

NOTES AND NEWS

WASHING SEDIMENTS TO OBTAIN MOST DESIRABLE SIZE OF GRAINS FOR MICROSCOPIC STUDY

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A few years ago, when beginning sedimentary studies, the writer wondered what was the smallest size grain that could be conveniently identified in ordinary petrographic work on detrital materials. Several references were consulted and a few observations made on the minimum size of grains that could be readily examined. This was found to be 0.04 mm.

In order to determine the most satisfactory method of washing detrital sediments, several experiments were run on a sample of Moscow shale (Devonian). It was crushed to pass a 100 mesh sieve and treated with 1:1 hydrochloric acid until effervescence ceased. Water was added to form a column 10 cm. in depth. After agitating thoroughly, it was allowed to stand for a period of time, after which the size of the particles remaining in suspension was measured with the microscope.

After a settling period of twenty minutes the water was siphoned off to within one or two centimeters of the sediment in the beaker. All grains in suspension at the end of this time were clearly too fine grained for ordinary investigation.

The whole process was repeated with a settling period of ten minutes. Then the average grain was found to have a diameter of 0.008 mm. Washing was continued with ten minute intervals until the water was clear. Further washing was tried after settling periods of five minutes, three minutes, one minute and thirty seconds. The grain sizes at the end of these periods were found to be 0.02 mm., 0.03 mm., 0.04 mm., and 0.20 mm., respectively. Since grains smaller than 0.04 are quite difficult to identify readily, it was concluded that material remaining in suspension in a 10 cm. column of water for periods greater than one minute could be discarded without loss of desirable grains.

Those in charge of the journal wish to suggest that every effort be made by contributors possessing unfinished articles to complete the manuscripts and send them to the Editor before leaving for summer work. By so doing it is hoped that sufficient material might be accumulated to insure undelayed issues through the summer months.

Also, those who presented papers at the last annual meeting and indicated their intention to publish them in the *American Mineralogist* should notify the Editor when these articles will be available. Such action will be of great assistance in planning well balanced numbers for future issues.

The first commercial shaft ever sunk in the United States for potash has now reached a depth of a thousand feet, and potash minerals are ready to ship. The shaft has been sunk in New Mexico in a district recently explored by the U. S. Geological Survey. The shaft has passed through several workable beds of potash minerals, the best of which consists of sylvite.

A book of 325 pages with 127 plates and map, by James G. Manchester on "The Minerals of New York City and its Environs" has recently made its appearance. A review of this interesting work appears in another section of this journal. The book was published as a bulletin of the New York Mineralogical Club and can be purchased for \$2.50 (plus 20¢ postage) by addressing the New York Mineralogical Club, care of the American Museum of Natural History, Central Park West and 77th St., New York City.

BOOKS REVIEWS

THE MINERALS OF NEW YORK CITY AND ITS ENVIRONS. JAMES G. MANCHESTER. Bull. New York Mineralogical Club: 3 (1) 1931, (186 pages, 127 photographic illustrations, map). \$2.50, plus 20 cents postage.

One Saturday, late in November, about twenty years ago, a New Yorker hurrying home from his daily work, hesitated on his way to the subway to examine an excavation for an apartment house at Broadway and 161st Street. The workmen had left and he descended into the cut. He found what looked like three faces of a feldspar crystal protruding from the rock. Not having any tools, he marked the spot, intending to extract the specimen later. During the night a storm arose, covering the ground with three inches of snow. Early on Sunday morning passing pedestrians stopped to see the strange sight of a man climbing over the rocks, and sweeping off the snow with a small whisk-broom. Two weeks of illness resulted from exposure, but the collector obtained a wonderful oligoclase crystal.¹

Of such enthusiasm was this book written. Mr. Manchester has been one of the most active members of the New York Mineralogical Club, and for many years was its president. In a life crowded with the duties of an executive in an insurance company, he has nevertheless found time to indulge in the hobby of collecting minerals in the excavations and mines about New York, and to gather the data set forth in this volume.

This work treats of the minerals to be found within fifty miles of Columbus Circle in New York City: an area which includes many famous localities such as Franklin Furnace, Sterling Hill, Paterson and Bergen Hill, in New Jersey; Orange County, Bedford, Peekskill and Tilly Foster, in New York; and Branchville, Danbury and Trumbull in Connecticut.

The Introduction describes the geology of the area, with an account of the various mining and quarrying enterprises which have made the district so fruitful to collectors. Exactly 400 localities are then listed alphabetically with the minerals

¹ Now in the American Museum of Natural History, and illustrated on Plate 39.