

LEGEND

(continued) (Greenfield)

IGNEOUS ROCKS

(Areas of igneous rocks are shown by patterns of triangles and rhombs)

Jb

Blackrock diabase (intrusive)

JH

Holyoke diabase (main sheet of Fernald, interbedded)

Jt

Talcott diabase (anterior sheet of Fernald, interbedded)

Jhp

Hampden diabase (posterior sheet of Fernald, interbedded)

Cw

Williamsburg granite (coarse muscovite-biotite granite, with pegmatite and albite granitic veins)

Cbt

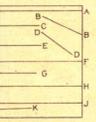
Belchertown tonalite (granular quartz-plagioclase hornblende rock)

mg

Middlefield granite (porphyritic biotite granite)

Probable faults

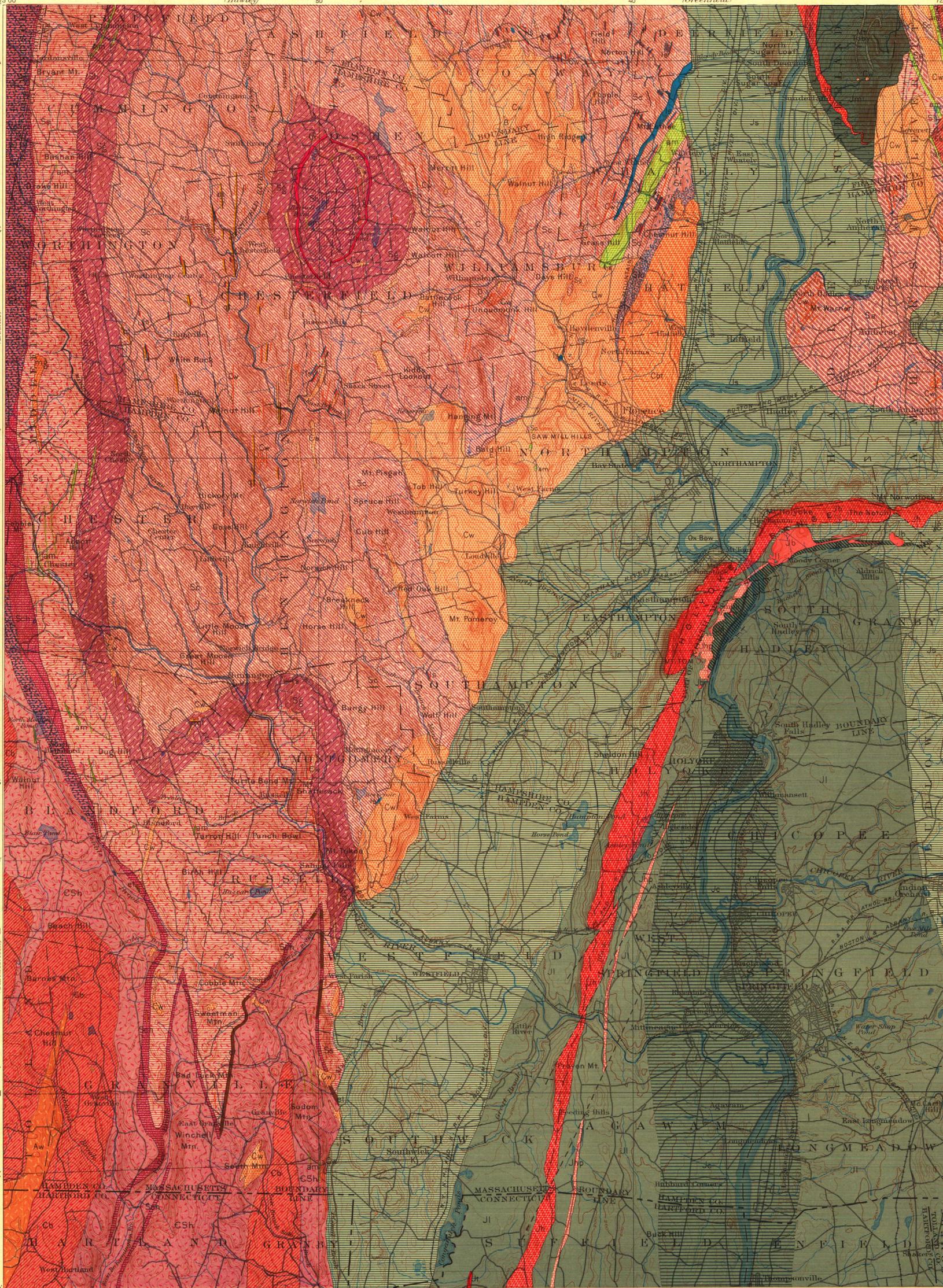
Sections



U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

HISTORICAL GEOLOGY SHEET

MASS.-CONN.
HOLYOKE QUADRANGLE



LEGEND

SEDIMENTARY ROCKS

(Areas of sedimentary rocks are shown by patterns of parallel lines. Metasandstone is indicated by short dashes combined with the parallel lines.)

Jc

Chicopee shale (black and red sandy shale)

Jl

Longmeadow sandstone (reddish-brown sandstone with shaly and shallow water markings)

Jg

Granby tuff (coarse agglomerate of fragments of diabase, grading into tuffaceous sandstone)

Js

Sugarloaf arkose (coarse feldspathic sandstone composed of the angular debris of granite)

Jm

Mt. Toby conglomerate (very coarse conglomerate composed largely of slate fragments)

Si

Leyden argillite (dark, coarse slate or fine grained mica schist)

Slc

Leyden argillite (chonetolitic contact zone)

Sc

Coitway schist (dark graphitic mica schist with beds of garnet, staurolite and soapstone and many beds of dark impure limestone and sandy quartzite)

Sa

Amherst schist (coarse, fibrolitic and foliated schist probably the equivalent of Coitway schist)

Sg

Goshen schist (dark graphitic, faggy mica schist, with biotite and garnet)

Sf

Hawley schist (sericite and chlorite schists with many beds of hornblende schist)

Ss

Savoy schist (sericite schist with garnet and chlorite locally developed)

Sch

Chester amphibolite (dark faggy hornblende schist in places changed to serpentine and emery)

Sr

Rowe schist (quartzose sericite schist)

CSh

Hoosac schist (albite sericite schist)

Cb

Becket gneiss (light gray biotite-gneiss, at times a conglomerate; contains irregular masses of sarsinite altered to serpentine and asbestos)

Aw

Washington gneiss (dark, compact gneiss slightly fibrolitic)

Rock masses (in various formations)

ls

Limestone (in Conway and Goshen schists)

qt

Quartzite (in Conway and Goshen schists)

gn

Gneiss (fine grained biotite gneiss in Goshen schist, possibly bedded granite)

am

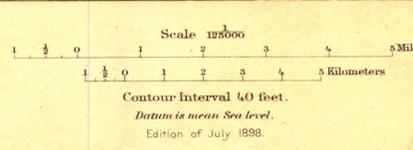
Amphibolite (in Conway, Hawley, Savoy, and Hoosac schists)

et

Kestite rock, pyroxene rock and dolomite (in Chester amphibolite)

Legend is continued on the left margin.

Henry Gannett, Chief Topographer.
Marcus Baker, Geographer in charge.
Triangulation by U.S. Coast and Geodetic Survey.
Topography by C. Arriok, C. C. Bassett, L. F. Cutter,
A. Karl, and H. L. Smyth.
Surveyed in 1884-87.



Geology by B.K. Emerson.
Surveyed 1875-1896.

Contour interval 40 feet.
Datum is mean sea level.
Edition of July 1898.