Foster, S. B., A. A. surgeon, Department letter of Jan. 23, 1905, granting leave of absence for twelve days, amended to read ten days from January 24.

BOARD CONVENED.

Board convened to meet at San Francisco Feb. 25, 1905, for the physical examination of officers of the Revenue-cutter Service. Detail for the board: P. A. Surgeon W. G. Stimpson, chairman; P. A. Surgeon J. M. Holt, recorder.

Health Reports.

The following cases of smallpox, yellow fever, cholera and plague have been reported to the Surgeon General, Public Health and Marine-Hospital Service, during the period from Feb. 18 to Feb. 25, 1905:

SMALLPOX—UNITED STATES.

Florida: Jacksonville, Feb. 11-18, 4 cases.
Illinois: Chicago, Feb. 11-18, 15 cases, 4 deaths; Galesburg, Feb. 13-20, 1 case.
Louisiana: New Orleans, Feb. 11-18, 6 cases, 2 imported.
Massachusetts: Boston, Feb. 11-18, 1 case; Lawrence, Feb. 5-18, 6 cases.
Michigan: Detroit, Feb. 11-18, 5 cases; at 66 localities, Jan. 28-Feb. 4, present.
Missouri: St. Louis, Feb. 11-18, 28 cases, 6 deaths.
Nebraska: Omaha, Feb. 11-18, 13 cases.
New York: New York City, Feb. 11-18, 1 case, 1 death.
Ohio: Toledo, Feb. 4-18, 12 cases.
Pennsylvania: Steelton, Feb. 11-18, 1 case.
South Carolina: Feb. 11-18, Camden, 1 case; Charleston, 2 cases; Greenville, Feb. 4-11, 5 cases, 2 deaths.
Tennessee: Nashville, Feb. 11-18, 7 cases.
Wisconsin: Milwaukee, Jan. 21-Feb. 11, 24 cases.

SMALLPOX—FOREIGN.

Brazil: Bahia, Dec. 31-Jan. 21, 2 deaths; Para, Jan. 1-31, 66 deaths; Pernambuco, Jan. 1-15, 131 deaths; Rio de Janeiro, Jan. 8-29, 123 cases, 54 deaths.
France: Paris, Jan. 28-Feb. 4, 12 cases.
Great Britain: Bradford, Dec. 26-Jan. 9, 12 cases; Leeds, Jan. 21-28, 7 cases; Jan. 28-Feb. 4, London, 1 case; Manchester, 2 cases; Newcastle-on-Tyne, 5 cases, 1 death; South Shields, 2 cases, 1 death.
India: Bombay, Jan. 17-24, 94 deaths; Calcutta, Jan. 14-21, 2 deaths; Karachi, Jan. 15-22, 1 case; Madras, Jan. 14-20, 2 cases.
Italy: Lecce Province, Jan. 26-Feb. 2, 24 cases.
Mexico: City of Mexico, Jan. 14-28, 3 cases, 3 deaths.
Norway: Christiania, Jan. 14-21, 1 case, 1 death.
Russia: Moscow, Dec. 31-Jan. 28, 26 cases, 8 deaths; Odessa, Jan. 14-Feb. 4, 4 cases, 2 deaths; St. Petersburg, Jan. 14-28, 4 cases, 2 deaths; Warsaw, Dec. 10-17, 2 deaths.
Spain: Barcelona, Jan. 1-28, 18 cases.
Turkey: Constantinople, Jan. 22-29, 9 deaths.
West Indies: Grenada, Jan. 11-28, 7 cases.

YELLOW FEVER.

Brazil: Rio de Janeiro, Jan. 8-29, 16 cases, 3 deaths.
Mexico: Merida, Feb. 5-11, 1 case.
Panama: Panama, Jan. 1-Feb. 11, 19 cases, 6 deaths, 6 cases, 2 deaths from U. S. S. *Boston*.

CHOLERA.

India: Calcutta, Jan. 14-21, 169 deaths.
Russia: Astrachan, Dec. 27-Jan. 8, 1 case; Dec. 21-Jan. 1, Government of Baku, 77 deaths; Government of Erivan, 38 cases, 33 deaths; Government of Saratow, Dec. 27-Jan. 3, 15 cases, 10 deaths; Trans-Caspian Province, Dec. 27-31, 7 cases, 3 deaths.
Turkey in Asia: Van, Jan. 1-7, 77 cases, 46 deaths.

PLAGUE.

Africa: Dec. 24-Jan. 7, East London, 8 cases, 5 deaths; Port Elizabeth, 1 case, 1 death.
Arabia: Aden, Jan. 14-21, 110 cases, 85 deaths.
Australia: Brisbane, Jan. 2, 1 death; Ulmarra, Jan. 10, 1 case.
Brazil: Bahia, Dec. 31-Jan. 7, 2 deaths; Para, Feb. 1, present; Rio de Janeiro, Jan. 8-29, 41 cases, 15 deaths.
Egypt: Jan. 14-21, Suez, 4 cases, 3 deaths; Tukh, 1 case, 1 death.
India: General, Dec. 31-Jan. 14, 58,376 cases, 50,604 deaths; Bombay, Jan. 19-24, 301 deaths; Calcutta, Jan. 14-21, 64 deaths; Karachi, Jan. 15-22, 46 cases, 46 deaths; Madras, vicinity of, Jan. 6, outbreak reported.
Japan: Hiogo, Dec. 14, 1 death.
Russia: Ural Territory, Jan. 3-9, 8 cases, 15 deaths.
Siam: Bangkok, Dec. 15-22, 9 deaths.
Straits Settlements: Singapore, Dec. 30, 3 cases.

Travel Notes.

AN INTERSEMESTRAL EXCURSION.

LEWELLYS F. BARKER, M.D.

CHICAGO.

(Continued from page 653.)

It is a little strange, in view of the activity in America of research dealing with the application of the methods of physical chemistry to biology, that Europeans are so little informed about what is going on here. Since the first experiments by Kahlenberg and True there has been a steady stream of physical-chemical research in biology in this country. Let anyone unfamiliar with what has been done read the address of A. P.

Mathews, one of the best workers in this field, on "The Relation of Inorganic Salts to Protoplasmic Activities," in the *Yale Medical Journal*, 1903; he will speedily be convinced of the fascination of the subject, of the great progress that has been made, and of the important participation of American intellect in this domain. A high tribute to American chemico-biologic research is to be recognized in the visit of Ostwald to the University of California, on the occasion of the opening of the new physiologic laboratory there. His address, "Biology and Chemistry," delivered on that occasion, is full of stimulus for further work.

KK. WILHELMINER SPITAL.

The new Kk. Wilhelminer Spital for sick children in Vienna is situated far from the center of the city, out in the *xvi Bezirk*. It is especially interesting to visit, as it exemplifies the isolated pavilion system carried to an extreme degree. The part of the hospital devoted to infectious diseases accommodates about 300 patients and for these alone there are no less than 23 separate buildings! In the first place, there is a special house for the reception of patients; it has its own physician and several different examining rooms corresponding to the various provisional diagnoses made outside. If a patient is supposed to have scarlet fever he is sent to the scarlet fever room for examination; if measles be suspected, to the measles room, and so on. Each room is thoroughly disinfected after use with lysol. The reception house has an operating room for tracheotomies, intubations, etc., when they must be done *instantly*. If a positive diagnosis can be made at once, the patient is transferred to the particular pavilion set aside for the cases of that particular disease. If the diagnosis is doubtful the patient is placed in an isolated expectant ward until the nature of the case is cleared up.

The infectious pavilions are divided into three principal groups: 1, diphtheria group; 2, scarlet fever group, and 3, measles and whooping cough group. In each group there is a separate building for the pure disease and accessory separate buildings for the disease as variously complicated. Thus in the diphtheria group there is one pavilion for pure, uncomplicated diphtheria, a second for mixed infection of diphtheria and measles, a third for another kind of mixed infection, and so on. Each pavilion has its main ward, its *Ordinationszimmer* in which operations are done, dressings are made, injections are given, etc., its laboratory, its day room for convalescents, its isolation room, its nurses' room, its closets, its bathroom, its kitchen, etc. Outside balconies are common. The children are excellently cared for, not only medically but from the standpoint of general hygiene. The situation of the hospital in the country on the side of a hill is most salubrious; the pavilions are widely separated from one another. The physician-in-chief to the infectious wards, a very earnest man, takes the deepest interest in the welfare of the patients; the immense organization necessary seems to run smoothly. The serum treatment of diphtheria is instituted at the earliest possible moment after a probable diagnosis has been made, of course without waiting for bacteriologic control. In some cases as much as 15,000 units of antitoxin are given.

One naturally asks the question, Is such an elaborate isolation system, such a maximal development of the pavilion system necessary or desirable? and I asked it of the medical chief of the infectious wards as we wandered through the labyrinth of separate pavilions. He frankly stated it as his opinion and as the result of experience there gained that so extreme a development of the pavilion system as the Wilhelminer Spital presents is not necessary. There are many objections to it; the amount of land required is very great, the initial expense for buildings and manifold of equipment is enormous, the professional *personnel*, including doctors and nurses, must be very large if the work is to be efficiently conducted, the *Dienerschaft* is unnecessarily increased, in bad weather the hardship on physicians and nurses may be considerable, and where the difficulties are made great for physician and nurse the patients are only

too likely to suffer from neglect. If unlimited amounts of money are available and it is lavishly enough spent to adequately supply the needs of the organization, then the luxury of the small pavilion system may be indulged; but buildings of two or more stories, with separate entrances to different parts, answer the purpose just as well, and the initial and current expenses can be thereby greatly curtailed. In the new Pasteur Hospital for Infectious Diseases, which I visited later in Paris, the problem has been more satisfactorily solved; how that hospital is arranged will be described further on in these notes.

STUDY OF ANATOMY OF THE NERVOUS SYSTEM.

Nervous anatomy, under Professor Obersteiner's leadership, is still making rapid progress in Vienna. Obersteiner's many American friends and former students will be interested to learn that the old laboratory in which, in spite of its narrow bounds and dilapidated character, a vast amount of original work has been done, is finally to be deserted; the work is being transferred to very good quarters in the old physiologic building, made vacant by Exner's occupation of the new physiologic laboratory just completed. Dr. Schacherl, the first assistant in the neurologic laboratory, showed me the vast collections of serial sections which have gradually accumulated. The material already gotten together there will form an excellent beginning for one of the central institutes for the investigation of the brain which scientists are now projecting. Among its other treasures, the institute possesses rare and valuable sets of brain sections from a series of Australian animals. Zuckerkandl's studies in the comparative anatomy of the brain were made largely in Obersteiner's laboratory. Obersteiner has proved himself to be a most stimulating, practical teacher and the Americans who have gone to him have profited much. He teaches his men how to observe, how to describe and how to use literature, and whenever possible leads his pupils into original work. One of his school, Dr. Marburg, has recently prepared an excellent atlas of the brain; its illustrations have been carefully made and the book may be warmly recommended.

PHYSIOLOGIC CHEMISTRY AND PHARMACOLOGY.

Physiologic chemistry and pharmacology, at any rate as officially represented in Vienna, appear to be far behind the times. Americans desiring to work in Europe in these important branches should at present look elsewhere than to the Austrian capital for facilities and leadership.¹

Buda-Pesth.

"Extra Hungariam non est vita, si est vita, non est ita!" So runs the Hungarian motto. Buda-Pesth is a joyous city, modern and progressive. The shops look bright and prosperous; were it not for the unintelligible words on the signboards, the names hind-end foremost, and the symbolical paintings on the portals advertising the wares on sale within, a business street in Buda-Pesth might be mistaken for one in a city in the New World.

The Royal Hungarian University (*Budapesti kiralyi magyar Tudomány-Egyetem*) has all four faculties and over 6,000 students. Its income for 1902 was \$551,410.

HOSPITALS AND MEDICAL COLLEGES.

The hospitals and medical schools are situated in or near the *Ullői-ut.* The professor of practical medicine and director of the medical clinic is F. Korányi, now an elderly man of 75 years, a member of the government and a distinguished speaker in the house of parliament. His work is cared for in his absence by Dr. H. Benedict, one of the best young medical men in Buda-Pesth. The clinic is rich in material and I saw there a number of cases of unusual interest, including osteomalacia, aneurism of the hypogastric artery with lesion of the cauda equina, pulsating pleurisy with exudate rich in cholesterin and a series

of interesting neurologic cases. The younger Korányi, son of the director of the clinic well known in connection with his studies in cryoscopy, did his work in the small clinical laboratory here. He now has his own wards at the St. Stefani Hospital in the suburbs of the city.

The neurologic clinic of the university, situated in the *Baross utca* is in charge of one of the most interesting and original men in Buda-Pesth, Prof. Ernő Jendrassik. The building is inadequate and unworthy of the good work done in the clinic. At the time of my visit some experiments were being made with the "bromid diet," in which all the ordinary salt of the food is replaced by sodium bromid. In combating the lightening pains of tabes emphasis is laid in Buda-Pesth on the value of combining half a milligram of scopolamin with each dose of morphin.

Anatomy is well taught under Professor Thanoffer and von Lenhossék. The latter has organized the teaching in his department in an admirable manner. The laboratory work is thorough, but von Lenhossék also lays great stress on the lectures, even in gross anatomy, holding that only through the lecture can the connection of the facts learned in the laboratory and their explanation be satisfactorily grasped by the student; a text-book can not entirely take the place of the *Macht des gesprochenen Wortes*. Von Lenhossék has worked out an ingenious method for helping an instructor who can not draw well to place accurate illustrations on the board; the method is published in the *Anatomischer Anzeiger*. He lays stress on the advantages of a white board (ground glass with white drawing paper behind it) over a blackboard for class work. In his chart making he uses the convenient and inexpensive stencil apparatus made by Pospisil of Stefanau.

Von Lenhossék is an ardent supporter of the neuron doctrine. He is now hard at work at the neurofibrils and rejoices at the simplicity of the new method of Ramón y Cajal over the methods of Apathy and Bethe. He finds Bielschowsky's method also good, though more complicated than Ramón's. Von Lenhossék asserts that the neurofibrils never pass from one neuron into another and that they are never found free outside the neurons. He contends that he has absolutely disproved Apathy's theory that the neurofibrils grow from without into the nerve cells. Nissl's "gray substance" is, in his opinion, a pure myth.

Bókay is the pharmacologist at Buda-Pesth; H. Pertik, the professor of histology, is an authority on tuberculosis; his collective review on the recent literature of the subject in Lubarsch-Ostertag's yearbook makes very interesting reading.

Prague.

The quarreling between the students in the two Karl-Ferdinand universities—German and Bohemian—in Prague still pursues its intermittent course. The feeling between German and Czech runs very high in the city; even the stranger who speaks German but not Bohemian may find himself in embarrassing circumstances there. Prof. Karl Rabl, head of the department of anatomy and rector of the university at the time of our visit, showed us in his institute a great heap of stones which Czechisch students had thrown through the windows of his laboratory. German life and property are continually threatened. One German professor said to me: "We live as in a prison; life is made a veritable hell for us here." One was reminded of the isolation of the ghetto. Rabl has just been called to Leipzig to succeed the late Professor His; I have no doubt that other professors in the German University of Prague would welcome warmly a suitable call elsewhere.

Prague, aside from its general charm, is, medically, a city of unusual interest. Despite the hardships of the life, many distinguished German-speaking men are active there. Pribram has the first medical clinic and v. Jaksch the second; Chiari is the pathologic anatomist and Pick is the psychiatrist; Hueppe has hygiene, Pohl pharmacology, Hering, Jr., general and experimental pathology, and v. Zeynek medical chemistry. In the Bohemian university there are also excellent men at work; Spina has general and experimental pathology, Horbaczewski

1. Since the above was written Professor Hans Meyer, the distinguished pharmacologist of Marburg, has been called to a chair in Vienna. Under his leadership pharmacology is sure to flourish in the Austrian capital.

medical chemistry, Pawlik obstetrics and gynecology, and Hlava pathologic anatomy.

GENERAL AND EXPERIMENTAL PATHOLOGY.

As I had only a short time in Prague, I devoted most of it to an inquiry as to the nature and status of a chair which exists in Austrian universities, but which has as yet not received separate recognition in the universities of Germany, namely, that of general and experimental pathology. The functions of this chair approach, to a certain degree, the ideal that I have had in mind for some time for a certain number of chairs in internal medicine, the main features of which are outlined in an article entitled "Medicine and the Universities." The chair as it is instituted in Austria might be better called "Pathological Physiology" or "Observational and Experimental Medicine," perhaps. The most important feature is the combination of a laboratory for experimental pathology with a medical clinic, under the leadership of one man.

The movement began with the appointment of Knoll in Vienna. The general character and aim of the movement appealed strongly to the late Professor v. Ziemssen of Munich, and he tried to have Knoll called to Munich. Earlier in these notes I have pointed out how admirably the Medical-Clinical Institute in Munich which was designed by v. Ziemssen is adapted for a combination of laboratory and clinical work. But Knoll died; v. Ziemssen lost interest and died. Austria established three such chairs, one in Vienna, occupied by Paltauf, whose assistant, Biedl, is interested especially in the continuation of the line of work begun by Knoll; one in Innsbrück, occupied by Löwit, and one in Prague, occupied by Ewald Hering, Jr. The training prerequisite to an adequate filling of the chair is in experimental physiology and pathology and clinical work. One of the principal ideas underlying the foundation is the desirability of the influence of clinical work on human beings on experiments in the laboratory; a second is the desirability of bringing to the bedside minds constantly in touch with the experimental side of scientific medicine. As everyone knows, there is all too wide a gulf fixed between the work of the first two years of the medical school and that of the last two years. Many of our great medical educators have lifted up their voices to urge the bridging from either side of the chasm; the Austrians are making a brave attempt to effect a crossing from the side of pathologic physiology.

Hering has a ward of 15 beds, with a capable clinical assistant constantly in attendance. His laboratory is fairly well outfitted with physiologic and chemical apparatus, library and research rooms. He has several laboratory assistants, and, very important for the experimental work, a well-trained mechanic. His teaching is divided between the laboratory and the ward. In the laboratory practical course he produces experimentally in animals a series of general and special pathologic conditions and these are studied from the physiologic rather than from the anatomic side. In cases selected from the clinics of Pribram and v. Jaksch and transferred to his wards, he demonstrates the symptoms and discusses the pathologic physiology underlying them.

It will be seen that this chair of general and experimental pathology is a sort of middle thing between pathology and physiology as usually thought of, on the one hand, and internal medicine and perhaps surgery, on the other. This arrangement has advantages and disadvantages. Among the advantages under present conditions may be mentioned (1) the possibility of a scientific study of certain clinical cases without antagonizing or coming into competition with the purely clinical men, (2) the opportunity to select suitable cases from the great aggregation of clinical material, (3) the relief from the overburden and responsibility which the entire management of the great clinics themselves would entail, (4) the opportunity for a minute and exact study of individual cases, and (5) the possibility of returning cases to the major clinics as soon as they have been studied thoroughly, thus always keeping the beds filled with "active" cases. Among the disadvantages are (1) the necessity of limiting one's problems to certain clinical features for fear of coming into

conflicts with the leaders of the major clinics, (2) the absence from such a ward, unless it has also single rooms for private patients, of the class of cases that never enter the public wards of a hospital.

The teaching as at present carried on in connection with the chair is given in the third year; this has the advantage of being near the student's physiologic knowledge, but the disadvantage that he has yet none, or but few, clinical ideas. Much might be said in favor of continuing this kind of work after the student has had considerable observational clinical experience. A drawback in Austria is the limited budget available for these new chairs. For their proper development large funds are necessary—larger than are likely to be forthcoming in that country in the near future, I fear. Some of the men holding chairs there fortunately have private means which make them independent of their honorarium. But it is greatly to the credit of Austria that she has recognized a crying medical need and at least made an effort to meet it.

Hering's studies thus far have dealt largely with the pathologic physiology of the nervous and circulatory systems. His investigations into the various forms of ataxia, his studies of antagonistic and synergistic muscular contractions, his inquiries into the nature of intracranial inhibition and his observations with the finer physiologic recording instruments on the irregularities of the pulse have all enriched clinical as well as purely physiologic knowledge.

NEED FOR SCIENTIFIC CLINICAL WORK.

The example set by Austria, it seems likely, will soon be followed by Germany. The Berlin pathologist, Professor Orth, in his address before the German Pathological Society, recently made a strong plea in favor of pathologic physiology; it is rumored that Bickel, who was trained clinically under Ebstein in Göttingen is to have charge of a sub-department of combined clinical, physiologic and pathologic work in connection with the Berlin laboratory of pathology.

(To be continued.)

Therapeutics.

[Our readers are invited to send favorite prescriptions or outlines of treatment, such as have been tried and found useful, for publication in these columns. The writer's name must be attached, but it will be published or omitted as he may prefer. It is the aim of this department to aid the general practitioner by giving practical prescriptions and, in brief, methods of treatment for the diseases seen especially in every-day practice. Proper inquiries concerning general formulae and outlines of treatment are answered in these columns without allusion to inquirer.]

Eczema in Children.

In the treatment of infantile eczema F. J. Poynton, in the *London Clin. Jour.*, states that the treatment must be both local and general. The diet may require revision, such as limiting the amount of sugar or starch in infants and the withholding of cakes, jams, and sweets from older children. The author mentions the compressed and manufactured foods, only to condemn them. If the eczema is acute, and the child highly fed, meat is best withdrawn from the diet. On the other hand, if the child is anemic, weak, and poorly fed, a diet of plain meat, eggs, milk, milk puddings and fish is advisable. Careful management of the bowels is of prime importance, and small doses of sulphate of magnesia may be of great service.

LOCAL REMEDIES.

Before the application of any preparation locally, the skin must first be prepared. This is of especial importance in dealing with dispensary cases on account of the scabs and crusts