

Emil Adolf von Behring and his contribution to medicine in the reflection of collectibles

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Abstract

The article presents the materials of a study devoted to the scientific activities of the world-famous microbiologist and bacteriologist, the winner of the first Nobel Prize for medicine, Emil Adolf von Bering, presented in the reflection of the world philately and other means of collecting.

Keywords: Emil Adolf Von Behring, Philately, Postage Stamps, Blocks, Envelopes, Medals, Coins.

Aim

The purpose of this article is to present, to the esteemed reader, the obtained and systematized results of the study devoted to the reflection, in the means of collecting (philately and medal art), of historical information and historical memory, about the famous German doctor and scientific - Emil Adolf von Behring.

Methods and means of research

When conducting this study, the author of the article previously found and selected in various available sources of information, commemorative medals from various countries of the world, which, thematically, were dedicated to famous German doctor and scientific Emil Adolf von Behring, his scientific achievements and life. From all selected commemorative medals found, first of all, on special collection sites representing numismatics and medal art, their screenshots were made (with strict observance of copyright). The author denies any claims from other persons and organizations related to the violation of compliance with the requirements of laws, on strict observance of copyright.

Introduction

Continuing my series of articles about heroes of medicine, in reflection of the means of collection, my story about him, I would like to begin with his brief biography. Speaking of famous scientists who made a significant contribution to its development, to the discovery and fight against dangerous diseases, it is impossible not to mention the name of Emil Adolf von Bering (1854-1917), German bacteriologist and microbiologist, one of the founders of immunology, who left his mark in pharmacy and industrial production of serums and vaccines.

Results of the study and discussion

Von Behring graduated from the Military Medical Institute in Berlin and in 1880-1888 worked on the orders of the military department, dealing mainly with the problems of antiseptics. In 1889 he joined the research group of Roberts Koch, where he continued to study methods of treatment of diphtheria and tetanus. In 1890 in collaboration with Shibasaburo Kitasato he demonstrated, following the discoveries of Emil Roux and Alexander Jersen, that in the blood of patients suffering from diphtheria and tetanus there are antitoxins, which ensure immunity to these diseases for both the diseased and those who receive such blood transfusions. On the basis of these discoveries, he developed a method of treatment with blood serum. Since 1895 Professor and Director of the Institute for Experimental Therapy in Marburg. In 1914 he founded there a company for the production of antitetanus and antiphtheria vaccines [1-3, 5, 6].

In 1890 Bering proposed serum therapy - injections of anatoxin using serum from immunized animals to stimulate the natural defenses of the human body. Diphtheria, previously considered a fatal childhood disease, became curable, and Bering became known as the "healer of children. [1-3, 5, 6].

The most important researches of Emil Bering were related to the works of Louis Pasteur, Paul Ehrlich and other scientists, which led to the emergence and development of the science of immunology [1-3, 5].

During World War I, the antitetanus vaccine created by Bering saved the lives of many soldiers [1-3, 5, 6] At the same time, E. Bering himself considered his participation in the production of

antiphtheria and antitetanus vaccines the pinnacle of his scientific activity, for it allowed to save mankind from terrible epidemic diseases to a great extent. The first recipient of the Nobel Prize in Physiology or Medicine was the German scientist Emil Adolf von Behring (German: Emit Adolf von Behring) in 1901.

The wording of the Nobel Committee was as follows: "For his work on serotherapy and, above all, for its use in the struggle against diphtheria, by which he opened a new direction in the field of medical knowledge and thereby gave into the hands of the physician a victorious weapon against disease and death." [1-3, 5, 6].

The scientific activities of E.A. von Bering are represented in the philatelic materials of many countries of the world. Postage stamps of the world devoted to this scientist are presented in Fig. 1 [3, 6, 8, 10]. These are, first of all, postage stamps of Germany (1940), issued in green and blue [3, 6, 8, 10], and also postage stamps of Comoros (2008), Guinea Bissau, Nevis (2001), Grenada, Republic of Guinea (2008), some of which are dedicated to the 100th anniversary of the Nobel Prize received by the scientist.





Figure 1: Postage stamps dedicated to E.A. von Behring

Also, in Fig. 2, we would like to present, the reflection of the personality of the scientist on the postal envelopes, postcard and postmarks of the special stamp, 1940-1941, 1976 and 2017 [3, 6, 8, 10].



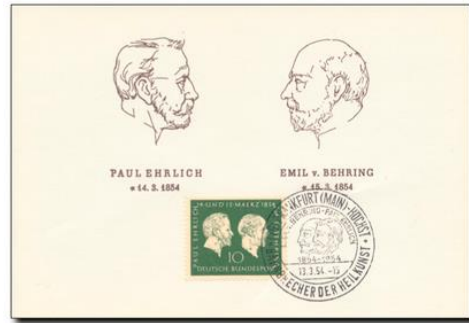


Figure 2: Postal envelopes, postcard and postmarks dedicated to E.A. von Bering

The following selection of philatelic materials is devoted to joint scientific and research activities of E.A. von Bering with other famous scientists (Paul Ehrlich, Shibasaburo Kitasato), in the

fight against diphtheria and tetanus. These stamps and envelopes, shown in Fig. 3 [3, 6, 8, 10].



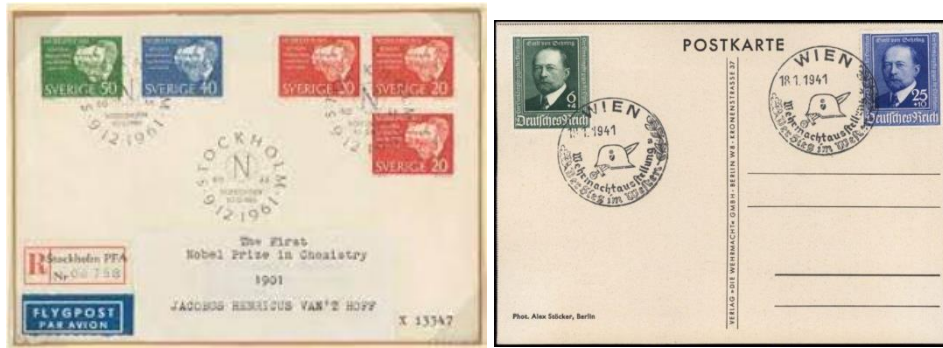


Figure 3: Images of E.A. Bering and other bacteriological scientists on postage stamps and envelopes

As a separate selection, we would like to present philatelic materials devoted to E. A. von Bering as a Nobel laureate. These are stamps of different years of issue, on which his portrait is depicted

together with other Nobel laureates, and his individual portraits, timed to coincide with the 100th anniversary of his receiving the Nobel Prize for Medicine. These are shown in Fig. 4 [3, 6, 8, 10].





Figure 4: World philatelic materials dedicated to E.A. von Bering as the first Nobel laureate in medicine

There are also commemorative medals of different departments and institutions, issued for different dates in the life of the scien-

tist, and dedicated to his scientific activity. Some of these medals are shown in Fig. 5 [7, 9].



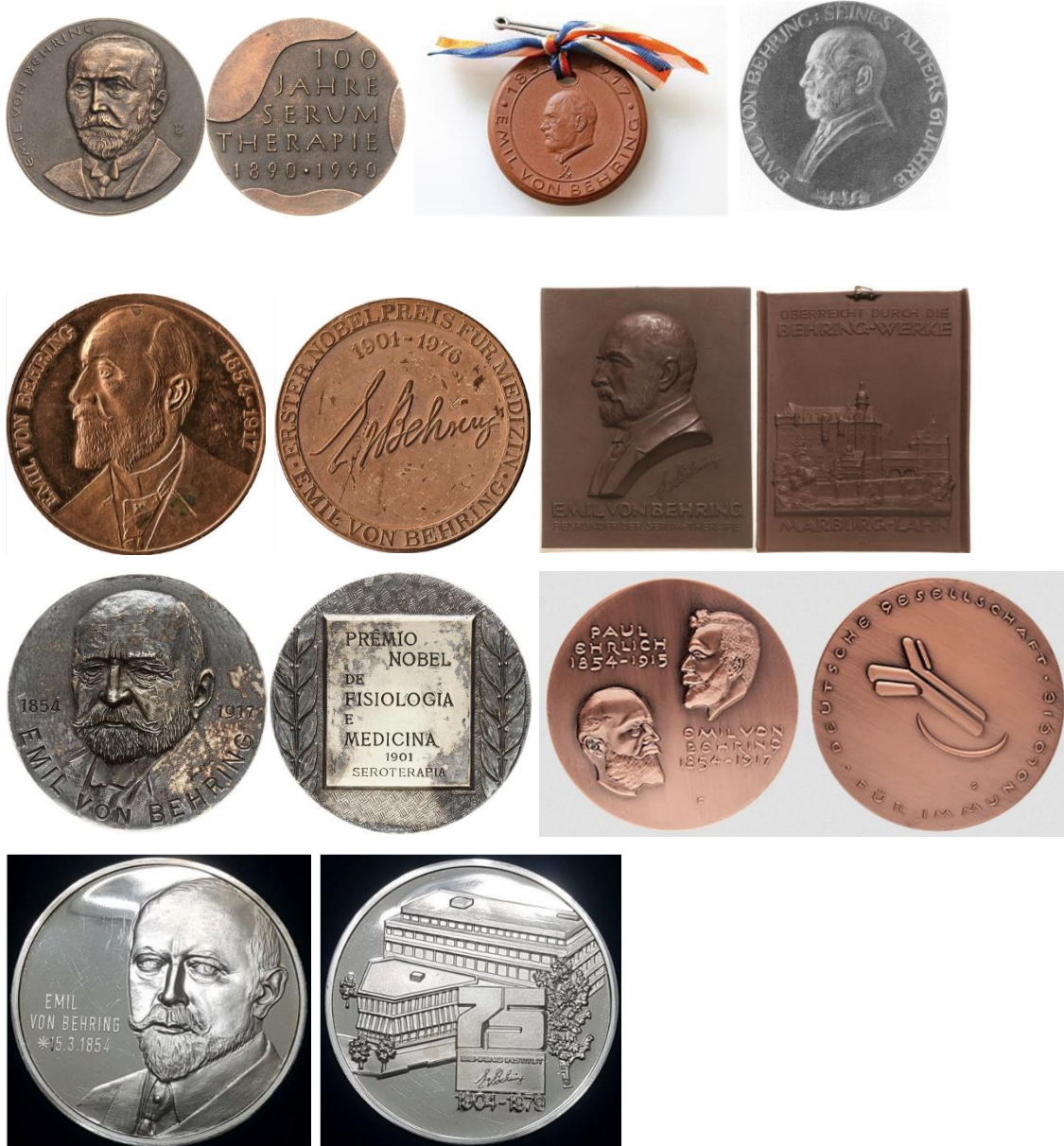


Figure 5: Commemorative medals dedicated to E.A. von Bering

The Ministry of Finance of North Korea issued a commemorative 1 and 5 won (2001) coin commemorating the 100th anniversary

of the awarding of the first Nobel Prize in medicine to E. A. von Bering, which is shown in Fig. 6, in the obverse and reverse [7, 9].





Figure 6: North Korean commemorative coin commemorating the 100th anniversary of the first Nobel Prize in medicine awarded to E. A. von Bering

This article concludes with a presentation of a gold (999 proof, weight 2 grams), commemorative (souvenir) coin of rectangular shape, part of a series of five such coins dedicated to the great German scientists, which is shown in Fig. 7 [11].



Figure 7: German gold souvenir coin dedicated to Emil von Bering

Conclusions

1. Collection tools, representing material sources of culture, selected thematically, are a full and objective source of information, which can be successfully applied, for example, in teaching and research of such an important discipline, as "History of Medicine".
2. This research work, in our opinion, serves as a vivid illustration of that.

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