been made, although some French estimates run as high as 30 or 40 per cent. Among the four million men in the active French army at present it is estimated that ½ to 1 per cent. have tuberculosis. It is not believed that the cases of tuberculosis among the civil population have decreased since the war, and in the remaining 30,000,000 not accounted for in the foregoing figures, on a conservative estimate, taking as a basis the prevalence of the disease before the war, there would be at least 150,000 cases, making in all about 500,000 cases, or, say, 400,000, to be extremely conservative, to be dealt with if the war were terminated at once. To deal with this vast number of cases Biggs says there are at present the so-called sanitary stations with 11,000 beds, which number it is hoped to increase to 16,000 by the end of the war, and a dozen or so well equipped dispensaries. There are practically no trained nurses or social service workers. but a few women are being trained in a three months' course in the Laennec Hospital. Not more than a dozen physicians are said to have given any special attention to tuberculosis, few have had sanatorium experience and still fewer are at all familiar with the tuberculosis work of others. The outlook, Biggs feels, is not encouraging, though the French government has partially realized the situation and is trying to meet the problem by the organization of dispensaries in the populous regions of France.

MEDICAL WORK IN BRAZIL

DR. GEORGE K. STRODE, a member of the International Health Board of the Rockefeller Foundation and who was one of the men sent to Brazil to make a study of medical conditions there, in a letter to Dr. David Riesman, which is quoted in *Old Penn*, writes in part as follows:

The work of the International Health Board is in the hands of two of us down here. We have just completed an infection survey in the state of Rio de Janeiro, which has shown among 7,000 examinations for uncinaria a percentage of positives of 82. Malaria, I believe, is almost as wide-spread, and the two are a heavy drain on the people. Our work will shortly be extended to the states of Minas Geraes and São Paulo, which means the board will be busy in this country for a long time. At the present moment we are instituting an intensive campaign in one county of the state which will aim to cure and eradicate the disease in that area. This we hope will serve as a demonstration and will stimulate the authorities to continue the work.

There are many diseases found here with which I am not yet familiar; most important are Chaga's disease (trypanosomiasis) and leishmaniasis. Tuberculosis is, however, more important than either of these and is being combated by voluntary organizations.

Medical schools are government institutions, and the four leading ones are quite good. Six years are devoted to the course, the first two being almost wholly given over to pre-medical work. The graduate is not required to serve as an interne, so that only about 30 per cent. take such work. Indeed, in most of the hospitals internships are not available. Research laboratories are few and far between; the most noted is the Oswaldo Cruz Institute, which I visited last week. Much good work is produced here, but it is unfortunately very narrow in scope, entomology and parasitology being the only fields that are tilled.

RECOMMENDATIONS OF THE THIRD INTER-STATE CEREAL CONFERENCE

In view of the world shortage of cereal food crops, which is likely to continue for an indefinite period, the Third Interstate Cereal Conference held at Kansas City, Mo., June 12–14, urges the greatest practicable enlargement of wheat acreage and would further make the following recommendations:

- 1. To encourage a larger wheat production, the producer should be guaranteed a minimum price, such price to continue at least one year after war is ended.
- 2. Early preparation of the land for small grains, where these do not follow cultivated crops, should always be practised. In the winter wheat area it is very important that this be done immediately after harvest.
- 3. Immediate action is required in providing seed for the next crop. At harvest time it is cheapest, and just before harvest seed in large bulk can best be selected. State and federal aid will be given in locating seed in localities of comparative abundance for use in localities where it is sorely needed. Clean seed, as free as possible from diseases, should be selected and arrangements be made for seed treatment.

- 4. Varieties of grain best adapted for the locality should always be used. The agricultural colleges and other state agricultural agencies will inform the farmers of the existence of these varieties and how and where to obtain the seed.
- 5. Every means should be employed to eliminate weeds, by use of clean seed, crop rotations, early cultivation above mentioned, and any special methods reliably recommended for particular weeds in different localities.
- 6. Seed testing for germination can well be further emphasized at this emergency period. The extension service, through county agents, should bring this matter home to every farm.
- 7. Seed treatment will largely prevent certain smuts and other diseases of cereals, and, as a real war measure, we are bound to see that it is applied as nearly as possible on every farm, thus increasing our cereal production a hundred million bushels or more, in one season. By field demonstrations the methods can and should be made plain to all concerned.
- 8. The possible ravages of Hessian fly, chinch bug, green bug, stored grain and mill products insects, etc., must be kept also in mind and the progress of and means of checking these insects be communicated, so far as possible, in advance of their local occurrence
- 9. As a means of reducing the great loss from rust, it is urged that all common barberry bushes (not the Japanese) and grass weeds harboring cereal rusts, be eradicated, and that rust-resistant cereal varieties be grown, if otherwise of good quality.
- 10. It is a conservative estimate that 20 million bushels of wheat and proportional quantities of other cereals are annually lost by waste in harvesting and thrashing. This waste can and and should be, in large measure, easily avoided. A man and team are known to have cleared \$27 to \$62 a day from cleaning up after thrashers, and, in another instance, last year in Kansas, \$500 was gained by a man, with a team and fanning mill, cleaning up after thrashing machine settings, in three weeks' time.
- 11. In the western and southwestern plains, grain sorghums should be widely planted. In the northern plains, in the drier districts, flax and, under certain conditions, proso or Russian millet, may be used to a similar advantage.
- 12. Suitable catch crops (such as cowpeas, soy beans, sorghums, millet, flax and buckwheat) should be grown on all lands on which staple crops can not be seeded at the proper time or on which they have been destroyed.

13. The increased use of corn, rice, grain, sorghums, proso, barley, rye, beans, cottonseed meal and peanut meal as substitutes for, or in conjunction with, wheat for human food is strongly recommended. Information on this matter can be obtained through the state agricultural colleges and the United States Department of Agriculture.

ORGANIZATION OF THE ENGINEERING

On June 27 was held the first meeting of the Engineering Council. This body is a department of the United Engineering Society and has recently come into being as a medium of cooperation between the four national engineering societies. The function of the council may perhaps best be described by the following extract from the by-laws of the United Engineering Society:

The council may speak authoritatively for all member societies on all public questions of a common interest or concern to engineers.

The council is composed of twenty-four members, five being appointed by each of the four founder societies and four by the United Engineering Society. Its present membership follows:

American Society of Civil Engineers.—J. F. Stevens (Chas. Warren Hunt), George F. Swain, F. H. Newell, Alex. C. Humphreys, F. D. Galloway. American Institute of Mining Engineers.—P. N. Moore, S. J. Jennings, B. B. Lawrence, J. Parke Channing, Edwin Ludlow.

American Society of Mechanical Engineers.—I. N. Hollis, Chas. Whiting Baker, John H. Barr, A. M. Greene, Jr., D. S. Jacobus.

American Institute of Electrical Engineers.—H. W. Buck, E. W. Rice, N. A. Carle, P. Junkersfeld, C. E. Skinner.

United Engineering Society.—Clemens Herschel, B. B. Thayer, I. E. Moultrop, Calvert Townley.

At the organization meeting held in the rooms of the American Society of Mechanical Engineers at 2.30 o'clock P.M., on the twenty-seventh instant, the following officers were elected:

President: I. N. Hollis.

Vice-presidents: H. W. Buck, George F. Swain. Secretary: Calvert Townley.

Executive Committee: The four officers named, with J. Parke Channing and D. S. Jacobus.