

as the title-deeds of any kind of property. The commissioners to be selected by the Privy Council from among men who are intimately acquainted with the arts and the sciences. I would extend the term of the patent to twenty years, and make the cost payable in four periods of five years, charging 50*l.* for each. This also might tend to restrict the number of patents applied for. I would leave the granting of licenses entirely to the patentee. It may suit his convenience to carry on the manufacture of his invention himself, better than to grant licenses to others to oppose him; and if he has the monopoly conferred upon him, he ought to be allowed to make use of it as he thinks proper. You have no more right to demand that a monopolist should grant a license than I have to drive my cattle into my neighbour's field. It appears to me to be absolutely impossible to fix the price for royalty on the granting of a patent; that, of course, must altogether depend upon the value of the invention, which cannot possibly be ascertained until some years after the patent is granted. We might as well attempt to fix the price for ten years of any commodity sold by shopkeepers, or of land to be sold. I propose to grant patents for inventions, whether they are made by foreigners or British subjects. I would propose the infliction of imprisonment in the case of any one infringing a patent, and having previously been convicted of the same offence. If this remedy were adopted we should have fewer rogues to deal with in patent cases, and the inventor might have the enjoyment of his monopoly. Since I began my proposed amendment of the patent laws in 1848, I have had more dishonesty to contend with than I hope may ever fall to the lot of any patentee. I have had fourteen years' litigation in defending the patent for my invention "for laying down submarine cables" against infringement, by Glass and Elliot, the Telegraph Construction Company, and others. Instead of being rewarded for a most valuable invention, without which the Atlantic, Indian, and other cables could not have been laid down, I have had to spend years in attending to law, and the expenses have amounted to thousands of pounds, whilst the pirates have made large fortunes by means of my invention.

PHILADELPHIA

American Philosophical Society, April 15.—Prof. Cope exhibited the greater part of the skeleton of an extinct crocodilian from the Cretaceous Greensand of New Jersey, which represented a new species of the genus *Bottosomus*, which he called *B. tuberculatus*. It displayed marked characters of the genus not before ascertained. Dr. Hayden called attention to numerous points in the topography and geology of the Rocky Mountain region, exhibiting photographs in illustration of them.

May 6.—A paper by Prof. Alex. Winchell, of the University of Michigan, was read, entitled, "On the Geological Character and Equivalents of the Marshall Group in the United States."—An obituary notice of Horace Binney, jun., was read by Prof. C. J. Stille.—A description of some beads of complex construction found in an Indian grave on the Susquehanna River, in Pennsylvania, by Prof. S. S. Holdeman, was read by the Secretary. They were described as ovoid, apparently made from parts of four concentric cylinders of blue and white material, the blue ridged so as to give a striated appearance to the coloration.—Prof. Harrison Allen read a paper entitled, "Some effects of Age, as observed in the Osseous System," illustrated by changes in the forms of the pterygoid alæ, malar bone, &c.—Prof. Cope read a paper "On the Fishes of the Tertiary Shales of Green River, Wyoming territory," in which the fragment of the fauna described was indicated as presenting resemblances to that of Monte Bolca. Prof. Cope also exhibited the cranium of a Dicynodont reptile from the Cape Colony, which he regarded as new, and called it *Lystrosaurus frontosus*. The genus was near *Ptychognathus*, but differed in the horizontal shovel-like mandible received within the upper. The species was near the *Pt. latifrons* (Owen), but differed in the breadth of cranium exceeding the length, great interorbital width, prominent orbital tuberosities, very narrow front, &c. He exhibited specimens of more or less imperfect tusks from the Trias of Pennsylvania, which he referred to Dicynodont reptiles.—Prof. F. V. Hayden communicated an essay on the stratigraphy of certain tertiary rocks on the line of the Pacific Railroad, including, among others, a section of a remarkable anticlinal in the basin of Utah. The strata exhibited in this section embrace two hundred distinct layers, varying from two inches to four feet in thickness. At the eastern extremity they are vertical, at the

western they are bent in the form of a bow. It is a remarkable illustration of an arch unaffected by heat that Dr. Hayden had seen in the West. Some of the layers were composed of fossil shells, among others, *Unio*, *Paludina*, *Corbula*, &c.; the species few, but the individuals numerous.

DIARY

THURSDAY, JUNE 2.

LINNEAN SOCIETY, at 8.—On some New Forms of Trichopterous Insects.
CHEMICAL SOCIETY, at 8.—On the Platinum Ammonias: Dr. Odling.
ROYAL INSTITUTION, at 3.—Electricity: Prof. Tyndall.

FRIDAY, JUNE 3.

ROYAL INSTITUTION, at 8.—Migration of Fables: Prof. Max Müller.
GEOLOGISTS' ASSOCIATION, at 8.

SATURDAY, JUNE 4.

ROYAL INSTITUTION, at 3.—Comets: Prof. Grant.

MONDAY, JUNE 6.

ENTOMOLOGICAL SOCIETY, at 7.
LONDON INSTITUTION, at 4.—Botany: Prof. Bentley.

TUESDAY, JUNE 7.

ROYAL INSTITUTION, at 3.—Present English History: Prof. Seeley.
ETHNOLOGICAL SOCIETY, at 8.30 (at the Museum of Practical Geology).—On the Geographical Distribution of the Chief Modifications of Mankind: Prof. Huxley.

WEDNESDAY, JUNE 8.

GEOLOGICAL SOCIETY, at 8.
ROYAL MICROSCOPICAL SOCIETY, at 8.—Experiments on Fermentation and Parasitic Fungi: John Bell.—A New Form of Binocular Microscope: John W. Stephenson.

THURSDAY, JUNE 9.

ZOOLOGICAL SOCIETY, at 8.30.
MATHEMATICAL SOCIETY, at 8.
ROYAL INSTITUTION, at 3.—Electricity: Prof. Tyndall.

BOOKS RECEIVED

ENGLISH.—The Interior of the Earth: H. P. Malet (Hodder and Stoughton).—The Modern Practical Angler; H. C. Pennell (Warne and Co.).—Primitive Man: L. Figuier (Chapman and Hall).—Water Analysis: J. A. Wanklyn (Trübner and Co.).—Rustic Adornments for Homes of Taste: Shirley Hibberd, new edition (Groombridge and Co.).—The Student's Flora of the British Islands: Dr. J. D. Hooker (Macmillan and Co.).

FOREIGN (through Williams and Norgate).—Die Pflanzenstoffe, zweite Lieferung: Dr. A. Husemann.—Précis de Paléontologie humaine: E. T. Hamy.—Die Gestaltung der Erdoberfläche nach bestimmten Gesetzen: O. Reichenbach.

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