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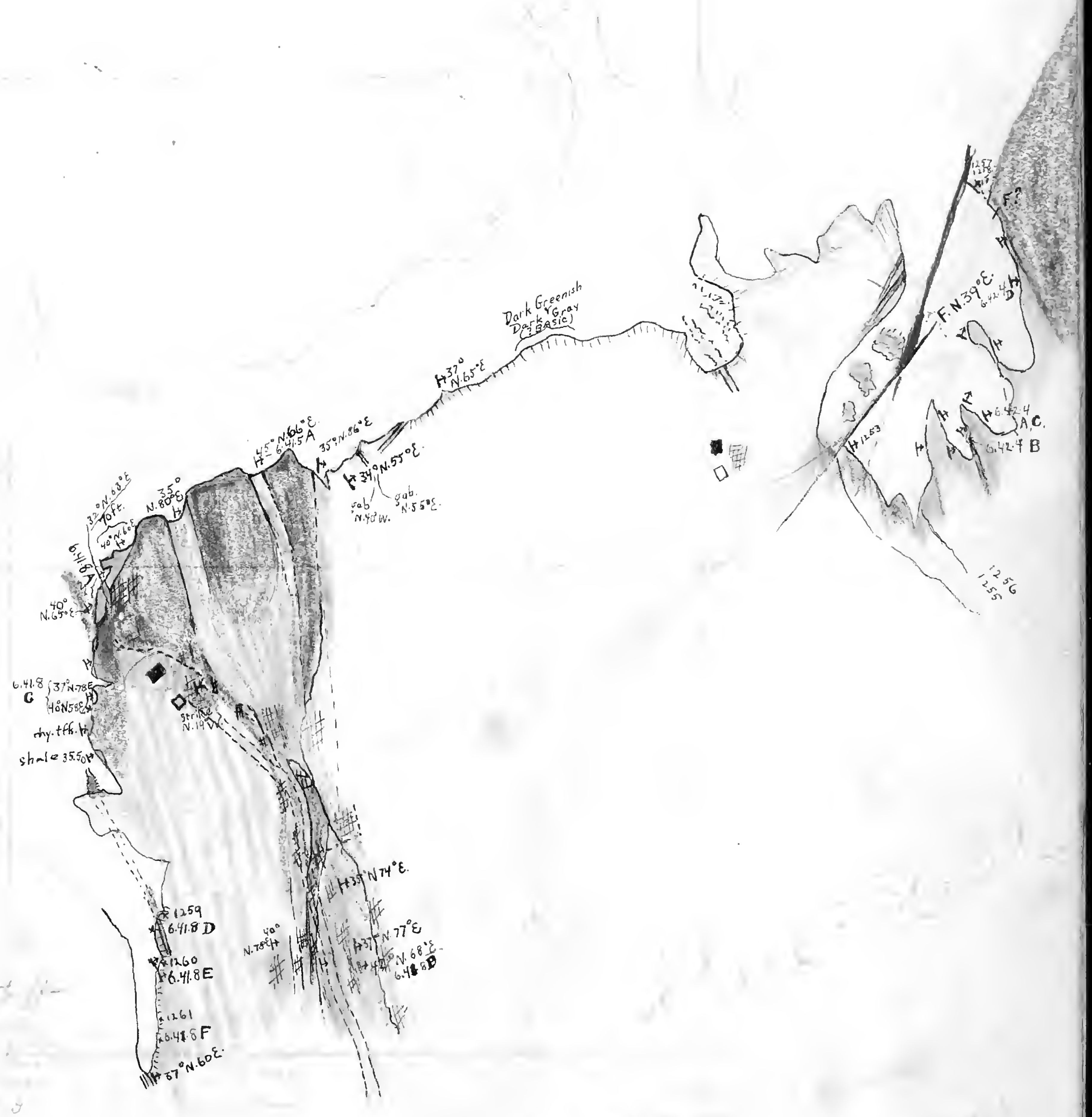
Federal Harbor

6.41. & 6.42.



Federal Harbor

6.41.8 A

Hamatocherchis abundant
Dictyota dichotoma
Cystoclonium purpureum
Polysiphonia
Nitophyllum
Phyllophora
Ceramium

6.41.5 A

Odontalia
Cladophora
Polysiphonia
Nitophyllum
Chondrus crispus
Phyllophora
Ceramium

6.42.4 C

6.42.4 B

The fossils in this series of tuffs include Chonetes arcuata, Camarotoechia, & Dalmanella etc., the same as 6.41.8 A.

North of the creek there begins a trap mass which forms the shore line ~~so far~~ for a couple of hundred yards southward as far as the clay point. Two little patches of shale & one of rhyolite fringe the trap along part of the shore. The contact is a wavy fault trending in general N. 20°W, but whether the fault is due to intrusion of the trap or to subsequent slipping appears indeterminate. The northernmost patch of shale ~~is a~~ is just south of the creek and extends for about 50 feet along the shore. About 10 feet of splintery blue shales crop out in front of the trap in part of a dome. The strike is N. 32°W dip 40° N.E at the southend and the strike curves around to N. 12°E. dip 37°E. at the north end. Only Actinopterella was observed in the shales =6.41.8 C, rare.

6.41.8 C

On the north side of the clay point (the conspicuous projection half way down the east side of the west end of Federal Harbor occurs a thick (~~over~~ 25 ft or more) gabbro dike trending N. 20°W. It is the only exposure on the point.

Perhaps 50 or 75 yds. S. of the clay point is a series of exposures beginning on the north with a few feet of massive tuffs of a dark gray color = 1259. These are cut off on the west by a 10 ft. trap dike trending N. 20°W. apparently toward the gabbro on the N. side of Clay point. To the west of the trap dike are some gray rhyolite tuffs, the bedding planes of which have been disturbed so that it is impossible to ascertain the strike & dip. A few fossils were collected here =6.41.8D Orbiculoidea, ? Camarotoechia R., Dalmanella (Schoonover Cove) common, Actinopterella occasional, Orthoceras ludense R.

6.41.8 D

A hundred feet or so to the south are some very coarse grained tuffs, having the appearance of coarsely crystalline acid volcanic. The strike is N. 54°W dip 46° N.E. Specimen is 1260. This tuff overlies a few feet of fossiliferous tuffs which in less than 50 feet swing around from strike N. 27°W dip 35° N.E to strike N. 54°W dip 46° N.E. The fossils here are 6.41.8 E (not collected) including

6.41.8 E

Dalmanella (Schoonover Cove)	common
Camarotoechia sp	rare
Cypricardinia "platyphyllus"	occasional
Orthoceras ludense	rare

South of this point for about 100 yds or less the rock is a fragmental massive tuff, the fragments are darkish gray in a similarly colored matrix. Specimen 1261. A couple of feet of more argillaceous tuffs appear to indicate an and nation. These are about 50 yards north of the south end of Federal Harbor and contain Dalmanella = 6.41.8 F.

6.41.8 F

A few yards north of the south end of Federal Harbor occur a few feet of "granitoid tuffs" — gray acid charged with feldspar phenocrysts. At the extreme south end of Federal Harbor the rock tumbles over some distinctly bedded and fine grained tuffs striking N. 30°W and dipping 34° N.E.

In the fields southeast of Mr. Doherty's farmhouse occur some outcrops of acid tuffs with occasional patches of a few inches to a couple of feet of splintery gray shales these cut by gabbro sills. A couple of feet of gray shale occurring east of the road near the mid height of the S.E. quarter of 6.41.8 contain a few Cypricardinia "platyphyllus" = 6.41.8 B.

6.41.8 B

South West of the house of Mr. ___ # there occurs on the west side of Devils Neck and the east shore of Morrison Cove a strip of dark blue thin bedded shales. About 30 feet of shales are here exposed striking N. 40° W. and dipping 44° N.E. ~~after this against a basic intrusion on the east. The shales are~~ the shales are even bedded, thin, dark blue in color and with frequent 1/4-1/2 inch semi-calcareous seams. Fossils are scarce. The fauna 5.35.5 A includes

Orbiculoidea sp. R.
Lingula (complanata type) R
Chonetes denysi R ← {apparently in place but possibly not so. The specimen if not actually in place (which is improbable) indicates a leaning talus of shale}
Camarotoechia sp. R.
"Modiolopsis platyphyllus" occasional
Actinopterella sp. "
Dawsonoceras sp. R.
Orthoceras (of O. myrice "type") R.
?Coleolus (possibly Onchus spine) R.
Phthonia sp. R.

The shales are cut off on the west by a coarse grained gabbro dike and underlain by acid tuffs. These tuffs become dense and crop out on the shore north of the gabbro dike and show large pink rhyolite fragments, many of them 2-5 inches, incased in a light gray matrix. These fragmental acid tuffs form the shore line for a couple of hundred yards northward, when there appears on the shore due west of Mr. ___ house # another patch of thin evenly bedded dark blue shales. About 25 feet of shales which are similar lithologically to 5.35.5 A occur here striking N. 50° W. and dipping 45° N.E. They are again cut off on the west by a thick coarse grained gabbro. Near the contact the shales are deflected striking N. 75° W and dipping N. 32°.

The dark blue shales as here exposed are about 20 feet thick and the gradation into the overlying fragmental tuffs may be observed at the south end of the exposure. Fossils in this strip of shales are extremely rare and include (= 5.35.5 B, on border between 5.35.4-5)

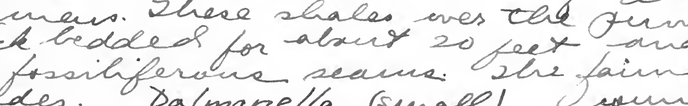
Orbiculoidea occasional
Lingula rare
Camarotoechia rare
?Dalmanella sp. rare.
Murchisonia (romanoborlea) common in a seam ~~found~~ 1 ft. below the tuffs.
M " (angulata whorled) R ~~found below~~
?Holopella sp. R.

Near the southeast end of Morrison Cove there occurs on a little cove on the Devils shore a couple of hundred yards N.W. of the schoolhouse a series of acid glass tuffs & tuffaceous (indurated) blue shales aggregating perhaps 150 ft. thick. They strike N. 40° W and dip 45° NE. The faunas 5.45.3 A are varied including Dalmanella (Schooner Cove species), Camarotoechia & Chonetes denysi

The house between the letters B & O on Devils Neck.

Different seams are composed almost exclusively of ~~the~~ only one of these 3 with occasional rare specimen of the other two. 5.45.3 A' is a seam in a dense rhyolite glass near the base containing Dalmanella abundant. 5.45.3 A² is a seam in a rhyolite glass with a few small fragments in seams & containing of Hindia fibrosa (cf. Schooner Cove) Dalmanella R, Camarotoechia rare. 5.45.3 A³ represents several seams in the overlying shales & glasses containing

Camarotoechia abundant
Chonetes denysi "
Dalmanella "
Actinopterella occasional
Modiolopsis platyphyllus R
" sp. (cf. gastropod beds). abundant in a seam
Cornulites O.
etc, etc.

In the cove on the north side of Horan's Head about a quarter of a mile south of Bradley's fish house & weir there occur on the west side some basic dark purplish red fine grained tuffs imperfectly bedded. These are followed by a grayish trap rock which in the upper part is exceedingly amygdaloidal and pumaceous. The upper surface of this pumaceous extrusion is irregular and exhibits hummocks & basins 5 or 6 feet broad and 1 or 2 feet deep. The rock is immediately overlain by coarse thick bedded blue shales striking N. 53° W. About half way down the cove these shales are offset about 50 or 75 feet to the S.W. by a fault bearing N. 30° E. For 2 to 6 feet above the pumice the shales contain calcareous nodules or concretions. A few of these calcareous masses appear to be of coral nature and a few specimens were observed of a simple ___ rugose coral with outline as indicated  but too poorly preserved to warrant the labor of extracting the specimens. These shales over the pumice are thick bedded for about 20 feet and contain several thin fossiliferous seams. The fauna 6.42.1 m includes.

6.42.1 m.

Dalmanella (small) common
Whitfieldella (?) (?Nucleospira) very common
Camarotoechia occasional
?Actinopterella
Lingula sp rare
Orbiculoidea sp rare.

These thick bedded fossiliferous shales are overlain in the cove by about 160 feet of ~~thinly laminated~~ dark blue shales which contain few if any fossils. These shales strike N. 43° W at the south end of the

cove and the strike may be seen to swing around to N. 53° W. in an even curve. These dark blue shales ~~underly~~ dip 50° N.E. and underly an exposure of about 20 feet of very light gray shales composed of rhyolitic material and apparently the same as those occurring on the southeast side of Horan's Head. (At south end of the cove there is another fault bringing the basic tuffs eastward about 100 ft. or more).

A trip was made to the east end of Horan Head to determine the nature of the rhyolite on the south side - whether intruded into the gabbro or the gabbro intruded into the rhyolite. The rhyolite here about 60 feet broad. The gabbro is coarse grained and uniform up to within 2 to 4 inches of the contact. This 2 to 4 inch irregular band is abruptly demarcated from both the rhyolite on the west and the gabbro on the east. A specimen is 1262. It is a dark blue very fine grained rock but not quite so glassy as is usual for rhyolite. The rhyolite 1 foot from the contact is dark blue & glassy - 1263. Ten feet from the contact the rhyolite is lighter blue or bluish gray 1264. Five feet farther in the rhyolite 1265 becomes grayish & coarser, and 10 feet still farther in the rhyolite, 1266 becomes pinkish.

In the one foot band there are included rounded scattered fragments of a much darker apparently basic rock though fine grained. A specimen of the rhyolite with one of these fragments is 1263 B

~~About~~ A quarter of a mile due west of the south end of Federal Harbor there occur in the fields about 100 feet west of the highway a series of light robin's egg blue acid tuffs and greenish gray sandstone bands the latter resembling those of the Long Cove beds. The strata strike N. 14° W. and dip approximately 35° N.E. Several seams 1 inch to two inches thick in the tuffs are full of finely preserved casts which yield a rich fauna = 6.41.7 A (The ~~fauna~~ rocks crop out across the boundary between 6.41.7 and 6.51.1. The fauna is exceedingly rich both in brachiopoda & mollusca including

6.41.7. A.

Camarotoechia (cf. Long Cove) abundant
Chonetes denysi abundant
Dalmanella (Schooner Cove species) common
Grammysia cingulata var. occasional
Actinopterella 2 or 3 spp. common
Pteronitella retrotlexa occasional
Goniophora 2 spp. (one of them of G. rhombea type).
Modiolopsis cf. platyphylla occasional
Ctenodonta 2 spp occasional
various Lamellibranchs common

Murchisonia 2 or 3 spp. common
Cornulites rare
Dalmanites ? or R
Calymene

Perry.

24.6 N. - Below the railroad, between the highway crossing ~~stone~~ culverts over Little River, ~~and~~ and just west of a wire fence there occur on the north bank of Little River see locality 38.

Record of outcrops about Perry


67°10'
67°5'
67°
45'
44'55'
LEGEND
DEVONIAN
PERRY FORMATION
Upper lava member
Upper sandstone member
Lower lava member
Lower conglomerate member
Red Beach
ST. CROIX RIVER
NEW BRUNSWICK
Hilchins Pt.
Brooks Cove
GRANITE
Robbinston
PERRY SANDSTONE
St Andrews
GRANITE
South Robbinston
Mill Cove
PASSAMAQUODDY
BAY
Lewis Cove
North Perry
Gin Cove
BOYDEN LAKE
Frost Cove
DEER
ISLAND
SILURIAN LAVAS
WITH SOME SHALE
Little River
Perry
PURPLE SHALE
RHYOLITE
Gleason Cove
PURPLE SHALE
Pembroke
Pleasant Pt
RHYOLITE
Carlow Id.
Sipp Bay
EAST BAY
SILURIAN STRATA
Bar Hbr
Hersey Pt.
PENAMAQUAN RIVER
Carryingplace Cove
Birch Pt.
COBSCOOK BAY
Eastport
Broad Cove

Case's Cove

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