

handedness) *so long as they were mixed or combined with inactive substances only*, but M. Pasteur found that this is no longer the case when they are combined with active substances, as for example the organic alkaloids, in which case the salts obtained differ widely in solubility, crystalline form, &c.

It is to the stimulus afforded by the investigations of M. Pasteur that we must ascribe the more recent discovery by M. Marbach, that several crystals belonging to the cubical system possess the power of rotating the plane of polarization. Thus M. Pasteur's original discovery has already begun to bear fruit in discoveries made by others.

DR. SHARPEY, in the absence of the Foreign Secretary,

I request that you will transmit this Medal to M. Pasteur, in testimony of the value which we attach to his brilliant discovery.

Your Council have awarded one of the Royal Medals to Sir John Richardson. His claims to that honour as a most distinguished naturalist and scientific traveller, will I am sure be generally admitted. Sir J. Richardson's earliest work on Zoology appeared about the year 1823, but his first great work was published in 1829, namely the 'Fauna Boreali-Americana,' in which he has described the Quadrupeds and Fishes of the Arctic Regions, and with Mr. Swainson's aid, the Birds; the merits of this work, in the very accurate descriptions of the species, in the great amount of information on their habits and ranges, are admitted to be of the highest order. Since that period Sir J. Richardson has published largely on various branches of zoology, physical geography, and meteorology. His Reports to the British Association, on the Fishes of New Zealand and of China, are extremely interesting under many points of view. Another Report to the same body on the General Zoology of North America, is a most valuable contribution to science. His later works, which here must be more particularly considered, are the 'Zoology of the Voyages of the Terror and of the Herald,' in which he has described the Fishes and Reptiles collected during those expeditions, and given an account of some of the great extinct mammifers of the Arctic countries, with very interesting observations on their ancient relations and ranges. He has also lately contributed to the Geolo-

gical Journal a valuable paper, in which he has made known the presence of tertiary strata abounding with vegetable remains, in districts now rendered sterile by the extreme cold. Altogether I think there can be no doubt that the merits of Sir John Richardson, as a philosophical naturalist, are of a very high order.

It is not within our province to reward his other claims to distinction; but all will rejoice, that in the conscientious discharge of a delicate and important duty, the Council have been able to bestow a Medal on one, who has earned the applause of all who have watched his career, for his patient endurance and fortitude under incredible hardships in his first Arctic Expedition in company with Franklin, and again for his chivalrous self-devotion in the cause of friendship and science combined, at a period of life when most men resolve to rest from their labours, or at least would hesitate to encounter the fatigues and dangers of a Polar Expedition, the anticipation of which must have been more appalling to one, who had bitter experience of their painful reality.

SIR J. RICHARDSON,

Accept this Medal as a token of our respect for your scientific labours and character.

The other Royal Medal has been awarded to Professor Thomson, whose labours in the cause of science are well known to scientific men. Yet the brief reference which can now be made to the Memoirs which he has written, will convey but an imperfect notion of the services which he has rendered; for the zeal with which he is inspired, his clear apprehension of mathematical and physical truths, and the freedom with which he communicates his ideas, have powerfully contributed to stimulate others in the pursuit of truth, and direct them into right paths. Shortly after graduating in the University of Cambridge he undertook the task of editing the Cambridge Mathematical Journal, which under his auspices was placed on an enlarged basis, under the title of the 'Cambridge and Dublin Mathematical Journal,' and is well known to the mathematicians of Europe. This Journal, as well as its predecessor the 'Cambridge Mathematical Journal,' is enriched by numerous contributions from the pen of Professor Thomson on various subjects, especially the mathematical theories