TABLE 5.

Remarks.	No. acetyl salicylic.	Wt. per 250 cc.	Cc $N/10$ I_2.	Factor for I_2.	Cc $N/10$ $Na_2S_2O_3$.	Factor for $Na_2S_2O_3$.	Cc $N/10$ I_2 equivalent to aliquot.	Factor for acetyl salicylic.	Per cent.	Sample Nos.
A good commercial sample	23275	0.8800	31.81	1.0366	3.76	1.0062	29.19	0.003001	99.54	1
	23275	0.8800	31.80	1.0355	3.67	1.0062	29.24	0.003001	99.71	2
No odor	23275	0.8800	31.80	1.0266	3.45	1.0062	29.18	0.003001	99.51	3
Recrystallized	H	0.8837	33.00	1.0033	3.79	1.0083	29.29	0.003001	99.48	4
sample, dried		0.8837	33.00	1.0033	3.78	1.0083	29.30	0.003001	99.50	5*
at 40° and then		0.8837	33.00	1.0033	3.77	1.0083	29.31	0.003001	99.54	6*
over sulphuric		0.8801	33.00	0.9988	3.72	1.0083	29.21	0.003001	99.60	7
Two old samples. Odor of acetic acid	5871 (2B)	0.8804	31.80	1.0266	3.53	1.0062	29.10	0.003001	99.19	8
	5872 (4C)	0.8801	31.80	1.0266	3.47	1.0062	29.16	0.003001	99.43	9
						Limit of error				
						1 drop in final titration			0.17%	

* Hastings.

LABORATORY OF
LEHN AND FINK, INC.

ACETYLSALICYLIC ACID.

SUBMITTED BY WM. H. GESELL.*

The method now employed for assaying samples of sodium salicylate may be extended to the analysis of acetylsalicylic acid. Weigh up about 0.88 gram of the acid, add 20.2 cc $N/2$ KOH to this (0.2 cc excess of KOH over enough to convert the acid to the potassium salt) and heat on a steam-bath a half-hour. Transfer to a 250-cc volumetric flask, make up to volume, shake, and proceed as directed in the method for sodium salicylate. In the samples of recrystallized acetylsalicylic acid the above exact amount of KOH was not added, but about 20 cc of a 2% sodium hydroxide solution was used.

Samples Nos. 5 and 6 were analyzed by Miss Hastings.

The following results were obtained: The results obtained were much more satisfactory and more closely checked than those reported in the *Journal of Association of Official Agricultural Chemists*, May 15, 1922, page 582.

The volumetric bromine method as given there has two faults: (1) It is difficult to carry out the method without the loss of any trace of bromine. (2) The limit of error (1 drop in titration) is 0.35%. It has not been found possible to check the method very closely in our laboratory.

The gravimetric iodine method given as a tentative method is inaccurate in one respect. As has been pointed out in the literature by Messinger and Vortmann originally and later by Wilkie, the iodine compound only forms quantitatively under certain conditions, exactly the right concentrations of sodium carbonate and iodine. These conditions are realized in the above volumetric method but not in those of the Report.

LABORATORY OF
LEHN & FINK, INC.,
M. W. EVANS.

* October 9, 1922.