steadily as the temperature fell, until a certain limit was reached. Radiation was more intense in men than in women, in boys than in girls, in young than in old, in the vigorously healthy than in the feeble or convalescent. In other words, radiation was more active as the processes of nutrition and metabolism were more active.

Reasons were given for believing that the radiating power of the skin, which would be shown to depend on its physical and chemical constitution, was subject to physical control; and thus, what was apparently the most physical of all the thermolytic processes was not outside the domain of the thermal nervous system. In discussing the value of an antipyretic method, in explaining its mode of action, we could not in future ignore the questions: What changes does it call forth in the texture of the skin? How does it modify the great thermolytic function of radiation?

Another subject connected with thermolysis deserves some mention, namely the connection of peripheral temperatures with central. The lecturer, in common with many others, had been perplexed and baffled by the apparent lawlessness of surface temperatures as taken by any of the ordinary methods. So doubtful were any results based on them that experts regarded with suspicion all observations but their own. Recent inquiries, also carried out at Zürich under Professor Eichhorst, showed that the difficulty lay chiefly in an erroneous method of procedure. When peripheral temperatures are taken continuously for some hours (eight or ten) instead of some minutes, it appears that in health as well as in disease the curves obtained consist of distinct portions. The first corresponds to a stage of an hour or so, in which the temperature is highly irregular and different from the central temperature. This is the *ambiguous* stage. The second is marked by much greater uniformity and nearness of the central temperature. Like the latter it tends to be constant and stable. This is the *continuous* stage, and it is so regular, so normal, that we are safe in drawing conclusions from its changes. Observers hitherto had seldom got beyond the ambiguous stage, and hence the irregularity and confusion already alluded to. The effects of antipyretic methods on the continuous stage of the peripheral temperature would form an interesting and trustworthy study later on.

Next, the anatomy and physiology of the thermogenic system had received valuable contributions. New points in the thermogenic tract had been made out (he would not call them *centres*) by Ott and others in America, using the methods and working under the inspiration of Professor Wood. In the rabbit four points in the cerebral axis were known, the stimulation of which gave rise to increased heat production, not simply rise of temperature. Two were at the anterior and median borders of the corpus striatum, one between that body and the thalamus, and a fourth at the anterior of the end of the thalamus. Dr. Hale White had in part verified the localisation as regards the anterior striate centre and had made out that unilateral irritation gave rise to bilateral pyrexia. It thus appeared that in the rabbit the lateral differentiation of the thermal tracts, like that of the motor, was still incomplete."

Cresylic Acid.

In a thesis published by Dr. Delplanque, are various experiments on the antiseptic properties of cresylic acid, at the laboratory of Hospital Cochin, Paris. After the determination of the toxicity of the acid, sometimes called cresylol, milk and urine were successfully experimented on. Cresylic acid (phenai, cresylic, cresol, hydrite, cresyl, etc.), exists in creasote, and is isolated by fractional distillation at between 200° and 210°C. It is a phenol, derived from toulene. It is separated out from the sulfotoluenate by potash, then separated by acid and ether. It is a colorless liquid. with an odor of creasote. It is slightly caustic. It is insoluble in water, quite soluble in alcohol, glycerine and aqueous ammonia, very soluble in ether. Toxic doses cause in rabbits convulsive shocks, followed by salivation, increased respiration, and paralysis of hind legs. The symptoms disappeared in two hours, but the rabbit died next day. The acid notably retards fermentation both in urine and milk.

Experiments on microbes showed that with doses of from 2 tenth-milligrams added to 3 cubic centimeters of culture, inoculated with typhoid bacilli, their development was either wholly prevented or greatly retarded.

BACTERIOLOGY.

Preventive Vaccination of Asiatic Cholera.

In the *Revue Scientifique* for Sept. 1st, appears a notable communication by M. Gamaleia, *chef* of the laboratory of Odessa, and presented to the Academy of Sciences, Paris, by M. Pasteur.