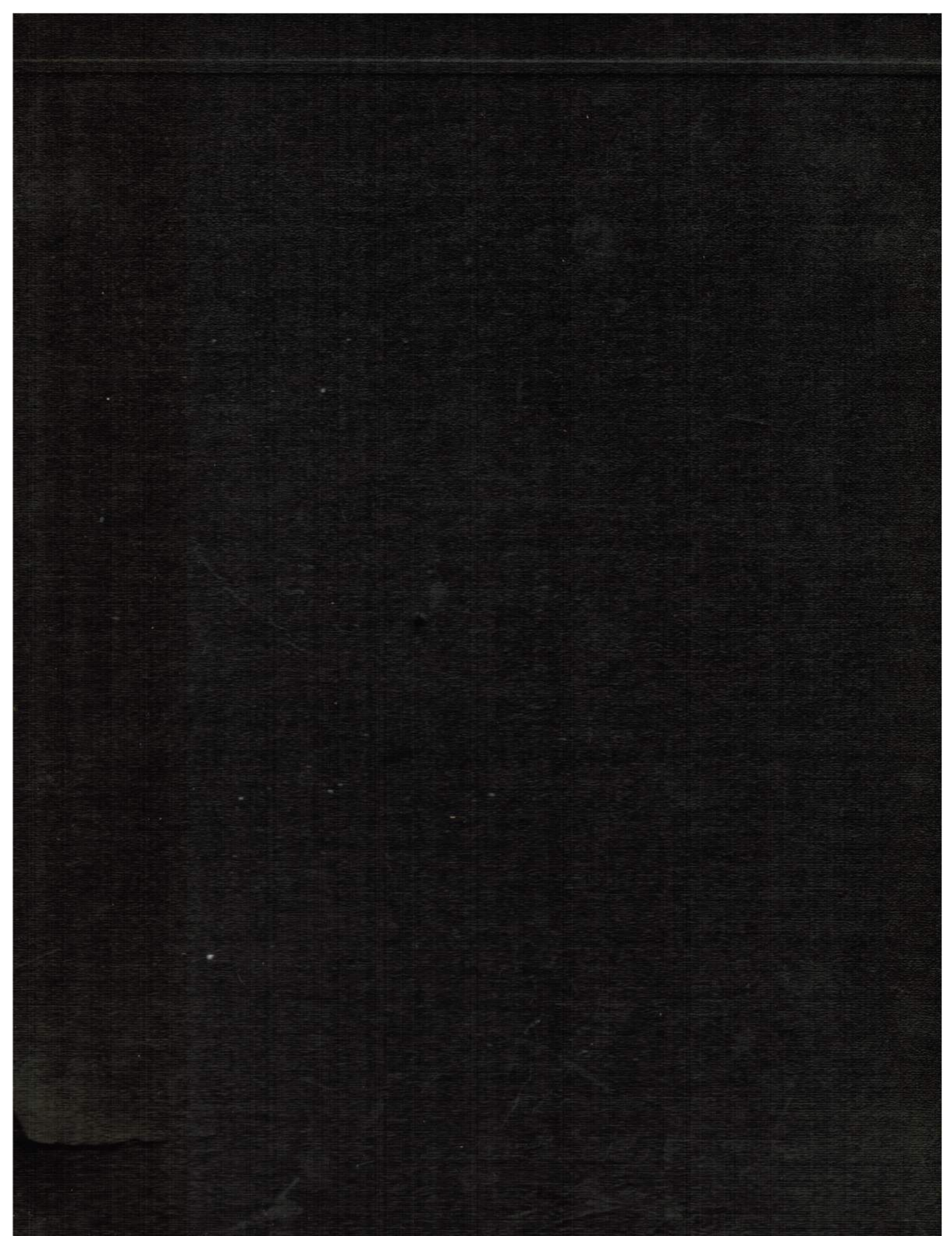
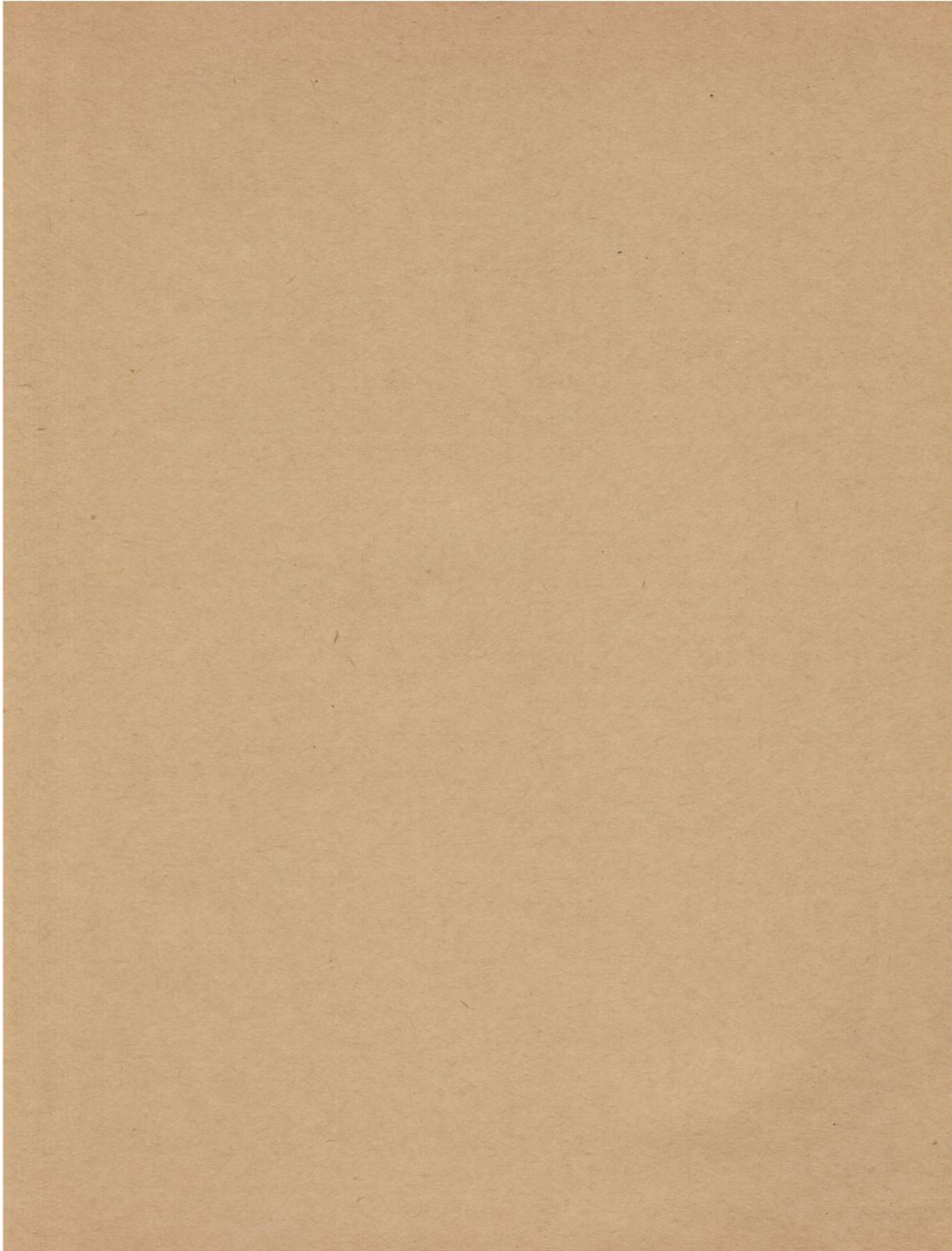


A microscopic view of mica crystals, showing a variety of colors including purple, blue, green, yellow, and orange, set against a light grey background. The crystals are thin and layered, with some showing distinct inclusions of other minerals.

**Some Mineral
Inclusions in
Mica of
Manhattan Island**

George E. Ashby





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THE NEW YORK MINERALOGICAL CLUB, INC.

NOVEMBER 15th 1944.

Geo. C. Ashby.

**SOME
MINERAL INCLUSIONS**

**IN MICA OF
MANHATTAN ISLAND**

A MICROSCOPICAL STUDY

BY

GEORGE E. ASHBY

The Minerals occurring as Inclusions in the Muscovite of Manhattan Island fall into three general groups:

- A. Primary or Original Minerals, which were formed and deposited simultaneously with the Mica.
- B. Secondary Minerals, introduced through heated solutions during periods of strain by external pressure.
- C. Minerals which have resulted through the decomposition of either the primary or secondary minerals.

They are enclosed between the lamina of the mica of the metamorphosed Granitic rocks of Manhattan Island and are abnormal in their crystallization, in that they are mainly two-dimensional, their thickness being limited by the available space between the mica lamina.

The minerals to be described were collected chiefly between 1900 and 1925, during excavations for the subways and other building operations.

