

HAECKEL AGAIN HONORED IN SPITE OF HIMSELF ON HIS 80TH BIRTHDAY

Modest Savant Who Tried to Side-Track His Admirers
Ten and Twenty Years Ago Once More Fails
to Do It—His Wonderful Career.

EUROPE celebrated Ernst Haeckel's eightieth birthday on Feb. 17. Twenty years ago in the week of Feb. 17 the postal and telegraph facilities of the little Thuringian university town of Jena were taxed to the very limit. Philosophers and scholars, preachers and princes the world over flocked to Jena to honor the man who in the teeth of the most violent opposition kept the torch of Charles Darwin burning in Germany.

Ten years later Haeckel slipped away to the quiet Italian town of Rapallo. "I wish to spend my seventieth birthday in peace," he wrote to a friend. But the Post Office at Rapallo was besieged with over a thousand messages from friends and disciples, among them the rulers of nations.

This year Haeckel hoped to spend his eightieth birthday in quiet retirement at his villa on Haeckel Street in Jena, surrounded by a few friends and the members of his family. He endeavored to deflect the enthusiasm for himself to one of the fruits of his work, an institution known as the German Monistic League, and to that end issued the following letter to his friends, pupils and followers:

I have been informed that a number of my friends, pupils, and followers intend to celebrate my approaching eightieth birthday by donations and other testimonials, about the form and nature of which different proposals have been made. Having been honored repeatedly on former occasions by similar presentations, I beg leave to request that this time all such personal gifts to myself be omitted and that the amounts intended for this purpose be applied to a foundation which I should wish put at the disposal of the German Monistic League.

This league, founded in the interest of furthering civilization, deserves support on account of the wonderful development it has reached since its foundation seven years ago, and on account of its importance for the attainment of a liberal and rational world conception, as well as for the practical application of this world conception toward a higher moral conduct of life. The content of the Ernst Haeckel Fund for Monism is intended permanently to promote this humanizing work on the secure basis of natural science and to furnish the necessary means for the practical performance of its numerous important tasks.

In the midst of all the enthusiastic appreciation of the present, this serene old silvery-bearded man must be making some sharp mental contrasts. He has not forgotten the bitter boycott of the sixties, when Church and State in Germany rose up and denounced him as a preacher of immoral doctrine and an arch infidel. The news that "The Riddle of the Universe" has just been translated into the twentieth language—Lettish—since its publication in German in 1899, must bring back to Haeckel's mind the day when he heard his works branded as "a fleck of shame on the escutcheon of Germany," "an attack on the founda-

tions of religion and morality," "a symptom of senile marasmus."

It is difficult for us of to-day, and especially of America, to realize how stormy has been Ernst Haeckel's career. Darwinism is no longer a red rag in the face of the clergy and the conservative. But at the time when Haeckel championed the theory of evolution, it was producing controversies which stopped just short of physical violence.

Haeckel was a young man when he mounted the steps of the platform at the Scientific Congress of '63 at Stettin. Barely 30, he looked little more than 20, ruddy, erect, and with an irrepressible gayety. A few months before he had received a laurel wreath for the record running broad jump at the Leipzig Festival for Athletic Contests.

He presented a curious contrast to the many white-haired, academic scholars who gathered annually to discuss the progress of science. And his procedure was nothing if not audacious. The very foundation of science, geology, he dumped boldly overboard. Cuvier, with his theory of recurring catastrophes, had been long discredited, but Haeckel annihilated him. Linnt, with his accepted law of the fixity of species, went promptly over the edge with Cuvier, and in place of them was put the name of Charles Darwin, whose "Origin of Species" had just appeared.

It was a famous speech and delivered with all the hot vehemence and the audacity of youth. It is still read as the best introduction to the study of the Darwinian question. And it was the first important challenge to the conservative element of Germany. For though the "Origin of Species" had appeared almost three years before, the terrible heresy of it had not yet penetrated the public mind. That this group of scientists discussing an unknown Englishman and some learned book of his were in reality plotting the overthrow of Germany's system of morality was not suspected.

Gradually, however, the German mind became conscious of the sinfulness lurking in all this lore of slugs and snails, and soon the heresy became noised abroad. These men actually claimed that plants and animals took care of their own growth, their individual changes, wholly without the slightest activity on the part of the Divine Providence.

By the time of the Stettin speech the storm broke loose. The close of Haeckel's Stettin oration was open defiance. This impudent young rebel said:

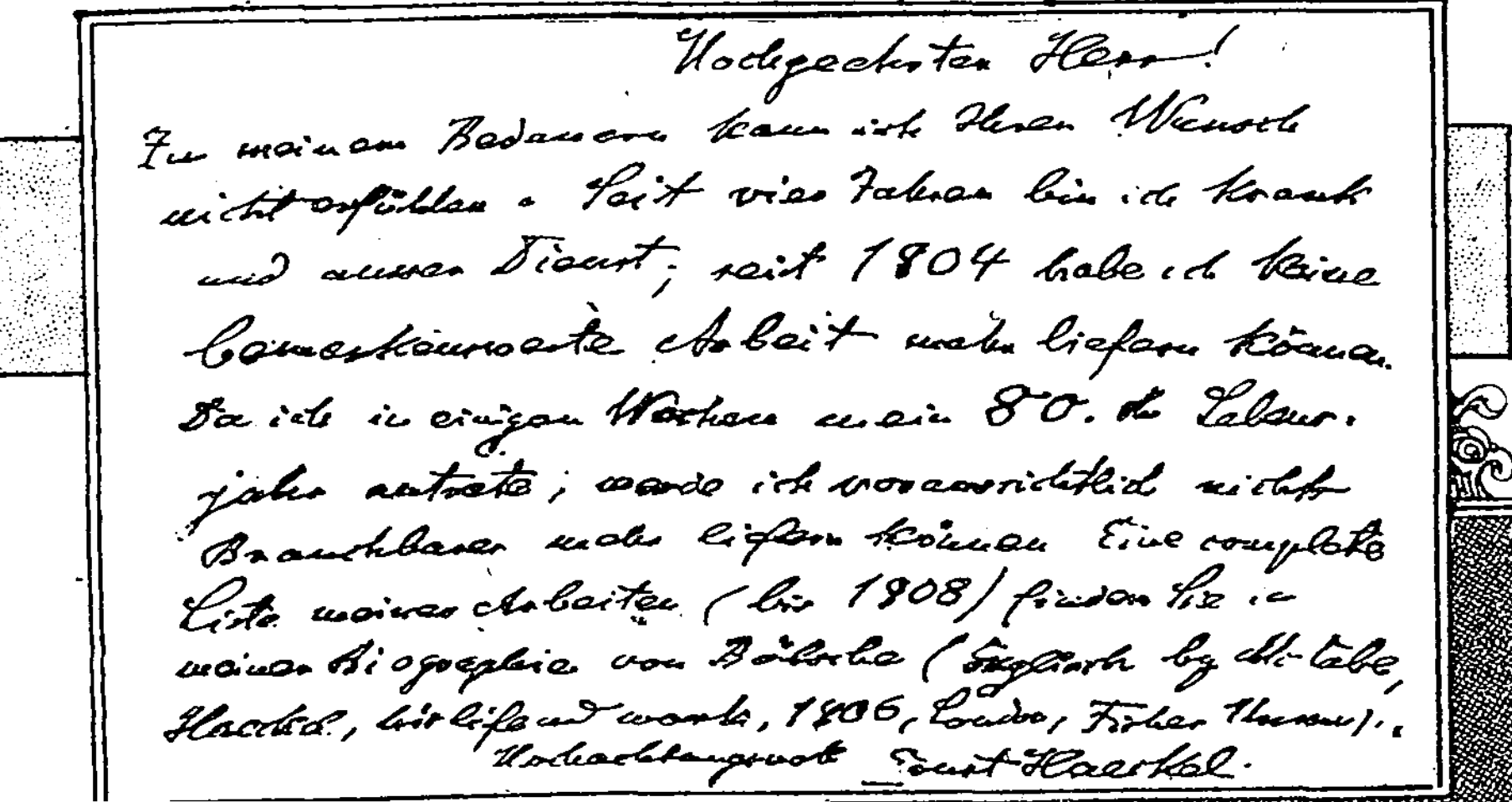
These attacks will never stem progress. For progress is one of nature's laws, which no human force, neither

the arms of tyrants nor the curses of theology, can ever permanently crush.

These words may seem trite now; at that time they were veritable bombs in a camp that had been lulled to sleep by a long conservatism. The University of Jena, which had been the stronghold of such idealists as Schiller and Hegel, did not realize at first what it had accepted when it offered the post of Professor and Director of the Zoological Museum to this brilliant young scientist. Haeckel himself relates that he was received at the university with this remark:

My dear Haeckel, you are still young and you will come to have yet more mature ideas of life. After all, you will do less harm here than elsewhere, so you had better stop here.

But if Jena thought it was burying Haeckel or could in any way muzzle him, it was mistaken. In a few years he lifted the university into the spotlight, and the controversialists for the whole continent gathered there.



A Post card from Haeckel.

There is a story told of an objection raised by one of the clergy on Haeckel's appointment to the Professorship at Jena. The clergyman went to Alexander, Grand Duke of Weimar, and protested against the public acknowledgment of an admittedly immoral character.

"Do you think that this Haeckel really believes the things that he publishes?" asked the Grand Duke. "He most certainly does," replied the theologian. "Well," said Alexander, "then, you know, he simply is doing the same thing as you."

Haeckel not only met with violent opposition, he met with a much more deadly opponent—ridicule. Working along the lines of the descent of man as laid down by Darwin, he attempted to piece together the great human family from the records of the animal species known to man, just as Cuvier sought to piece together a whole animal from stray bits of bone. Haeckel bridged the gaps in his series with hy-

pothetical forms which were greeted by scientists of a different stripe with hoots of derision.

The ape-man—the "missing link"—grew to be a stock joke. Yet in 1894 Du Bois actually discovered the Pithecanthropus in Java, and Haeckel had the delight of holding in his hand the femur and the skullcap of the creature that he had described ten years before its discovery.

It was because Haeckel had built up a solid structure of facts that he was gradually able to down his opposition, so that when "The Riddle of the Universe" was brought out in the last year of the century which claims Haeckel as its particular child, over 10,000 copies were sold in the first month. A cheap edition of 100,000 copies issued shortly afterward was snapped up in a few more months. It had a more phenomenal sale than any other book of the century, and has already been translated into twenty different tongues. Haeckel shows with considerable pride a recent communication from a missionary, stating that he had come across readers of it among the natives in the Orkney Islands.

Between 1862 and 1890 Haeckel wrote forty scientific works, many of them quarto size, illustrated by his

own hand. He has discovered over 3,500 species of the radiolaria, the minute jelly-like sea creatures with filmy shells, which he has made his life specialty. One can hardly realize how Haeckel loved these little radiolaria. He has named his house on Ernst-Haeckelstrasse in Jena the Villa Medusae, which has no reference to the lady of the terrible locks, but to the little jellyfish with long waving filaments for which he has fished from Heligoland to the Canaries, from Malaysia to Britain.

Haeckel's life is full of anecdotes. When he was but a little child in his father's home in Maseburg, playing with the leaves and flowers in which he always had a consuming interest, his favorite diversion was carefully to pluck the petals from a daisy. Having examined each petal and then the yellow centre, he would arrange the petals around the centre again and announce, "Now it's all right again." It was the method which he followed throughout his long and energetic life.

He started out in the direction of botany. His father fitted up a conservatory for him at home, and he began at an early age to collect and classify, to read Humboldt and Goethe and Darwin's "Naturalist's Voyage Around the World."

He soon ran up against the crucial problem which Darwin had not then solved: Is the species fixed or variable, and if the first, what is to be done with the many forms which will not seem to fit into the old pigeonholes? Puzzled, he compromised by making two sets of series in his herbarium,

one for the "good" species and one for the "bad."

The time arrived to put away childish things, according to Herr Haeckel, an eminent jurist and a parent with an ambition for his son's career. The elder Haeckel decided on medicine. The next few years of Ernst's life were spent in keeping his feet dutifully in the path his father had indicated and meanwhile looking over his shoulder at the byways that led toward crabs and radiolaria.

He gravitated toward men like the famous Johan Müller and Gegenbaur, two of the most advanced zoologists of the day, and between lectures at the medical college in Würzburg he would go off to the laboratories of these men or in vacations would accompany them on their expeditions to the sea at Heligoland. It was here that he had his introduction to his life-long friends, the radiolaria, and, the acquaintance once made, he had much difficulty in seeing the medical business through.

Finally he set up as a practicing physician. He fixed his hours of consultation between 5 and 6 in the morning. During the first—and last—year he had three patients, one with a sprained finger, one with a broken rib, and the third with a slight fever. None of them died. "This success was enough for my dear father," says Haeckel.

Herr Haeckel, at the close of that significant year, allowed his son to make an expedition to Italy for the exploration of marine forms. Italy was a revelation to young Haeckel, then 25 years old. Haeckel was but half scientist, the other half was pure

artist; if he had not come of a family of lawyers he would, by the combination, probably have made the greatest philosopher the world has ever known.

"In Italy," he writes, "I was nearly thrown out of my line and made a landscape painter." At his home in Jena to-day Haeckel will show you more than 800 sketches made during his many travels over the globe, and his illustrations of his work, all by his own hand, are excellent in their workmanship. He has had the imagination to see the beauty not only of landscape, however, but of the microscopic animals which he studied, and he shows with pride the designs of a noted French architect based upon his drawings of jelly fish.

The jelly fish finally claimed him, however, and when he returned to Jena he brought out the results of his long days of fishing and analyzing at Messina in a "Monograph on Radiolaria." It attracted little attention at the time except in strict scientific circles, but it contained the fundamental discoveries on which the Darwinian theory was based. Haeckel had not gone on to Darwin's conclusion, but with the appearance of the "Origin of Species" he recognized in his own work the foundation of fact in the evolutionary theory and promptly advocated it.

He eventually became Darwin's loyal friend, and his reminiscences of the mild old scientist are worth the recording. He describes Darwin at their first meeting, when Haeckel had gone to Downs to visit him. Haeckel writes:

He stepped from out of the shadow of the vine-mantled porch—a tall, venerable figure, with the bowed shoulders of an Atlas, carrying a world of thought; a Jovean brow like that of Goethe, lofty and broadly vaulted, furrowed deep by the plough of intellectual toil; soft, kindly eyes, overshadowed by a heavy penthouse roof of beetling brows, and a sensitive mouth framed by an opulent, silver-white beard. It seemed to me that I stood in the presence of some exalted cosmic sage, some Socrates or Aristotle.

The seventeen years of friendship between Darwin and Haeckel ended with a picturesque incident. On Feb. 12, 1882, Darwin's birthday, Haeckel was travelling in Ceylon, and with his companions had climbed Adam's Peak to a little temple of Buddha at the summit, suspended by chains 2,500 yards above the Indian Ocean. There is a slight depression in the rock before the temple, and here Buddha is said to have left his footprints, though the Mohammedan tradition states that it was Adam, while he stood on one foot and regretted disobedience.

Haeckel and his companions broke a bottle of Rhine wine over this depression by way of wishing Darwin many birthdays the more. Two months later Darwin died.

In "The Riddle of the Universe" Haeckel attempted to pack the fruits of his life-long study and research in a form to appeal to the general reader. This book contained the broad results of the explorations which filled the later years of his life, and of which he wrote in other volumes. His explorations were not without adventure; for a long period he lived in Lesina, in Dalmatia, in a monastery with a jolly old abbot—he, the arch-heretic!—while in Algeria his sketches and his dissecting instruments aroused immediate suspicion and he was arrested and sentenced to be shot as a spy.



Haeckel in his study

(Photo by Emil Carus)