

**Rotary Electric Coefficients of Metals.**—Dr. E. H. Hall, of Baltimore, communicated a paper to the British Association upon his electric discovery, giving calculations of the degree of rotation produced by a unit of section of various substances; some of the rotations being positive, others negative. Sir Wm. Thompson regarded the communication as the most important that has been made to electrical science since the days of Faraday. It would be interesting, in view of the nature of electricity and of the properties of matter, to know whether there is a direct action of the magnetism upon the current, or whether the action is upon the distribution of the material molecules, changing the molecular constitution and thus changing the conditions of the propagation of the current.—*L'Electricien*. C.

**Metallic Cæsium and Rubidium.**—The discovery of cæsium and rubidium was one of the first triumphs of spectrum analysis. They are the most electro-positive of all the known elements; their affinity for oxygen is so great that it has hitherto been impossible to obtain cæsium in the metallic state. The problem, however, has just been resolved by M. Lettenberg by the electrolysis of a melted mixture of cyanide of cæsium and cyanide of barium, of which the experimenter obtained a large quantity at an enormous price. Cæsium is like the other alkaline metals, of a silvery whiteness, very soft and very ductile. Its melting point is  $25\cdot3$  ( $77\cdot54$  F.), and its specific gravity 1·88. It inflames spontaneously in the air, and when thrown upon water it behaves like sodium, potassium and rubidium.—*Les Mondes*. C.

**Pompeian Surgery.**—Every one who has visited the ruins of Pompeii knows the house of the surgeon, and has heard of the numerous surgical instruments which were found in it at the moment of excavation. Nearly every instrument is now in use, especially in country practice. When we remember that Pompeii was not a city of the first class, but a simple municipality, a borough of small importance in comparison with Naples, it seems remarkable that the Pompeian surgery should have been as thorough and as scientific as it is at the present day in French towns of similar magnitude. The fact is perhaps partly attributable to the influence of the neighboring schools of Magna Græcia, and yet whenever chance permits us, as at Pompeii, to spend a day with men of a former age there is always occasion for surprise that so little change has been made in the most important details of domestic life.—*Les Mondes*. C.