operative procedures in mind, but, on the other hand, I think it must be admitted, if we approach the question from a scientific point of view, that there is no field of medicine in which so much awaits discovery. The practically minded man may in turn reply that that is possibly correct, but that most of the unsolved problems are of scientific interest only and have little or no bearing upon the relief of suffering or the cure of disease.

This being the case, I can not refrain from enumerating certain of the problems which are in urgent need of solution and after that I shall be content to have the unprejudiced hearer decide whether they are important or not. For example, what do we know concerning the actual nature and cause of normal menstruation? Do we realize that millions of women are incapacitated for some days each month as the result of its abnormal course and that we are unable to relieve it much more efficiently than our grandfathers? Do we realize that we know almost nothing about sterility and its cure, except when it is due to frankly mechanical causes? What do we know about the cause and prevention of carcinoma, or why is it that every third colored woman develops uterine myomata after passing the fortieth year. Likewise, we are practically ignorant as to why uterine displacements follow every third or fourth normal labor, and until such information is forthcoming our treatment of the abnormality must remain empirical. What do we know concerning the endocrine and metabolic changes associated with the menopause or concerning their rational control? Every one knows that the pregnant woman falls into labor approximately ten lunar months after conception, but we are as ignorant of its cause as was Job concerning the wild goats of the mountain or the hinds that calve. Imagine what a boon it would be both to womankind and to obstetricians, when it becomes necessary to induce labor, if it could be done safely and efficiently by the hypodermic injection of some substance which will eventually be discovered. We are just beginning to learn the wonderfully economical manner in which nature keeps house during pregnancy, but our knowledge of the finer details of metabolism during that state are woefully incomplete.

Do we realize that thousands of women go through untold mental anguish each year because of the fact that, while they conceive readily, the pregnancy comes to an untimely end as soon as it attains a certain stage, and that we are as powerless to prevent it as when our grandfathers talked of rheumatism of the womb.

All statisticians who write upon maternal mortality point out that from 25 to 30 per cent. of all maternal deaths are due to the toxemias of pregnancy, and yet we are as ignorant concerning their true cause as a generation ago. The same statisticians tell us that a further 40 per cent. of deaths are due to puerperal infection, and we are still debating whether or not there is a scientific basis for autoinfection. Moreover, while infection can generally be prevented by the employment of suitable prophylactic measures, we can do little more to cure it, when it develops, than could Semmelweiss eighty years ago. The entire field of bacteriology in so far as the pregnant and parturient woman is concerned is in urgent need of cultivation, and we still have to devise methods of coping with bacterial invasion and of increasing the patients' power of resistance to it.

I could continue to enumerate similar problems indefinitely, but what has been said should suffice to indicate that they are abundant and urgent, and I can conceive of no worthier function of a woman's clinic than to afford opportunities to men who are anxious and willing to devote themselves to such investigations.

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TERTIARY MAN IN ASIA—THE CHOU KOU TIEN DISCOVERY[1]

A RICH fossiliferous deposit at Chou Kou Tien seventy li to the southwest of Peking was first discovered in the summer of 1921 by Dr. J. G. Andersson and later surveyed and partially excavated by Dr. O. Zdansky. A preliminary report on the site was published by Dr. Andersson in March, 1923,[2] followed in October of that year by a brief description of his survey by Dr. Zdansky.[3] The material recovered from the Chou Kou Tien cave deposit has been prepared in Professor Wiman's laboratory in Upsala and subsequently studied there by Dr. Zdansky. As a result of this research Dr. Andersson has now announced that in addition to the mammalian groups already known from this site there have also been identified representatives of the Cheiroptera, one cynopithecid and finally two specimens of extraordinary interest, namely, one premolar and one molar tooth of a species which can not otherwise be named than *Homo? sp.*

Judging from the presence of a true horse and the

[1] Announcement of the Chou Kou Tien discovery was first made by Dr. J. G. Andersson on the occasion of a joint scientific meeting of the Geological Society of China, the Peking Natural History Society and the Peking Union Medical College held in Peking on October 22, 1926, in honor of H. R. H. the Crown Prince of Sweden.

[2] Mem. Geol. Surv. China, Ser. A, No. 5, pp. 83 to 89.

[3] Bull. Geol. Surv. China, No. 5, pp. 83 to 89.

absence of *Hipparion,* Dr. Andersson in his preliminary report considered that the Chou Kou Tien fauna was possibly of upper Pliocene age, an opinion also expressed by Dr. Zdansky. It is possible, however, in the light of recent research that the horizon represented by this site may be of Lower Pleistocene age. Whether it be of late Tertiary or of early Quaternary age the outstanding fact remains that for the first time on the Asiatic continent north of the Himalayas archaic hominid fossil material has been recovered accompanied by complete and certain geological data. The actual presence of early man in eastern Asia is therefore now no longer a matter of conjecture.

While a complete description of these very important specimens may shortly be expected in *Palaeontologia Sinica,* the following brief notes may be of interest here. One of the teeth recovered is a right upper molar, probably the third, whose relatively unworn crown presents characters which appear from the photographs to be essentially human. The posterior moiety of the crown is narrow and the roots appear to be fused. The other tooth is probably a lower anterior premolar of which the crown only is preserved. The latter also is practically unworn and appears in the photograph to be essentially bicuspid in character, a condition usually to be correlated with a reduction of the upper canine.

The Chou Kou Tien molar tooth though unworn would seem to resemble in general features the specimen purchased by Haberer in a Peking native drug shop and subsequently described in 1903 by Schlosser. The latter tooth was a left upper third molar having a very much worn crown, extensively fused lateral roots and from the nature of its fossilization considered by Schlosser to be in all probability Tertiary in age. It was provisionally designated as *Homo? Anthropoide?* It is of more than passing interest to recall that Schlosser in concluding his description of the tooth pointed out that future investigators might expect to find in China a new fossil anthropoid, Tertiary man or ancient Pleistocene man. The Chou Kou Tien discovery thus constitutes a striking confirmation of that prediction.

It is now evident that at the close of Tertiary or the beginning of Quaternary time man or a very closely related anthropoid actually did exist in eastern Asia. This knowledge is of fundamental importance in the field of prehistoric anthropology; for about this time also there lived in Java Pithecanthropus, at Piltdown Eoanthropus and but very shortly after at Mauer the man of Heidelberg. All these forms were thus practically contemporaneous with one another and occupied regions equally far removed respectively to the east, to the southeast and to the west from the central Asiatic plateau which it has been shown elsewhere most probably coincides with their common dispersal center. The Chou Kou Tien discovery therefore furnishes one more link in the already strong chain of evidence supporting the hypothesis of the central Asiatic origin of the Hominidae.

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THE PAN-PACIFIC RESEARCH INSTITUTION

THE Pan-Pacific Research Institution is attempting in Honolulu an experiment in providing a home where actual research workers, other than executives, may gather and meet together without supervision, to pursue their chosen work alone or with the cooperation of congenial companions of their own selection. In other words, any scientist on sabbatical leave or other vacation if interested in research work, especially along the lines of food and population problems in the Pacific area, would be welcomed as a guest at the Pan-Pacific Research Institution in Honolulu and given a home for the period of time spent in actual research work.

The institution has no laboratories of its own, but those of existing scientific organizations are at the service of the scientists making their temporary home at the institution. A corps of student helpers is maintained—young men of several Pacific races who are given homes at the institution and are taking science courses at the university. They are aided financially in return for any service rendered visiting scientists or those resident in Hawaii and connected with the institution.

About one hundred scientists, entomologists, plant pathologists, agronomists, ichthyologists, biologists, etc., form the local science council of the institution. Some thirty of these dine together each Friday night at the institution at a conference meal; a popular science lecture, open to the public, is given later in the evening in the auditorium of the institution. The institution has the use of some seven acres of ground with several commodious and extensive buildings where might be comfortably housed forty or fifty visitors and workers; additions are contemplated.

The Pan-Pacific Research Institution was organized by the Pan-Pacific Union pursuant to resolutions passed at the first Pan-Pacific Food Conservation Conference, the carrying out of the plan being made possible by two of the directors of the union, Messrs. George and William Castle, who placed the splendid property in Manoa Valley in Honolulu at the service