

Adelaide, Saturday, October 3, 1931.

Century of Science

THE meeting in London this week of the British Association for the Advancement of Science marked its centenary. The first meeting, held in York in 1831, was the outcome of a prevailing impression that England had fallen behind other countries, both as to the general estimation in which scientific men were held and the prosecution of science itself.

What epoch-making discoveries have been recorded since that first meeting? Scientific thought has been completely revolutionised. First came the Darwinian theory, then discoveries in astronomy, and later discoveries about the nature of the atom.

Many times in the course of the centuries science has given man a new world. It was a new world that Galileo discovered when he earth ceded to the sun the place of honor as the centre of our system. It was a new world that Newton revealed when he formulated the most universal of Nature's laws. It was a new world that Darwin disclosed when he discovered man to be the blood relation of the lower animals; again a new world was revealed by Sir J. J. Thomson and Sir Ernest Rutherford when it was found that the solid material world, when reduced to the lowest factor, was an immaterial world of radiating electrons, and it is a new world that Einstein with his Fourth Dimension has given glimpses of.

It was in 1859 that Darwin startled the scientific world and frightened the religious world with the publication of his work "The Origin of Species," which he followed a few years later with "The Descent of Man." This was the first big revolutionary event since the formation of the association. Man up till that time had been regarded as a special creation. The storm which the theory of Darwin raised is now only a matter of historical interest, but it raged for many years.

The general doctrine of evolution influenced, as time went on, many branches of science; it was an inspiration to investigators not only in biological science, but in the realm of Nature.

In other branches of science remarkable progress has been made. Mathematicians have done many wonderful things. When the British Association was formed astronomy appeared to be almost a complete science. All that was needed, so it was thought, was the collection of a few additional observations. There was nothing much more to discover. But the spectroscope has been brought to the aid of the astronomer's telescope and novel, and unexpected advances have been made in the knowledge of the celestial bodies. The element, helium, which was not known on earth, was first detected in the sun by means of the spectroscope. It was 25 years later before it was recognised on this earth.

In the application of scientific discoveries progress has been startling. Wireless has become a commonplace and television is on the threshold. Aeroplanes are travelling at what we now regard as phenomenal speeds, motor cars are almost foolproof, and mammoth liners, driven by oil, are more palatial than our forefathers dreamed of. Here in South Australia sheep are being bred to give more and better wool, and experiments are in hand to produce a wheat which will mature before the coming of the hot winds in October.

All the world over the restless genius of man—and of woman—is trying to wrest the secrets of Nature—on the ground, up in the air, and under the water.

He would be a bold man indeed who would attempt to predict the advances which will have been made when the British Association meets to celebrate its second centenary.