

New Research History of World Anesthesiology in Reflection of Collecting Media

Bugaevsky KA

Department of Medical and Biological Foundations of Sports and Physical Rehabilitation, The Petro Mohyla Black Sea State University, Nilolaev, Ukraine

*Corresponding author

Bugaevsky KA, Department of Medical and Biological Foundations of Sports and Physical Rehabilitation, The Petro Mohyla Black Sea State University, Nilolaev, Ukraine

Submitted: 07 Jan 2022; Accepted: 11 Jan 2022; Published: 31 Jan 2022

Citation: Bugaevsky KA (2022) New Research History of World Anesthesiology in Reflection of Collecting Media. *J Anesth Pain Med* 7(1): 26- 36.

Abstract

The article presents the materials of the study devoted to the reflection in the means of collecting, such as philately, phaleristics and numismatics, data on the history of world anesthesiology, and about its heroes. The article is illustrated with images of postage stamps, artistic marked envelopes, original postmarks, medals, tokens and commemorative badges, their description and additional information to them are given.

Keywords: History of Anesthesiology; Renowned Anesthesiologists; Philately; Faleristics; Numismatics.

Introduction

Preserving history in the memory of descendants is a noble and demanded deed! Historical events in the history of medicine and, in particular, in the history of world anesthesiology, are chronicles of the struggle of mankind with pain and suffering, both physical and psychological, caused by diseases and, unfortunately, their treatment. From the very beginning of its existence, the struggle with pain has been one of the leading motives for curing a person from suffering. In every country, thanks to the efforts of many scientists - theorists and practitioners of medicine, chemistry, pharmacology and a number of other sciences, people have learned to deal with pain. They tested thousands and tens of thousands of different methods and methods of analgesia - natural, physical, chemical, choosing the most effective methods and means for practical application. In this new article, on the history of the development and formation of world anesthesia and the fight against pain, we will talk about new people who have left their mark in this struggle, scientists from different countries and centuries. All text inserts will be colorfully illustrated using screenshots of philatelic, numismatic, faleristic and other collection materials that informatively and fascinatingly complement the narrative about people and important events in the history of world anesthesiology. This, the second article, is a logical and semantic addition to the earlier published first article on the history of world anesthesiology. It contains new, textual and illustrative materials not previously used by the author.

Aim of the Work

To present new, non-standard data about the history, formation and heroes of world anesthesiology and the fight against pain, through such means as a variety of collectibles and, in particular, postage stamps and envelopes, commemorative coins and medals, badges and awards dedicated to anesthesiology.

Material and Methods

In carrying out this research work, we used the method of in-depth literary-critical analysis of available scientific sources of information on the issue under study, using reference books, encyclopedias, catalogs, specialized periodicals, and Internet resources.

Result and Discussion

I would like to start my new article on the treatment of pain and the history of the pain relief process with a lyrical digression. Pain has always accompanied a person, causing him both physical and physical suffering. At one time, the famous Scottish poet Robert Burns devoted a whole ode to toothache, colorfully describing all his torment and suffering in the work "Address to the toothache" [1, 33]. A small selection of collection materials dedicated to Robert Burns is shown in Fig. 1 [25, 33].



Figure 1: Collectibles dedicated to Robert Burns

Passing directly to the topic of the article on the history of world anesthesiology, I would like to note that there is a belief, actively supported by many historians of medicine around the world, that the medical term "anesthesia" was first used in the 1st century AD, by the Greek physician and philosopher Dioscorides Pedanias (43-90 AD) [7, 17, 25]. He did this by describing, in part, the healing effect of mandrake, a popular drug in early medicine.

Dioscorides Pedanias, is the "father" of botany and pharmacognosy. He left behind a monumental scientific work called "De Materia Medica", which contains a description of more than 600 plants and more than 1000 different medicines [7, 17, 25]. A selection of collection materials dedicated to Dioscorides is shown in Fig. 2 [7, 17, 25].



Figure 2: Collectibles dedicated to Dioscorides

In addition, it should be noted that in 1540 Paracelsus, working with various chemicals, established the analgesic effect of diethyl ether, which he used a lot in practice [2, 11, 16, 25]. He, like

Ambroise Paré, used breathing / endotracheal tubes. The collection set dedicated to Paracelsus is shown in Fig. 3 [11, 16, 25].



Figure 3: Collection set dedicated to Theophrastus Paracelsus

A Chinese physician Hua Tuo, in the 2nd century AD, for the purpose of pain relief, prepared and gave his patients a medicinal mixture consisting of wine, a mixture of herbal extracts and marijuana - mafeisan. According to the preserved historical data, under this kind of oral anesthesia, he performed a gangrenous

colon resection [23, 34-36]. He also actively used acupuncture as an anesthetic. In fig. 4, shows postage stamps and blocks of the People's Republic of China, dedicated to the physician Hua Tuo [23, 34-36].



Figure 4. Collectible materials dedicated to Huo Tuo

In the history of world anesthesiology, scientific discoveries in the field of chemistry and physics occupy an important place. So, of great importance, in this matter, was the discovery in 1774 by Joseph Priestley of oxygen, and by him, in 1772 - nitrous oxide [8, 9, 24]. The abundance of collectible materials is striking,

especially the number of US First Day envelopes dedicated to J. Priestley and his discoveries of world significance! Collectible materials dedicated to J. Priestley are presented in Fig. 5 [8, 9, 12, 24].





In a separate section, I would like to present information about the contribution of Russian doctors in the 19th-20th centuries to the development of world anesthesiology. The first operation in Russia, using ether anesthesia, was carried out on February 7, 1847, by the famous Russian surgeon - Professor Fedor Iva-

novich Inozemtsev (1802-1869), who later carried out, very successfully, several complex abdominal operations [3]. In fig. 4, there is a postage stamp of Ukraine dedicated to F.I. Inozemtsev [13, 25].



Figure 6: Postage stamp of Ukraine dedicated to F.I. Inozemtsev

So, on December 7, 1909, for the first time in clinical practice, intravenous hedonal anesthesia was used, which was called "Russian anesthesia" [3]. On this day, at the clinic of Professor Sergei Petrovich Fedorov, the foot was amputated. This became possible due to the close creative cooperation of the scientist-surgeon S.P. Fedorov and chemist, academician of the Russian Academy of Sciences, Nikolai P. Kravkov (1865-1924) [25]. The method

of using hedonal anesthesia was developed by A.P. Eremic. In this clinic, 63 surgeries were successfully performed using intravenous hedonal anesthesia. This paved the way for the use of non-inhalation anesthesia. [25]. Collectible materials dedicated to the founder of Russian pharmacology, academician N.P. Kravkov, are shown in Fig. 7 [3, 25].



Figure 7: Collectible materials dedicated to N.P. Kravkov

A separate collection collection, in Fig. 8, presents numismatic and phaleristic materials dedicated to the famous Russian surgeon, founder of Russian urology, professor at the Military Medical Academy, personal physician of the last Russian emperor

Nicholas II - S.P. Fedorov (1869-1936) [15, 19, 25]. During operations in his clinic, he actively used various anesthetics available in those years [15, 19, 25].



Figure 8: Collectible materials dedicated to S.P. Fedorov

In 1915, he received the Nobel Prize in the field of medicine and physiology, the scientist Richard Willstätter (1872-1942), who used cocaine derivatives in his works, was the first to completely

synthesize it, was engaged in the introduction of regional anesthesia [20, 25, 27,30]. A selection of collection materials dedicated to this scientist is shown in Fig. 9 [20, 25, 27, 30].



Figure 9: Collectibles dedicated to Richard Willsteter

In America, Horace Wells (1815-1848), a dentist, experienced the analgesic effect of nitrous oxide during tooth extraction, and then himself applied it to 15 more patients [8, 13, 25, 27]. Since 1844, he began to actively use this gas as a general anesthetic. A

postage stamp of Ukraine dedicated to Horatio Wells, as well as a bas-relief and a commemorative badge, are shown in Fig. 10 [8, 13, 25, 27].



Figure 10: Collectibles dedicated to Horatio Wells

English chemist, Sir Humphry Davy / Hemphrey / Humphry Davy (1778-1829), in his practical activity discovered the analgesic properties of nitrous oxide, calling it "laughing gas" [8, 10, 13, 25, 27]. On April 11, 1799, he managed to establish industrial production of pure nitrous oxide for medical purposes

[6, 8, 10, 13, 14, 25, 27]. In fig. 11, a selection of collectible materials (lithographic portraits, commemorative medals, postcards and postcards dedicated to Sir Humphrey Davy [6, 8, 10, 13, 14, 25, 27].



Figure 11: A selection of collection materials dedicated to Humphrey Davy

In fig. 12, presents a small collectible collection (marked postage envelopes and a commemorative medal of the USA) dedicated

to the famous physician and pioneer of the use of inhalation anesthesia - Crawford Long [25-27].



Figure 12: Collectibles dedicated to Dr. Crawford Long

In 1846, an English surgeon, Robert Liston, was the first in Europe to use ether as anesthesia and successfully amputated a patient named James Churchill. A small selection of collectible

materials (a screenshot of R. Liston's book, a commemorative bronze medal and a postage stamp of Ukraine) are shown in Fig. 13[13, 21, 25].



Figure 13: Collectibles dedicated to Robert Liston

The following fig. 14, presents a postage stamp and thematic, artistic stamped envelopes of Romania (1994) dedicated to the founder of the anesthesia service in this country, military doctor, MD, Matthias Musil (1806-1889) [4, 18, 25]. He, and another Romanian physician, MD, Joseph Siehs (1813-1850), were the pioneers of the Romanian Anesthesia Service, as well as active supporters of the use of ether anesthesia in surgical practice [4,

18, 25]. On Friday, February 5, 1847, in the garrison hospital of Timisoaru, during an operation at the soldier Nikola Muntean, by surgeons Matthias Musil and Dr. Giess, ether anesthesia was applied [4, 18, 25]. Romanian doctors made their own essential inhaler from a drawing printed in London Illustr. Gazette " [4, 18, 25].



Figure 14: Collector's Kit dedicated to Matthias Musil

The next small collection is dedicated to a Japanese surgeon and anesthesiologist, an expert in Chinese herbal medicine and European (Dutch) medicine at that time - Seishu Hanaoka (1760-1835) [22, 24, 25]. He, the first in Japan, performed an operation under general anesthesia, performed amputations of limbs and removal of malignant tumors [22, 24, 25]. So, in particular, he performed more than 150 successful mastectomies, using general anesthesia caused by the remedy / drink he used from a

mixture of herbs "tsüsensan," among other means, including belladonna, which led to the patient's loss of consciousness, adequate prolonged anesthesia and relaxation of skeletal muscles [22, 24, 25]. The image of the flower of the Datura stramonium plant has become a symbol not only of the medical practice of Seishu Hanaoka, but also of the Japanese Association of Anesthesiologists [22, 24, 25]. In fig. 15, a selection of collectible materials dedicated to Seishu Hanaoka [22, 24, 25].



Figure 15: Collectibles dedicated to Seishu Hanaoka

The following fig. 16, presents a small selection of commemorative medals and a screenshot of the painting dedicated to Oliver Wendell Holmes Sr. (1809-1894) [3, 25, 27, 29, 30]. It was

he who introduced the scientific term "anesthesia" into medical practice [3, 25, 27, 29, 30].



Figure 16: Commemorative medals dedicated to Oliver W. Holmes

In the history of the development of world anesthesiology, a special place is occupied by the practical application of such a method as spinal anesthesia in surgical interventions, one of the most important methods of using non-inhalation anesthesia. One of the active supporters of this method, who repeatedly used this method in his surgical practice, was the German scientist and

practicing surgeon, Professor August Bier (1861-1949) [14, 30]. He performed his exemplary operation, using spinal anesthesia, on 16 August 1898, at the Royal Hospital, University of Keele [14]. A commemorative medal dedicated to A. Bier (obverse and reverse) is shown in Fig. 17 [6, 14, 25, 30].



Figure 17. Commemorative medal dedicated to Augustus Bier

A significant role in the popularization and introduction of spinal anesthesia into surgical practice was made by the famous Romanian scientist and practicing surgeon, with a worldwide reputation, Professor Thoma Ionescu (1860-1926), who himself performed more than 6000 operations using spinal anesthesia

[5, 18, 25, 28, 31, 32]. A selection of collectible philatelic and numismatic materials dedicated to Professor Tom Ionescu, the "pioneer" of Romanian and world spinal anesthesia, are shown in Fig. 18 [5, 18, 25, 28, 31, 32].



Figure 18: Collection set dedicated to Toma Ionescu

This concludes the next article devoted to the history of world anesthesiology and its heroes from different countries of the world. The author is preparing a new article, which will include materials from new scientific research on this topic.

Conclusion

1. The article presents new collection materials devoted to the reflection in the means of world collecting, albeit in a brief form, the history of world anesthesiology.
2. The presented illustrative materials can be used as an auxiliary informative tool in the study of such disciplines as "Anesthesiology" and "History of Medicine" in specialized universities and departments.
3. Modern collectibles, in all their diversity, quite fully, brightly and creatively, reflect the history of world anesthesiology and its heroes of different years, from many countries of the world.

Conflict of Interest

I have no conflict of interest.

References

1. Address_to_the_toothache.jpg Illustration from The poetry of Robert Burns, vol I Edinburgh, 1897 Artist William Brassey Hole - Texas Hill Country URL: [https:// texashillcountry.com](https://texashillcountry.com) (date of treatment 05.01.2022).
2. Bugaevsky KA (2022) "Study of the History of Global Anatomy Using Philately, Faleristics and Numismatics". Acta Scientific Anatomy 2022: 13-21.
3. Bugaevsky KA, Bugaevskaya NA (2018) Surgery and foreign surgeons in philately, phaleristics, bonistics and numismatics. Bulletin of SMUS74 3: 4-13.
4. Cauti Silvian Daschievici \ Mihai Mihailescu - Chirurgie? Vezi URL: <https:// Okazii> (date of treatment 05.01.2022).
5. Cauti Placheta Prof. Thoma Ionescu URL: <https:// 100 de ani de chirurgi> (date of treatment 05.01.2022).
6. CoinArchives.com Search Results : wills URL: <https:// Coin Archives> (date of treatment 05.01.2022).
7. Dioscorides Pedanius URL: <https:// Life of great names> (date of treatment 05.05.2022).
8. Journal of the Association of Physicians of India - JAPI URL: <https:// Journal of the Association of Physicians of India - JAPI> (date of treatment 05.01.2022).
9. Joseph Priestley 50th Birthday Medallion 1783 URL: <https:// VCoins> (date of treatment 05.01.2022).
10. Humphrey Davy - British Scientist - Biography URL: <https:// Rus.Team> (date of treatment 05.01.2022).
11. Medaille auf Theophrast Paracelsus, 1538 URL: <https:// Landesmuseum Stuttgart> (date of treatment 05.01.2022).
12. Medal - Joseph Priestley - United States URL: <https:// Numista> (date of treatment 05.01.2022).
13. Medical Ukrainian Stamps for sale URL: <https:// eBay> (date of treatment 05.01.2022).
14. NumisBids: WAG Online oHG Auction 100 (7 Jul 2019) URL: <https:// NumisBids> (date of treatment 05.01.2022).
15. OUTSTANDING REPRESENTATIVE OF THE ERA OF ENCYCLOPEDIST SURGEONS (ON THE 150TH AN-

- NIVERSARY OF THE BIRTH OF SERGEY PETROVICH FEDOROV) URL: [https:// cyberleninka.ru](https://cyberleninka.ru) (date of treatment 05.01.2022).
16. Paracelsus-Medaille 2019: Vorbildliche ärztliche Haltung URL: [https:// Deutsches Arztblatt](https://Deutsches_Arztblatt) (date of treatment 05.01.2022).
 17. Pedanius Dioscorides Bronze Medal URL: [https:// Greek-coins Eshop](https://Greek-coins-Eshop) (date of treatment 05.01.2022).
 18. Prima anestezie cu eter la Timisoara, 5 februarie 1847 | Por URL: [https:// Portalul Medfam](https://Portalul_Medfam) (date of treatment 05.01.2022).
 19. PROFESSOR SERGEY PETROVICH FEDOROV (1869-1936) (TO THE 150TH ANNIVERSARY FROM BIRTH-DAY) URL: [https:// cyberleninka.ru](https://cyberleninka.ru) (date of treatment 05.01.2022).
 20. Richard Willstatter URL: [https:// pubs.acs.org](https://pubs.acs.org) (date of treatment 05.01.2022).
 21. Robert Liston | HSLs URL: [https:// HSLs - University of Pittsburgh](https://HSLs-University_of_Pittsburgh) (date of treatment 05.01.2022).
 22. Seishu Hanaoka (1760-1835), Physician, and Flower - □ 100回日本外科学会総会 80y Multicolored stamp price, value URL: [https:// Find Your Stamp's Value](https://Find_Your_Stamp's_Value) (date of treatment 05.01.2022).
 23. Stamp: Hua Tuo Developing Ma Fei San Treatment (China, PURL: [https:// TouchStamps](https://TouchStamps) (date of treatment 05.01.2022).
 24. The Japanese surgeon, pharmacist, and anesthesiologist Seishu Hanaoka... Download Scientific Diagram URL: [https:// researchgate.net](https://researchgate.net) (date of treatment 05.01.2022).
 25. Ukraine, Europe, Stamps Page 9 | PicClick URL: [https:// picclick.com](https://picclick.com) (date of treatment 05.01.2022).
 26. What was the first kind of anesthetic ever used in medical URL: [https:// Quora](https://Quora) (date of treatment 05.01.2022).
 27. Who invented anesthesia and when? URL: [https:// homsk](https://homsk) (date of treatment 05.01.2022).
 28. PDF) ANNIVERSARY MEDALLION: "THOMA IONESCU" URL: [https:// researchgate.net](https://researchgate.net) (date of treatment 05.01.2022).
 29. PDF) Oliver Wendell Holmes (1809–1894) and his essay on puerperal fever URL: [https:// researchgate.net](https://researchgate.net) (date of treatment 05.01.2022).
 30. PDF] A philatelic history of anesthesiology URL: [https:// Semantic Scholar](https://Semantic_Scholar) (date of treatment 05.01.2022).
 31. 1998 Red Cross, Dr.Thoma Ionescu, Surgical Soc., Rotes Kreuz, Romania,5309, maxi card e URL: [https:// Bay](https://Bay) (date of treatment 05.01.2022).
 32. 1979 Medicine, Prof. Dr.Thoma Ionescu, Anatomy/surgery, Coltea H,Romania,card Variety URL: [https:// eBay](https://eBay) (date of treatment 05.01.2022).
 33. (I.B) Cinderella Collection : Robert Burns Patriotic Label | G URL: [https:// HipStamp](https://HipStamp) (date of treatment 05.01.2022).
 34. 切手□趣味の通信販売 | スタマガネット 華岡青洲: URL: <https://フレーム切手 スタマガネット> (date of treatment 05.01.2022).
 35. 医学の発展に貢献した日本人 URL: [https:// FC2](https://FC2) (date of treatment 05.01.2022).
 36. 方寸话中医: 华佗_夫人 URL: [https:// www.sohu.com](https://www.sohu.com) (date of treatment 05.01.2022).

Copyright: ©2022 Bugaevsky KA. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.