

A P P E N D I X.

NEW BRUNSWICK, N. J., Oct. 2, 1887.

DEAR DR. TERNE: I have just returned from a week's trip through the southern counties of this State, and hasten to reply to your favor of the 27th September.

This State fertilizer law provides that all determinations of available phosphoric acid must be made at a temperature not exceeding 100° Fah. For this reason I have not attended any of the conventions held by State chemists since the Atlanta meeting, when the change to 150° Fah. was proposed. I regret that I have no copies of the transactions of recent conventions, but will immediately write to my friend, Dr. Jenkins, of Conn., and ask him to mail you the last report.

Yours truly,

ARTHUR J. NEALE.

CHAS. H. STILLWELL,
THOMAS S. GLADDING.

OFFICE AND LABORATORY OF STILLWELL & GLADDING, }
ANALYTICAL AND CONSULTING CHEMISTS, }
No. 55 FULTON ST., COR. CLIFF ST., }
NEW YORK, Oct. 5, 1887. }

DR. BRUNO TERNE.

Dear Sir: We use 65° C., and have heard nothing about a return to 40° C. We have not heard what was done at the convention of State Chemists at Washington last August.

Yours truly,

STILLWELL & GLADDING.

OCTOBER 7, 1887.

DEAR SIR: I learn from Dr. Gascoyne that they made no change in the temp.

In N. J. the law prescribes a temp. of 100° F.; so the chemists have to follow it.

Yours truly,

CHAS. H. STILLWELL.

DR. W. J. GASCOYNE,
Chemist.

COMMONWEALTH OF VIRGINIA,
DEPARTMENT OF AGRICULTURE, CHEMICAL LABORATORY,
RICHMOND, VA., Oct. 5, 1887. }

DR. BRUNO TERNE, Philadelphia, Pa.

Dear Sir: Your favor of the 4th inst. is just to hand. New Jersey is the only State in which the law prescribes the temperature at which the determination shall be made (40° C.).

In all other States is used the methods of the convention of Off. Chemists, 65° C.

You will receive a copy of the methods from our secretary in a few days.

I will send you the P_2O_5 samples to-morrow or next day.

In haste, very truly yours,

W. J. GASCOYNE, PH. D.

LABORATORY,
G. A. LIEBIG, PH. D.

BALTIMORE, Oct. 15, 1887.

DR. BRUNO TERNE.

Dear Sir: In reply to your favor of yesterday I beg to say that I generally use the oxal. am. solution to determine amount of reverted P_2O_5 .

If specially ordered to employ the citr. am. solution, I use 65° C. temperature.

Am not aware that any other temperature is used.

Very respectfully,

G. A. LIEBIG.

DR. T. R. WOLF,
Analytical and Consulting Chemist.

NEWARK, DEL., Oct. 13, 1887.

DR. BRUNO TERNE, Philadelphia.

Dear Sir: Your letter of the 4th inst. was duly received, but owing to the great pressure of official duties, the matter was en-

tirely overlooked. In reply to your query I would say that I digest at 65° C., as recommended by Dr. Gladding.

Yours truly,

T. R. WOLF.

UNIV. OF PA., Oct. 5, 1887.

DEAR SIR: There is no law in this State as to which methods are to be used in analysis. I always use for the determination of reverted P_2O_5 citrate of ammonium solution for thirty minutes at 65° C.

Yours truly,

F. A. GENTH.

C. A. GOESSMAN, PH. D.,
Director of Experiment Station.

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION, }
AMHERST, MASS., Oct. 12, 1887. }

DR. BRUNO TERNE, Philadelphia, Pa.

Dear Sir: For several years past I used in my analysis of superphosphate, etc., as State Inspector of Fertilizer, the temperature 65° C. for one-half hour for the determination of the citrate ammonia soluble phosphoric acid. Years ago our State law required 40° C. Nothing but the desire to secure conformity of modes of analyzing fertilizer have induced me to make the change.

I am, yours respectfully,

C. A. GOESSMAN.