



Smithsonian

*National Museum of American History Kenneth E. Behring Center*

Guide to the Milton S. Wirtz,  
D.D.S., Artificial Eye Collection

NMAH.AC.0501

Grace Meyer

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## Collection Overview

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| <b>Repository:</b> | Archives Center, National Museum of American History |
| <b>Title:</b>      | Milton S. Wirtz, D.D.S., Artificial Eye Collection   |
| <b>Date:</b>       | 1973-1988<br>1941-1947                               |
| <b>Identifier:</b> | NMAH.AC.0501   |
| <b>Creator:</b>    | Wirtz, Milton S., Dr. (dentist) (Creator)            |
| <b>Extent:</b>     | 0.3 Cubic feet (1 box, 1 oversized folder)           |
| <b>Language:</b>   | English .  |

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## Administrative Information

### Acquisition Information

The collection was donated by Milton S. Wirtz, D.D.S., to the Medical Sciences Department of the National Museum of American History in August 1991. It was transferred to the Archives Center in October 1993.

### Processing Information

Collection processed by Grace Meyer, August 26 1994.

### Preferred Citation

Milton S. Wirtz, D.D.S., Artificial Eye Collection, Archives Center, National Museum of American History.

### Restrictions

Collection is open for research.

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## Biographical / Historical

Major Milton S. Wirtz, head of the dental section at the U.S. Army base at Camp Crowder, Missouri, was one of the pioneers in plastic eye prosthesis. He became aware of the concerns of people with artificial eyes while working with a dental technician who was very displeased with the glass eye he was wearing. In addition, his interest in plastics and his work with them in dentistry fueled his desire to fabricate an artificial eye.

About the same time, two other army dentists became involved in making artificial eyes of plastic materials. Major Victor Dietz in Atlantic City and Captain Stanley F. Erpf in England. These three dentists were brought together by order of the Surgeon General at the Valley Forge General Hospital in Phoenixville, Pennsylvania, to pool their

knowledge of plastics, science, and medicine and to found the "Artificial Eye Laboratory." In six months they had perfected the technique and developed an instruction program for training technicians. After only one month these technicians were known as ophthalmoprosthetists.

Prior to the development of the plastic prosthesis, artificial eyes were made of glass by a manufacturer in Germany, using a closely guarded process. The acute need for artificial eyes at the start of World War Two became apparent when the supply from Germany was curtailed and the existing supply in the United States was rapidly depleted. In addition, glass eyes were unsatisfactory as they broke easily, exploded in acute temperature changes, were not custom fitted, and gave the appearance of staring since they did not move. All these problems were eliminated with plastic artificial eyes.

Major Wirtz received the Legion of Merit Medal from the Army and accolades and awards from the Iowa Dental Association for his wartime contribution. After the war he worked for a short time at Fitzsimmons General Hospital in Denver, Colorado. Though he became a millionaire on his royalties, he ultimately returned to Latimer, Iowa, to practice family dentistry.

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## Scope and Contents

This collection contains materials relating to Milton S. Wirtz, D.D.S., and his involvement in the development of plastic eye prosthesis from 1941 to 1947. It includes news clippings about Dr. Wirtz and several articles regarding the process and the materials used in the manufacture of artificial eyes.

The bulk of the collection consists of graphic displays of the procedures used in the fitting and processing of the prosthesis. There is a series of photoprints of service men with artificial eye prosthesis, including a serviceman wearing the first plastic eye made at Camp Crowder in 1943. There are also photoprints of patients before and after being fitted with the artificial eye, as well as photoprints showing other persons involved in the process. In addition, there is a syllabus for the course of instruction in the fitting and manufacturing of the eye developed at the Valley Forge General Hospital, as well as photoprints of the stainless steel dies with descriptive captions.

A booklet entitled *An Eye For An Eye*, from Fitzsimmons General Hospital in Denver, Colorado, has photographic transparencies showing the fitting of an artificial eye, with the complete process only taking two to three days.

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## Arrangement

Collection is arranged into one series.

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## Names and Subject Terms

This collection is indexed in the online catalog of the Smithsonian Institution under the following terms:

Subjects:

Eyes, Artificial  
Ophthalmology  
Ophthalmoprosthetists

Names:

Dietz, Victor, Major  
Erpf, Stanley F., Captain

Places:

Phoenixville (Pa.)

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## Container Listing

|                    |  |
|--------------------|--|
| Box 1, Folder 1    | Newsclippings, 1973, 1944-1945, 1988                                       |
| Box 1, Folder 2    | Articles, 1945   |
| Box 1, Folder 3    | TPR of the Red Cross Volunteer Nurse's Aids, Denver Chapter, February 1945 |
| Box 1, Folder 4    | Training Syllabus from Valley Forge General Hospital                       |
| Box 1, Folder 5    | An Eye for an Eye (Transparencies of Procedures) Photoprints               |
| Box 1, Folder 6    | Dies   |
| Box 1, Folder 7    | Processing the Prosthesis  |
| Box 1, Folder 8    | Dies for Implants after Enucleation  |
| Box 1, Folder 9-11 | Laboratory Procedures<br>47 Items  |
|                    | Before and After Views of Army Patients who received Prosthesis            |
| Map-folder 1       | Charts showing Stages of the Prosthetic Development                        |