

quiet. Ten c.c. of the infusion of digitalis were slowly injected into the vein in the course of five minutes, and thereafter 1 c.c. every two minutes until the death of the animal. The total amount of the drug injected divided by the weight of the animal gave the strength of the preparation in terms of so-called "cat units." The following protocol will serve as an illustration:

Experiment, April 30, 1915. Cat weighing 2.6 kg. Cannula in left femoral vein, light ether anesthesia.

3:20 p. m. experiment begins. Pulse 160 per min.

Slow injection of infusion digitalis.

3:25....	Finished injection of 10 c.c.....	Pulse 140 per minute
3:27.....	Injected 1 c.c.....	Pulse 120
3:29.....	Injected 1 c.c.....	Pulse 100
3:31.....	Injected 1 c.c.....	Pulse 72 respirations rapid
3:33.....	Injected 1 c.c.....	Pulse 72 vomits
3:35.....	Injected 1 c.c.....	Pulse 72
3:37.....	Injected 1 c.c.....	Pulse 60
3:39.....	Injected 1 c.c.....	Pulse 148
3:41.....	Injected 1 c.c.....	Pulse 160
3:43.....	Injected 1 c.c.....	Pulse 160
3:45.....	Injected 1 c.c.....	Pulse 180
3:47.....	Injected 1 c.c.....	Pulse 168
3:49.....	Injected 1 c.c.....	Pulse 240
3:51.....	Injected 1 c.c.....	Pulse 240
3:53.....	Injected 1 c.c.....	Pulse 240
3:55.....	Injected 1 c.c.....	Pulse irregular, very rapid
3:57.....	Injected 1 c.c.....	Pulse irregular, very rapid
3:59.....	Injected 1 c.c.....	Pulse dead: heart in systole
Total amount of infusion = 26 c.c.		
Therefore lethal dose = 26		

$$\frac{26}{2.6} = 10 \text{ c.c. per kg.}$$

By this method different infusions of digitalis prepared from two batches of Allen's English leaves were assayed: the one from the stock of the pharmacy of the Johns Hopkins Hospital, the other an infusion procured from a well-known pharmacy in New York. The lethal dose of the former was found to be 13.5 c.c. per kilogram; that of the latter, 7.5 c.c. per kilogram. This difference in potency could be accounted for only in two ways: either by differences in the method of preparation or by variations in the intrinsic quality of the leaves.

DIFFERENCES IN POTENCY DUE TO METHOD OF PREPARATION

A comparison was made between a New York infusion of digitalis and an infusion from the same stock of leaves prepared by our own pharmacist. The lethal dose of the New York preparation was 6.6 c.c. per kilogram. The lethal dose of our own infusion from