PARIS.

Academy of Sciences, March 21.—M. Mascart in the chair.—On hypoabelian groups: Camille **Jordan.**—New researches on the density of fluorine: Henri **Moissan** (see p. 520).—On an African trypanosome, pathogenic for horses: A. **Laveran** and F. **Mesnil.** In the course of their researches on human trypanosomiasis, Messrs. Dutton and Todd have discovered a new trypanosome which is pathogenic to horses, and to which they give the name of *Tr. dimorphon.* A comparison of this trypanosome with *Tr. gambiense* shows that the two species are morphologically distinct. That they are distinct species is also shown by the fact that animals which have acquired immunity for *Tr. gambiense* are still sensible to *Tr. dimorphon*; human serum, which is without action upon *Tr. gambiense,* has a feeble but distinct action upon the other species. The general conclusions of Dutton and Todd are confirmed.—On some formulæ useful in discussing the stability of a vitreous medium: P. **Duhem.**—On the general conditions and unity of formation of combustible minerals of all ages and of all species: M. **Grand'Eury.** The author regards all Coal-measures, of whatever epoch, as being formed under water in a similar manner by the débris of marshy vegetation.—On forms decomposable into linear factors: F. **Hocevar.**—The law of disappearance of the activity induced by radium after heating the substances rendered active: P. **Curie** and J. **Danne.** Plates of platinum, which had been exposed for some time to the action of radium, were heated to different temperatures, and the rate of loss of activity studied at the room temperature. The curves, taking time as the abscissæ and the logarithm of the intensity of radiation as the ordinates, become linear at the higher temperatures.—The study and comparison of the methods of reduction of magnetic hysteresis: Ch. **Moureu.** The hysteresis may be suppressed by the action of an oscillating magnetic field.—The action of magnetism on phosphorescence: Alex. **de Hemptinne.** All phosphorescent substances do not appear to be equally susceptible to the action of a magnetic field.—The application of the electric spark to the chronophotography of rapid movements: Lucien **Bull.** An instrument is described which is capable of taking 1500 images per second.—The study of colloidal solutions: Victor **Henri** and André **Mayer.** It has been generally held that the phase rule cannot serve as a guide in the case of colloidal solutions. The author holds that the phase rule may be applied to the systematic study of the precipitation of colloids whenever the phenomena of precipitation are reversible.—The transformation of oxides and oxygenated salts into chlorides: C. **Matignon** and F. **Bourion.** Further applications are given of the use of a mixture of chlorine and sulphur chloride in the preparation of anhydrous chlorides. The substances studied include tungstic acid, chromic and ferric oxides, the oxides of nickel and cobalt, zinc, manganese and tin, boric anhydride and the sulphates of barium and calcium. In the last two cases the transformation is so complete that the reaction may serve as the basis of a quantitative method.—The lead and silver salts of the monoalkylphosphoric acids: J. **Cavalier.**—Arnisterine, the phytosterine of *Arnica montana*: T. **Klobb.**—On some aminoalcohols with alcoholic function of the type $R.C(OH)(CH_3).CH_2.N(CH_3)_2$: E. **Fourneau.**—*Hyphoene coriacea,* the textile palm of Madagascar: Pascal **Claverie.**—On the persistence of alternate structure in some Labiates: G. **Chauveaud.**—Specific action of some parts of the body on certain phosphorescent screens: Augustin **Charpentier.**—On the colour reactions resulting from the action of tyrosinase: C. **Gessard.**—On the presence of an apparatus for accommodation in the compound eyes of certain insects: Pierre **Vigier.** Proofs are given of the existence in the compound eyes of Aeschna of a real accommodation apparatus, allowing of the adaptation of the sight to different distances.—Study of the law of action of maltase. The influence of the concentration of the maltose: E. F. **Terroine.** The influence of the concentration of the maltose is similar to the cases of invertine, emulsin, amylase and trypsin.—Studies on the action of maltase. The constancy of the ferment: Mlle. Ch. **Philoche.** When maltase from Taka diastase is allowed to act at 40° C. the activity of the ferment undergoes no appreciable change in the first twenty-four hours.—On the duration of the treatment of arterial hypertension in arteriosclerosis by d'Arsonvalisation: A. **Moutier.** Under appropriate diet, the arterial tension in patients suffering from arteriosclerosis can be rapidly reduced to the normal by the use of high frequency currents.—The action of metals in the colloidal state and of artificial oxidases on the evolution of infectious diseases: Albert **Robin** and G. **Bardet.**—The action of formic acid on the muscular system: E. **Clement.** Sodium formate increases the muscular power and also the resistance to fatigue to a marked extent.—The fusion of ice by electricity, and the application of this principle to navigation in Arctic seas: F. Romanet **du Caillaud.**

DIARY OF SOCIETIES.

TUESDAY, APRIL 5.

NATIONAL ASSOCIATION OF MANUAL TRAINING TEACHERS.—Annual Conference at Hastings, at 3.—The Psychological Importance of Manual Training: Sir John Cockburn.

THURSDAY, APRIL 7.

LINNEAN SOCIETY, at 8.—The Morphology and Anatomy of the Stem of the Genus Lycopodium: C. E. Jones.

RÖNTGEN SOCIETY, at 8.30.—Exhibition Evening.

FRIDAY, APRIL 8.

GEOLOGISTS' ASSOCIATION, at 8.—On the Metamorphism of Sediments: G. Barrow.

MALACOLOGICAL SOCIETY, at 8.—Description of apparently New Species of Corbicula, Melania, Vivipara and Lagochilus from Java: Rev. R. Ashington Bullen.—The Hawaiian species of Opeas: E. R. Sykes.—On some Non-marine Hawaiian Mollusca: C. F. Ancey.—Description of a New Species of Ancilla from New Zealand: Rev. W. H. Webster.—Report on a Small Collection of Helicoids from British New Guinea, with Description of a New Species: G. K. Gude.

ROYAL ASTRONOMICAL SOCIETY, at 5.

CONTENTS.