tion caused increased permeability and the acid diffused out. This effect could not be obtained with currents too weak to cause the bleb formation previously described.

III. Mrs. Harvey states that the tentacle coils at the make remains coiled while the current is passing and relaxes at the break. This is true for certain individuals and certain positions of the organisms relative to the current direction, but not for all. There is considerable variety of detail for which the reader is referred to a fuller report to be published later. When the current is from aboral to oral the usual effect is as follows: Strong contraction of tentacle at make; held contracted nearly to full extent while current is passing; slight contraction (sometimes none) at break followed by marked relaxation. When current is oral to aboral: extreme relaxation at the make (sometimes preceded by a slight instantaneous contraction); held relaxed while current is passing; strong contraction at break, followed by return to normal position. Often spontaneous to and fro movement was seen either in the strongly contracted or strongly relaxed tentacle while current was passing. These effects of the current seem explicable on the basis of electrotonus.

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Observations on the assay and factors influencing the quality of digitalis.

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A method for assaying digitalis and other drugs of this group by the use of cats was outlined. The procedure was practically identical with the Hatcher-Ouabain Method, as published in the *American Journal of Pharmacy,* 1910, but differed in the important point of completing the test with the digitalis to be standardized, rather than with a standard Ouabain solution. Results by this method, it was stated, were comparable with those obtained with Ouabain, and as accurate as the use of frogs or guinea pigs for determining toxicity. Regulating the dose

and rate of flow in proportion to the weight of the animal was held to be important, if satisfactory results were to be obtained. The use of the cat was held to possess distinct advantages in that it afforded the analyst the opportunity of recording the exact action of the preparation upon the heart. It was held to be a possibility that further work might result in a method for measuring the total therapeutic activity, as well as the toxicity.

Results were submitted showing that the first year's growth digitalis leaves as produced at the University of Minnesota during 1922 were the equal in every way with respect to therapeutic value to leaves collected from second year's growth, provided the long petioles which frequently develop during the first year's growth were not included in the drug. The petioles, it was pointed out, represented 40 per cent. of the weight of the entire dried leaf. The general practice is not to collect these long leaf stalks. The leaf stalks or petioles were stated to be only about one-quarter as rich in therapeutic constituents as the lamina.

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Experimental goitre and iodin in natural waters in relation to distribution of goitre.

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White rats of 30 gram weight were placed on a diet containing about or less than .006 milligram of iodin in 50 grams of dry foodstuff in addition to distilled water. Controls were placed on the same diet except for one day a week when they drank water containing .01 per cent. iodin. At the end of about three months those receiving the iodin had thyroid glands one-half to two-thirds the weight of those receiving no iodin.

The United States is divided into four zones based on the