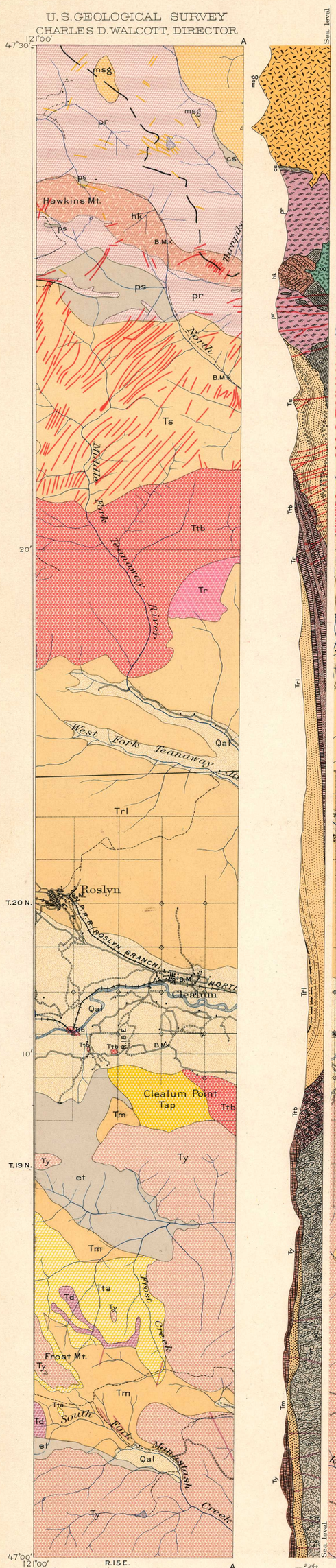
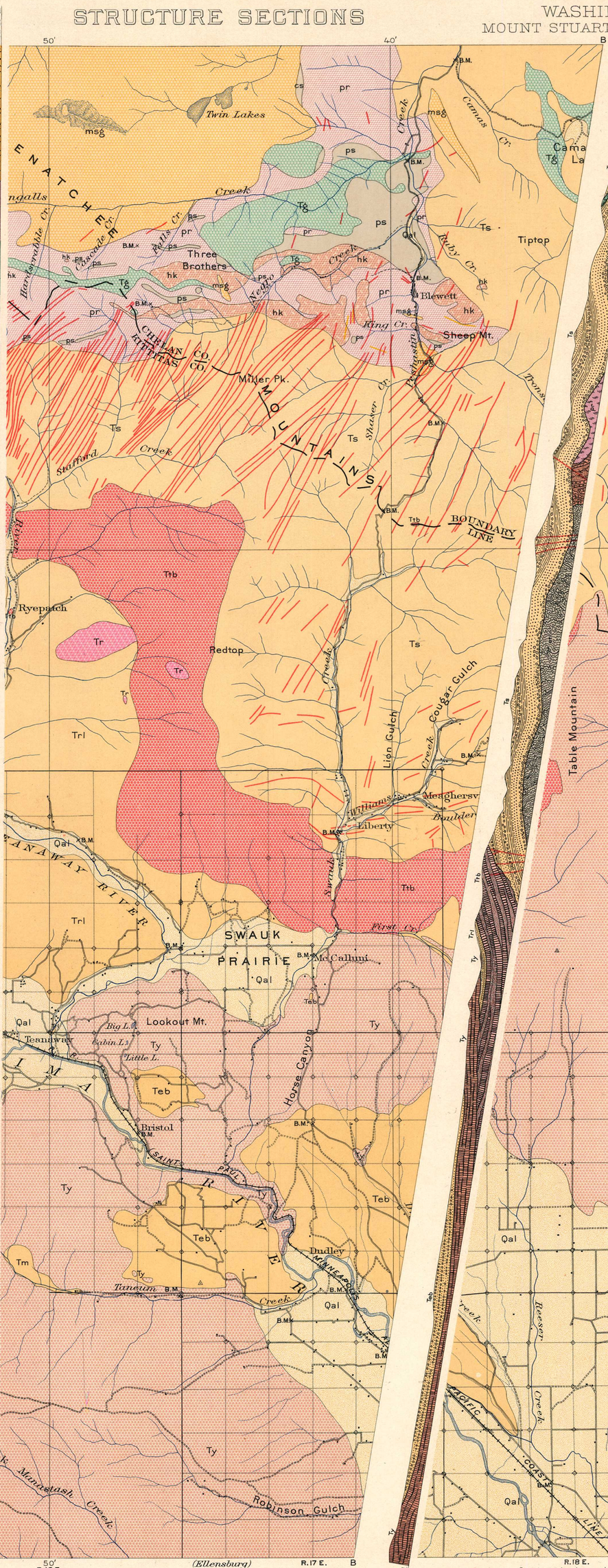
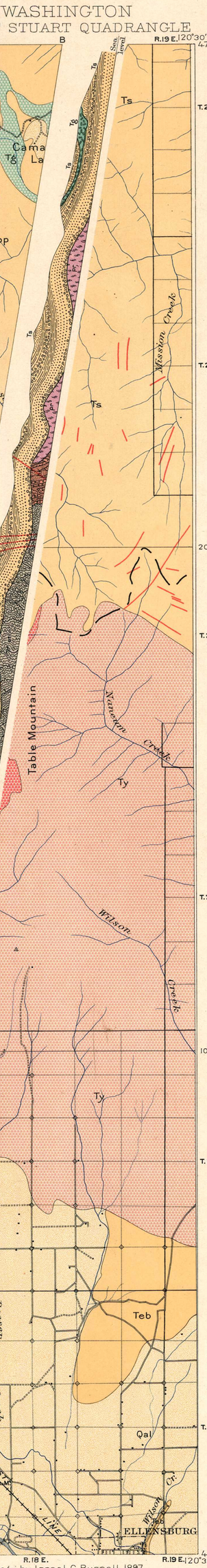
U.S. GEOLOGICAL SURVEY
CHARLES D. WALCOTT, DIRECTOR

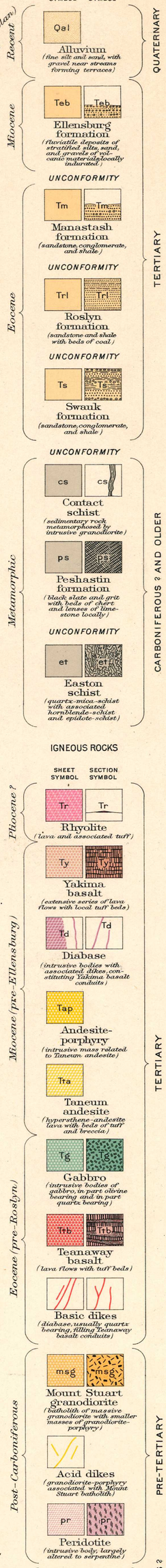
STRUCTURE SECTIONS

WASHINGTON
MOUNT STUART QUADRANGLE









LEGEND

SEDIMENTARY ROCKS

SHEET SYMBOL	SECTION SYMBOL		
Qal		Alluvium (fine silt and sand, with gravel near streams forming terraces)	Recent — QUATERNARY
Teb	Teb	Ellensburg formation (fluviatile deposits of stratified silts, sand, and gravels of volcanic materials locally indurated)	Miocene — TERTIARY
		UNCONFORMITY	
Tm	Tm	Manastash formation (sandstone, conglomerate, and shale)	Eocene — TERTIARY
		UNCONFORMITY	
Trl	Trl	Roslyn formation (sandstone and shale with beds of coal)	Eocene — TERTIARY
		UNCONFORMITY	
Ts	Ts	Swauk formation (sandstone, conglomerate, and shale)	Eocene — TERTIARY
		UNCONFORMITY	
cs	cs	Contact schist (sedimentary rock metamorphosed by intrusive granodiorite)	Metamorphic — CARBONIFEROUS ? AND OLDER
ps	ps	Peshastin formation (black slate and grit with beds of chert and lenses of limestone locally)	Metamorphic — CARBONIFEROUS ? AND OLDER
		UNCONFORMITY	
et	et	Easton schist (quartz-mica-schist with associated hornblende-schist and epidote-schist)	Metamorphic — CARBONIFEROUS ? AND OLDER

IGNEOUS ROCKS

SHEET SYMBOL	SECTION SYMBOL		
Tr	Tr	Rhyolite (lava and associated tuff)	Pliocene ? — TERTIARY
Ty	Ty	Yakima basalt (extensive series of lava flows with local tuff beds)	Miocene (pre-Ellensbury) — TERTIARY
Td	Td	Diabase (intrusive bodies with associated dikes, constituting Yakima basalt conduits)	Miocene (pre-Ellensbury) — TERTIARY
Tap		Andesite-porphyry (intrusive mass related to Taneum andesite)	Miocene (pre-Ellensbury) — TERTIARY
Tra		Taneum andesite (hypersthene-andesite lava with beds of tuff and breccia)	Miocene (pre-Ellensbury) — TERTIARY
Tg	Tg	Gabbro (intrusive bodies of gabbro, in part olivine bearing and in part quartz bearing)	Eocene (pre-Roslyn) — TERTIARY
Trb	Trb	Teanaway basalt (lava flows with tuff beds)	Eocene (pre-Roslyn) — TERTIARY
		Basic dikes (diabase, usually quartz bearing, filling Teanaway basalt conduits)	Eocene (pre-Roslyn) — TERTIARY
msg	msg	Mount Stuart granodiorite (batholith of massive granodiorite with smaller masses of granodiorite-porphyry)	Post-Carboniferous — PRE-TERTIARY
		Acid dikes (granodiorite-porphyry associated with Mount Stuart batholith)	Post-Carboniferous — PRE-TERTIARY
pr	pr	Peridotite (intrusive body, largely altered to serpentine)	Post-Carboniferous — PRE-TERTIARY
hk	hk	Hawkins formation (diabasic lavas, tuffs, and breccias)	Metamorphic — CARBONIFEROUS ?

Faults

R. U. Goode, Geographer in charge.
Triangulation by S. S. Gannett
Topography by G. E. Hyde.
Surveyed in 1896–97.

DIAGRAM OF TOWNSHIP

6	5	4	3	2	1	
7	8	9	10	11	12	
18	17	16	15	14	13	
19	20	21	22	23	24	
30	29	28	27	26	25	
31	32	33	34	35	36	

Geology by Israel C. Russell, 1897;
George Otis Smith and G. C. Curtis, 1898;
George Otis Smith and W. C. Mendenhall, 1899.

APPROXIMATE MEAN DECLINATION 1902.

Scale 1/125000

1 0 1 2 3 4 5 Miles

1 0 1 2 3 4 5 Kilometers

Edition of Jan. 1904.