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The locus of the action of veratrin in Mnemiopsis.

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Specimens of *Mnemiopsis* immersed in a solution of veratrin (1 : 1345) in sea water show immediate inhibition of beats of the swimming plates, these stopping in the upright position. If, now, single plates or groups of plates be isolated from a specimen, in two minutes these begin beating and continue to do so for half an hour or longer in the solution of veratrin. With intact specimens the plates begin to show movement at the tips, only after fifteen minutes' immersion in veratrin. This movement increases in speed and regularity, becoming abnormally vigorous at the end of an hour. At this stage, during momentary cessation of beat, it can be seen that the plates stop in the upright position, and that mechanical stimulation causes, not inhibition of the beat and assumption of the prone position as in the normal animal, but excitation and acceleration of beat. This abnormal type of beat persists for six hours, appearing in pieces of the animal after disintegration.

Since the initial effect of veratrin, namely, inhibition of beat, can be removed by isolation of plates and groups of plates from the animal, and since in the secondary stage of veratrin poisoning, an inhibition is converted into an excitation, it seems probable that the locus of veratrin action in *Mnemiopsis* is on the nerve net.