AREAL GEOLOGY

STATE OF MAINE
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U. S. GEOLOGICAL SURVEY
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MAINE
PENOBSCOT BAY QUADRANGLE

LEGEND

SEDIMENTARY ROCKS

(Areas of subaqueous deposits are shown by patterns of parallel lines; metamorphism is indicated by hachures combined with the line patterns)

Niagara — SILURIAN

Sa — Ames Knob formation *(fossiliferous limestone and red shale)*

UNCONFORMITY

Cp, Cpm — Penobscot formation and contact phases, Cpm *(slates and schists, locally injected and metamorphosed by granite and diorite)*

Cb — Battie quartzite *(quartzite and quartzite conglomerate)*

Ccw — Calderwood formation *(slates and schists, probably equivalent to the Penobscot or the Islesboro formation)*

Cc, Ci — Islesboro formation and Coombs limestone member, Cc *(slates and schists locally quartzitic with shaly quartzose, and occasionally pure limestones)*

CAMBRIAN ?

UNCONFORMITY

Metamorphic — CAMBRIAN OR PRE-CAMBRIAN

ew — Ellsworth schist *(crumpled green and gray schists)*

IGNEOUS ROCKS

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

DEVONIAN ?

gr — Biotite-granite *(fine, medium, and coarse-grained granite)*

di — Diorite, diabase, and gabbro *(earlier differentiation from the granite magma.)*

SILURIAN ?

sp — Serpentine

Younger than Ames Knob formation — SILURIAN

Svh — Vinalhaven rhyolite *(massive rhyolite, rhyolite porphyry, tuff, and flow breccia.)*

St — Thorofare andesite *(massive andesite, andesite porphyry, amygdaloids, tuffs, and flow breccia.)*

UNCONFORMITY

Contemporaneous with upper part of Islesboro formation — CAMBRIAN ?

Cnh — North Haven Greenstone *(diabase, basic porphyrite, and albite-augite syenite, occurring as flows, dikes, sills, and pyroclastics)*

Cct — Castine formation *(rhyolite, andesite, and some dacite, occurring as flows, dikes, and pyroclastics)*

Faults

- *Quarries* — granite, unless otherwise marked.
- GRAVEL Gravel pits
- CLAY Brick yards

Note—*Biotite granite, gr, mostly medium-grained, extensively quarried for building and ornamental purposes; diorite, diabase, and gabbro, di, quarried locally for monument purposes; serpentine, sp, formerly quarried for ornamental and building stone, and limestone, Cc, the purer portions formerly quarried for manufacture of lime.*

H. M. Wilson, Geographer in charge.
Topography by U. S. Coast and Geodetic Survey, W. H. Lovell, and Hersey Munroe.
Triangulation by U. S. Coast and Geodetic Survey.
Surveyed in 1900-1903.

SURVEYED IN COOPERATION WITH THE STATE OF MAINE.

Geology by George Otis Smith, E. S. Bastin and C. W. Brown.
Surveyed in 1902-04.

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Scale 1/125000
1 ½ 0 1 2 3 4 5 Miles
1 ½ 0 1 2 3 4 5 Kilometers

Contour interval 20 feet.
Datum is mean sea level.

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