## NOTES.

Changes in Official Methods of Soil and Ash Analysis.—The following are the principal changes in methods of soil and ash analysis adopted at the last meeting of the Association of Official Agricultural Chemists:

- 1. A sieve with circular openings one-half mm, in diameter is to be used in preparation of the fine earth for analysis.
- 2. Moisture is to be determined in the air-dried, prepared sample by drying a weighed portion to constant weight in a water-oven, the water of which is kept briskly boiling.
- 3. The digestion is to be done in a flask provided with a return condensing tube and heated for ten hours continuously in boiling water; ten grams of soil and too cc. of HCl of sp. gr. 1,115 are to be used, and the solution is to be made up to 500 cc. and aliquots taken for analysis, except where the insoluble residue exceeds ninety per cent., in which case twenty grams are to be used with 100 cc. of acid. Larger quantities of soil may be used if the proportion of acid and amount of dilution be preserved.
- 4. The silica soluble in  $Na_sCO_s$  solution is to be separated before the ignition of the ''insoluble residue'' in both ash and soil analysis.

The methods of analysis are essentially the same as those provisionally adopted for the past two years, but as they have been rewritten and revised, it is necessary to refer to the forthcoming proceedings for the details. The proceedings, are now in the hands of the printer and will soon be ready for distribution.

The recommendation of the reporter, that the question of the determination of available  $P_2O_6$  and  $K_2O$  in soils, particularly by the action of dilute organic acids, be made one of the subjects for investigation next year, was also adopted.

ALFRED M. PETER,
Reporter on Soil and Ash, A. O. A. C.

LEXINGTON, Ky., Oct. 3, 1894.

ERRATUM.—Page 650, October 1894, fifteenth line, for Amelia read Amherst.