

attention it is desired to point out several improvements in the lime-water method, as described in *Journal of the American Chemical Society*, 26, p. 661.

It has been found that to "draw off" the supernatant liquid and boil it to a volume of about 5 c.c. may lead to errors of 200 or 300 parts per million, because traces of soluble alkaline lime salts may not diffuse into the upper portion of the supernatant liquid. The method has been modified to read

... allow to stand over night, with occasional shaking, shake thoroughly and filter immediately through a neutral filter paper (S. & S. 588 is good) rejecting the first 10 to 15 c.c., or until the filtrate is quite or nearly clear, place in a Jena (Nonsol or Pyrex, or other insoluble glass may be used) beaker. . . .

I have realized from the first that the lime-water method gives high results on soils very rich in organic matter. One of the reasons for this was recently observed by Mr. Holman, of this laboratory. It is that the characteristic pink color developed when phenolphthalein is added to an alkaline solution is often almost immediately destroyed rather than masked in solutions containing much dissolved organic matter.

The error which may be thus introduced is lessened but not entirely eliminated by boiling down the filtrate to about 10 c.c. and adding, watching carefully meanwhile for the temporary pink color, the phenolphthalein a drop at a time.

This is not the only cause for the high results obtained on soils rich in organic matter. Other causes, modifications to eliminate them and improvements simplifying and shortening the method, will be presented at an early date.

F. P. VEITCH

WASHINGTON, D. C.

#### THE SURVIVAL OF BEAT IN THE REMOVED HEART OF THE SNAPPING TURTLE

THE aim of the present note is to place on record the details of the survival of pulsations in the heart of the snapping turtle. A specimen having a shell-length of about twelve inches was captured in the vicinity of Kingston by one of the boys of the community. For

three days it was kept in a tub without food and on the fourth was killed and dressed "to make a stew." The writer was not present at the killing which occurred at 9:45 in the morning. The heart was brought to the laboratory at 10:45, the boy being interested in the fact that the beating continued. At the time the writer first observed the specimen it was lying in a small pool of blood in a saucer with the vessels cut short. It was then beating strongly at the rate of eleven times per minute. At 11:35 the blood was washed out of the saucer and normal salt solution added to partly cover the organ. The further record of the beats per minute was made as follows, the room temperature being 73° F.

9:45	.....	turtle killed.
10:45	.....	rate 11 beats.
11:05	.....	rate 12 beats.
11:35	.....	rate 12 beats.
12:30	.....	rate 16 beats.
1:00	.....	rate 18 beats.
1:30	.....	rate 18 beats.
2:00	.....	rate 18 beats.
2:30	.....	rate 18 beats.
3:00	.....	no contractions.

From the above it will be observed that the contractions continued at a slightly increasing rate for a period of about six hours. At the end of this time mechanical stimulus failed to produce further contractions.

PHILIP B. HADLEY

KINGSTON, R. I.,  
June 27, 1916

#### QUOTATIONS

##### SCIENTIFIC SOCIETIES AND THE GOVERNMENT

THE letter in the *Times* of Professor E. G. Conklin, of Princeton, pointing out that no president has given such generous recognition to the National Academy of Sciences and other scientific bodies as Wilson, deserves larger attention than it will get. It occurs to few that the government could make profitable use of scientific auxiliaries. Though the National Academy of Sciences was authorized fifty-three years ago by Congress, in response to a demand by Alexander Bache, superintendent of the Coast Survey, for an official organization for research; though it was launched with a membership including Agassiz, Davis,