## ANALYSIS OF SAM-SHU, A CHINESE LIQUOR. By Charles E. Munsell, Ph.D.

The liquor known as toddy, arrack, saki, tsin, and by other names in Eastern Asia, is distilled from the yeasty liquor in which boiled rice has fermented for many days under pressure. Only one distillation is made for common liquor, but when greater strength is desired two or three distillations are made; and it is this strong spirit alone which is rightly called Samshu, a word meaning "thrice fired." (The Middle Kingdom: S. Wells Williams. New York, 1883. Vol. 1, p. 808.)

This liquid, which has the color of rich sherry wine, is imported in large quantities and is sold here (New York City) in the shops of Mott and Pell streets to Chinamen, who are very fond of it, not only for drinking but for preparing their opium for smoking. It is not agreeable to the taste of Caucasians, as it tastes and smells like-spoiled Jamaica rum. Hitherto the proprietors of the Chinese shops, where it is retailed, have refused to take out licenses because they did not consider the liquid intoxicating; in consequence of this refusal a sample was sent to the Health Department by the Excise Commissioners, with a request for its analysis. The results of this analysis are as follows:

Specific Gravity at 18°C		
Percentage of	Alcohol, by weight	38.81
" "	" volume	45.70
" "	Saccharose	
" "	Glucose 1.19	
" "	Minerai constituents	
" "	other Organic Solids 2.80	
"	Total Solids	9.44

Dr. J. P. Battershall, of the United States Laboratory, Port of New York, obtained the following percentages of Absolute Alcohol in samples of this "Chinese Medicine":

		Volume.	Weight.
No.	1	44.50	37.50
No.	2	33.10	27.27
No.	3	<b>52</b> 00	44.42

These analyses show that Sam-shu contains as much alcohol as any liquor usually sold.