

seems safe to conclude that the cold simply reveals the "potentialities," so to speak, of the "bent" genes, and that these potentialities are similar in the two species.

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Localization of the vomiting center.

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1. Emesis was induced after destruction of the quadrigeminate bodies, after destruction of the cerebellum, and after section of the columns of Goll and Burdach in the cat, and after destruction of the area described as the vomiting center by Thumas¹ in the cat and in the dog.

2. Emesis could not be induced by any drug that we employed after destruction of the sensory nuclei of the vagi in the cat, nor could it be induced in any of three experiments in this animal in which the sensory nucleus of only one side had been destroyed, but vomiting did occur in one experiment in which an attempt to destroy the sensory nucleus of the right vagus may have been only partially successful.

3. Results of these experiments indicate that the sensory nuclei of the vagi are essential for the coordination of the vomiting reflex (that is, for vomiting however induced), and this is in harmony with our conception of the mechanism of emesis because: (a) It is well known that the vagus nerve is essential for emetic action of many drugs. (b) We have been unable to induce vomiting in the cat after destruction of the sensory nuclei of the vagi while taking especial care to avoid injury to the area described by Thumas as the vomiting center. (c) There are no nerve cells concerned so far as known, in the area described by Thumas.

4. We have shown elsewhere² that afferent emetic impulses from the heart pass by way of the sympathetic nerve, hence the conclusion is unavoidable that this nerve must make functional communication with the sensory nuclei of the vagi.

¹ Thumas, L. J., *Arch. f. Anat. u. Phys.*, 1891, cxxiii, 44.

² Hatcher, R. A., and Weiss, Soma, *Arch. Int. Med.*, 1922, vol. xxix, 690.