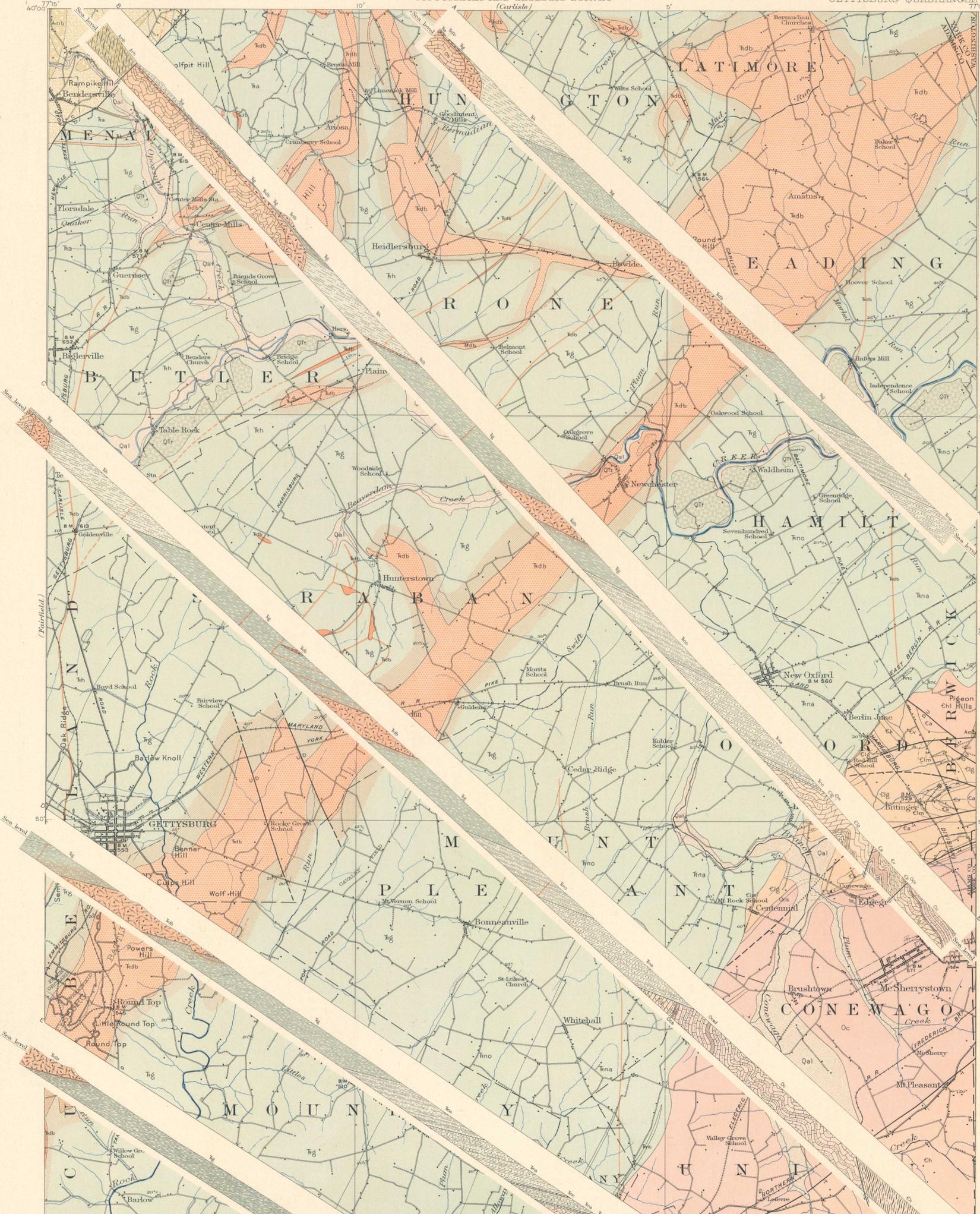


STRUCTURE SECTIONS

DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

STATE OF PENNSYLVANIA
DEPARTMENT OF FORESTS AND WATERS
TOPOGRAPHIC AND GEOLOGIC SURVEY
(Carlisle)

PENNSYLVANIA
GETTYSBURG QUADRANGLE



EXPLANATION

SEDIMENTARY ROCKS

SHEET SECTION SYMBOL

Qal

Alluvium
(Gravel and silt in stream bottoms; only larger areas mapped)

Qtr

Terrace gravel
(Gravel, cobbles, and sand on elevated terraces and benches along the larger streams)

UNCONFORMITY

Fg

Gettysburg shale
(Chiefly red shale and soft red sandstone; middle part, Heidelberg member; Sh, contains numerous hard white sandstone beds; Heidelberg fragment and waterholes, Fa at the top in places; shale adjacent to intrusive diabase metamorphosed to hard dense dark-purple and black granite and sandstone altered to hard white sandstone, shown by red rating)

Fno

New Oxford formation
(red shale and sandstone with beds of hard light-colored micaceous sandstone and conglomerate, lower part, Fno, containing many interbedded layers of light-colored, micaceous arkose, and thin beds of quartzose conglomerate, Fnc)

UNCONFORMITY

Oc

Conestoga limestone
(thin-bedded, impure, blue limestone; dark gray-greenish shaly part, Foc, containing many interbedded layers of light-colored, micaceous arkose, and thin beds of quartzose conglomerate, Fnc)

UNCONFORMITY

Ob

Beekmantown ? limestone

Cig

Ledger dolomite
(coarse gray pure dolomite, with pure white and blue limestone marble, Cim, in places)

Ck

Kinzers formation
(chiefly gray shale)

Cv

Vintage dolomite
(dark impure dolomite)

Ca

Antietam sandstone
(rusty banded fossiliferous sandstone, weathering purple)

Ch

Harpers schist
(gray sandy schist and high-weathering slate)

Cc

Chickies quartzite with Hellam conglomerate member, Chl
(vitreous, white, scintillating quartzite, with basal conglomerate, Chl, of glassy quartz pebbles and gravel)

UNCONFORMITY

Metamorphosed volcanic rocks

Amb

Metabasalt
(basalt flows altered to greenstone)

Arh

Aporhyolite
(rhyolite flows altered to purplish felsitic rock)

IGNEOUS ROCKS

Diabase
(sills, intrusive masses, and dikes; one small basalt lava flow, Rb, interbedded in upper part of Heidelberg member of Gettysburg shale near Bendersville)

Faults
(dotted where concealed)

T Overthrust side of thrust fault

D Down-dropped side of normal fault

U Up-thrown side of normal fault

Sc Strike and dip of stratified rocks

Recent

Upper Triassic (Carnegie group)

Lower (O) Ordovician

Probably equivalent to Tomatocum dolomite

Lower Cambrian

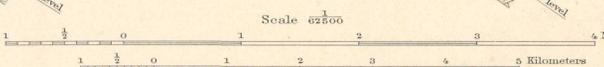
Algonkian

Late Triassic

Frank Sutton, Geographer in charge.
Topography by L.C. Fletcher.
Control by S.S. Gannett, Geo. T. Hawkins, and
Gettysburg Battlefield Commission.
Surveyed in 1906-1907.

SURVEYED IN COOPERATION WITH THE STATE OF PENNSYLVANIA.

APPROXIMATE MEAN DECLINATION 1929.



Scale 62500
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Geology by Geo. W. Stose
Surveyed in 1908-1925.