NOTES FROM THE U. S. BUREAU OF CHEMISTRY.*

THE COMPOSITION AND BAKING VALUE OF THE DIFFERENT SIZED PARTICLES OF FLOUR.¹

By J. A. LeClerc, H. L. Wessling, L. H. Bailey, and W. O. Gordon.

[ABSTRACT.]

AN investigation was conducted with 14 samples of flour to determine the composition and baking value of the different sized particles. Almost one-fourth of the flour, all of which was passed through a series of bolting silks number 15, 18, 20 and 21, remained on the No. 15 XX silk, while one-third passed through the No. 21. Upon analyzing and baking each separate, it was found that the quality of the coarse and very fine separates is inferior to that of the intermediate portion. The very fine separate is by far the poorest, both in quantity and quality of the gluten, as well as in the quality of the bread it produces. A superior quality of bread was secured when only the intermediate separates were selected for the baking.

THE CRYSTALLOGRAPHY OF MORPHINE AND CERTAIN OF ITS DERIVATIVES.²

By Edgar T. Wherry and Elias Yanovsky.

[ABSTRACT.]

DETAILED crystallographic measurements and partial optical observations have been made on morphine monohydrate, codeine (morphine methyl ester), in both anhydrous and monohydrate forms, codethyline (morphine ethyl ester), monohydrate, and heroine (diacetyl morphine), anhydrous. All crystallize in the rhombic system, and on calculating the topic axes it is found that there are definite relations between them, it being possible to

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