

Who, for instance, could foresee that a simple physiological preparation, the leg of a frog with its living but non-sentient nerve in the hands of Galvani, was to be the origin of Galvanism, electricity, and allied subjects?

If one urge that experiments may be performed on one class of animals and not on another, it may be said in reply that no two persons could agree where to draw the line between the tadpole and the dog, and some might even include within the pale the phylloxera that formerly destroyed the vineyards of a nation.

For the benefit of those who deny that utility and morality have any interdependence it will be necessary to refer to the ethics of vivisection. If there is a moral wrong involved in experimenting on animals, then, they say, no considerations of utility can justify it, even if by the death of one animal the light would break upon the pestilence that stalketh in the darkness, that there may be a knowledge which man is bound to forego, and that the alleviation of pain is not the highest good. According to the same principle, it were better to starve than to do that violence to the moral nature which is involved in the death of a creature. They say that honor should deter man from exercising the tyrant's power, which nature has given him, and that is well nigh impossible to deal rightly with animals when men are at the same time judge, accuser, witness, and culprit.

Another class of objectors resist scientific research because it loves what art hates, analysis; and yet another class, because they accuse it of attempting to reduce God to a "physical necessity." To the one it may be said that art itself must have a basis in truth, and "to the solid ground of nature trusts the mind which builds for aye." The other class of objectors is urged to remember that the "Kingdom of God is within."

But the greatest show of reason is with those who object on what they call "moral grounds." Arguments have been urged against them by Virchow, who held that an animal was a man's "honestly bought chattel," and by Dr. Carpenter, who affirmed that moral duties exist only towards those possessing moral responsibility, but these do not meet the case. As reasoning beings, we can only be reasonable when we deal with the facts around us as we find them. It would be easy to conjure up Swift's land of the "houyhnhnms," where the relations between men and beasts were reversed, but with this condition we have not to do; there is no brotherhood between man and beasts. Without insisting too strongly on the fiat which went forth in the world's first spring time, "Let man have dominion over the fish of the sea and over the fowl of the air, and over the cattle, and over all the earth," it