The screening removes any dust and also particles which are too large, thus giving a uniform size of powder.

In using liquids that are subject to rapid volatilization the powdered glass may be placed beneath the cover glass with the mineral fragments. In this way the liquid may be constantly checked as to change in index while the actual determination of an index of the mineral is being made. This seems to be the most valuable use of the glass because the check is made on the liquid which is in contact with the mineral and not on another portion of the liquid which must be used for a refractometer.

In the above method it is best to screen the mineral fragments and use glass powder of a different size to avoid confusion of the glass and the mineral. In most cases this would be unnecessary since the glass is colorless and isotropic but in determining the index of an isotropic mineral it is better to use the different sizes.

The glass manufacturers state that the index of the glass does not vary within the melt nor with time, to any appreciable degree that would affect the above usage. The accuracy to which determination of index can be made depends upon the investigator's ability to distinguish small differences in index by use of the "Becke line" or "inclined illumination," methods.

Undoubtedly others have resorted to similar methods of checking index liquids but so far as the writer knows this method has not been mentioned in the literature.

THE PRESENT STATUS OF THE MINERAL REMINGTONITE[1]

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The mineral remingtonite, supposedly a hydrous cobalt—carbonate, was described by J. C. Booth in 1852 from the old mine at Finksburg, Carroll County, Maryland. The composition was based upon qualitative tests, the mineral being considered a carbonate because of a slight effervescence when it was treated with hydrochloric acid. It occurred associated with carrollite as a rose red, very thin coating on serpentine.

[1] Published by permission of the Secretary of the Smithsonian Institution. The present paper is the third of a series of preliminary papers on the minerals of Maryland which are being studied in cooperation with the Maryland State Geological Survey.

In the course of the writer's investigations on the minerals of Maryland a persistent effort has been made to obtain an authentic specimen of this mineral from this locality. Finally a specimen labeled remingtonite from this locality, from the Brush Collection of Yale University, was loaned by Prof. W. E. Ford. This is described as follows:

The specimen (Brush Coll. No. 2906) is a porous mass of crystalline magnetite. The cavities are largely lined with a translucent botryoidal coating of the "remingtonite" which overlies brilliant minute octahedral crystals of magnetite which has a few included grains of "carrollite". The crust of the supposed remingtonite in the best cavity is about .25 mm. thick and is deep purplish-pink in the interior and brownish-pink to brown outside. Elsewhere the botryoidal coating varies through various shades of brown to pale green.

Fragments of the material showing the most intense pink color when immersed in dilute (1:1) and concentrated hydrochloric acid did not effervesce at all and retained their original form but were decolorized, the pink color leaching out and, in concentrated acid, giving the characteristic rich, blue-green color of cobalt.

Under the microscope in polarized light the mineral is transparent and colorless, and consists of metacolloidal, sub-microscopic fibers giving the usual black extinction cross. The fibers have parallel extinction and a positive elongation. The indices are somewhat variable with $\alpha = 1.535$, $\gamma = 1.543$; $\gamma - \alpha = 0.008$.

There seems little doubt but that this material is a serpentinous substance colored by cobalt, possibly a cobalt stained serpentine or a cobalt equivalent of garnierite.

The existence of a hydrous cobalt—carbonate corresponding to the supposed remingtonite has not been conclusively demonstrated. Several occurrences of supposed remingtonite have been proven to be erythrite. The data given by Larsen for remingtonite from Lower California seem to indicate an anhydrous carbonate of the rhombohedral group, possibly cobaltiferous smithsonite.

It is highly desirable that any further specimens of supposed remingtonite from Maryland be examined and the writer would be very pleased to obtain the loan of any that may exist in collections. The locality has been thoroughly gone over without finding anything resembling this mineral.