

him, "X, the Soviet government has taken over all of the economic details of a capitalistic state, namely, the differential wage scheme, the income tax, the sales tax, and so forth. Is not this a trend toward state controlled capitalism?"

"No," he replied, "this is a socialistic state on the way to communism." "What then is the ultimate condition of the people under communism?" He replied, "We will all fare the same, be the same, at all times, at all places. To each shall be given according to his needs. Competition will be eliminated, and by planned economy and planned distribution everybody will enjoy as full a measure of happiness as possible." I said, "X, this is heaven you are describing." Whereupon he turned and indignantly said, "There is no such

thing as heaven; there is such a condition as communism."

In conclusion, upon the variance of human nature and the unexplained biological mutation of personality will come the disruptive factors, for not everybody can be at one and the same time always the same and always happy.

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The Fifteenth International Physiological Congress, Leningrad and Moscow, August 8-18, 1935

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THE memorable feature of previous international congresses has been the scientific program and the pleasure and profit of meeting and discussing matters of mutual interest with foreign colleagues in the international atmosphere of Science. The Fifteenth "International Physiological Congress" not only was memorable in this regard but also in that the large majority of delegates was visiting a country concerning which they had read much and of which they knew nothing by first-hand experience. You may imagine the surprise of some of us, who had carried dried fruit, chocolate, etc., into Russia, when confronted at the opening informal reception (August 8, at 20 o'clock,—8:00 P. M.), held in the magnificent marble hall of the Ethnographical Museum, by the most luxurious and extravagant display of food and refreshments that most of us ever had seen. This surprise was only an introduction to the many surprises, opposites, paradoxes and apparent inconsistencies with which we were to meet, all of which may be explained by the engrafting of new social developments on the old culture of the tsaristic *regime*.

The Congress was formally opened the next morning by Professor Pavlov in the Uritzky Palace, which was originally built for Potemkin, a favorite of Catherine the Great, later the meeting place for the Duma and the Provisional Government of 1917, and now of the local Leningrad Soviet. The Palace recently had been renovated and the beautiful and famous Round Hall was decorated with palms and flowers. (*Footnote 1).

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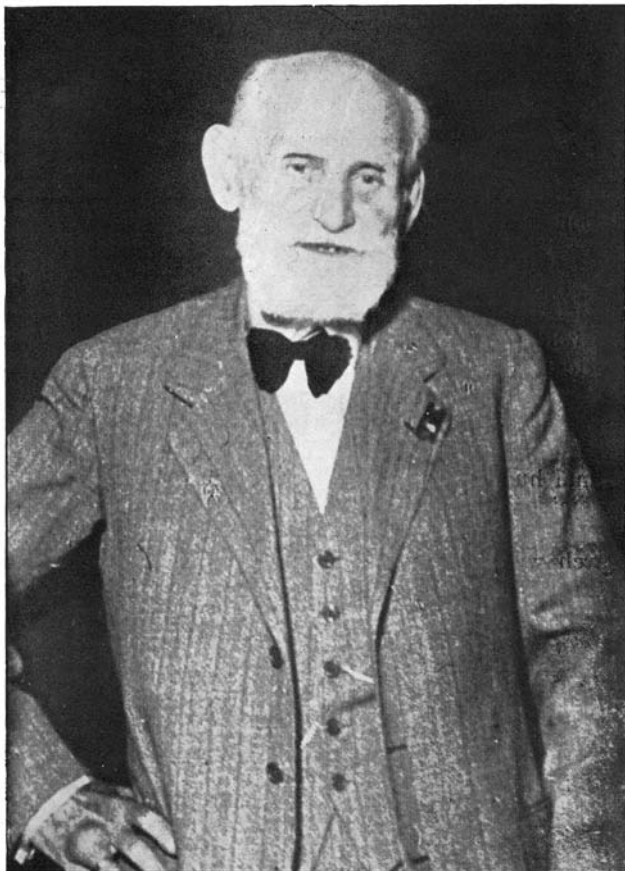
*Footnote 1. Before entering the building our attention was attracted by a group of workers, because we observed that the women were working and the men sitting near-by smoking. Among other items of interest, we ascertained that this group of workers had been working night and day to complete their work prior to the Congress, and, on completing it ahead of schedule, had been given a large bonus in rubles.

Academician Professor Pavlov called the Congress to order and gave the opening address, which, in spite of his eighty-six years of age, was delivered with his characteristic physical vigor and perspicacity. After greeting the members of the Congress, he paid tribute to Sechenov (1829-1915), who was the first Russian to deliver his lectures, not from texts, but from data gathered through his own experiments and demonstrations. Professor Pavlov, pointing out the international aspect of Science, made a plea for peace. He said: "I can well understand the greatness of a war for liberty. At the same time, it cannot be denied that war is essentially a beastly method of solving life's difficulties, a method unworthy of the human mind with its immeasurable resources."

The members of the Congress were then welcomed on behalf of the Soviet Government by I. A. Akulov and, on behalf of the Leningrad Soviet, by I. S. Kadatski (Mayor). Professor Karpinski welcomed the Congress on behalf of the Russian Academy of Sciences. The governmental representatives emphasized that physiology was the foundation of the health of the workers, of medicine and animal husbandry and that Science was of, and for, the people.

The keynote of these addresses was the high regard for and the great attention given Science by the workers and the Government. There can be no doubt of this. But, why is there such a dearth of foreign scientific literature in Russia? And, why are not more of the younger Russian scientists "permitted" to study abroad?

The scientific address of the opening plenary session was delivered by Professor W. B. Cannon (United States). By way of introduction to his technical discussion of, "Some Implications of the Evidence for Chemical Transmission of Nerve Impulses," Professor



A photograph of Pavlov taken August 8, 1935.

Cannon paid just tribute to Professor Pavlov and briefly discussed international politics as related to Science. (*Footnote 2). Among other things, he said: "During the past few years how profoundly and unexpectedly the world has changed! Nationalism has become violently intensified until it is tainted with bitter feeling." "Creative investigators of high international reputation have been degraded and subjected to privations." "The scientific triumphs of the past have not been achieved by workers of any single nation; not by representatives of any single racial group." "No other example could illustrate more strikingly the international character of scientific endeavor" than the technical subject Professor Cannon discussed, namely, the "knowledge of the mode of action of autonomic nerves on their effector organs."

Two other plenary sessions were held, one in Leningrad and the other in Moscow. The session in Leningrad was addressed by Professor J. Barcroft (England), the title of his address being, "The Velocities of Certain Physiological Processes," and by Professor L. Orbeli (Russia), the title of his address being, "Pain and its Physiological Effects." The plenary session in Moscow was addressed by Professor L. Lapicque (France), the title of his address being, "Recent Progress in Our Knowledge of Nervous Mechanisms," and by Professor A. Ukhtomsky (Russia), his title being, "Physiological Liability and the Act of Inhibition." The usual boredom of having to sit and listen to an address in a foreign language was avoided at

*Footnote 2. International politics has been a prominent item of discussion at every physiological congress held since the World War. Physiologists, like most people, believe in Peace.

these plenary sessions. Head phones were available, so that one could make connection with a very competent translator and follow the speaker in anyone of the five official languages of the Congress. This was an innovation in so far as the delegates were concerned, but a necessity for governmental meetings in a country like Russia where so many different languages and dialects are spoken.

All the meetings of the various sections were held in Leningrad. Five sections met simultaneously, some forty sessions being held. About 485 papers were presented. More than 1,200 members and associate members were registered, many of whom were faithful attendants at the scientific meetings. At some of the plenary sessions and entertainments the attendance was 1,500. More than 200 Americans (not all physiologists, of course) were in attendance; there were about 500 Russians.

The arrangements made for the meetings were excellent, when the number in attendance is considered. The special excursions provided by Intourist (the Travel Agency of U. S. S. R.) were superlative. Boats and trains were met in many instances by brass bands. Private cars (Lincolns and Fords) were provided for transfer between hotels and meeting places and, not infrequently, for sight-seeing excursions. The traffic police "knew we were there" and immediately changed traffic to give "right-of-way." Passes were issued which gave free *entré* to busses, street cars, parks, theaters, museums, etc., but purchases could be made only in "Torgsin stores." The evening excursion to Peterhof, the country place and palace originally designed by Peter the Great and completed by Catherine, with its forest, gardens and fountains, illuminated by lights of various colors, was an experience never to be forgotten. The same may be said of the most extravagant banquet tendered by the Organizing Committee and the Leningrad Soviet in "Dietskoye Selo," Catherine's Summer Palace. Set in a scene of great splendor and lasting for four hours, it was followed by an unusual display of fireworks. Also, a splendid concert was given in the State Theater of Drama by many of the prominent Russian artists. In fact, the entertainment was so exceptional that the International



The entrance to a district medical and dental dispensary in Leningrad. Here we saw X-ray apparatus "made in Russia." A dental school was housed in these buildings. All the dental students we saw were women.



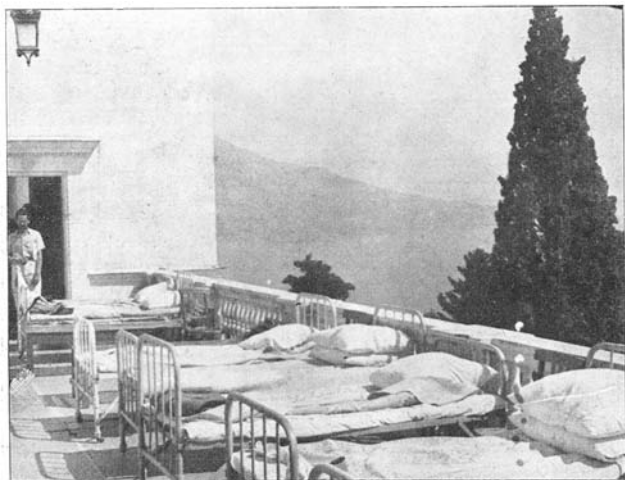
A group of children at a rural communal nursery, with their two nurses. We saw no evidence of "fly consciousness" in Russia.

Committee of Physiologists advised that in the future the entertainment should be so simplified as to be covered approximately by membership fees. (*Footnote 3).

On the evening of the eighth day, the Congress was moved *en masse* to Moscow where the third plenary session, referred to above, was held in the great hall of the Conservatory of Music, at the conclusion of which the Congress officially was closed. However, that evening a reception and banquet were tendered by V. M. Molotov, Chairman of the Council of the Peoples' Commissars of U. S. S. R., in the Grand Kremlin Palace. This was followed by another concert.

From every aspect, with the possible exception of the dining room services of the hotels, and of the complaints of a few members who contacted insects or had to occupy a sleeping compartment with the sexes mixed, the Fifteenth International Physiological Congress may be viewed as a transcendental success.

*Footnote 3. It should be mentioned for those who have not visited Russia recently, that the largest palaces in the City are being used as museums and the country places as vacation resorts for the workers. We saw large groups of children and workers being conducted on parties through the museums. The palaces had been recently renovated and had apparently not been molested by the revolutionists.



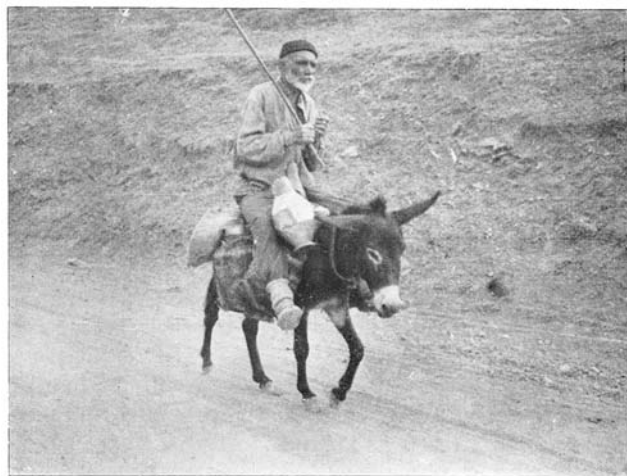
Livada at Yalta. Formerly the Czar's large summer palace; now, the Rest Home for the Workers at Stalin's Tractor Works.

From the viewpoint of a physiologist, it was a great privilege to visit Pavlov's laboratories in which he and his students have done so much classical work. It was also a privilege to witness the high esteem tendered him by his scientific colleagues and by government officials.

It would appear that Pavlov was the initial stimulus responsible for the remarkable development of physiology, and possibly biology, which has occurred in Russia during the past fifteen years. It is claimed that in Russia there are now 380 institutes working in the field of physiology. In 1917 the Russian Physiological Congress had fifty members. Five hundred Russian physiologists attended the recent Congress.

Part of this mushroom growth undoubtedly has been due to the attention directed by the government to animal husbandry and to the increased production of physicians.

The increase in the number of institutes and research workers has led to a marked increase in the number of articles published. As one listened to, or



Evidence that "the king can do no wrong" even in Russia.

read the abstracts of, the papers presented by the younger Russian biologists, or read the completed works of the institutes, he was impressed by the imagination and enthusiasm of their Authors. On the other hand, it may be said, in the spirit of scientific friendliness, that one too frequently is surprised by the lack of breadth of training, adequate "controls" and critical thought. Many felt that due to the rapid growth there was a deficiency in critical judgment and a need for rigorous criticism and a higher standard of scientific accuracy. When, as a small group, some of us visited a dispensary or some similar institution, we were met not by a single official but by three or more officials, giving us the distinct *impression* that the "chief" official was apprehensive lest he might be reported for telling us something that he did not say. Taking these and similar impressions into consideration, one wonders whether in such an environment rigorous and stern criticism, marked differences in viewpoint and true scientific freedom are not suppressed. Yet, having met numerous Russian physiologists, having noted the changes already made by the Soviet Government in their system and being assured that further changes will come when practically expedient, I view the future



A view of two buildings in the Metschnikoff Hospital group just outside Leningrad.

of physiological science in Russia optimistically. (*Footnote 4).

Some of us visited hospitals, dispensaries, nurseries, and prophylactoria, (*Footnote 5), in an attempt to obtain an insight of the Russian system of medical practice. We learned that, on paper at least, they have a "perfect" system of socialized medicine. In so far as I could ascertain the facts, their system is most analogous to the Swedish system. One finds individual differences of opinion among physicians and patients in regard to how they like the system. Foreign tourists also react differently to the system of state capitalism in Russia, some entering Russia "pink" and returning "red" and others "white."

If one attempts to maintain an emotional balance and evaluate one's responses according to one's past conditioning and that of the Russians, (*i.e.* objectively, which is very difficult) he sees many things that are good and other things that are bad. Thus, when such a person is asked, "how do you like," or, "what do you think of Russia" (after 10 days of it—much too long for many people!), he may reply: "A very interesting experiment is being conducted in Russia. It is to be hoped that it will not be interfered with by external forces and that the Russian experimenters will not interfere with governmental and social experiments going on elsewhere."

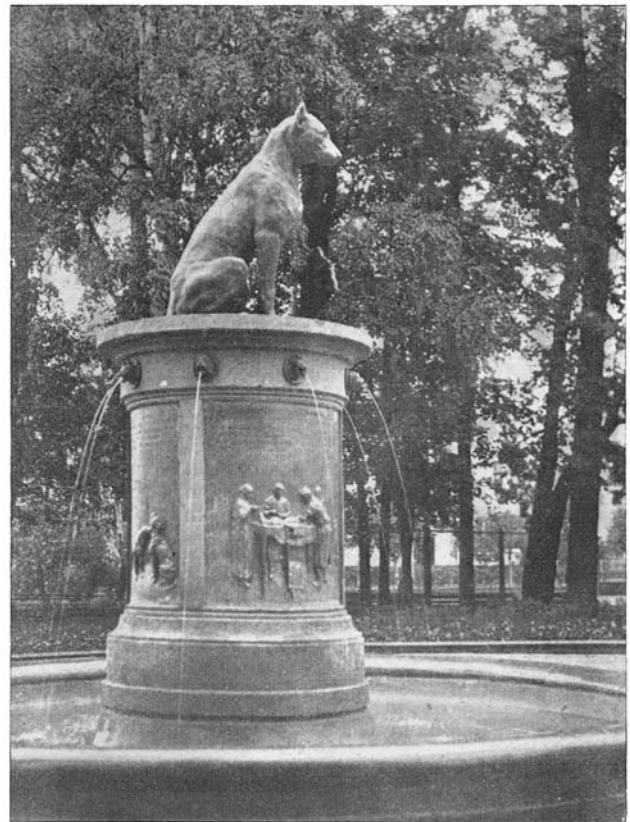
The Russian experiment is in progress, and one cannot pass judgment, except on the basis of theory,

*Footnote 4. Various sorts of devices, prizes, bonuses, badges, etc., are used to stimulate individual effort among scientists, officials and workers.

*Footnote 5. A "prophylactorium" is an institution for the "cure" of prostitutes, or, as the Russian officials say, for their "reconditioning." Hard labor is one of the "cures." The following amusing conversation occurred during one of these visits. Noting that the majority of women gave the appearance of being "feebleminded," we inquired for the percentage of cures. The reply was, "100 per cent." We manifested incredulity, and inquired how many of the women came back. The reply was that a number of them was brought back, but they were "crossed-off," because they had not been cured in the first place.

on an experiment in progress. One may say that a certain part of the technique of the experimenter is good or bad, but the critic who does not know all the details expedient for particular situations may be wrong. In another generation or two, the experiment should be about concluded. Then, and then only, may one pass judgment on its success. At least the prominent Russian experimenters are sincerely idealistic, though they claim to be materialistic, and are not becoming privately rich through graft. The experimenters, however, are well paid and have a high standard of living; this can hardly be said of the mass of workers at present, when their standard of living is compared with that of the mass of American workers.

In other words, from the viewpoint of an experimentalist, the Russians are conducting an interesting experiment, but it is preferable in this experiment to play the *rôle* of a prominent official, scientist or engineer. The result of the experiment may prove that communism or that state capitalism (not a "*dictatorship* of the proletariat," which is most repulsive to a thoroughbred American, though it may be expedient in present-day Russia) is not a Utopian dream, but is a practical social procedure.



The Memorial to the Unknown Dog, located in the yard of Pavlov's Institute.