

hope you will allow me to make known in your forthcoming publication a fact in thermo-electricity which I have observed since my last communication to you, and which I believe has not been noticed in print in this or any other country.

"With a pair of metallic elements, consisting of one bismuth and one antimony, weighing each five grains and measuring 0.5 of an inch long and 0.12 diameter, when their extremities were unevenly heated, I have obtained with a Henry's flat ribbon coil, a very perceptible and brilliant spark.

"I have had the pleasure of showing the experiment to MM. De la Rive, Plateau and Netschayef, and I need not add that these distinguished philosophers were much delighted on seeing the thermo-electric light developed by a single pair of metallic elements."

Medical Mission to China

THE following announcement is contained in the *British and Foreign Medical Review* of October, 1837: "The London Missionary Society is desirous of finding medical men adapted to execute its benevolent designs for the improvement of the vast and interesting population of China. To candidates properly qualified such an undertaking must be highly attractive. In a scientific point of view China presents a field of observation of great variety and extent. With slight exceptions the state of medical knowledge is extremely low and defective, and notwithstanding their inordinate national vanity, many of the inhabitants are beginning to recognize the superiority of Europeans in this as in many other departments. A competent endowment of medical science and more especially a talent for operative and ophthalmic surgery, would be a sure passport of popularity and reputation under such circumstances; and we can hardly imagine a situation more calculated to excite and gratify the honourable ambition and philanthropic feelings of generous and adventurous work."

The Medical Literature of Norway

THE following extract is taken from a paper in the *British and Foreign Medical Review* of October, 1837, by Prof. Frederick Holst, professor of medicine at the Royal Frederick's University at Christiania: "The medical literature of Norway is but of small extent, and will probably always continue such in proportion to the population; as the latter is not great, the medical practitioners are but few, and the language of the country is understood by very few out of Scandinavia. Consequently, neither the medical man who might feel inclined to come forward as an author, nor the bookseller who is able to undertake the cost of printing the work, has the same encouragement as in other countries. It would therefore be unjust to consider the paucity of literary productions in that country as a proof of the incompetence of its medical men. The facilities of communication with other countries makes them pretty soon acquainted with foreign publications on subjects in their department; and in Norway there is no well-informed practitioner who does not take one or more of the best foreign medical journals, and procure the more important works by foreign medical writers. The medical works that have appeared in Norway have, in almost every instance, been called forth by particular occasions, or possess merely a private or local interest."

Societies and Academies

Paris

Academy of Sciences, July 26 (*C.R.*, 205, 265-300).

NIKOLA OBRECHKOFF: The solutions of a system of linear finite difference equations of the first order with constant coefficients.

JEAN LERAY: Discussion of the problem of Dirichlet.

FOLKE ODQVIST: Complete equations of equilibrium of thin elastic skew layers.

GEORGES CARPÉNI: The dissociation constants of *d*-glucoascorbic acid and of its product of oxidation by iodine. The absorption ultra-violet spectra of *d*-glucoascorbic acid.

HENRI MOUREU, MICHEL MAGAT and GEORGES WÉTROFF: The Raman spectra of the two forms of phosphorus pentachloride. From the study of the Raman spectra of phosphorus pentachloride in the solid and liquid states, it is found that this substance has two distinct molecular forms, changing from one to the other on fusion. The partially fused substance shows the two spectra superposed. In liquid form the molecule possesses the symmetry of a trigonal bipyramid; the Raman spectrum of the solid form can be interpreted in more than one way. The Langmuir formula $(\text{PCl}_4)_n + \text{Cl}^-$ is consistent with the results.

MOÏSE NEUMANN and PAUL TOUTAKIN: The dissociation of peroxides and the cold flame of hydrocarbons. Experiments confirming the theory of Aïvazov and Neumann on the formation of cold flames during the oxidation of hydrocarbons, the intermediate oxidation product being a peroxide.

MILLE. ALICE LACOURT: The volumetric micro-estimation of oxygen (ter Meulen method).

FÉLIX FRANÇOIS and MILLE. MARIE LOUISE DELWAULLE: The isothermal decomposition of the nickel peroxides.

DINAH ABRAGAM and YVES DEUX: The fixation of hypochlorous acid on phenylbutadiene and the isomerization of the corresponding epoxide into phenylcrotonaldehyde.

MIGUEL POCTIVAS and MLE. BIANCA TCHOUBAR: The action of $\text{C}_2\text{H}_5\text{MgBr}$ and of MgBr_2 on the oxide of dimethylstyrolene.

EDOUARD ROCH: The Oligo-Miocene of the southern slope of the Moroccan Haut-Atlas.

RENÉ ABRAR and EDGAR AUBERT DE LA RÛE: The presence of the Pliocene at the island of Malekula (New Hebrides)

DANIEL AUGER: Complex pulsations of the action current produced in *Nitella* by the action of certain buffer substances.

ROBERT ECHEVIN and ARTHUR BRUNEL: Ureides and free urea, the degradation of the purins in *Soja hispida*.

YVES LE GRAND and EUGÈNE GEBLEWICZ: Fluttering in lateral vision.

ERNEST FOURNEAU, M. and MME. JACQUES TRÉFOUËL, FEDERICO NITTI and DANIEL BOVET: The chemotherapy of pneumococcal infection by di(*p*-acetylaminophenyl) sulphone (1399F).

Calcutta

National Institute of Sciences of India, August 27-28.

R. N. CHOPRA: Therapeutics of antimalarial drugs.

A. C. BANERJEE: Urban malaria in the United Provinces.

R. B. LAL: Methods of forecasting malarial epidemics.

- FROILANO DE MELLO: Malaria in Portuguese India.
 R. SENIOR WHITE: Physical factors in mosquito ecology.
 W. C. SWEET: Irrigation and malaria.
 T. A. CURRY: Flood and flush schemes in Bengal.
 F. C. GRIFFEN: Surface and subsoil drainage.
 S. G. MASILLAMANI: Irrigation and malaria in the Madras Presidency.
 M. O. T. IYENGAR: Topography of land in relation to malaria.
 P. SEN: *Anopheles ludlowii* survey in and around Calcutta.
 G. C. CHATTERJEE: Malaria and its relation to agriculture in India.
 M. K. AFRIDI: Antimalarial operations in Delhi.
 B. A. RAO: Control of anopheline breeding in irrigation channels by Paris green.
 J. D. SINHA: Drug prophylaxis in malaria by the use of quinine and plasmoquine in the field.
 K. V. KRISHNAN: The spleen and resistance to malaria and hæmoglobinuria.
 K. L. CHOWDHURY: Mosquito control in Calcutta.
 G. C. CHATTERJEE: Larvivorous fish.
 S. L. HORA: Larvicidal fish.
 R. N. CHOPRA: Experimental studies on ape malaria with reference to its use in therapy for nervous conditions.
 B. B. DIKSHIT: Pharmacology of plasmochin with special reference to its action in pregnancy.
 K. V. KRISHNAN: Biochemical changes in the blood of monkeys developing malarial hæmoglobinuria and their significance in the etiology and treatment of blackwater fever in man.
 B. M. DAS GUPTA: Transmission of *P. inui* to man.
 M. O. T. IYENGAR: Natural parasites of mosquitos in India.
 S. L. HORA and K. K. NAIR: Observations on the nutrition of *Panchax panchax*.
 A. G. FRASER: Observations on the bionomics of *Panchax panchax*.
 H. N. RAY: The development of bird malaria parasites in endothelial cells.
 D. N. ROY: Salt water *rossi* as a malaria carrier.
 M. N. DE: The pathology of malârial spleen.

Moscow

- Academy of Sciences (C.R., 15, No. 6-7; 1937).
 I. M. VINOGRADOW: Representation of an odd number as a sum of three primes.
 D. MENŠOV: The series of orthogonal functions limited in their totality.
 A. A. IVANOV: The most probable orbit of the small planet (122) Gerda, from observations at thirty-four oppositions from 1872 to 1934.
 M. KURENSKIJ: Fundamental formulæ for the calculation of elements of a trajectory of the centre of gravity of a projectile.
 V. FURDUJEV: A method of acoustical design of rooms equipped with loud speakers.
 S. LIFSHITZ: Experimental investigations of reverberation optimum for different frequencies.
 W. W. ŠHOLEJKIN: The principles of the moon-son theory.
 L. A. TUMERMANN and V. ŠYMANOVSKIJ: A fluorometer based on the effect of Debye and Sears.
 K. S. LJALIKOV: Experimental verification of the Thomson formula.
 N. S. KURNAKOV, G. B. BOKIJ and I. N. LEPEŠKOV: Kainite and polyhalite in salt deposits of the Soviet Union.

V. I. NIKOLAJEV, O. K. JANATJEVA and V. D. POLJAKOV: The potassium deposits on the right side of the Volga and in Kalmykia.

I. I. ČERNIAJEV and V. I. GOREMYKIN: (1) Hydroxylamine-pyridine compounds of bivalent platinum. (2) Oxidation of hydroxylamine compounds of platinum.

F. M. ŠEMIÄKIN: The reactions of rare earths and allied elements with pyrogallol, gallic acid and morphine (5).

A. I. ZUJŤIN: Influence of temperature contrasts on the frequency of lethal mutations in *Drosophila melanogaster*.

A. M. GROSSMAN: The elimination of supernumerary chromosomes in *Zea mays*.

I. SOKOLOV: The chromosomes in the spermatogenesis of the domestic ass.

V. I. TOVARNITSKIJ and T. L. RIVKIND: Hormonization of seeds. Treatment of seeds with a solution of equine urine, known to contain substances of hormone nature, resulted in an increase in the yield of grain up to 60 per cent.

B. S. ZAKHAROV: The problem of vernalization of *Perilla*.

T. T. DEMIDENKO and N. P. MARTYNOV: The effect of the osmotic pressure of soil solution on the yield and composition of sugar-beet.

T. T. DEMIDENKO and V. P. GOLLE: The influence of light on the inflow of nutrient substances in plants.

N. V. NASSONOV: The effect of the subcutaneous insertion of epithelial, osseous and muscular tissues on the surrounding tissues in axolotls.

L. V. POLEŽÄEV: The determination of a regenerating extremity in axolotl.

A. M. VASJUTOČKIN: Some derivatives of the epithelial framework of the thymus gland of an amphibian.

A. A. VOITKEVIČ: Morphogenetic activity of different parts of the hypophysis. (3) The influence of different zones of the anterior lobes of hypophysis on the thyroid gland of Amphibia. (4) Inhibition of metamorphosis of tadpoles by the substance of the "eosinophilous zone" of the anterior lobes of the hypophysis.

S. M. ANDRONOV: *Gigantella* Sars and its stratigraphic importance in the Lower Carboniferous deposits of the middle course of the Ishim River.

Rome

National Academy of the Lincei (*Atti*, 25, 149-196; 1793).

E. BOMPIANI: Construction of surface elements starting from curvilinear elements.

G. GIORGI: A method for calculating distortion effects in telegraph and telephone wires.

W. BLASCHKE: Invariants of complexes.

E. BORTOLOTTI: Moutard's quadratics and the canonic bundle.

R. CALAPSO: Some surfaces of the third and fourth order.

W. DOEBLIN: Continuous case of chain probabilities.

G. ARRIGHI: Observations on the Newtonian motion of any two masses.

L. MARTINELLI: Luminosity of the images which appear in a telescope.

G. OCCHIALINI: Gamma radiations of polonium-beryllium.

A. BARONI: Non-existence of bismuthous bromide, BiBr₂.