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### **3**

# On the Siluro-Devonian Fauna of Chöl-tagh, Eastern T'ien-shan

Part I: *Anthozoa*

BY

GERHARD REGNÉLL

With Plates I—XII and 10 figures of Text.

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## PREFACE.

During 1927—34 Dr. ERIK NORIN, head geologist of the Sino-Swedish Expedition in Central Asia under Dr. SVEN HEDIN, made an important collection of Lower Paleozoic marine fossils from the eastern T'ien-shan. Part of this most interesting collection, viz. that comprising fossils from Cambro-Ordovician series of strata, was described some years ago by TROEDSSON. Another portion, originating from the Arpishmebulaq Series, the age of which was tentatively given by NORIN (1935) as Upper Silurian or Lower Devonian, was entrusted to the present writer for description. For this favour he is much obliged to Dr. NORIN who has also in every way facilitated the work.

The present paper deals exclusively with the coral fauna of the Arpishmebulaq Series. Though the rest of the fauna has not been fully elaborated as yet, it has, for various reasons, been thought convenient to publish the part now completed. The general character and definite stratigraphical evidence of the fauna will be discussed in the second part of this study. Here only a short survey is given.

It should be mentioned that, under prevailing conditions, several papers which would have been of interest for this investigation unfortunately could not be procured among them papers by RUKHIN (1935), and CHERNISHEV (1937), dealing with Upper Silurian and Devonian tabulates collected not very far from our region.

All expenses for this investigation were defrayed by grants received from the Royal Swedish Academy of Science, for which the author begs to express his sincere gratitude.

The author is greatly indebted to the eminent specialist on Silurian faunas and stratigraphy, Dr. J. E. HEDE, Lund, who has taken a keen interest in the work and given much valuable help and advice.

The photographs were taken by Miss INGRID NILSSON with great skill and ability. No figures were retouched.

All specimens belong to the Paleozoological Dept., Riksmuseum, Stockholm. Unfortunately the definite numbers of the specimens were not available when I was preparing the manuscript.

The Geological-Mineralogical Institute, University of Lund, July 1941.