2 minutes. The percentages of moisture are given in Table VI.

TABLE VI—PERCENTAGES OF MOISTURE

Mesh screen	Vacuum 15 min.	Centrifugal 2 min
50	7.50	2.56
60	7.38	2.55

The marked efficiency of the centrifugal is noteworthy and the method of procedure was altered to show this more forcibly.

Sand was placed in the Buchner funnel, wetted and vacuum applied for 5 minutes. After sampling, the sand was placed while still moist, in the centrifugal which was then run for 2 minutes at 2000 r. p. m. Table VII shows the percentages of moisture.

TABLE VII—PERCENTAGES OF MOISTURE

Mesh screen	Vacuum 5 min.	Centrifugal 2 min
30	17.35	2.26
	17.12	2.20
40	17.80	1.93
	17.60	2.30
50	18.70	2.56
	18.60	2.80
60	19.35	2.36
	18.40	2.65
80	19.70	2.49
	19.56	2.46

It is seen from the above results, that the moisture content under vacuum varies inversely as the diameter of the grains; the moisture content after centrifuging, however, is nearly the same for the finer as it is for the coarser sands.

The distribution of the water at several points in the annulus of sand was also investigated and Table VIII presents the results in percentage of moisture.

TABLE VIII—PERCENTAGE OF MOISTURE

	Distance from center of basket		
Mesh screen	1/2"	1"	1 1/2"
40	2.9	2.72	2.43
50	3.0	2.90	2.76

The variation, while sufficient to permit measurement, is small and might be neglected for practical purposes.

The objection may be raised that these results, obtained in the laboratory with a small centrifugal, are of little value for comparison with the larger machines used in the factory. While with the hand centrifugal, the diameter is small, the speed is high, and we have calculated that a weight of 1 lb. revolving at a 2 inch radius at 2000 r. p. m. is subjected to practically the same centrifugal force as a weight of 1 lb. revolving at a radius of 12 inches at 600 r. p. m. The comparison is, therefore, justifiable and a good idea of the behavior of a moist mass when centrifuged in