

THE SENCKENBERG MUSEUM,¹ FRANKFORT-ON-MAIN,
GERMANY.

BY ELSIE M. B. NAUMBERG.

IN 1817, twenty-two citizens of the free city of Frankfort-on-Main, founded the "Senckenbergische Naturforschende Gesellschaft." The Senckenberg Museum was then established at the Eschenheimer Gate, an old part of the city, and was opened to the public on the 22nd day of November 1821.

In 1904-1907, the same society built the present Museum situated in the Victoria Allée, and in 1914 founded the three University Institutes for Zoology, Geology-Paleontology, and Mineralogy and added another building.

Today this Society, with more than twelve hundred members is one of the most substantial scientific organizations in existence. The Museum is entirely supported by voluntary contributions and by occasional legacies. Only in times of great need does the city contribute towards the support of one of the finest museums in Germany. The society publishes a popular natural science periodical and two scientific journals. It provides the University, free of charge, with three well equipped scientific institutes as well as with a large and increasing library. Its main purpose is to hold popular meetings for the people of the city, who in spite of personal trials and tribulations, constantly bear in mind the ideals of science.

On the ground floor of the Museum are two lecture halls, the mineral collection and the geological-paleontological specimens, also the administrative offices, the department for preparing material, a carpenter shop and a small printing establishment.

The zoological exhibits as well as the large lecture hall are on the first and second floors. The latter is used for lectures whenever a large number of members are in attendance. The study collections are kept on the top floor and are not open to the public. However, any collector desirous of knowing something about the various specimens, may have them shown to him by the curators. There are many voluntary workers on the scientific collections and

¹ Translated in part from "Das Senckenberg Museum."

their activity for the past one hundred years has been of great importance to the life of the Museum.

The large paleontological and zoological specimens are on exhibition in the enclosed court-yard. Most conspicuous are the reptiles of the remote past, amongst the more important being the sea-saurian and largest land animals, and the dinosaurs. Here as well as in the other departments the name of the donor is indicated so that it is easy to form an idea of the manner in which private citizens through their legacies have enriched the collections.

In the hall to the right on the ground floor the plants and invertebrates of remote ages are represented by several valuable specimens. The mineral collections including many beautiful ores are located in the hall to the left. In the transverse hall behind the court yard is a collection of mammals belonging to prehistoric times. A collection showing the history of the earth and the workings of the forces constantly transforming the earth has not been placed on exhibition for lack of space. A collection of useful minerals and precious stones and a collection useful to the various branches of industry and to the nature lover are conspicuous by their absence. There is a great deal of material in the study collection which could at any time be put on exhibition.

A small portion of the bird collection may be seen on the first floor to the right. The small adjacent collection of fish and reptiles will shortly be removed to the second floor, thereby making way for a larger exhibit of birds and mammals. Two groups, one showing animal life on the African plains and another depicting the fauna of the Arctic Zone are on view in the small passage-way which leads to the other side of the building.

The collection of mammals may be seen on the first floor to the left of the court yard. The collection of comparative anatomy formed exclusively by voluntary workers as well as a small collection of native vertebrates are located on the second floor, while the invertebrates including a very fine entomological collection are to the left. Only a portion of one of the finest collections of mollusks in the world is on exhibition.

Throughout the museum appear the names of generous citizens of Frankfurt, who from time to time have been good enough to forward the interests of the Senckenberg Museum. All members

enjoy the same privileges. They and their families have access to the exhibits and study collections at all times. They have also the right to attend all Saturday and Sunday lectures and other functions. It is their privilege to make use of the library and to receive the periodical of natural history which the Museum issues.

COLLECTIONS IN THE SENCKENBERG MUSEUM.¹

Frankfort has something over 100,000 birds and is believed to have the largest ornithological collection in Germany. At present all of Rüppell's and Cretzschmar's types are at Frankfort. Here also are a number of Kittlitz's² paratypes, among them one (of the four) *Geocichla terrestris* and two *Chamaoproctus ferreirostris* from Boninsima, both supposed to be extinct and also some types of Finsch, Hartlaub, Bonaparte, Reichenow and Hartert (e. g. *Otocoris berlepschi*).

The Senckenberg Museum also has the collection of Carl Parrot, of Munich including nearly 2000 skins from the Palaearctic Region, and five types from the Balkan Peninsula. The writer has worked on the more recent acquisitions of the Duke Adolf Friedrich of Mecklenburg's collection from Central Africa. Dr. Huy's collection from the interior of Cameroon, Elbert's collection from the Sunda Islands, R. Merton's collection from Aru Felde, H. Voeltzkow's from Aldabra, and other islands off the east coast of Africa, W. Kukenthal's from the Malay Peninsula, etc., belong also to the more recent acquisitions. A full account of Carlo von Erlanger's collection was published by Hilgert (Friedlander & Sohn Verlag.). This is one of the most important collections in the Museum, and was presented by Erlanger after an expedition to Algeria, Tunis, and northeastern Africa, together with all the mammals and bird skins he collected there.

The von Berlepsch Collection.—This outstanding collection, composed of about 55,000 specimens, was purchased by the Museum

¹ Some of this information has been supplied by Dr. C. E. Hellmayr, of the Field Museum, Chicago, and Dr. Ernst Hartert gives a good account of the early history of the collection in the introduction to his "Katalog," 1891.

² Baron F. H. Von Kittlitz, of Frankfort, the famous Naturalist of the Russian Sloop "Seniavin," visited Chile, Kamchatka, Alaska, the Aleutian Islands, Guam and Boninsima, discovered and described many species from this region. Cotypes of his species are at Frankfort and listed in Hartert's Catalogue.

during the Great War (in 1916) from the widow of Count von Berlepsch.

The writer had the great privilege of going to Schloss Berlepsch (near the city of Cassel, in Germany) to assist in packing and transporting this rare acquisition. She was accompanied by Dr. C. E. Hellmayr, and her good friend Robert de Neufville, of Frankfort, recently deceased. The wonderful opportunity of viewing this famous collection and many of its glorious specimens was in no wise marred by the shortage of fuel and food incident to that period of the War. We left Frankfort provided with a little bread, some "sausage" and a home-made cake, all of which were considered most luxurious articles in March, 1916. The writer slept in a room with stone walls dating back to the eleventh century. Not even a roaring fire started each morning at 7 A.M. succeeded in dissipating the moisture, or in moderating the cold and dampness of the air. Although the writer unpacked the collection upon its arrival in Frankfort, and arranged the specimens in cases according to families, yet she had no opportunity to do any appreciable additional work on the collections themselves.

There are approximately 280 type specimens composed mostly of species and subspecies described by Count von Berlepsch (partly in conjunction with Jean Stolczmann). Other authors' whose types are in the collection are Kleinschmidt (1), Taczanowski (3), Salvin (1), Hellmayr (11), Sharpe (1).¹

Original Collections.—These are based on about 4000–5000 skins collected by the Garlepp Brothers in Bolivia; about 200 skins collected by Otto Garlepp in southeastern Peru; and specimens collected by Gustav Hopke (Rio Dagua and Rio Putumayo), in the Pacific region of southern Colombia.

A. Schulz collected in Pará and on the lower Amazon; E. Peters in Curaçao and northern Venezuela; M. Trujillo in Jalapa and Chiapas, Mexico; H. von Ihering in Rio Grande do Sul, Brazil; George K. Cherrie and F. C. Underwood in Costa Rica; and Kubary in German New Guinea (Konstantinhafen).

Part of the collections comprising the von Berlepsch collection were made by E. Hartert in the Dutch West Indies and by O. T. Barron in northern Peru; by J. Kalinowski in central and eastern

¹ Information received from Dr. C. E. Hellmayr, Field Museum Chicago.

Peru; by G. Garlepp in northern Peru; by H. Whitely in British Guiana; and in Turkestan by T. Barcy whose material was sent to Warsaw, Poland, and was worked up by Stolczmann.

Especially noteworthy are the collections of Hummingbirds represented by 5356 skins and 507 mounted specimens of 500 different species, including 20¹ types.

The Tanagers are also well represented by about 3400 skins and the Ramphastidae by 300 or more skins.

Rarities.—The collection contains only one Passenger Pigeon and four Carolina Parakeets but many rare species from the Hawaiian and Galapagos Islands, and Birds of Paradise from New Guinea.

It may be said that the von Berlepsch collection was in general a well-rounded one; while tropical America was predominantly represented the collection was also rich in Palaearctic and Indian material, though weak in African and Australian.

Even as far back as 1828 there were plans for enlarging the museum after Edward Rüppell returned from an expedition to Egypt with many remarkable specimens, and started corresponding and exchanging his material with all the large museums and well-known scientists. In the same year he again started for the interior of Africa, and from the coast of the Red Sea proceeded to the highlands of Abyssinia bringing back large quantities of material. These collections also required more storage space and in 1841 the store-rooms of the Museum were again enlarged.

The political conditions in 1848–49 were not especially conducive to the advancement of science, particularly in Frankfort. However, in 1854, the Society started issuing the 'Abhandlungen' which have appeared at regular intervals down to the present time. After the wars of 1866 and 1870, a period of peace followed, and some collections were made in the colonies by young men, who, upon their return, presented the museum with much valuable material. After the fiftieth anniversary of the Museum, at which time the Rüppell legacy was created, there were many and varied expeditions. The local geological collection of Albert von Reinach was made during his lifetime in the mountainous region of the Taunus, near Frankfort.

"With ideas of establishing conditions of reciprocity between

¹ These numbers were furnished by Dr. C. E. Hellmayr.

museums, with the idea that one of the extraordinary examples of the remote geological past will prove of influence in the advancement of science,"¹ Morris K. Jesup commissioned Prof. Bumpus, of New York, in the fall of 1907 to donate to the Society the specimen of a *Diplodocus* which still has a distinguished place in the court of honor. "The *Diplodocus* which represents one of nature's final efforts toward the establishment of physical supremacy."²

All visitors view with pleasure the new scientific Museum on modern plans in Frankfort, a city widely known as educationally progressive.

American Museum Nat. Hist., New York.

¹ Prof. Bumpus' speech at the opening of the new Museum, 1907.