

This pdf file consists of figures containing photographs, and their captions,  
scanned from:

STRUCTURAL GEOLOGY OF THE FORT MILLER, SCHUYLERVILLE AND  
PORTIONS OF THE SCHAGHTICOKE 7½' QUADRANGLES,  
EASTERN NEW YORK, AND ITS IMPLICATIONS  
IN TACONIC GEOLOGY  
and  
EXPERIMENTAL AND THEORETICAL STUDIES OF SOLUTION TRANSFER  
IN DEFORMING HETEROGENEOUS SYSTEMS

by  
William P. Bosworth

A Dissertation  
Submitted to the State University of New York at Albany  
in Partial Fulfillment of  
the Requirement for the Degree of  
Doctor of Philosophy

College of Science and Mathematics  
Department of Geological Sciences

1980



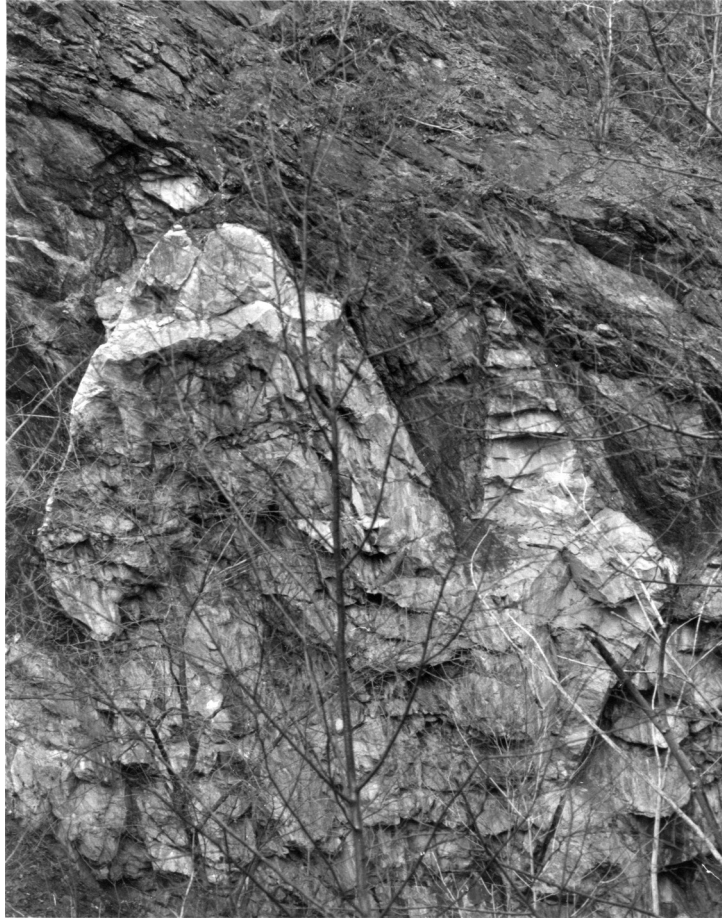


Figure 4.3 South quarry face at Bald Mountain.  
Large tooth-like projections of carbonate and shale are about  
5 m in height.



Figure 4.4 Foliated carbonate at Bald Mountain quarry. (Length of hammer handle 50 cm.)



Figure 5.2 Post-slaty cleavage mesoscopic fold  
on Whelden Mountain. (Outcrop no. 2241)

a. Field photograph. (Pen knife is approximately  
10 cm in length.)



Figure 6.1 Taconic melange: broken formation.  
Hammer handle length is 50 cm. (Hoosic River bed below  
Schaghticoke, N. Y.)



Figure 6.2 Taconic melange: isolated fold. Viewed southeast. The axial plane strikes  $39^{\circ}$  and dips  $71^{\circ}$  east. Hinge line plunges  $60^{\circ}$  towards  $183^{\circ}$  (Kroma Kill above U. S. Rt. 4 in Saratoga National Historical Park).

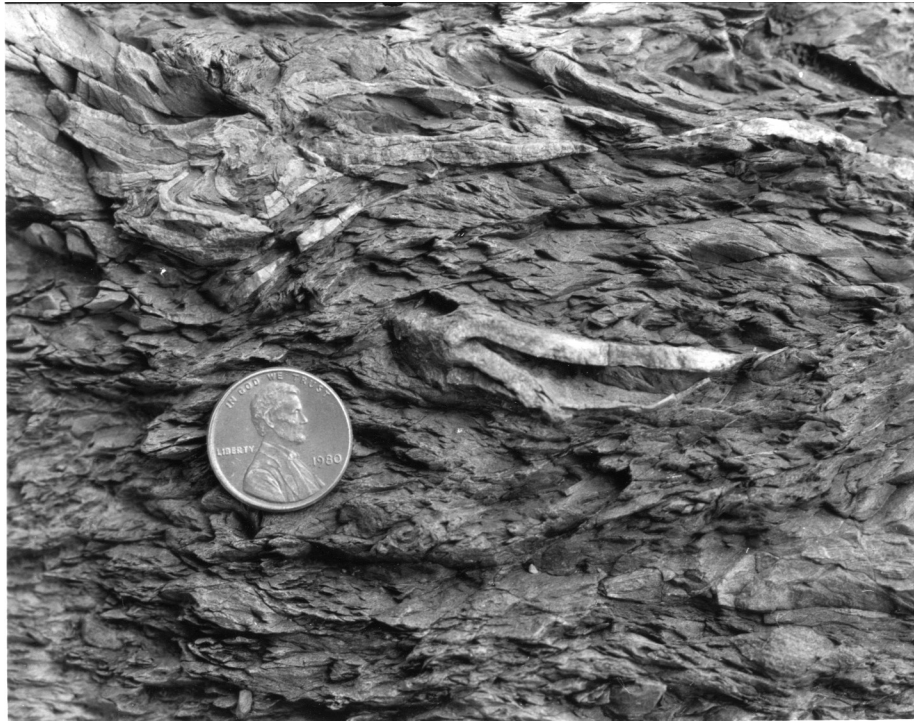


Figure 6.5 Folded extensional calcite veins in the Hudson flysch. Vein fibers are perpendicular to vein walls at all positions in fold.



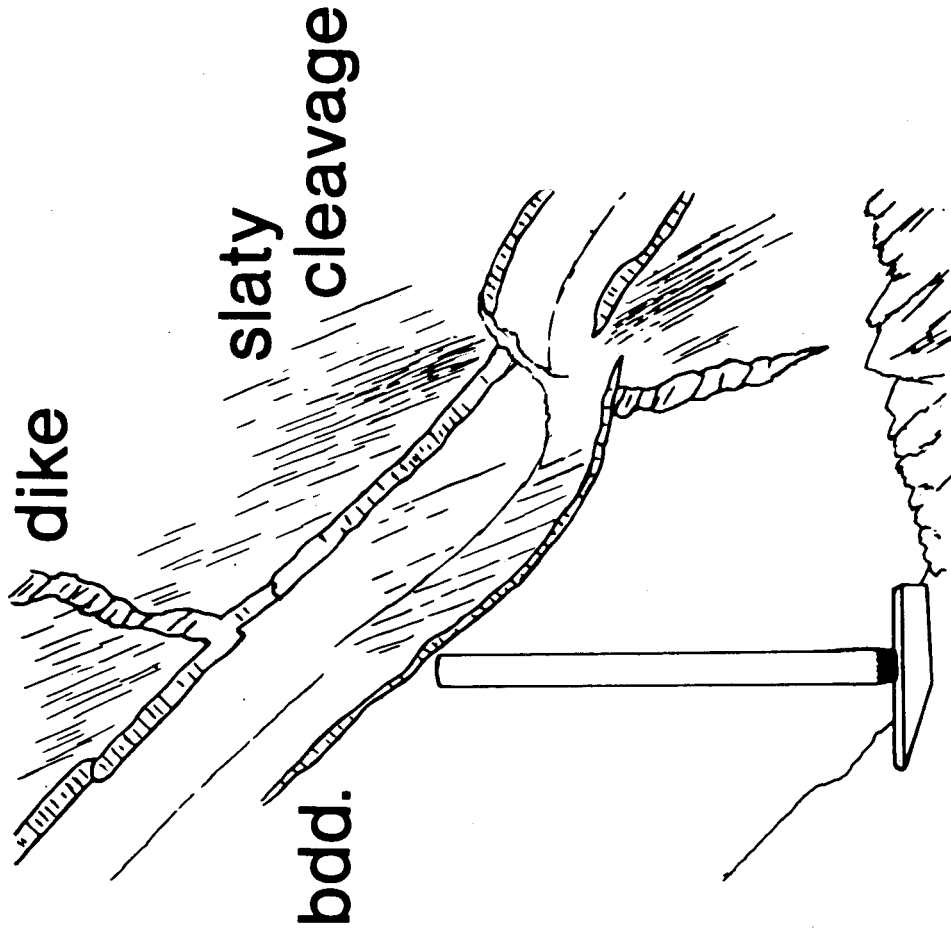
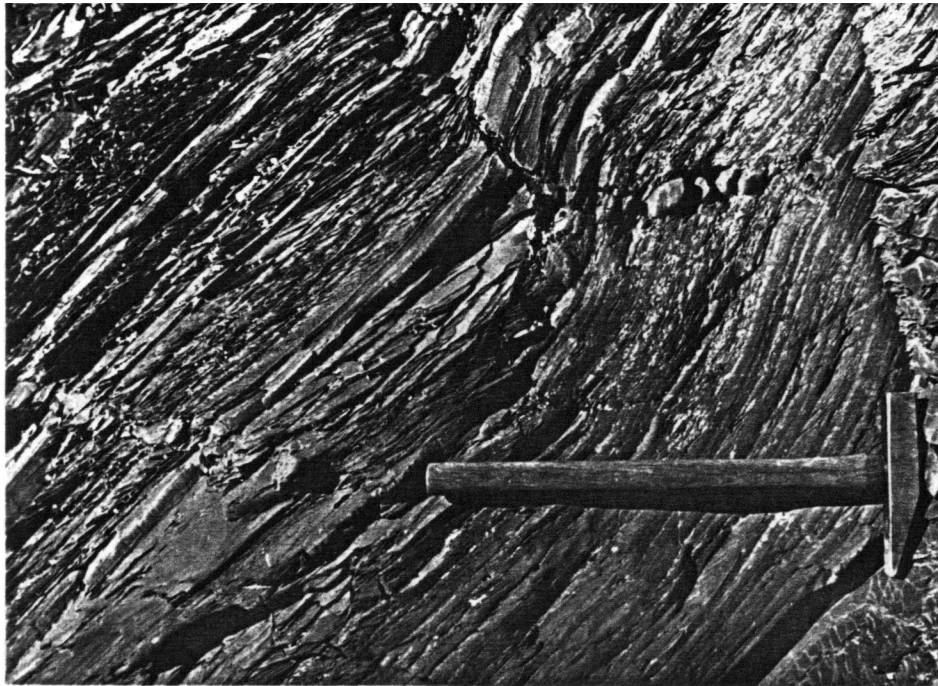


Figure 6.6 Clastic dike-slaty cleavage relationships in the Hudson River lowlands. Slaty cleavage dips to the right (east) more steeply than bedding, and is refracted through the nearly vertical clastic dikes. (Batten Kill gorge below Middle Falls, N. Y.)



Figure 6.9 Phacoidally cleaved Hudson River Shale.

Plate 2.1 Halite Single Crystal Cylindrical Hole Experiments. Hole height-to-width ratios are given to the lower left corner of each specimen, with values corrected for plastic strains indicated with an asterisk and listed in the lower right corner (where such strains were significant). The diameter of the hole in crystal 1A equals 6.35 mm, and all photographs are to the same scale. The loading axes in the deformed samples are vertical.

1A. TM 156, prior to first loading, representative of the initial form of each test specimen.

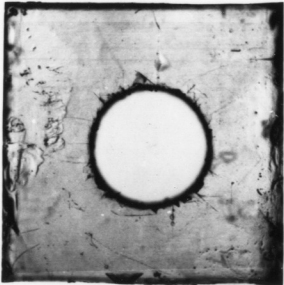
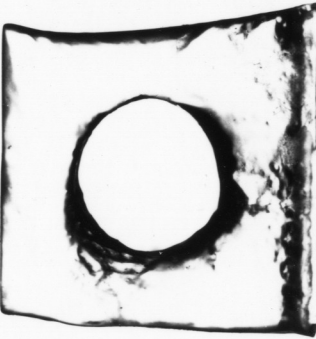
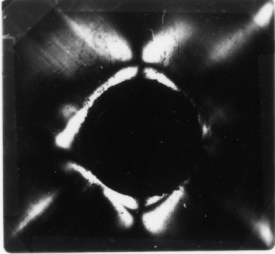

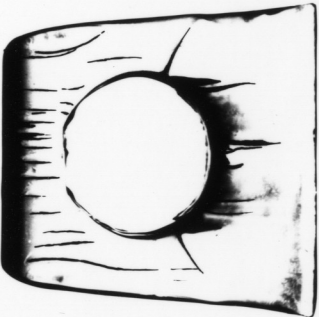
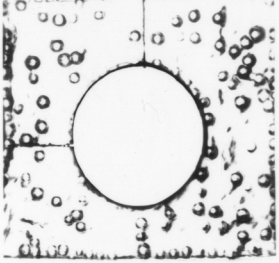
1B. TM 125 loaded in solution at 30 bars for two weeks. (Near saturated conditions.)

1C. TM 171, under load, cross-polarized light. Axial stress equals 35 bars. Photoelasticity of the halite crystal is an indication of the distribution of stress in the crystal.

1D. TM 133C, loaded in air, then removed from press and placed in solution (undersaturated conditions).

1E. TM 133C Reference, no loading, but underwent same solution event as TM 133C.

1F. TM 171, loaded in air, then removed from press and placed in solution with hole-axis vertical, to better eliminate possible stratification effects (near saturated conditions).

<p data-bbox="300 1717 349 1768">A</p>  <p data-bbox="743 1654 792 1768">1.000</p>	<p data-bbox="300 1180 349 1230">B</p>  <p data-bbox="743 1108 792 1222">0.926</p> <p data-bbox="743 751 792 886">*0.956</p>	<p data-bbox="300 646 349 697">C</p> 
<p data-bbox="836 1717 885 1768">D</p>  <p data-bbox="1282 1654 1331 1768">0.912</p>	<p data-bbox="836 1180 885 1230">E</p>  <p data-bbox="1282 1108 1331 1222">0.933</p>	<p data-bbox="836 646 885 697">F</p>  <p data-bbox="1282 592 1331 697">0.931</p> <p data-bbox="1274 205 1323 340">*0.946</p>