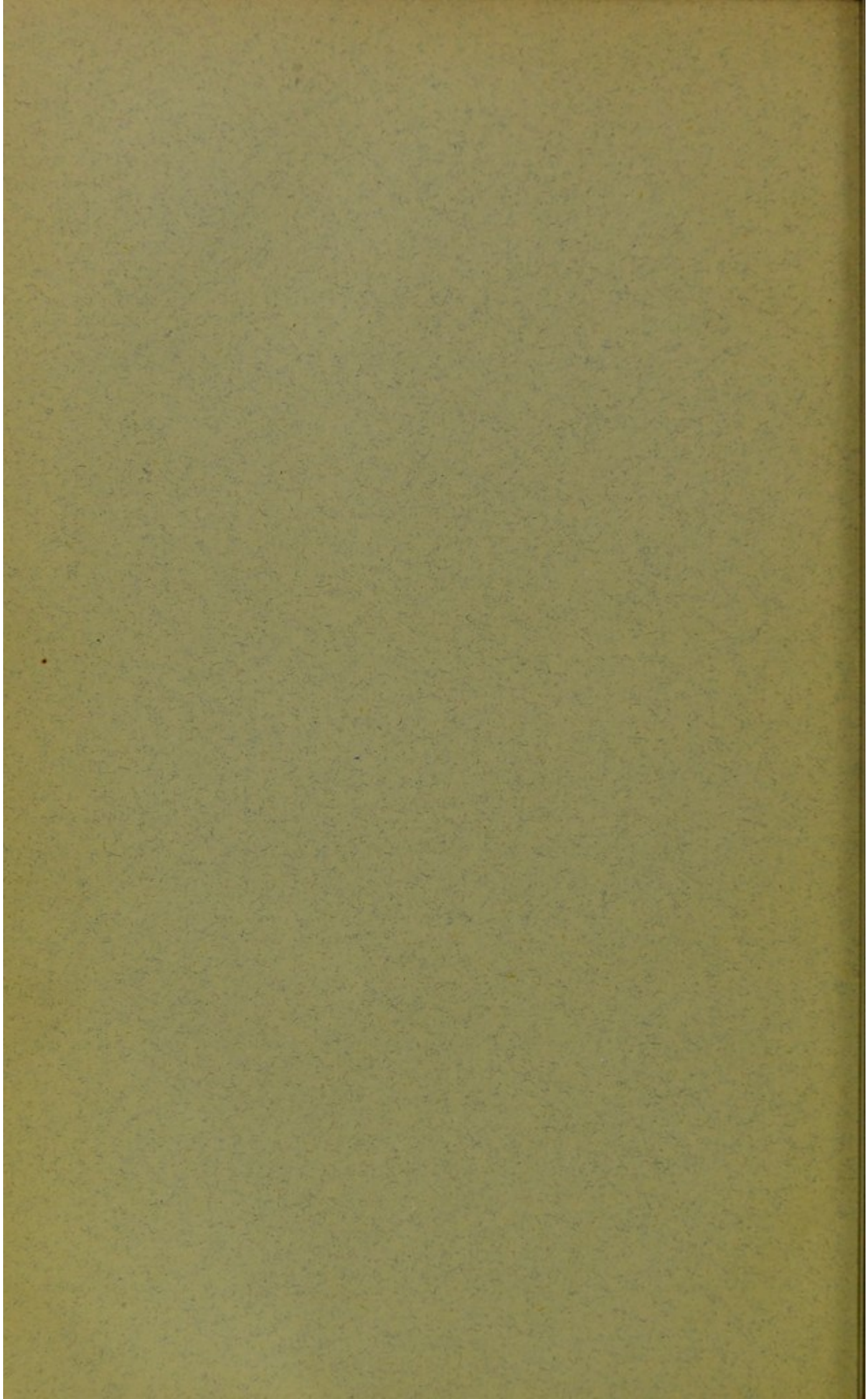
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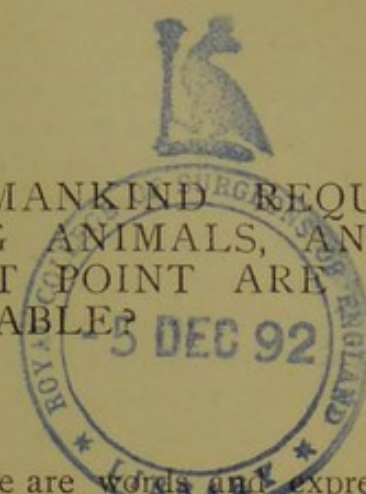
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IN approaching this subject we find there are words and expressions used of very doubtful significance, such as cruelty, the utility of experiments, and even the word vivisection itself. This word has very largely prejudiced the question, for it immediately calls up before the mind the cutting into a living creature and the revolting picture of an animal writhing in its gore; whereas in the large majority of experiments it means no more than pricking the skin with a needle, and very often merely the administration of a particular food or drug in order to watch its effects on the system. The term does not appear in the Act of Parliament which is entitled "The Cruelty to Animals Act." I think, therefore, it would be better to handle the question in such a manner that the meaning of these words will come out in a clearer light. This will probably be best done by first considering what is the relation between man and animals. Now much has been said and written on the rights of animals, but I am at a perfect loss to know in what these rights consist. I can make out no more than that we ought to be kind, and not cruel to animals—a dictum containing a platitude which we all accept. The rights spoken of certainly do not mean what is intended by the term when applied to the relations between man and man; there is no such understanding implied as in the Christian doctrine of doing to animals as you would be done by. It would be easier to define the rights of a slave in relation to his arbitrary master than the rights of the lower animals. We shall see, indeed, that right means might.

I think it will not be foreign to the subject to look first at animal life irrespective of man, because it is sometimes forgotten that under these circumstances suffering exists. Let us regard for a moment this world and the universe around: the great and underlying fact, probably the greatest that man has ever discovered, is that everything is moving and changing; undergoing degradation and development. As far as our telescopes can reach, movement is going on; as far as our microscopes can penetrate, the same fact is apparent. Vegetation springs up in the early year and then decays; nothing fresh is added to our globe, but an incessant change is going on of life and death. In the animal world the same facts are apparent. Some creatures take one revolution around the sun and their course is run. Others a few more revolutions to bring them to the same end. The life of these creatures depends, in part, upon the vegetables which they assimilate to themselves, but also

to a great degree on their living upon one another. They are so constructed as to seize and devour those creatures which are more helpless than themselves, and their internal organization is formed to digest them. The victims have also their special attributes contrived to escape the enemy, and so a perpetual warfare goes on. As these are sensitive creatures, it does not want much imagination to picture to one's self the amount of suffering which must always be prevailing amongst these tortured creatures in every forest in the world, and moreover, knowing that the lower animals are subject to a large number of diseases, as in the human being, we are sure that they must end their days without food, or a drop of water to slake their thirst in their agony. The poet and painter may picture in glowing colours the beauties of the opening spring and the equally gorgeous beauties of the departing autumn, but when we come to the animal world, this living and dying so dependent on one another, and part of the same scheme, the picture is a different one, and from the point of view which I have taken is not pleasant to look upon; so that one would fain exclaim with the Apostle, that the whole creation groaneth and travaileth together until now. Now, having contemplated animal life alone, we place man on the scene; he is an animal, constructed like other animals, with all their appetites and instincts. He is essentially a carnivorous animal. He pursues other creatures to kill and to eat them; he also rejoices in the pursuit; so much so that when not requiring them for food he still hunts and shoots them for pure enjoyment. If there be no animals to hunt, he keeps a stag for the purpose; taking him out into the field in a cart, and then pursuing him with his dogs, being careful, however, not to let the dogs rend him, as, being an expensive animal, he may be hunted over and over again. If man wants food but does not care to procure it himself, he employs another man to fell the ox, or cut the throat of the sheep; or should he prefer game, he employs someone to shoot it or entrap it by every means of deceit and treachery, which he would never use towards his fellow-man. Not only this, but he kills other animals for the sake of their skins to put upon his own back, and makes use, indeed, of all parts of the animal for various purposes useful to himself. In my early childhood, I remember my spelling-book describing the ox and how its various parts were made use of by man, the impression left on my mind being that the creature was so constructed for our benefit. There certainly was not a word said about its wonderful structure which enabled it to move about, or how all its complex machinery was formed out of the grass of the field. Modern teaching not only does the same, but maintains the correctness of it. An account of the slaughtering of the seals for the sake of their skins appeared lately in one of the periodicals; the picture of hundreds of these warm-blooded animals being harpooned and writhing in their gore, mothers and young in heaps together, was not pleasant to contemplate. But should a rich lady, not caring to dress like ordinary persons, wish for a finer raiment, she deposes someone to go to the furthest Arctic regions where she knows the animals live, and there acquire the warmest and finest skins, and says, "Strip it of its skin, and I will handsomely repay you." I have never yet heard a hint given as to an animal having a right to its own skin, or even any compunction of conscience on the part of the lady who has deprived him of it. If we want oil for our lamps we

kill the whales for their blubber, so that these creatures are as near their extermination as the buffalo in the prairies. We snare thousands of larks for our table, and although we do not actually catch the warbler, which, singing, up to heaven's gate ascends, we pay someone else to entrap it for us. Sometimes, indeed, we eat our victims alive, previously putting a little pepper and vinegar on the writhing oyster before we swallow him. Then, for the sake of modesty, we usually let pass the gigantic amount of mutilation going on in the unsexing of animals so as to render them mere masses of fat beef and mutton for our eating. We make our horses go round and round in mills, which, from a human point of view, I should think is not a pleasant occupation, and again, the finest horses we can procure we compel to join in our battles, where they are shot down and mutilated by hundreds and thousands. I fancy if horses could speak they would not pretend to a nationality, but rather to a universal brotherhood. All these things we approve, or certainly do not condemn, and, therefore, I suppose, they are strictly correct, but if so it is nothing less than ridiculous to speak of the rights of animals.

I can imagine it to be said, What has this to do with vivisection?—the subject in hand—or that two blacks do not make a white; but in answer to this I say herein lies the very gist of my argument, to show that there does not exist any national conscience as regards cruelty, and therefore the cry against experiments on animals has another basis and motive.

Until a few years ago no legislative measures whatever had been taken in reference to the subject of our treatment of animals, when the Society for the Suppression of Cruelty to Animals was founded. Those who have read the "Letters of Peter Plymley," by the Rev. Sydney Smith, may remember his objections to all societies of this kind, saying that they led to tyranny, certain persons wishing to make use of the arm of the law to put down what they themselves did not approve of; there would always be, he said, a difficulty in defining such terms as vice or cruelty. Now, although it must be admitted that the societies of which he spoke have been useful, his objections have much weight in them, for in the case of the Society for the Suppression of Cruelty of Animals, the larger and grosser cases of cruelty of which everyone approves are left untouched, whereas those only are offences which affect particular individuals and not the community at large. For example, I am a witness in Bond Street of a gentleman taking cognizance of an overworked horse in a coal wagon; he could easily show his indignation, as he was not a coal merchant, and had no interest in the trade, but behind him was a fishmonger with a basket of lobsters standing at the door, in which these poor creatures had been writhing about for two or three days in their death agony from absence of water and dried up gills. In the next shop window was a cage of fat quails, which had just arrived from the Continent; the birds without water and crowded together in a mass. Both the lobsters and quails this gentleman wanted for his dinner, but in a suffering horse he had no interest. This is the weak side of the society, that it touches only a few individual cases of ill-treatment of animals in which the prosecutors have no concern. It seems to be that whatever the majority approve of is allowable, whether it be the slaughtering of seals, boiling lobsters alive, docking horses, the use of bearing reins, or cutting off dogs' tails. This doctrine

is endorsed by the highest legal authorities, who declare that the word cruelty has no relation to the suffering of the animal, but to the question of utility ; this word again applying not to the animal, but to the owner. Thus, not long ago, a case came before the judges of a farmer charged with cruelty on account of his dishorning cattle. I am not quite sure of the reason for this practice, but I have heard that it has some reference to the animal producing more fat, or cream ; whilst in America it is done to enable greater numbers to be stowed away in the railway trucks. Lord Coleridge and Mr. Justice Hawkins, who were the judges, declared that the act was one of cruelty, although they admitted that their opinion differed from that of many authorities. The Lord Chief Justice commenced his argument by considering what is meant by cruelty. He said, "The mere infliction of pain, and even of extreme pain, is not sufficient to constitute cruelty. Men constantly inflict pain on one another, or on the brute creation, for the purpose of medicine or surgery, or under sanction—as by way of punishment—which is lawful, and in such cases it may be reasonably necessary." He then went on to discuss the meaning of the word necessary. He said it was difficult of definition, but must have reference to the object aimed at. He adopted the language of another judge, who spoke of "Unnecessary ill-usage by which the animals suffer." Then, as regarded the question before him, that of dishorning cattle, he considered it unnecessary ; it was therefore cruel, and he convicted the accused. Mr. Justice Hawkins pursued the same argument, saying that he would like to add to it some other practices, such as the docking of horses, and quoted another judge to the effect that an operation was not cruel if it was to make the animal more serviceable, that is, as I understand it, more serviceable to man, for I do not remember any attempt to operate on an animal for its own improvement or advantage. I should much like these judges to try the case of lopping off dogs' tails, and decide whether it be cruel or not. The judgment would again turn, I apprehend, upon the question of advantage. In order to settle the question, I intend to make a charge against the next curate whom I meet in a country lane with a terrier without a tail or ears.

The next thing done by legislation was to make an alteration in the Act relating to cruelty to animals, owing to the outcry which took place against experiments being made upon them whilst alive. The term vivisection, as I have already said, does not appear, and is the word unfairly adopted by the opponents of experiments of the most trifling operation. It is cited simply as "The Cruelty to Animals Act, being an extension of the original Act to cases of experiment for medical, physiological, or other scientific purposes." All these experiments were to be made illegal, except under special license, and now the agitation which is going on is to absolutely forbid them. Now, taking into account the large amount of suffering inflicted upon the lower animals by man, which is considered allowable, and the case of any suffering for scientific purposes, which ought to be forbidden, we ask the question why this difference in our action ? The answer is obvious ; it is given by the common consent of mankind, and put into distinct phraseology by the judges. Because, in the first case, the suffering is associated with what is useful to man, but in the second it is not. We need not enter into the question of what is really useful or necessary, otherwise we

might doubt the necessity of eating meat or wearing clothes ; but we speak of what the world generally regards as useful or necessary. Therefore, according to common consent and the dictum of the judges, many things I have spoken of are not cruel, but allowable. The converse is that all pain inflicted on creatures for the sake of scientific inquiry is cruel, because useless, that is, useless as conceived by the majority of people, and should be suppressed by law. The majority approve, or at least regard with complacency, other forms of suffering, seeing they are associated with what is useful to mankind ; but this scientific cruelty, being useless, is therefore horrible to contemplate. This is all logical enough, both in a popular and legal sense. If my cook poisons a mouse there is no law to prevent her ; but if I gave the same poison to another mouse, in order to watch its effects, I am breaking the law, and liable to a penalty of fifty pounds. The suffering in the two cases is the same, but the motive is different. It is killing the animal for a scientific object which constitutes the offence. Now, then, comes the question of utility, the point on which the whole argument turns. The inutility has a very wide meaning, and is obviously used in a different sense by different persons. The ignorant man can at once see his right to pain an animal for the sake of getting its flesh to eat, or for the skin to put on his back ; but to pain it in order to discover the mode in which the heart beats, or the stomach digests its food, is a pure piece of idle curiosity, and ought not to be allowed. The inutility may have another meaning. There are educated men belonging to a well-known heretical sect in the medical profession who say such experiments are useless, because of no value in the healing art, the whole function of the doctor being to recognize symptoms and the administration of remedies to relieve them. All physiological and pathological research, they say, is unnecessary. I pass by one or two books written to order, and paid for by the Anti-Vivisection Society. Then, finally, the principal and most powerful opposition comes from those who have an antipathy or real hatred to all knowledge of a physiological kind, it being, they say, of no value, even if it be not degrading in its effects ; that men should not be perpetually engaged in prying into their mechanism, but have regard rather to the higher aims of social life, morals, and religion. These persons are the most difficult to deal with, because the hatred to science, and especially to physiology, is a part of their nature, or is hereditary. It has been well said that everyone is born a Platonist or Aristotelian, and so it happens that whilst there are those who are intent on scientific pursuits and unravelling the secrets of nature, there are those who not only feel the strongest antipathy to these researches, but declare that they tend to vulgarize and demoralize mankind, and that their pursuit should be stayed by the strong arm of the law. All this is made evident by the large amount of remarkable literature which the anti-vivisection movement has called forth. I will give one example. "Not content," says one writer, "with observing the blush on the maiden cheek with admiration or joy, a certain man, called Claude Bernard, actually made some experiments on rabbits, to show how the blood-vessels expanded or contracted under the influence of the nerves, and so took all the poetry and sentiment out of this beauteous sign of emotion, and put a vulgar piece of machinery in its place." The writer seemed to imply that it was absolutely wicked to look beneath the skin

and see God Almighty's hand behind the scenes pulling the strings and making the puppets dance. One great writer on art, after describing the beauty of the dove's wing, its form and its sheen, speaks with horror of the anatomist picking it to pieces to see the structure of the feathers. I believe it is the same writer who said that the little country girl knows more of the flower which she loves, and places in her bosom, than the botanist who picks it to pieces. The answer to this was given by Wendell Holmes, who said that the botanist examined the whole structure of the plant, and, therefore, he not only loved the colour and the fragrance of the flower, as a child might do, but he loved the root as well. This is the style of much of the anti-scientific writing; the discovery of the cause of any function they call materialism, and this word is now often used as almost synonymous with immorality, or at least irreligion. In this way the inutility of experiments and their cruelty go hand in hand. These views had a very chief exponent in Cardinal Manning, who, at a meeting of the Society for the Suppression of Cruelty to Animals, said, "He deplored the science worship of the present day, and dwelt upon the fact that not one single discovery had been made through the practise of vivisection." It is curious to think of these blind devotees worshipping a shadow, whilst his Eminence had discovered the worthlessness of science. His speech is valuable as showing the reasons which are used against physiological research. Nearly the whole of the anti-vivisectionist literature is composed of statements endeavouring to prove the worthlessness of experiment, and for good reason, because the whole question of cruelty turns upon it, for, as we have already said, according to common consent and the dictum of the judges, one has no meaning without the other. It becomes the real question at issue. I might just remind my hearers that the reasons which Professor Freeman gave for his opposition were founded entirely on this argument. His proposition seems to be very illogical, or at least very loose, for it certainly can be answered one way as well as the other. It was this, "Is it lawful to seek for knowledge by means which would be confessedly blameworthy if they were used for some other object?" The Professor answered it in the negative to his satisfaction, but it could quite as reasonably be answered in the opposite sense by saying the experimenter adopted practices which, under other circumstances, were not considered blameworthy.

The question, therefore, as to the legitimacy of vivisection turns upon its utility, and I see by the resolution before us that the Congress is thinking of deciding upon it. I should be very sorry to see them attempt it. I do not know how they will proceed. Take, for example, the experiment I just now mentioned, which proved how the blood vessels were under the dominion of the nerves. This illustration, amongst others, was given in a paper published some years ago to show the value of experiments on animals, whereupon an anti-vivisectionist paper attempted to answer this memorandum, and, as regards the experiment spoken of, deliberately put it aside in two lines as useless, although, on the other hand, it was maintained that it has helped to explain a large number of phenomena connected with the nutrition of the body, thrown a light on the operation of many medicines, and suggested new ones. Now, I ask, how will you act? Will you accept the statement on the one hand that that experiment is useless, or the

one declaring that it has thrown a flood of light on many natural and morbid processes? As sensible men you will assuredly say you know nothing at all about it. But as you are not unaccustomed to accept authority, you ought to find no difficulty in adopting the same method on this question.

At the Medical Congress of all nations which met in London a few years ago, the meeting, which crammed S. James' Hall, was unanimous in favour of the utility of experiments on animals; and the other day, at Nottingham, the British Medical Association, at its annual meeting, also gave a unanimous vote in agreement with this. Not only are there these spoken statements, but nearly all the scientific men in all nations take the same line, considering experimentation absolutely necessary for the advancement of our knowledge. This ought, I should think, to be enough, and especially at the present time, when you must be aware that there exists a totally different view of many diseases from that which formerly existed. This is owing to the discovery of parasites or microbes in the system, which come from without, and give a totally different complexion to many complaints. The specific difference between all these morbid agencies can only be told by the inoculation of animals (mostly rats, mice, and guinea-pigs), and the result will probably prove that herein lies the greatest discovery in the whole history of medicine. There are a number of persons who, I am sorry to think, are doing their very best to hinder talented, enthusiastic young Englishmen from taking their share in the grand work in which all other parts of Europe are engaged. I should have considered it far better for you not to have expressed an opinion at all on the value of vivisection, but been content with declaring that, having had the subject brought before you, you saw no reason to offer your protest against the practice. You would thus be left with a free hand.

Now, one word as to the question of cruelty. It is constantly said that it is a dreadful thing to contemplate medical students, who should be reared in a school of philanthropy and gentleness, being allowed to make experiments on animals, cruel to the creatures, and brutalizing to themselves. Now, I quite accord with the sentiments, but declare that the statement is absolutely untrue. Students do not make experiments, and the very supposition is ridiculous, seeing that most experiments require all the sagacity and adroitness of the practised hand of the educated man to perform them. Nor is it true that the student witnesses experiments. Not one in a hundred, I believe I might say not one in five hundred, has ever witnessed an experiment on an animal. Experiments are not performed by lecturers, but usually by a few men in their licensed laboratories. It is true that some of the pictures which have been industriously circulated by anti-vivisectionists have been taken from physiological books, but that these are samples of what is going on in medical schools is untrue. It has been shown over and over again that the amount of suffering inflicted on animals by experimenters is infinitesimal compared with that produced by what is considered allowable for the exigencies of mankind. The scientist has the proud boast that he is the only man who anæsthetizes animals before operating upon them. Those who live near rabbit warrens can tell of the nocturnal cries of these mutilated creatures as they lie dying in the traps. Then, again, if the word cruelty be used in connection with these

experiments, the promoters and sanctioners of these acts must be cruel men. Now, for a moment, take the first ten names on the list of those who call themselves anti-vivisectionists, and ten of those who are opposed to them, and hand them to any person ignorant of your object, desiring him to state the apparent difference between them. Would anyone ever conceive that the difference between them was a moral one, and that cruelty was the vice which divided them? The mere suggestion only raises a smile. The difference lies in the fact that one list contains the names of men devoted to science, whilst the others are composed of literary men, clergymen, and some lawyers. This brings us back again to the same point. But it may be said, all that is meant by cruel is that the vivisectionist becomes hardened by the sight of suffering and of blood. If this be so, no better argument could be used in their favour, who believe that herein lies one great reason for the difference between the two antagonistic parties, that is, that it is one of sentiment. The thought of blood and other disagreeable sights is quite enough to settle the question in some minds. It might here be remarked that mere sensitiveness, as being necessarily associated with kindness of heart or active benevolence, and the converse, has been refuted over and over again. I knew a lady who dilated on her extreme sensibility and feeling, and, as a proof, she said if one of her children cut its finger, and she saw blood, she ran out of the room. I proved to her logically that John Howard, who could witness scenes which few could bear, must have been the most hard-hearted of men. Has a woman a tender heart towards the lower creatures who feels a thrill when she crushes a beetle, and then scolds the cook for not getting rid of the vermin by throwing them into the fire or into boiling water?

Now, I must add that much of the agitation against experimentation has been owing, not so much to this feeble reason I have given, but to a much more creditable one, although equally unreasonable, as being one of a personal kind, that is, an appeal to the feelings; making use of that much-abused Christian doctrine, to do to others as you would they should do to you; and so this feeling becomes the basis of their action. As an illustration, the question of allowing children to act on the stage came before the House of Lords. A benevolent nobleman said he had no difficulty in settling the question by applying the true Christian doctrine—would he like a daughter of his own to go on the stage? As he answered in the negative, a very important and large social question was peremptorily settled. In the same way I once heard an American gentleman arguing the question of vivisection with a fellow-countryman, and, after hearing his objections, said, “Are you thinking of your little Flo?” His opponent admitted it was so, when the other exclaimed that he would no longer argue the case with him. I think he was right, for I know for certainty that in many cases, especially of ladies, when you are arguing the question of vivisection on large and general principles, their mind is all the while on the possible sufferings of their little Flos. This *argumentum ad hominem*, which is considered so just, and is yet so erroneous in its application, was used formerly with much force against the dissectors of the dead, and is one even still used. It runs thus: “I should not like any child or relative of mine to be dissected. I ought, therefore, to act to others according to my own feelings, and consequently there should be no dissection.” Or: “Ought animals

to be experimented upon for scientific purposes?" Answer: "I should not like my little Flo to be operated upon, and, therefore, they ought not." This feeling largely influences a question which should be argued on other grounds. I should like to say one word in a parenthesis about dissection—to acquaint you with a fact perhaps unknown to most of my audience—that, owing to the very severe restrictions in the Anatomy Act, imposed mainly by the clergy, which required the burial of every dissected body, it has come to pass that it has been quite impossible during the last half-century for any medical man to have learned his anatomy, had England been an isolated country. During this period not a single skeleton has been made in England, nearly all of them being obtained from France, and a few from America. A considerable sum of money is paid by the medical schools every year for their importation. Every medical man of the present day has learned his anatomy from the bones of Frenchmen, and it is very fortunate for us that they do not much differ from our own. Thanks mainly to the clergy, this nation owes much to the French for our acquaintance with anatomy, and I do hope that you will not increase our debt by forcing us to go also to them still further for instruction in physiology and pathology. The agitation against experiments on animals is very much of the same kind as it formerly was against dissection, so that in the beginning of the last century it caused much rioting in many parts of Europe. Fortunately, that good and learned Pope, Benedict XIV., who was a great patron of science, made a decree that all patients dying in the hospital of Bologna should be dissected. His action in the matter created a school of medicine and science in his native city, which brought students from England and all parts of Europe, and made it the most famous in the world. You cannot do better than follow the example of that good Pope.

There are one or two side issues, which, if time allowed, might with value be dwelt upon; one refers to the question sometimes put, Might not all the knowledge we require be obtained without these experiments? Such a question could only be asked by someone who had had no scientific reading, for otherwise he would know that experiment lies at the basis of all knowledge. The Greeks were wonderful observers, but gained very little insight into the nature of the material world. With Bacon first came the method of investigation. The substance of the earth, for example, is of too complex a nature to be known until fire is applied to it, and a number of other powerful agents to decompose and disintegrate it. To know anything of the nature of an object you must see it under different relations, and this is done by experimentation. How can it be known what food is essential to an animal's existence without trying various kinds? and this is an experiment—whether cruel or not is an entirely different question. Whenever a new relation takes place between the earth, sun, and planets, a grand experiment is being made, and persons will travel round the globe at the expense of thousands of pounds to witness an eclipse of the sun or transit of Venus.

Now there is another point which should not be forgotten; that the love of scientific enquiry cannot be suppressed by Act of Parliament any more than any other passion of the mind. It is as utterly useless as to try and put down the cultivation of music or painting.

We have heard of the boy who, to avoid his father's displeasure, went to the hayloft to play his violin, and another who cultivated drawing by means of a rushlight in his garret. We read of Pascal doing his mathematical problems with a piece of chalk on the floor, or the shepherd boy Ferguson lying out in the fields measuring the course of the planets. We find in the same way naturalists travelling through pathless forests in America in search of some new butterflies, or, as I was lately reading, of a professor who spent months in the wildest parts of Australia in search of a fish whose internal structure he was anxious to examine. The impulse to penetrate into the secrets of nature is quite as strong as the passion for cultivating the fine arts. Neither one or the other can be suppressed by Act of Parliament, in other words, by the will of the majority of the people. What happens at the present day as regards any young man pursuing his investigations, say into the nature of the woolsorter's disease, and wishing to make a few experiments on animals, but unable to obtain a license, is that he goes to France or Germany to perform them. I do not know what might happen if this outlet for his energies did not exist; at present he certainly does not break the law; Englishmen are a law-abiding people, and I have never heard of a single instance of anyone breaking the law respecting experimentation on animals. A young man, a colleague of my own, now unfortunately for the sake of science deceased, became as a student ardently desirous of making some further discoveries into the nature of many properties of the blood, which would explain several morbid phenomena. By dint of hard work, in three short years of his life he made some most important researches and gained a European fame. His friends, his family, his countrymen, are proud of the renown he gained, but they scarcely realize the fact that he was driven from his country to do all his work at Leipsic. It should also be known that not only is this ardour instinctive in the breasts of many young men, but they are urged on to their investigations by their teachers and by the colleges. Even the venerable College of Physicians in its yearly meeting, in commemoration of Harvey, enforces the doctrine which he left as a legacy to his successors to search out the secrets of nature by way of experiment. The Anti-Vivisection Society should know what it has to contend against.

Now what has been my argument? That an immense amount of suffering exists in the world irrespective of man, and in places where man has never set foot; then, that the relations between man and the lower animals have never been defined; that right has been might, and they have been treated just as man willed; that although individuals may have been merciful, there has been no national recognition of cruelty until the Cruelty to Animals Act was framed, and this has only a very partial, individual, and one-sided action. According to the "Zoopholist" the Church has never raised its voice as a body to plead for the lower animals. The tacit understanding of the nation has been that pain and suffering are not to be taken into account if our needs or pleasures demand them. Not only is this the accepted view, but the judges have stated in distinct phraseology that this is the correct view. Cruelty cannot be considered by itself, it is purely relative, and has to do with the advantages derived in connection with it. It being then admitted

by all that cruelty is to be determined by utility, the anti-vivisectionist, logically enough, says that experiments made for physiological and pathological purposes being useless are therefore cruel, and ought not to be allowed. Those who peruse the journals of this sect know that their opposition to Pasteur's work is based on this supposition. They will see pages with black edges giving accounts of Pasteur's fresh victims. As before said, there are many who openly and honestly confess that their use of the term inutility is not in reference to any particular case—that of Pasteur's as treatment of hydrophobia—but is rather expressive of their general feeling towards the valuelessness of all physiological enquiry, even if discoveries are made. That this feeling is the main-spring of nearly all the opposition, I have no doubt, seeing that I am unaware of any known scientific man who has written against the practice of vivisection, whereas on the other hand, there is no one who inveighs against vivisection but takes the opportunity of attacking all scientists, and especially physiologists. A physiologist is a bad, coarse sort of man, whether he makes experiments or not.

What is this Congress asked to do? not to discuss the question of man's relation to the lower animal world; not for the first time in Church history to take up the question of cruelty to animals, but to support the cry to stay educated men, gentlemen, professors, those who have a moral charge over students, from performing any experiments on animals, because, they say, those experiments are useless. Are you going to decide the question? I hope not. You surely would not follow the example of Cardinal Manning, who, shortly after the unanimous vote of the Medical Congress in favour of experimentation, informed a public meeting over which he presided that not a single discovery had been made through the practice of vivisection. An opinion of this kind, wherever given, could have no other effect than that of raising a smile. I personally would rather that you did not express an opinion at all, but merely stand aloof, declaring that you saw no reason to interfere with scientific men. Perhaps if I had the forming of a resolution myself, I should have preferred it to have run in this wise: "Seeing that the amount of suffering to animals is very great in supplying the wants of man, and therefore worthy of the consideration of Congress; but hearing that the pain inflicted on them by experimentation for scientific enquiry is comparatively small, and also hearing from those who are alone competent to judge that the knowledge thus obtained is eminently useful, we cannot as a body declare our disapproval of the so-called vivisection."

Now I make my appeal. Considering that the Church has never as a body raised its voice against different forms of cruelty to animals, I would ask you as a body of educated and enlightened men not to join the crowd of ignorant persons, sentimentalists, and haters of knowledge, and for the first time in your history when the subject of cruelty has come before you, to entirely overlook many of the grosser forms, but pick out that particular form of cruelty (if you prefer the term) which has for its object the acquisition of knowledge, and declare to the country that it ought to be suppressed. I hope we shall be no more benighted than old Horace who said *nescire malum est*. We often hear with sorrow of the opposition between religion and science; I do hope for the love which we all bear the Church that you will do nothing to strengthen that feeling.

