DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

STRUCTURE SECTIONS

SOUTH CAROLINA-NORTH CAROLINA
GAFFNEY QUADRANGLE

Frank Sutton, Geographer in charge.
Topography by W.L. Miller and L.L. Lee.
Control by C.B. Kendall.
Surveyed in 1907.

Geology by Arthur Keith and D.B. Sterrett.
Surveyed in 1908-1912.

Scale 1/62500

1 0 1 2 3 4 Miles

1 0 1 2 3 4 5 Kilometers

Edition of June 1931

APPROXIMATE MEAN DECLINATION 1929

EXPLANATION

SEDIMENTARY ROCKS (Metamorphosed)

SHEET SYMBOL / SECTION SYMBOL

Gaffney marble — *(fine-grained to medium-grained, bluish-gray to white marble)*

Blacksburg schist — *(rocks of variable character, ranging from beds resembling fine graywacke to fine-grained sericite schist or phyllite)*

Kings Mountain quartzite — *(Ckw white quartzite facies, chiefly angular interlocking grains of quartz with a few scales of mica; thin bed underlying Blacksburg schist; Ckd Draytonville conglomerate member, hard thick-bedded quartz conglomerate altered almost to a gneiss; thin bed infolded in older rocks)*

CAMBRIAN

UNCONFORMITY

Battleground schist — *(chiefly gray, bluish, bluish-black, and mottled white and bluish sericitic schist, with manganese schist member, Abm at top, and conglomerate bed, Abc near base)*

ALGONKIAN

UNCONFORMITY

Carolina gneiss — *(interbedded gneisses and schists, including mica gneiss and mica schist, garnet gneiss and garnet schist, kyanite gneiss and kyanite schist, a staurolite schist member, Arcs, marble beds, and some granitoid layers)*

ARCHEAN

IGNEOUS ROCKS (In part metamorphosed)

Diabase dikes

TRIASSIC

Whiteside granite — *(light-gray muscovite-biotite granite, little metamorphosed; intrusive into Carolina and Roan gneisses)*

LATE CARBONIFEROUS

Pegmatite — *(sheets, lenses, and irregular masses cutting Carolina and Roan gneisses and Bessemer and Whiteside granites)*

ARCHEAN AND LATE CARBONIFEROUS?

Bessemer granite — *(medium to fine-grained muscovite-biotite granite much metamorphosed; porphyritic texture developed locally; intrusive into Carolina and Roan gneisses;)*

Gabbro

Soapstone, pyroxenite, and allied basic rocks — *(occur chiefly in or associated with masses of Roan gneiss, but some isolated bodies appear in Carolina gneiss and Bessemer granite)*

Roan gneiss — *(chiefly hornblende schist, hornblende gneiss, schistose diorite, and diorite; in places intercalated with layers of mica schist, mica gneiss, garnet schist, and garnet gneiss; intrusive into Carolina gneiss. Roan gneiss closely injected by Bessemer granite Arg.)*

ARCHEAN

Faults