

however, mindful of the rights of the individual, and of the State, are woefully blind to the needs of suffering humanity.

That these men, members, as Prof. Yeo has so aptly termed them, of "The Society for the Maintenance of Darkness," will finally be overcome, and made to understand the great wrong they are undoubtedly inflicting upon their fellows, I feel fully convinced. That the time may not be far distant is the hope of every earnest worker in the field of medical science.

There are many such workers scattered over the continents of Europe and America, and upon the shoulders of these must the burden of the work now rest. It is a cause for deep regret, that those who have contributed so much to bring our science to its present high position, should be shut out from that which has been their life's work, a work which has for its single object the saving of human life and the alleviation of human suffering. That these men, among whom are the most benevolent and philanthropic men living, should be hampered and retarded by a set of provisions, alike remarkable for their quibbling exclusiveness and their ignorant hostility, seems almost incredible. Whether or not those who oppose Vivisection are capable of appreciating the discovery of the circulation of the blood appears to be doubtful; judging from their apparent knowledge of physiology, which in some cases is simply a mass of limited and confused ideas, and in the vast majority absolutely nil, I should say they were not.

That incomparable discovery of Harvey, made in the year 1616, completely revolutionised the whole fabric of Physiology, which had hitherto rested upon the most erroneous theories; it led up to the further elaboration of the various functions and relations of the respiratory and circulatory systems, and formed the starting point of a new epoch of Physiological Science, as far removed from that which had gone before it as the day is from the night.

And this discovery, in all its details, was the outcome of experiments upon living animals; but before proceeding to show that this was the case, let us look for a few moments at the state of things prior to Harvey's discovery.

Dating back from Harvey to Galen we have a distinct period, during which, Physiology remained in some respects almost at a standstill.

Galen, who lived about the year 160 A.D., forms the most prominent landmark in Medical History during those times; he was a most earnest and scientific worker, and gained a great part of his physiological knowledge by numerous and careful vivisections.

The erroneous and in some cases mysterious views which were held by this celebrated physician are too well known to demand more than a passing reminder, for the purpose of showing how these have been entirely overthrown by vivisectional experiments.

The slow and laboured ascent from the *ἔμφυτον θεριον* of Hippocrates up to the *πνευμα* or "Ethereal Spirit" of Galen, and from thence up to the present high standard of Medical Science, can only be followed and appreciated by a careful study of the History of Medicine from the earliest times to the present day.

After Galen came Servetus, Vesalius, Columbus, Cesalpini, whose numerous experiments added somewhat to the original doctrines of their predecessor; but they were all, nevertheless, completely in the dark as to the true course of the circulation, although some among them, more especially Servetus, came comparatively near the mark.

It was only by a very large number of vivisections that Harvey was able to elaborate and establish upon a firm and impregnable foundation his great discovery; as he says himself, "It was only by daily diligence in vivisection on a variety of animals that he thought he had obtained the truth."