Glycerophosphoethanolamine, taurine, Glycine, alanine and γ -aminobutyric acid decreased in the cerebral cortex of human epileptics, which was resected by surgical operation.

Cystathionine has been proved to be an intermediate of the process from methionine to cysteine in animal liver. It is very significant that cystathionine content especially increased in the human brain, while its content seems to be considerably different at various parts of the brain. Therefore, an analysis of cystathionine was made at these various parts and its metabolism was also investigated.

Moreover, the changes of free amino acids of the brain in B_6 deficiency or other conditions are reported and discussed.

102. Convulsion Produced with Some Dyes Introduced into c. s. f. of Dogs

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Various dyes (methylen blue, trypan blue, eosin etc.) introduced into the ventricle of dogs had the action to produce convulsion. 1) The latent period to produce the seizure by these dyes was rather long, e.g. 4-55 minutes, so that seizures were not due to their direct action, but 2) they might accelerate the production of the excitatory transmitter of the central nervous system, or 3) some of them might inhibit the genesis of the inhibitory transmitter in the brain, and 4) some of them had double actions of the above 2) and 3).

103. Metabolism of Perfused Cat's Brain (Part 2).

Influences of Electrostimulations and γ -Amino- β -Oxybutylic Acid (GABOB) on Metabolism of Cat's Brain by Use of Brain Perfusion Method in Situ

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The influences of electrostimulations and GABOB on the metabolism of perfused cat's brain were investigated by the use of the Geiger's brain perfusion method and the following results were obtained:

1. When frequent electrostimulations were given in succession, cerebral oxy-