

Contents

CHAPTER I Distribution and Number of Paleozoic Evaporite Sequences and Basins

Introduction.	1
Cambrian Evaporite Deposits.	1
Ordovician Evaporite Deposits	6
Silurian Evaporite Deposits	12
Devonian Evaporite Deposits	18
Carboniferous Evaporite Deposits.	36
Permian Evaporite Deposits.	55
General Conclusions.	74

CHAPTER II Stratigraphic Position of Evaporites and Stages of Evaporite Accumulation

Statement of the Problem	91
Stratigraphic Position of Cambrian Evaporites.	92
Stratigraphic Position of Ordovician Evaporites.	97
Stratigraphic Position of Silurian Evaporites	102
Stratigraphic Position of Devonian Evaporites.	107
Stratigraphic Position of Carboniferous Evaporites.	113
Stratigraphic Position of Permian Evaporites.	122
Stages of Sulfate, Halite, and Potassium Accumulation in the Paleozoic.	129

CHAPTER III Areal Extent and Volume of Evaporites. Epochs of Intense Evaporite Accumulation

Introductory Remarks	140
Areal Extent and Volume of Halogenic Rocks in Paleozoic Evaporite Basins	141
Areal Extent of Evaporites During Various Periods, Epochs, and Ages of the Paleozoic	165

The Volume of Evaporite Sedimentation in Different Periods, Epochs, and Ages of the Paleozoic	174
General Conclusions.	191
CHAPTER IV Paleogeography of Continents and Paleoclimatic Zonation of Evaporite Sedimentation	
Introductory Remarks	193
Paleogeography of Continents and Paleoclimatic Zonation for Evaporite Sedimentation in the Early Cambrian	196
Reconstruction Without Regard for Continental Drift	196
Reconstruction Which Invokes Continental Drift	203
Conclusions Concerning Paleoclimate and Paleogeography of Evaporite Basins in the Early Cambrian	204
Paleogeography of Continents and Paleoclimatic Zonation of Evaporite Sedimentation for the Middle and Late Devonian	206
Reconstruction Which Does Not Invoke Continental Drift.	206
Reconstruction Which Invokes Continental Drift	220
Conclusions Concerning Paleoclimate and Paleogeography of Evaporite Basins During the Middle and Late Devonian.	226
Paleogeography of Continents and Paleoclimatic Zonation of Evaporite Sedimentation in the Permian.	227
Reconstruction Which Does Not Invoke Continental Drift.	227
Reconstruction Which Invokes Continental Drift.	234
Conclusions Concerning Paleoclimate and Paleogeography of Evaporite Basins During the Permian	239
Main Paleogeographic and Paleoclimatic Features of Paleozoic Evaporite Sedimentation	241
EPILOG Evolution of Evaporite Sedimentation in the Paleozoic	245
References	248
Subject Index	287