Quotes on and by **James Clerk Maxwell** from "The Man Who Changed Everything" by **Basil Mahon**

1 Quotes about Maxwell or his physics

[Maxwell was] to physicists, easily the most magical figure of the nineteenth century.

From the **Times Literary Supplement** editorial of 1925 (preserved in the Trinity College Library, Cambridge)

One scientific epoch ended and another began with James Clerk Maxwell.

Albert Einstein

From a long view of the history of mankind – seen from, say, ten thousand years from now – there can be little doubt that the most significant event of the nine-teenth century will be judged as Maxwell's discovery of the laws of electrodynamics.

Richard Feynman

I can hardly imagine anyone who practically and numerically knows the agreement [between calculations based on action at a distinct and experimental results] to hesitate an instant between this simple and precise action on the one hand and anything so vague and varying as lines of force on the other.

Sir George Airy, the Astronomer Royal, on whether objects interact with each other through action at a distance or lines of force.

2 Quotes by Maxwell

... I think that the results which each man arrives at in his attempts to harmonise his science with his Christianity ought not to be regarded as having any significance except to the man himself, and to him only for a time, and should not receive the stamp of a society. For it is in the nature of science, especifally those branches of science which are spreading into unknown regions, to be continually changing.

In his letter declining the invitation to join the Victoria Institute, an eminent organisation specifically set up to establish common ground between Christianity and science.

... I see daily more reason to believe that the study of the 'dark sciences' is one which will repay investigation. I think that what is called the proneness to superstition in the present day is much more significant than some make it. The prevalence of a misdirected tendency proves the misdirection of a prevalant tendency. It is the nature and object of this tendency that calls for examination.

In a letter to his friend R.B. Litchfield voicing his concern that so many people were ready to accept claims that "dark" (paranormal) forces were at work.

I have no reason to believe that the human intellect is able to weave a system of physics out of its own resources without experimental labour. Whenever the attempt has been made it has resulted in an unnatural and self-contradictory mass of rubbish.

Faraday ... shows us his unsuccessful as well as his successful experiments, and his crude ideas as well as his developed ones, and the reader, however inferior to him in inductive power, feels sympathy even more than admiration, and is tempted to believe that, if he had the opportunity, he too would be a discoverer.

From Maxwell's "Treatise on Electricity and Magnetism"

My duty is to give you the requisite foundation and to allow your thoughts to arrange themselves freely. It is best that every man should be settled in his own mind, and not be led into other men's ways of thinking under the pretence of studying science. By a careful and diligent study of natural laws I trust that we shall at least escape the dangers of vague and desultory modes of thought and acquire a habit of healthy and vigorous thinking which will enable us to recognise error in all the popular forms in which it appears and to seize and hold fast truth whether it be old or new.

Maxwell's philosophy of teaching as voiced to his students.