

of the nerve failed to affect respiration to any appreciable degree although inspirations were still taking place.

This showed that there was loss of irritability either in the nerve itself, or in the nerve roots, or on the sensory side of the respiratory centre. It is hard to decide for certain which,

FIG IV.

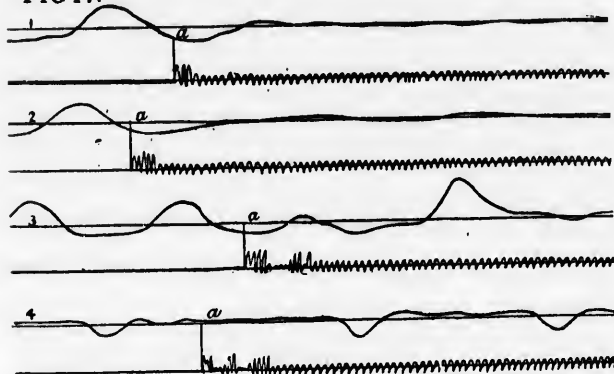


Fig. 4.—Effect of stimulating the pneumogastric nerves at various stages of tobacco poisoning. In each curve (a) marks the point at which a moderately strong current from a Du Bois-Reymond inductorium was turned into the nerve. At first the breathing is stopped or greatly modified, but in the final stage of poisoning seen in Tracing 4 the stimulation has no effect.

but I believe that the profound change in the breathing at this stage may be attributed with reason to all the afferent impulses being cut off from the centre, so that it was only stimulated to action in an imperfect way by the impure blood which reached it. This assumption is borne out by the work of Loewy, as referred to in Landois and Stirling's *Physiology*.

FIG V.

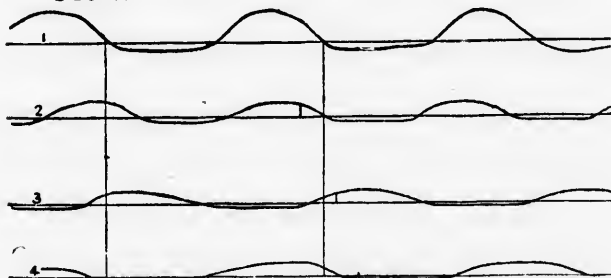


Fig. 5.—Stages of chloral poisoning, shows weakening and slowing of respiration following a preliminary quickening. The failure of inspiration is, if anything, more marked than that of expiration.

He found that on cutting off all possible nervous impulses from the centre the respiration became extraordinarily slow, and each individual respiration became deeper. He believes that these respiratory movements were due to the stimulation