questions, but I remember that there was a time when few men were able to conceive of a round earth moving alone in space without a support beneath it; today this conception is readily grasped even by children. Both the infant child and the infant race begin to think in terms of material objects. As the mind grows, these material objects are gradually left in the background of thought, so that in time, to the gifted thinker, they are no longer essential; the mind goes on without them; their symbols only are retained, and these without thought of their material origin. Here is a strange thing, which, I think, has remarkable significance. When these thoughts which have wandered alone for great distances are brought back and checked with their material origin they are found to correspond in a remakable way with the material world; thus, mathematical symbols that for a time have no numerical significance, may come after certain operations to stand for real numerical values. There is a principle of correspondence between the mind of man within and the world without so that the mind may play its own game according to its own rules of logic, and find in the end that it has likewise followed the rules of the material world. It is this, I think, that causes Eddington to select a certain theory because of its "good form," knowing that good form is an evidence of truth. There are deeper things here than we have dreamed. Perhaps this principle of correspondence may justify us in believing that in the long run of time there is nothing unknowable.

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A COMPARISON OF COMMERCIAL AND CRUDE SAMPLES OF SODIUM CHLORIDE

Jean Horace Sullivan

The object of the experiment was to compare the relative purity of several brands of table salt with crude sodium chloride as it comes from the mines. The comparison was

made by a gravimetric determination of the chlorine as silver chloride. Two commercial samples obtained from the local stores were compared with a crude sample from Jefferson Island mine[1].

The salt was dried at 140° C. for one and a half hours and cooled to room temperature in a dessicator. Two samples, 0.2-0.5 grams, of each brand were weighed and each dissolved in 150 cc. of distilled water. Five cubic centimeters of one-tenth molar nitric acid were added to each solution and a calculated amount of one-tenth normal silver nitrate was added for complete precipitation. Each precipitate was washed by decantation and transferred to a Gooch crucible. The wash water contained a small amount of nitric acid. The washing was continued until the filtrate gave no test for silver on addition of hydrochloric acid. The crucibles were dried in an electric oven at 115° C., until consecutive weighings agreed to .0002 grams.

Results show salt from this mine to be of a high degree of purity. Comparison work will be continued, using crude samples from Texas salt mines.

ANALYSIS OF CHLORINE BY GOOCH METHOD

	A Commercial Grams	B Commercial Grams	C Crude Grams
Weight of samples	.2000	.2000	.1999
	.2000	.5000	.4999
Weight of silver chloride	.4892	.4865	.4872
	.4893	1.2163	1.2189
Weight of sodium chloride corresponding to above silver chloride	.1995	.1984	.1987
	.1995	.4960	.4971
Assuming all chlorine present as silver chloride:			
Per cent purity	99.75%	99.20%	99.40%
	99.77%	99.20%	99.44%
Average	99.76%	99.20%	99.42%

[1] Sample of crude salt supplied by Professor H. B. Dunkle of the Engineering School.