

https://dspace.org/

The Rubidge Collection of fossil Karroo vertebrates

Haughton, S. H.

1965-12
Bernard Price Institute for Palaeontological Research
http://hdl.handle.net/10539/16057
None

Downloaded from a DSpace repository. https://dspace.org/

THE RUBIDGE COLLECTION OF FOSSIL KARROO VERTEBRATES

By S. H. Haughton, F.R.S.

Wherever palaeontologists interested in fossils from the strata of the Karroo system discuss the systematics and evolutionary importance of Permian and Triassic vertebrates they perforce have to consider the facts that have been revealed by studies of the hundreds of specimens forming what is known as the "Rubidge Collection".

Housed in the family home on the farm Wellwood in the district of Graaff-Reinet, Cape Province, this magnificent collection has been gathered together by the enthusiasm and generosity of one man—Sidney H. Rubidge, farmer and Honorary Doctor of Science of the University of the Orange Free State. Among those who deserve the honoured title of "amateur", one who pursues a hobby for pure love and without thought of material gain, Dr S. H. Rubidge must rank very high.

The name Rubidge was not by any means unknown to Science before Sidney added lustre to it. Among the associates of, and collaborators with, Andrew Geddes Bain—the "father of South African geology"—was Dr Richard Nathaniel Rubidge, who had come in 1821, at the age of two years, with his father to South Africa from Wales, beginning his South African life in Grahamstown. He became the leading medical doctor in Port Elizabeth and was a co-founder of the Provincial Hospital in that city. He was also an ardent botanist as well as an enthusiastic collector of fossils, especially of the Cretaceous fossils of the Uitenhage basin. He sent collections, from both the Cretaceous and Karroo beds, to London and also had papers on various aspects of South African geology published by the Geological Society of London, of which he was a Fellow, including one of the occurrence of gold in dolerite dykes at Smithfield in the Orange Free State and another in which he gives his own interpretation of the relations of the various formations in the Ceres area. Some of the fossils, both plants and invertebrates, in these collections became types of new species.

This Dr R. N. Rubidge was an uncle of S. H.'s father (also named Richard) and the grand-nephew relates, in his modest reminiscences published in 1956 in the Bulletin of the South African Museums Association, the memories of his father concerning this "professional-clad figure, frock-coated and starch-shirted" searching the ridge adjacent to the house on Wellwood in quest of "inlaid bones". To reach Wellwood from Port Elizabeth required a journey by ox-wagon occupying ten days. One hundred years later it takes but a few hours by car.

The founder of the present collection was born on May 31, 1887. After matriculating in his eighteenth year he was, as he records, "put to farming" with manual labour associated with the business of breeding Merino sheep as his chief occupation for the next twelve years. As a schoolboy he had seen his father pick up a slab of shale in which was embedded a fossil bone; this aroused

his curiosity. His father told him "this is thousands and thousands of years old"; but he could find no answer at that time to the problem of how hard bone became mixed with hard stone. When, as a farmer, he began to "ride the ranges", in addition to keeping a sharp look-out for predators among the sheep grazing within their fenced areas he found, and took home with him, more stones with embedded bones.

The most important part of the collection, however, can be said to have its beginning in 1934. Dr Rubidge, in a letter to the author, has described the story of this episode in the following manner: "Several years elapsed, and in fact I had entirely forgotten about the earlier interest—and most probably it would have remained forgotten had I not been blessed with a little daughter endowed with a lively curiosity. To this child Peggy must justly be ascribed all of whatever credit may be attached to the origin, or founding, of the 'Rubidge Collection' of fossils. Peggy was ten years of age and was spending her 1934 Easter holidays with some of her school friends at home when one Sunday morning she enquired: 'Daddy, what are fossils?' To hide my ignorance I replied: 'Let us go for a picnic at the gravel ridge and then see if you can find any.' Soon after arriving at the site many outcrops were discovered and a large rock was brought home which revealed what appeared to be three parallel bones at its extreme tip and which later proved to be the slightly weathered front teeth of a toothy skull."

The excited father spent his spare time for the next month in "knocking away the matrix with a large carpenter's hammer and a broad steel chisel" (a primitive method of development compared with present-day techniques) and finally exposed to view the anterior half of the large Gorgonopsian skull that Broom, in 1936, made the type of a new genus and species *Dinogorgon rubidgei*. This was the spark needed to kindle into flame the latent fires of enthusiasm. Rubidge states that he had now found an interest that obsessed him, although he felt bound in honour to give first place to "the curatorship and upkeep of an old estate dating back to the original British Settlers" to which he had succeeded and to the need for "placing work and duty before any personal inclination that I might desire to follow instead".

This "work and duty" took up most of his time, and opportunities to undertake the journeys necessary in a search for fossils were few and far between. However, he enlisted the co-operation of the late C. J. Kitching, an energetic overseer of road construction who by reason of his occupation had his week-ends free "to go fossil-hunting". In this he had the assistance of four young sons, the eldest of whom, James, has since then acquired international fame as a collector of fossils *par excellence*. C. J. Kitching would, with his family, range far and near by car during week-ends, collect everything that he or they could see, and carry his finds back to Wellwood for inspection. Dr Rubidge would make an appraisal of the finds, valuing them according to a rough and ready but mutually acceptable classification, and exchange the rocks for a cash disburse-

ment, both parties to the transaction feeling that they had been adequately rewarded.

Robert Broom first visited Rubidge in April, 1934, and maintained contact with him to the date of his death in 1951. Rubidge was greatly impressed with Broom's erudition and was strengthened in his desire to collect and preserve by encouragement that he received from this savant and the assurance from him that he was undertaking a worth-while task. Broom made known to the world of science, in numerous publications, the many hitherto unknown genera and species that were annually being added to the collection as a result of field-work by Rubidge himself, by one or more of the Kitching family, or by their conjoint efforts. He paid many visits to Wellwood and maintained a frequent exchange of letters with the owner of the collection, which was visited by a number of renowned palaeontologists from overseas countries. It was a source of pleasure to Dr Rubidge that one of them, Prof. D. M. S. Watson, should write: "There is no parallel to the building up, in some ten years, of so magnificent a series of fossil reptiles, essentially from one set of rocks, by any one man who is actively engaged in the management of a difficult farm".

From the time of its foundation, the Bernard Price Institute for Palaeontological Research has maintained close contact with Dr Rubidge, a contact made easier by the fact that its chief Field Officer, Mr James Kitching, has been closely associated from boyhood with the building-up of the collection. During the past ten years or more, Dr Rubidge has freely made available to scientists working either permanently or temporarily in the Institute treasures from his store for development and detailed study. In his enthusiasm for making known to the world the existence of new species of Karroo vertebrates, Broom was inclined to remove from a specimen just sufficient matrix to disclose what to him were diagnostic features. The proper development of many of the specimens to a stage at which morphological features of one can be closely compared with those of another is a tedious and skilled task, one that can effectively be undertaken only in a properly equipped laboratory. The opportunities that Dr Rubidge has afforded the Institute for this detailed work and study of specimens highly treasured by him have greatly enhanced the scientific value of these specimens and further placed the world of Science in his debt.

It is a source of pride to the Institute, its Board of Control, and its officers, that Dr Rubidge has arranged for yet closer collaboration between him and them. The Rubidge Collection, with his approval and that of his son who will succeed to the ownership, will be permanently and adequately housed at Wellwood. The Institute will exercise scientific control over it, prepare and maintain proper catalogues, and see that its integrity is preserved. Study of individual specimens will be subject to the Institute's supervision. Provision will be made at Wellwood for field headquarters for the Institute's staff. For its part, the Institute gives the assurance that it will do its utmost to arrange that the collection will be a lasting tribute and memorial to a South African who enthusiastically devoted himself, his thought and his competent energy to the preservation of

one part of his country's scientific treasures without thought of material gain. Dr Rubidge himself has written: "I value not what I have done. I set much greater store by the fact that, because I have done it, others following where I shall have been forced to leave off may, in their turn, advance the science of palaeontology even further and to much greater heights of scientific achievement".

Some idea of what he has done may be gleaned from a perusal of the following list of type and described specimens in the collection. It must be emphasized that this is merely a list of the described and figured specimens—the Pièces d'Honneur, as it were, of the collection; there are, in addition, some hundreds of specimens that await preparation and classification and that will add to the sum total of our knowledge of what is, essentially, a local fauna within the history of the Karroo vertebrates. It is, in effect, from the district of Graaff-Reinet and the adjoining districts of Murraysburg and Richmond that the bulk of the collection was gathered in perforce hurried visits to "productive patches" that had not previously been searched by others. The number and variety of forms picked up at the surface on these visits go far to substantiate Rubidge's "boast" to Broom that his "home district" would prove to be the "most prolific" fossil-bearing area in the whole expanse of the Karroo strata.

Here follows a classified list, prepared by Mr James Kitching, of the type and described specimens in the collection, in the following standard order: Number : Generic and Specific name : Author : Family name : Collector : Date : Horizon : Locality : Brief description : Bibliographic reference.

R.C. 1 : *Dinogorgon rubidgei* Broom (gen. et sp. nov.) : Rubidgeidae : Peggy Rubidge and Frank Collins : April 1934 : *Cistecephalus*-zone : Wellwood : Anterior half of large gorgonopsian skull with lower jaw : Broom, R., 1936, *Ann. Transv. Mus.*, xviii, p. 373, fig. 19.

R.C. 2 : *Galerhinus rubidgei* Broom (sp. nov.) : Gorgonopsidae : S. H. Rubidge : 1934 : *Cistecephalus*-zone : Wellwood : Small skull with lower jaw : Broom, R., 1936, *Ann. Transv. Mus.*, xviii, p. 375, figs. 20, 21.

R.C. 3 : *Spondylolestes rubidgei* Broom (gen. et sp. nov.) : Procolophonidae : S. H. Rubidge : 1936 : *Cistecephalus*-zone : Bethesda Road : Small imperfect skull with lower jaw : Broom, R., 1937, *Proc. zool. Soc.*, p. 299, fig. 1.

R.C. 4 : *Galerhynchus rubidgei* Broom (gen. et sp. nov.) : Gorgonopsidae : C. J. Kitching : 1937 : *Cistecephalus*-zone : Blaaukrantz, Graaff Reinet : Small skull with lower jaw : Broom, R., 1937, *Proc. zool. Soc.*, p. 303, fig. 4.

R.C. 5 : *Procynosuchus delaharpeae* Broom (gen. et sp. nov.) : Procynosuchidae : Lorraine de la Harpe : — : *Cistecephalus*-zone : The Glen, Graaff-Reinet : Small skull without lower jaw : Broom, R., 1937, *Proc. zool. Soc.*, p. 314, fig. 14.

R.C. 6 : *Ictidosuchoides rubidgei* Broom (gen. et sp. nov.) : Ictidosuchidae : S. H. Rubidge : 1936 : *Cistecephalus*-zone : Wellwood : Two-thirds of small skull : Broom, R., 1937, *Ann. Transv. Mus.*, xix, p. 141, fig. 6A.

R.C. 7 : *Cyniscops rubidgei* Broom (gen. et sp. nov.) : Gorgonopsidae : S. H. Rubidge : 1937 : *Cistecephalus*-zone : Wellwood : Small skull without lower jaw : Broom, R., 1937, *Ann. Transv. Mus.*, xix, p. 143, fig. 4. (Not R.C. 74 from New Bethesda as listed in the bibliographical list of Haughton and Brink, 1954.)

R.C. 8 : *Palemydops rubidgeae* Broom (sp. nov.) : Endothiodontidae : Peggy Rubidge : 1937 : *Cistecephalus*-zone : Wellwood : Small anomodont skull : Broom, R., 1937, *Ann. Transv. Mus.*, xix, p. 143, fig. 6B, C.

R.C. 9 : *Dinanomodon rubidgei* Broom (gen. et sp. nov.) : Dicynodontidae : C. J. Kitching : Feb. 1938 : *Cistecephalus*-zone : Stylkrans, Graaff Reinet : Very large anomodont skull without lower jaw : Broom, R., 1938, *Ann. Transv. Mus.*, xix, p. 247, figs. 1, 2.

R.C. 10 : *Pelanomodon rubidgei* Broom (gen. et sp. nov.) : Cryptodontidae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Kareelaagte, Graaff Reinet : Medium-sized anomodont skull : Broom, R., 1938, *Ann. Transv. Mus.*, xix, p. 249, fig. 3.

R.C. 11 : *Ictidosuchops* (*Ictidosuchoides*) *intermedius* (Broom) (sp. nov.) : Ictidosuchidae : C. J. Kitching : 7 Dec. 1938 : *Cistecephalus*-zone : New Bethesda river bed : Anterior half of skull : Broom, R., 1938, *Ann. Transv. Mus.*, xix, p. 257, figs. 1-3.

R.C. 12 : *Procynosuchus rubidgei* Broom (sp. nov.) : Procynosuchidae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Afrikanerskloof, Graaff Reinet : Small cynodont skull without lower jaw : Broom, R., 1938, *Ann. Transv. Mus.*, xix, p. 283, figs. 4-8A.

R.C. 13 : *Rubidgea atrox* Broom (gen. et sp. nov.) : Rubidgeidae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Dorsfontein, Graaff Reinet : Very large gorgonopsian skull with lower jaw : Broom, R., 1938, *Proc. zool. Soc.*, p. 527, figs. 1, 2.

R.C. 14 : *Milleretta* (*Millerina*) *rubidgei* (Broom) (gen. et sp. nov.) : Milleretti-dae : (*a*) S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Wel-tevreden, Graaff Reinet : Small captorhinomorph skull with lower jaw : Broom, R., 1938, *Proc. zool. Soc.*, cviiiB, p. 535, figs. 1-4. (*b*) C. J. Kitching : 1940 : *Cistecephalus*-zone : Grootdriefontein, Murraysburg : Skull slightly smaller than R.C. 14(*a*).

R.C. 15 : *Millerinoides acutirostris* Broom (gen. et sp. nov.) : Millerettidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : Wellwood : Very small captorhinomorph skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 71, fig. 1.

R.C. 16 : *Nanictocephalus richardi* Broom (gen. et sp. nov.) : Scaloposauridae : S. H. Rubidge : 1 Apr. 1938 : *Cistecephalus*-zone : Doornplaas, Graaff Reinet : Very small skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 72, fig. 2C.

R.C. 17 : *Paracynosuchus rubidgei* Broom (gen. et sp. nov.) : Procynosuchidae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Grootdriefontein, Murraysburg : Small cynodont skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 73, fig. 2A, B, D.

R.C. 18 : *Scaloposuchus rubidgei* Broom (gen. et sp. nov.) : Scaloposauridae : C. J. Kitching and party : 1939 : *Cistecephalus*-zone : Osfontein, Graaff Reinet : Small skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 73, fig. 3A-C.

R.C. 19 : *Broomisaurus rubidgei* Broom (sp. nov.) : Gorgonopsidae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Doornberg, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 75, figs. 4, 5.

R.C. 20 : *Hipposauroides* (*Hipposaurus*) *rubidgei* (Broom) (gen. et sp. nov.) : Ictidorhinidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : Wellwood : Small skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 77, figs. 6, 7.

R.C. 21 : *Scylacocephalus watermeyeri* Broom (gen. et sp. nov.) : Gorgonopsidae : G. H. Watermeyer : 1938 : *Cistecephalus*-zone : Grootdriefontein, Murraysburg : Small skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 79, figs. 8, 9.

R.C. 22 : *Dicynodon macrodon* Broom (sp. nov.) : Dicynodontidae : G. H. Watermeyer : 1938 : *Cistecephalus*-zone : Grootdriefontein, Murraysburg : Anomodont skull without lower jaw and with good tusks : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 81, fig. 10A, B.

R.C. 23 : *Dicynodon cadlei* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : Apr. 1938 : *Cistecephalus*-zone : Hoeksplaas, Murraysburg : Anomodont skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 82, fig. 11.

R.C. 24 : *Aulacephalodon* (*Aulacocephalodon*) *rubidgei* Broom (sp. nov.) : Aulacephalodontinae : S. H. Rubidge and party : 28 Apr. 1938 : *Cistecephalus*-zone : Wimbledon, Graaff Reinet : Large dicynodont skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 203, fig. 13.

R.C. 25 : *Platycyclops latirhinus* Broom (sp. nov.) : Cryptodontidae : S. H. Rubidge and party : 28 Apr. 1938 : *Cistecephalus*-zone : Wimbledon, Graaff Reinet : Anterior two-thirds of large anomodont skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 85, fig. 14.

R.C. 26 : *Platycyclops rubidgei* Broom (sp. nov.) : Cryptodontidae : S. H. Rubidge and party : 11 Apr. 1938 : *Cistecephalus*-zone : Grootdriefontein, Murraysburg : Very large anomodont skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 85, fig. 15.

R.C. 27 : *Nanictosuchus melinodon* Broom (sp. nov.) : Galesauridae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Klipfontein, Graaff Reinet : Small imperfect cynodont without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 85, fig. 16.

R.C. 28 : *Pareiasaurus rubidgei* Broom (sp. nov.) : Pareiasauridae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Oudeberg, Graaff Reinet : Large cotylosaur skull with lower jaw, cervical vertebrae and inter-clavicle : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 157, fig. 1.

R.C. 29 : *Polycynodon* (*Octocynodon*) *elegans* (Broom) (gen. et sp. nov.) : Scaloposauridae : S. H. Rubidge and party : 10 Apr. 1938 : *Cistecephalus*-zone : Modderfontein, Middelburg : Anterior two thirds of skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 160, fig. 3.

R.C. 30 : *Ictidosuchops baurioides* Broom (sp. nov.) : Scaloposauridae : S. H. Rubidge and party : 29 Apr. 1938 : *Cistecephalus*-zone : Zuurplaas, Graaff Reinet : Small skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 163, fig. 6.

R.C. 31 : *Pelictosuchus paucidens* Broom (gen. et sp. nov.) : Scaloposauridae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : Wellwood : Anterior two-thirds of skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 164, fig. 7.

R.C. 32 : *Moschorhinus esterhuyseni* Broom (sp. nov.) : Whaitsiidae : D. Esterhuysen : 1939 : *Cistecephalus*-zone : Slopes of Compassberg, Graaff Reinet : Almost complete skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 167, fig. 10.

R.C. 33 : *Rubidgea laticeps* Broom (sp. nov.) : Rubidgeidae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Patrysfontein, Graaff Reinet : Large gorgonopsian skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 173, fig. 15.

R.C. 34 : *Prorubidgea maccabei* Broom (gen. et sp. nov.) : Gorgonopsidae : C. J. Kitching : 1939 : *Cistecephalus*-zone : St. Olives, Graaff Reinet : Complete gorgonopsian skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 169, figs. 11, 12. (*P. pugnax in errore.*)

R.C. 35 : *Leontocephalus cadlei* Broom (gen. et sp. nov.) : Gorgonopsidae : C. J. Kitching : 1938 : *Cistecephalus*-zone : Weltevreden, New Bethesda : Weathered anterior two-thirds of skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 174, fig. 16.

R.C. 36 : *Dinanomodon gigas* Broom (sp. nov.) : Dicynodontidae : C. J. Kitching and party : 1938 : *Cistecephalus*-zone : Oudeberg, Graaff Reinet : Very large anomodont skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 176, fig. 17.

R.C. 37 : *Dicynodon allani* Broom (sp. nov.) : Dicynodontidae : Allan McCabe : 1938 : *Cistecephalus*-zone : Wimbledon, Graaff Reinet : Complete anomodont skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 177, fig. 18.

R.C. 38 : *Dicynodon trigonocephalus* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : Klipfontein, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 182, fig. 24.

R.C. 39 : *Dicynodon calverleyi* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Klipfontein, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 179, fig. 21.

R.C. 40 : *Dicynodon grahami* Broom (sp. nov.) : Dicynodontidae : Paul McCabe : 1938 : *Cistecephalus*-zone : St. Olives, Graaff Reinet : Medium sized skull with part of lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 180, fig. 22.

R.C. 41 : *Dicynodon richardi* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : Wimbledon, Graaff-Reinet : Anomodont skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 178, fig. 19.

R.C. 42 : *Dicynodon whitsoni* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone: : Wellwood : Small anomodont skull : Broom, R. (not published).

R.C. 43 : *Dicynodon swierstrai* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Klipfontein, Graaff Reinet : Anomodont skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 183, fig. 25A.

R.C. 44 : *Dicynodon sidneyi* Broom (sp. nov.) : Dicynodontidae : J. W. Kitching : 1938 : *Cistecephalus*-zone : Klipfontein, Graaff-Reinet : Skull with lower jaw and cervical vertebrae : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 184, fig. 25B.

R.C. 45 : *Dicynodon parringtoni* Broom (sp. nov.) : Dicynodontidae : D. Esterhuyzen : 1939 : *Cistecephalus*-zone : Bethesda Road : Medium sized anomodont skull with lower jaw : Broom, R. (not published).

R.C. 46 : *Lystrosaurus rubidgei* Broom (sp. nov.) : Lystrosauridae : C. J. Kitching and party : 1939 : Base of *Lystrosaurus*-zone : Bethesda Road : Anterior two-thirds of large *Lystrosaurus* skull : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 189, fig. 29.

R.C. 47 : *Nanictosaurus rubidgei* Broom (sp. nov.) : Galesauridae : C. J. Kitching and sons : 1937 : *Cistecephalus*-zone : Wellwood, Graaff Reinet : Very small cynodont with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 190, figs. 31, 32A.

R.C. 48 : *Nanictosaurus robustus* Broom (sp. nov.) : Galesauridae : S. H. Rubidge and party : Apr. 1938 : *Cistecephalus*-zone : Hoeksplaas, Murraysburg : Small cynodont skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 192, figs. 32B, 33.

R.C. 49 : *Nanictidops kitchingi* Broom (gen. et sp. nov.) : Scaloposauria : C. J. Kitching : 1938 : *Cistecephalus*-zone : Patrysfontein, Graaff Reinet : Small weathered skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 165, figs. 8, 9.

R.C. 50 : *Owenetta rubidgei* Broom (gen. et sp. nov.) : Procolophonidae : S. H. Rubidge : 1938 : *Cistecephalus*-zone : New Bethesda : Small skull with lower jaw : Broom, R., 1939, *Ann. Transv. Mus.*, xix, p. 319, figs. 1, 2.

R.C. 51 : *Alopecorhynchus rubidgei* Brink & Kitching (gen. et sp. nov.) : Gorgonopsidae : C. J. Kitching and party : 1939 : *Cistecephalus*-zone : Patrysfontein, Graaff Reinet : Small skull with lower jaw : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 8, figs. 9, 10. (Generic and specific name originally suggested by R. Broom in manuscript.)

R.C. 52 : *Dicynodon maccabei* Broom (sp. nov.) : Dicynodontidae : Dick McCabe : 1938 : *Cistecephalus*-zone : St. Olives, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 178, fig. 20.

R.C. 53 : *Mygalesuchus peggyae* Broom (gen. et sp. nov.) : Rubidginidae : Peggy Rubidge : 1941 : *Cistecephalus*-zone : Wellwood : Very small skull with lower jaw and partial skeleton : Broom, R., 1942, *Bull. S. Afr. Mus. Ass.*, ii, p. 386.

R.C. 54 : *Myosauroides minnaari* Broom (gen. et sp. nov.) : Endothiodontidae : C. J. Kitching and sons : 1940 : *Cistecephalus*-zone : Kleinfontein, Graaff Reinet : Small anomodont skull with lower jaw and partial skeleton : Broom, R., 1941, *Ann. Transv. Mus.*, xx, p. 209, fig. 13.

R.C. 55 : *Rubidgina angusticeps* Broom (gen. et sp. nov.) : Rubidginidae : C. J. Kitching and party : 1940 : *Cistecephalus*-zone : Wellwood : Small skull with lower jaw : Broom, R., 1942, *Bull. S. Afr. Mus. Ass.*, ii, p. 386.

R.C. 56 : *Mygalesaurus platyceps* Broom (gen. et sp. nov.) : Rubidginidae : S. H. Rubidge and party : — : *Cistecephalus*-zone : Doornberg, Graaff Reinet : Very small skull with lower jaw : Broom, R., 1942, *Bull. S. Afr. Mus. Ass.*, ii, p. 386.

R.C. 57 : *Clelandina rubidgei* Broom (gen. et sp. nov.) : Gorgonopsidae : C. J. Kitching : Jan. 1940 : *Endothiodon*-zone : Sundays River, Adendorp,

Graaff Reinet : Medium sized badly preserved skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 587, figs. 8-10.

R.C. 58 : *Cerdops burgheri* Broom (gen. et sp. nov.) : Akidnognathidae : A. Burger : — : *Cistecephalus*-zone : De Rust, New Bethesda : Small therocephalian skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 585, figs. 6B, 7C.

R.C. 59 : *Elaphrosuchus rubidgei* Broom (gen. et sp. nov.) : Erythrosuchidae : S. H. Rubidge and party : 1937 : *Lystrosaurus*-zone : Barendskraal, Middelburg : Pseudosuchian skull with lower jaw : Broom, R., 1946, *Ann. Transv. Mus.*, xx, p. 343, figs. 1, 2A.

R.C. 60 : *Tigricephalus kingwilli* Broom (gen. et sp. nov.) : Gorgonopsidae : S. H. Rubidge and party : Jan. 1943 : *Cistecephalus*-zone : Middlevlei, Murraysburg : Skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 599, figs. 17B, 18B.

R.C. 61 : *Scymnognathus holmesi* Broom (sp. nov.) : Gorgonopsidae : B. and S. Kitching : 28 Dec. 1942 : *Cistecephalus*-zone : Brooksfield, Murraysburg : Small skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 603, figs. 19B, 20A.

R.C. 62 : *Smilesaurus ferox* Broom (gen. et sp. nov.) : Rubidgeidae : S. Kitching : Sept. 1943 : *Endothiodon*-zone : Graaff Reinet : Large gorgonopsian skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 599, figs. 19A, 20B.

R.C. 63 : *Dicynodon benjamini* Broom (sp. nov.) : Dicynodontidae : B. Kitching : 28 Dec. 1942 : *Cistecephalus*-zone : Brooksfield, Murraysburg : Anomodont skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 606, figs. 23B, 24B.

R.C. 64 : *Dicynodon duvenhagei* Broom (sp. nov.) : Dicynodontidae : A. J. Duvenhage : Oct. 1944 : *Cistecephalus*-zone : Doornkloof, Graaff Reinet : Medium sized anomodont without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 607, fig. 25.

R.C. 65 : *Pelanomodon wesselsi* Broom (sp. nov.) : Cryptodontidae : Tois Wessels : 27 Dec. 1943 : *Cistecephalus*-zone : Murraysburg Commonage : Very large anomodont skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 612, fig. 30.

R.C. 66 : *Platycyclops richardi* Broom (sp. nov.) : Cryptodontidae : Dick McCabe : Dec. 1937 : *Cistecephalus*-zone : Woodcliffe, Graaff Reinet : Anterior two-thirds of a large, well preserved anomodont skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 613, fig. 31A, B.

R.C. 67 : *Aulacephalodon* (*Aulacocephalodon*) *cadlei* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : Apr. 1938 : *Cistecephalus*-zone : Hoeksplaas, Murraysburg : Large anomodont skull with squamosals missing : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 615, fig. 31C, D.

R.C. 68 : *Cistecephalus platyceps* Broom (sp. nov.) : Cistecephalidae : S. H. Rubidge and party : — : *Cistecephalus*-zone : Murraysburg Commonage : skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi.

R.C. 69 : *Ictidochampsa platyceps* Broom (gen. et sp. nov.) : Alopecodontidae : C. J. Kitching : — : *Cistecephalus*-zone : New Bethesda Commonage : Weathered therocephalian skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 584, figs. 6A, 7A, B.

R.C. 70 : *Millerettops kitchingi* Broom (gen. et sp. nov.) : Millerettidae : B. and S. Kitching : June 1941 : *Cistecephalus*-zone : New Bethesda Commonage : Well preserved captorhinomorph skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 579, figs. 2, 3.

R.C. 71 : *Millerettoides platyceps* Broom (gen. et sp. nov.) : Millerettidae : B. Kitching : — : *Cistecephalus*-zone : Ganora, New Bethesda : Well preserved small captorhinomorph skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 581, fig. 4.

R.C. 72 : *Galeophrys kitchingi* Broom (gen. et sp. nov.) : Procynosuchidae : Kitching brothers : — : Ganora, New Bethesda : Small cynodont skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 627, fig. 44C, D.

R.C. 73 : *Rhinesuchus rubidgei* Broom (sp. nov.) : Rhinesuchidae : Collector and date uncertain : *Cistecephalus*-zone : Wimbledon, Graaff Reinet : Large amphibian skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 578, fig. 1.

R.C. 74 : *Cyniscops rubidgei* Broom : Gorgonopsidae : C. J. Kitching : — : *Cistecephalus*-zone : New Bethesda Commonage : Almost complete skull : Duplicate (Erroneously indicated as the type specimen in the Bibliographical List of Haughton and Brink; the type is R.C. 7.)

R.C. 75 : *Cyniscops longiceps* Broom (sp. nov.) : Gorgonopsidae : S. H. Rubidge and party : — : *Cistecephalus*-zone : Springfontein, Graaff Reinet : Skull with lower jaw : Broom, R., 1941, *Ann. Transv. Mus.*, xx, p. 197, figs. 1B, 2B.

R.C. 76 : *Digalodon rubidgei* Broom and Robinson (gen. et sp. nov.) : Dicynodontia *incertae sedis* : Kitching brothers : Dec. 1946 : *Cistecephalus*-zone : Ferndale, Graaff Reinet : Small anomodont skull without lower jaw : Broom, R. and J. T. Robinson, 1948, *Proc. zool. Soc.*, p. 402, figs. 7, 8.

R.C. 77 : *Dicynodon galecephalus* Broom and Robinson (sp. nov.) : Dicynodontidae : Kitching brothers : — : *Cistecephalus*-zone : Ferndale, Graaff Reinet : Small anomodont without lower jaw : Broom, R. and J. T. Robinson, 1948, *Proc. zool. Soc.*, p. 404, figs. 9, 10.

R.C. 78 : *Millerosaurus ornatus* Broom (gen. et sp. nov.) : Varanopsidae : Kitching brothers : — : *Cistecephalus*-zone : New Bethesda : Very small pelycosaur skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 582, figs. 5A-C.

R.C. 79 : *Cistecephalus major* Broom (sp. nov.) : Cistecephalidae : J. W. Kitching : — : *Cistecephalus*-zone : Doornplaas, Graaff Reinet : Very large cistecephalid skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 615, figs. 32, 33B.

R.C. 80 : *Cistecephalus platyfrons* Broom (sp. nov.) : Cistecephalidae : Kitching brothers : — : *Cistecephalus*-zone : Ferndale, Graaff Reinet : skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 617, fig. 34.

R.C. 81 : *Smilesaurus maccabei* Broom (sp. nov.) : Rubidgeidae : Neil McCabe : — : *Cistecephalus*-zone : Riverdale, Graaff Reinet : Large gorgonopsian skull with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 601, fig. 21A, B.

R.C. 82 : *Pardocephalus wallacei* Broom (gen. et sp. nov.) : Gorgonopsidae : B. Kitching : July 1944 : *Cistecephalus*-zone : Dalham, Graaff Reinet : Skull with lower jaw; top of skull weathered away : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 603, fig. 21C.

R.C. 83 : *Dicynodon howardi* Broom (sp. nov.) : Dicynodontidae : Kitching brothers : — : *Cistecephalus*-zone : Riversdale, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 604, fig. 22A.

R.C. 84 : *Dicynodon glaucops* Broom (sp. nov.) : Dicynodontidae : B. Kitching : — : *Cistecephalus*-zone : Doornplaas, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 604, fig. 22B.

R.C. 85 : *Dicynodon aetorhamphus* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : 28 Dec. 1944 : *Cistecephalus*-zone : Hoeksplaas, Murraysburg : Medium sized skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 605, figs. 23A, 24A.

R.C. 86 : *Dicynodon brachyrhynchus* Broom (sp. nov.) : Dicynodontidae : Kitching brothers : — : *Cistecephalus*-zone : Ferndale, Graaff Reinet : Medium sized skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 609, figs. 27B, 28B.

R.C. 87 : *Galecranium liorhynchus* Broom (gen. et sp. nov.) : Procynosuchidae : Kitching brothers : — : *Cistecephalus*-zone : Ganora, New Bethesda : Small cynodont skull : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 628, fig. 44A, B.

R.C. 88 : *Platycyclops crassus* Broom (sp. nov.) : Cryptodontidae : S. H. Rubidge : — : *Cistecephalus*-zone : Ferndale, Graaff Reinet : Very large anomodont skull with portion of lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 614, fig. 29A.

R.C. 89 : *Tetracynodon tenuis* Broom & Robinson (gen. et sp. nov.) : Scaloposauridae : L. Kitching : — : *Cistecephalus*-zone : New Bethesda Commonage : Small skull with lower jaw : Broom, R. & J. T.

Robinson, 1948, Broom Commemorative Volume, *Roy. Soc. S. Afr.*, p. 41, figs. 6C, 7B.

R.C. 90 : *Youngopsis rubidgei* Broom & Robinson (gen. et sp. nov.) : Younginidae : J. W. Kitching : 1939 : *Cistecephalus*-zone : Doornkloof, Graaff Reinet : Small eosuchian skull : Broom, R. & J. T. Robinson, 1948, *Proc. zool. Soc.*, 118, p. 396, fig. 2A, C.

R.C. 91 : *Youngoides minor* Broom & Robinson (sp. nov.) : Younginidae : Kitching brothers : 1940 : *Cistecephalus*-zone : New Bethesda Commonage : Small eosuchian skull with lower jaw : Broom, R. & J. T. Robinson, 1948, *Proc. zool. Soc.*, 118, p. 397, fig. 2B, D.

R.C. 92 : *Leavachia duvenhagei* Broom (gen. et sp. nov.) : Procynosuchidae : S. H. Rubidge : — : *Cistecephalus*-zone : Doornkloof, Graaff Reinet : Well preserved skull and much of skeleton : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 618, figs. 35-43.

R.C. 93 : *Cistecephalus rubidgei* Broom (sp. nov.) : Cistecephalidae : Kitching brothers : — : *Cistecephalus*-zone : Murraysburg Commonage : Skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 617, fig. 33B.

R.C. 94 : *Clelandina major* Broom (sp. nov.) : Gorgonopsidae : J. W. Kitching : — : *Endothiodon*-zone : Spandau Kop, Graaff Reinet : Skull without lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 590, fig. 11.

R.C. 95 : *Dicynodon scheepersi* Broom (sp. nov.) : Dicynodontidae : S. Kitching : — : *Endothiodon*-zone : Third Drift, Adendorp, Graaff Reinet : Large anomodont with lower jaw : Broom, R., 1948, *Trans. roy. Soc. Edinb.*, lxi, p. 611, fig. 29B.

R.C. 96 : *Dicynodon leontocephalus* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : 1939 : *Cistecephalus*-zone (perhaps *Lystrosaurus*-zone) : Springfield, Middelburg : Large anomodont skull without lower jaw : Broom, R., 1950, *Ann. Transv. Mus.*, xxi, p. 246, fig. 1.

R.C. 97 : *Dicynodon clarencei* Broom (sp. nov.) : Dicynodontidae : S. H. Rubidge and party : 1945 : *Cistecephalus*-zone : 20 miles south of Hanover : Small anomodont skull with lower jaw : Broom, R., 1950, *Ann. Transv. Mus.*, xxi, p. 247, fig. 2.

R.C. 98 : *Pelanomodon halli* Broom (sp. nov.) : Cryptodontidae : S. H. Rubidge and party : — : *Cistecephalus*-zone : The Willows, Middelburg : Medium sized skull without lower jaw : Broom, R., 1950, *Ann. Transv. Mus.*, xxi, p. 248, fig. 3.

R.C. 99 : *Moschorhinus esterhuyseni* : Identified by J. W. Kitching : Whaitsiidae : Kitching brothers : 1941 : *Cistecephalus*-zone : Brandkraal, Middelburg : Skull without lower jaw : Brink, A. S., 1954, *Trans. roy. Soc. S. Afr.*, xxxiv, p. 56.

R.C. 100 : *Dicynodon rubidgei* Broom (sp. nov.) : Dicynodontidae : R. Rubidge : — : *Cistecephalus*-zone : Wellwood : Complete but weathered skull : Broom, R., 1932, Mammal-like Reptiles, p. 189, fig. 62F. (This specimen was sent by R. Rubidge to the British Museum of Natural History where it was given the number 47081.)

R.C. 101 : *Broomicephalus laticeps* Brink & Kitching (gen. et sp. nov.) : Gorgonopsidae : Charles Rubidge : *Cistecephalus*-zone : Zoetvlei, Richmond : Skull with lower jaw : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 3, figs. 1, 2.

R.C. 102 : *Dracocephalus scheepersi* Brink & Kitching (gen. et sp. nov.) : Gorgonopsidae : S. C. Kitching : — : *Cistecephalus*-zone : Zuurplaas, Graaff Reinet : Skull with lower jaw : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 5, figs. 3, 4.

R.C. 103 : *Dinogorgon oudebergensis* Brink & Kitching (sp. nov.) : Rubidgeidae : J. W. Kitching : — : *Cistecephalus*-zone : Oudeberg, Graaff Reinet : Large gorgonopsian skull with lower jaw : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 6, figs. 5, 6.

R.C. 104 : *Ictidosuchops* (*Ictidosuchoides*) *intermedius* : Ictidosuchidae : F. Els : — : *Cistecephalus*-zone : New Bethesda : Greater part of skeleton with portion of skull impression.

R.C. 105 : *Ictidosuchops intermedius* : Ictidosuchidae : J. W. Kitching : 1938 : *Cistecephalus*-zone : Stylkrans, New Bethesda : Skull with lower jaw.

R.C. 106 : *Ictidosuchops intermedius* : Ictidosuchidae : B. J. Kitching : July 1939 : *Cistecephalus*-zone : St. Olives, Graaff Reinet : Complete skull with lower jaw : Broom, R., 1940, *Ann. Transv. Mus.*, xx, p. 161, figs. 4, 5.

R.C. 107 : *Notictosaurus luckhoffi* Broom (gen. et sp. nov.) : Galesauridae : R. Luckhoff : — : *Lystrosaurus*-zone : Bethesda Road : Small cynodont skull with lower jaw : Broom, R., 1936, *Ann. Transv. Mus.*, xviii, p. 382, figs. 28-30 (Luckhoff Collection L.1).

R.C. 108 : *Notosollasia luckhoffi* Broom (sp. nov.) : Whaitsiidae : R. Luckhoff : — : *Cistecephalus*-zone : Bethesda Road : Imperfect snout : Broom, R., 1936, *Ann. Transv. Mus.*, xviii, p. 363, fig. 11. (Luckhoff Collection L.2.)

R.C. 109 : *Nanoparia luckhoffi* Broom (gen. et sp. nov.) : Pareiasauridae : R. Luckhoff : — : *Cistecephalus*-zone : Oudeberg, Graaff Reinet : Small skull without lower jaw : Broom, R., 1936, *Ann. Transv. Mus.*, xviii, p. 349, fig. 1. (Luckhoff Collection L.3.)

R.C. 110 : *Gorgonorhinus luckhoffi* Broom (gen. et sp. nov.) : Gorgonopsidae : R. Luckhoff : — : *Cistecephalus*-zone : Zuurplaas, Graaff Reinet : Anterior portion of skull : Broom, R., 1937, *Ann. Transv. Mus.*, xix, p. 141, fig. 3.

R.C. 111 : *Gorgonorhinus minor* Broom (sp. nov.) Gorgonopsidae : R. Luckhoff : — : *Cistecephalus*-zone : Zuurplaas, Graaff Reinet : Skull with

anterior part of lower jaw missing : Broom, R., 1948, *Transv. roy. Soc. Edinb.*, lxi, p. 597, figs. 17A, 18A. (Luckhoff Collection L.4.)

R.C. 112 : *Protacmon ruebsameni* Broom (sp. nov.) Diademodontidae : R. Ruebsamen : — : *Cynognathus*-zone : Lady Frere : Skull badly fragmented in preparation : Broom, R., 1950, *S. Afr. J. Sci.*, xlvii, p. 86, fig. 1. (Ruebsamen Coll.).

R.C. 113 : *Sysphinctostoma gracilis* Broom (sp. nov.) Galesauridae : R. Ruebsamen : — : *Cynognathus*-zone : Lady Frere : Skull with partial skeleton : Broom, R., 1950, *S. Afr. J. Sci.*, xlvii, p. 88, figs. 2A, 3. (Ruebsamen Coll.).

R.C. 114 : *Sesamodontoides pauli* Broom (gen. et sp. nov.) : Bauriidae : R. Ruebsamen : — : *Cynognathus*-zone : Lady Frere : Skull and parts of lower jaw : Broom, R., 1950, *S. Afr. J. Sci.*, xlvii, p. 88, fig. 2B.

R.C. 115 : *Prorubidgea maccabei* (paratype) : Gorgonopsidae : Kitching brothers : — : *Cistecephalus*-zone : Ferndale, Graaff Reinet : Skull with lower jaw : See R.C. 34.

R.C. 116 : *Promoschorhynchus platyrhinus* (paratype) : Whaitsiidae : Hans Wessels : — : *Cistecephalus*-zone : Wellwood : Small skull with lower jaw : Brink, A. S., 1954, *Trans. roy. Soc. S. Afr.*, xxxiv, p. 43.

R.C. 117 : *Dicynodon calverleyi* (paratype) : Dicynodontidae : — : *Cistecephalus*-zone : Graaff Reinet district : Medium sized skull without lower jaw

R.C. 118 : *Dicynodon* sp. : S. J. Kitching : — : *Cistecephalus*-zone : New Bethesda : Small skull with lower jaw.

R.C. 119 : *Aelurognathus minor* : Gorgonopsidae : C. J. Kitching : — : *Cistecephalus*-zone : Bethesda Road : Small skull with lower jaw.

R.C. 120 : *Aelurognathus* sp. : S. H. Rubidge : *Endothiodon*-zone : South of Aberdeen : Weathered and crushed skull.

R.C. 121 : *Rhinesuchus* sp. : Rhinesuchidae : S. C. Kitching : *Cistecephalus*-zone : Klipplaat, Richmond : Very large, well preserved amphibian skull with lower jaw.

R.C. 122 : *Dicynodon* sp. : Dicynodontidae : Kitching brothers : Feb. 1944 : *Endothiodon* / *Cistecephalus*-zone : Third Drift, Graaff Reinet : Two small anomodont skulls and a lower jaw in one block.

R.C. 123 : *Dicynodon* sp. : Dicynodontidae : S. H. Rubidge and party : 1938 : *Cistecephalus*-zone : Wimbledon, Graaff Reinet : Two small anomodonts skulls without lower jaws, associated in one block—traditionally referred to as "Romeo and Juliet".

R.C. 124 : *Dicynodon* sp. : Dicynodontidae : S. H. Rubidge and party : 2 Feb. 1945 : *Endothiodon* / *Cistecephalus*-zone : Matjieskloof, Aberdeen : Three small anomodont skulls associated in one block—traditionally referred to as "The Triplets".

R.C. 125 : *Owenetta rubidgei* (paratype) : Procolophonidae : S. H. Rubidge and party : 15 Dec. 1950 : *Lystrosaurus*-zone : Melsetter, Middel-

burg : Small skull showing palate very clearly. (See R.C. 50.)

R.C. 126 : *Owenetta rubidgei* (Identified by J. W. Kitching) : Collector and locality unknown : Small skull with lower jaw.

R.C. 127 : *Owenetta rubidgei* (Identified by J. W. Kitching) : Kitching brothers : Sept. 1945 : *Cistecephalus*-zone : Graaff Reinet Commonage : Well preserved skull with lower jaw.

R.C. 128 : *Owenetta rubidgei* (Identified by J. W. Kitching) : S. H. Rubidge and party : 1952 : *Cistecephalus*-zone : Oudeberg, Graaff Reinet : Small crushed skull with lower jaw.

R.C. 129 : *Pristerodon buffaloensis* (Identified by J. W. Kitching) : Endothiodontidae : — : *Endothiodon*-zone : — : Small skull with crushed lower jaw.

R.C. 130 : *Galecranium liorhynchus* : Procynosuchidae : C. J. Kitching : 1937 : *Cistecephalus*-zone : Karreelaagte, New Bethesda : Almost complete skull with lower jaw : See Brink, A. S. & J. W. Kitching, 1953, *S. Afr. J. Sci.*, xlix, p. 314.

R.C. 131 : *Emydops* sp. (identified by M. J. Toerien) : Endothiodontidae : S. H. Rubidge : 1940 : *Cistecephalus*-zone : Goliatskraal, Graaff Reinet : Badly crushed small skull but with fair palate.

R.C. 132 : *Procynosuchus rubidgei* : Procynosuchidae : C. J. Kitching : 1941 : *Cistecephalus*-zone : Zeekoegat, Graaff Reinet : Small, almost complete cynodont skull : See Brink, A. S. & J. W. Kitching, 1953, *S. Afr. J. Sci.*, xlix, p. 314.

R.C. 133 : *Nanictosaurus rubidgei* : Galesauridae : S. H. Rubidge : — : *Cistecephalus*-zone : Wellwood : Small cynodont skull weathered on the left : See Brink, A. S. & J. W. Kitching, 1953, *S. Afr. J. Sci.*, xlix, p. 316.

R.C. 134 : *Dicynodon* cf. *sollasi* : Dicynodontidae : S. H. Rubidge : 1951 : *Cistecephalus*-zone : Oudeberg, Graaff-Reinet : Small anomodont skull with lower jaw (Identified by M. J. Toerien).

R.C. 135 : *Hofmeyeria* cf. *atavus* : Pristerognathidae : B. J. Kitching : 1944 : *Cistecephalus*-zone : Graaff Reinet Commonage : Small crushed therocephalian skull with lower jaw (identified by J. W. Kitching).

R.C. 136 : *Emydops* cf. *microdon* : Endothiodontidae : S. H. Rubidge : 27 Dec. 1947 : *Cistecephalus*-zone : Wellwood : Small anomodont skull with lower jaw and part of skeleton (identified by M. J. Toerien).

R.C. 137 : *Dinanomodon* cf. *rubidgei* : Dicynodontidae : Hans Wessels : 1962 : *Cistecephalus*-zone : Blaauwater, Graaff Reinet : Anterior two-thirds of juvenile skull (identified by J. W. Kitching).

R.C. 138 : *Pareiasaurus* sp. : Pareiasauridae : S. H. Rubidge and party : 30 Dec. 1940 : *Cistecephalus*-zone : Tierkloof, Graaff Reinet : Well preserved skull.

R.C. 139 : (Very small lacertid skull and skeletal impression from the Cradock district, collected by Coetzer in 1937.)

R.C. 140 : (Anomodont foot from Bloemhoff, Cradock, collected by Willie Probart in 1943.)

R.C. 141 : (Medium sized anomodont foot and other bones from Bloemhoff, Cradock, collected by Willie Probart in 1943.)

R.C. 142 : (Anomodont foot from Bloemhoff, Cradock.)

R.C. 143 : *Ictidosuchops intermedius* (paratype) : Ictidosuchidae : Kitching brothers : 1940 : *Cistecephalus*-zone : Garnora, Graaff Reinet : Anterior two-thirds of skull and well preserved manus : Broom, R., 1941 (*Ictidosuchoides*), *Ann. Transv. Mus.*, xx, p. 194, fig. 3.

R.C. 144 : (Small *Dicynodon* sp. from Glen Harry, Graaff Reinet.)

R.C. 145 : (Very small lacertid skull with greater part of skeleton from Wellwood, collected by S. H. Rubidge and party in 1938.)

R.C. 146 : (Therocephalian lower jaw showing interesting tooth replacement, collected by S. H. Rubidge on Wellwood in 1939.)

R.C. 147 : *Lycaenops ornatus* : Gorgonopsidae : S. H. Rubidge and party : *Endothiodon*-zone : Matjiesfontein, Aberdeen : Skull with part of right mandible in place : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 21.

R.C. 148 : *Cyniscops longiceps* : Gorgonopsidae : S. H. Rubidge and party : — : *Endothiodon*-zone : Matjiesfontein, Aberdeen : Almost complete skull with lower jaw : Brink, A. S. & J. W. Kitching, 1953, *Palaeont. Afric.*, i, p. 17, fig. 20.

R.C. 149 : *Smilesaurus* sp. : Rubidgeidae : Hans Wessels : 29 Dec. 1940 : *Cistecephalus*-zone : Middelvlei, Murraysburg : Gorgonopsian skull without lower jaw : Identified by J. W. Kitching.

R.C. 150 : *Pelanomodon rubidgei* (paratype) : Cryptodontidae : C. J. Kitching : 1939 : *Cistecephalus*-zone : Osfontein, Graaff Reinet : Large anomodont skull without lower jaw : See R.C. 10 : Toerien, M. J., 1953, *Palaeont. Afric.*, i, p. 103, fig. 68. (No. 1584 on specimen is Broom's Transvaal Museum Number.)