to the institute they will also work in conjunction with one another to elucidate the problems taken in hand.

HUMAN VIBRATIONS.

To return to the Congress of Psychology, what is likely to interest the greatest number, at least of outsiders, are the material facts that can be brought forward. But before it is possible to reach a fact it is most necessary to be able to detect a fraud. In this respect Dr. Encausse, who for many years was a co-worker with Dr. Luys in the hypnotic wards of the Charité Hospital, submitted some drawings of tables, chairs, sofas, &c., which were so arranged with electric wires that they would at once reveal even in the dark any fraudulent movement on the part of a so-called medium. If such contrivances were in more general use much of the prevailing imposture would be rendered impossible. Then Dr. JOHN E. PURDON, from California, read a paper on the "Transfer of Sensori-Motor Impulses proved by the Sphygmograph." Dr. J. E. Purdon argued that Mr. John Beattie of Bristol, England, had demonstrated that "emanations from the living body which may provisionally be termed vital vibrations could and actually did under a variety of forms impress themselves" on photographic plates. Dr. Purdon, however, deemed that such action could be more readily studied upon another similar organism. For this purpose the sphygmograph was employed, and the tracing resulting from a great number of experiments showed, it was claimed, that "a forced vibration due to the dominance of a second person propagated in some unknown manner from his nervous system to that of the other person can be obtained."

Apart from the three congresses just mentioned and which are official congresses there have been other non-official congresses where notably "spiritists" have talked a good deal of nonsense and have made any number of affirmations they were absolutely unable to prove. But amid much of this sort of loose talk there have been read some thoughtful papers written by persons who have had lengthy scientific training, and it is all symptomatic of a great and widespread craving for more light on these mysterious questions. The Paris Universal Exhibition in gathering together people from all parts of the world has supplied the opportunity for rendering manifest this growing tendency, this desire to unravel past superstitions, and to bring all strange and as yet unexplained phenomena to the test of scientific investigation.

Paris, Sept. 23rd.

LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

Plague in Foreign Ports.

IN view of the possibility of the introduction of plague into the port of Liverpool the medical officer of health (Dr. E. W. Hope) has issued a short memorandum drawn up by Dr. Balfour Stewart of University College showing the salient features of the disease. Dr. Hope lays stress upon the fact that cases of pneumonia of uncertain character or patients suffering from bubo without apparent cause may seek medical advice. Having regard to these circumstances he has made arrangements for the isolation in the city hospitals of such cases, and the sputum of any doubtful case of pneumonia will be examined on application to Dr. Balfour Stewart at the Thompson-Yates Laboratories, University College. The names and addresses of all persons coming from infected ports are taken on arrival in the port, and Dr. Hope is prepared to give any information in his possession as to the antecedent movements of any stranger to the town. The "memorandum" points out that plague is generally associated with enlarged lymphatic glands, but not always. In the greater proportion of cases the enlarged glands are those of the groins, both the inguinal and femoral chains of glands being involved; next in frequency come the axillary glands; those in the cervical region are rarely enlarged. It is seldom possible to find a peripheral focus of infection; when it is found it is often a mere pimple. In an early case tenderness on pressure over one or other glandular region is found before the glands enlarge. There are two types of plague—pestis minor and pestis major. In *pestis minor* or *ambulatory plague* enlarged and tender glands are found; the constitutional symptoms are malaise and slight rise of temperature. In some such cases of exceptional mildness advice would probably not be sought. In *pestis major* three forms are found: (*a*) bubonic, (*b*) pneumonic, and (*c*) septicæmic. The *bubonic* (*a*) form in which enlarged lymphatic glands occur is the most common. The buboes may vary in size from that of an almond to that of a small orange. At first a hard and enlarged gland is felt, tender on pressure. Afterwards there is generally more or less œdema of the subcutaneous tissue around the gland, and the skin pits on pressure and appears sodden and of a dull red colour. Later the bubo begins to soften in the centre and a hard ring is felt around the breaking-down mass. The patient has an anxious and dazed expression; he appears dull and stupid, as if under the influence of a drug, and later there may be delirium. The conjunctivæ are injected. The temperature varies from about 101° to 104° F. The *pneumonic* (*b*) form is generally that of broncho-pneumonia. It may follow on the bubonic form or it may be primary, in which case buboes are seldom found. It is rapidly fatal. The *septicæmic* (*c*) form has no peculiar characteristics to show that the blood-poisoning is caused by specific infection. It is also rapidly fatal. The *bubonic* (*a*) form is the only form that would be likely to be diagnosed from the symptoms and signs *per se*. A case of broncho-pneumonia where the constitutional symptoms were severe in proportion to the amount of lung trouble or a case of septicæmia which could not be accounted for would suggest the advisability of questioning the family for any other case of illness. Should plague unfortunately come to this city it would be very important to discover the first case. To this end it would help, if the possibility were borne in mind, however remote, of (1) cases with enlarged glands appearing suddenly and without apparent cause; or (2) cases of pneumonia being due to this disease. The following resolution was carried by the council of the borough of Bootle:—

That this council, as the local authority for the borough under the Infectious Diseases (Notification) Act, 1889, doth hereby order that as a case of emergency the said Act shall apply within the borough to the infectious disease known as "plague"; that the cause of such emergency be declared to be (*inter alia*) the present outbreak of bubonic plague at Glasgow and the highly infectious nature of the disease; that such order shall continue in force for three months from its coming into operation at the expiration of one week from the date of the order being advertised; and that application be made to the Local Government Board for their approval of such order.

Sept. 25th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENT.)

Aberdeen Royal Infirmary.

THE servants of the municipal corporation have declined to accept a suggestion that each should contribute so much regularly to this hospital and, on the contrary, have resolved to contribute nothing at all, holding that the institution should be put on the rates and managed by a popularly-selected body.

Aberdeen Royal Asylum.

The managers of the Aberdeen Royal Lunatic Asylum are to purchase at the price of £7750 the lands of Ashgrove, adjoining the present grounds of Elmhill.

Sept. 25th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The late Sir William Stokes.

IT is a sad coincidence that on the day when the account of the funeral of the late Sir William Stokes appeared in the Dublin papers the death of his accomplished sister, Miss Margaret Stokes, was also announced. She was widely known as the author of many standard works on Irish ecclesiastical architecture. Miss Stokes devoted a lifelong study to the subject and since the death of Dr. Petrie she was recognised as the highest authority on the matter.

The New Veterinary College for Ireland.

The site for the new Veterinary College in Dublin—already mentioned in THE LANCET—is causing some adverse criticism of the sanitary authorities who are accused of not being sufficiently alert. Mr. Meldon, D.L., F.R.C.S. Irel., writes that the College, if permanently established in its present position, will not alone be a source of great danger to the

public health, but prove an injury to all the valuable property in its immediate neighbourhood.

Richmond District Lunatic Asylum.

An epidemic of typhoid fever now prevails at the Richmond Asylum. The medical superintendent reported on Sept. 20th that there were then 22 cases, 14 being among the patients of the institution and eight among the nurses.

The Samaritan Hospital, Belfast.

As a result of the *fête* on behalf of this hospital, which was so well organised by Miss Henderson of Norwood Tower, Belfast, and which took place on July 6th and 7th, a net sum of £325 was raised. Dr. J. St. Clair Boyd, one of the hospital surgeons, in accordance with his generous promise that he would clear off whatever remained on the debt has added £125. The Samaritan Hospital has also received a sum of £1000 from the family of the Belfast millionaire—Mr. James Craig.

The Proposed Technical Institute in Belfast.

The city corporation of Belfast has very wisely decided to build a new technical school in Belfast and have selected an admirable site in the centre of the city on a portion of the grounds purchased from the Royal Academical Institution. They have also appointed an efficient architect and they very prudently arranged on Sept. 24th to go a little further and to appoint at once a principal for the institute at a salary of £600 per annum, whose coöperation and experienced practical advice would be of great value in settling the interior arrangements of the building and in organising during the interval of its construction. In this way the new principal would find a place in every way suited to his wants.

Queen's College, Belfast: the President's Report.

From the President's report just issued I find that during the Session 1899–1900 there were 353 students at Queen's College, Belfast, but as six attended in more than one faculty there was a net number of 347. In the Faculty of Medicine there were 214 students, an increase of eight over the preceding session. References are made to the loss the College has sustained in the deaths of Dr. Cuming, Dr. Hodges, and Dr. W. N. Watts, all of whom were professors, and a former librarian, the Rev. G. Hill. A full account is given of the success of the students at the various universities. Dr. W. A. Osborne has been appointed assistant professor of physiology at University College, London; Dr. B. Moore has been selected as lecturer on physiology at Charing-cross, London; Mr. F. G. Dennan, M.A., has been appointed assistant to Professor Ramsay in University College, London; and Dr. W. Hanna, sent out by the Government to India to inquire into the nature of the plague, now occupies a high position in the Plague Laboratory at Bombay. All of these old Belfast College students held research scholarships as founded by Her Majesty's Commissioners for the 1851 Exhibition. The various College museums have been well cared for during the year, and owing to the great and most praiseworthy exertions of Dr. H. O'Neill, the Museum of Hygiene and Sanitary Science has made the greatest progress. A mechanical workshop has been opened. While in the medical school the number of departments has been exactly doubled in the last 10 years a new physical and a new biological laboratory as well as the completion of the buildings erected for the department of chemistry are much needed. The present President has already done so much to improve Queen's College during his period of office that I am sure he will manage to get all these wants supplied.

Commission in the Royal Army Medical Corps.

Dr. J. W. West, house physician to the Royal Victoria Hospital, Belfast, has been given the commission in the Royal Army Medical Corps which was placed by Government at the disposal of the authorities of Queen's College, Belfast.

New Medical Local Government Board Inspector.

Dr. E. C. Bigger of Belfast has been appointed a medical inspector under the Irish Local Government Board. The appointment has not arisen from any vacancy, but it has been decided to add a new inspector for Ulster in addition to the present one—Dr. C. J. Clibborn—the work being very onerous. Dr. Bigger's district will comprise the northern part of Ulster and his headquarters will probably be Londonderry. Dr. Bigger was senior visiting medical officer to the Belfast Union Hospital and superintendent medical officer of health of the rural portion of the union. He in former years held a dispensary medical district in Belfast. He has thus had an admirable training in the work over which he will now act as inspector. Dr. Bigger was an alderman of the Belfast City Council and a prominent member of the Public Health Committee, and at a meeting of that committee on Sept. 20th a resolution was passed congratulating him on his promotion and speaking of his fitness and high qualifications for the inspectorship.

Sept. 25th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

On Herpes in general and the rôle of Influenzal Herpes in Pneumonia and other Infectious Maladies.

M. VIDAL of Hyères laid before the Academy of Medicine in July, 1899, some observations as to the frequency of zonal and other forms of herpes in influenza. During the latest epidemic of influenza he has been able to confirm these observations. M. Vidal has established the relation which exists between herpes, of which disease he gave a general definition, and the method of penetration of different organisms into the body. Localised groups of bacilli, according to M. Vidal, give rise to diseases of different organs which are thus laid open to attack by the secondary bacillary products, while the presence of bacilli in the blood-vessels gives rise to a general infection. M. Vidal related some experimental investigations which he considered to bear out his theory and concluded by describing the part played by herpes in influenzal pneumonia.

The Physiological Action and Therapeutics of Compressed Air.

At the meeting of the Academy of Sciences held on Sept. 3rd M. Mosso said that an atmosphere containing as much as 50 per cent.[1] of carbon monoxide was not fatal to mice provided that pure oxygen was also supplied at a pressure of two atmospheres. M. Mosso was able to establish the like facts with regard to larger animals such as monkeys, dogs, and rabbits. A mixture containing 6 per cent. of carbon monoxide showed no harmful effects provided that oxygen was present under a pressure of two atmospheres or air at a pressure of 10 atmospheres, whereas 0·5 per cent. of carbon monoxide will bring about death at ordinary pressures. M. Mosso also found that if the animals were brought straight out of the mixture of oxygen and carbon monoxide into the air they died at once, but that if the mixture were gradually purified the blood was regularly washed (*on produit un véritable lavage de leur sang*), and at the end of about half an hour they could without danger be placed in a normal atmosphere. M. Mosso considered this last fact to be particularly interesting from a therapeutical point of view. Take for instance the case of a mining accident where men live in a condition of partial asphyxiation for hours or even days; it is probable that many of these would be saved if immediately after they were brought up they were placed in an atmosphere containing oxygen under pressure.

The Last Sign of Life.

Mr. Augustus D. Waller has reported to the Academy of Sciences a distinctive sign which permits the recognition in a few moments whether any organ or tissue, animal or vegetable, is living or dead. The reaction is based upon the following principle. Living matter responds to an electrical excitation by a current in the same direction. This same substance killed by exposure to a high temperature no longer responds to the excitation, or if it does it shows a polarisation current in the opposite direction. This positive reaction proves, according to M. Waller, that the object examined is not lifeless; it is a general and characteristic phenomenon of living matter as such, and one which is found in the nerves, muscles, retina, skin, liver, &c., in animals, and in the leaves, roots, fruits, seeds, &c., in vegetables. It is their last sign of life by means of which it is possible to recognise immediately whether they are still alive and even, up to a certain point, to measure and to express in figures how much vitality they retain.

Obituary.

Dr. Alfred Lamoureux of Paris, Municipal Councillor and Member of the General Council of the Seine, died last week. He had for a long time been suffering from heart disease.

Sept. 25th.

[1] If this percentage is correctly quoted the statement is indeed remarkable.—ED. L.