## MILITARY MEDICAL HISTORY

MILITARY MEDICINE, 182, 5/6:1570, 2017

## Lantern Slides Reveal the Impact of World War I on St. Elizabeths Hospital

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During World War I, many institutions diverted resources and energy to the war effort. St. Elizabeths Hospital in Washington, DC, was no exception. Originally known as the Government Hospital for the Insane when it was established in 1855, St. Elizabeths was the first national mental hospital in the United States. The National Museum of Health and Medicine houses the Blackburn-Neumann Collection from St. Elizabeths. The collection, started by Blackburn (1884– 1911) and continued by neuropathologist Meta Neumann (1924-1980), was transferred to the National Museum of Health and Medicine in 1989 and consists of 15,000 complete case studies, 100,000 glass slides, 1,350 formalinized brains, and over 5,000 photographs, representing the full spectrum of mental and neurologic disorders. Unique objects from this collection, such as a box of World War I lantern slides titled "Infections and Parasitic Diseases and some Brain Tumors" (Fig. 1) illustrate the impact of war on institutions on the home front, particularly hospitals.

This lantern slide set was made by the Photographic Laboratory, a department within the Instruction Laboratory of the Army Medical Museum, as indicated by labels on the

**FIGURE 1.** World War I-era lantern slide training set from the St. Elizabeths Hospital Blackburn–Neumann Collection in the holdings of the National Museum of Health and Medicine, depicting a variety of infections, parasitic diseases, and brain tumors. (National Museum of Health and Medicine photo/Released.)

Contractor in support of the National Museum of Health and Medicine, Defense Health Agency, 2500 Linden Lane, Silver Spring, MD 20910.

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doi: 10.7205/MILMED-D-17-00056

slides. The Instruction Laboratory was started during the war to produce and distribute medical training material in support of the war effort.<sup>2</sup> The presence of such a training set in the Blackburn Collection further highlights the institutional exchange of materials and knowledge prompted by the war.

In 1884, Isaac W. Blackburn established the first laboratory at St. Elizabeths to study the pathology of mental disease.<sup>3</sup> When America entered World War I, St. Elizabeths was well suited to study the implications of war on the mental health of returning soldiers, and was even called upon to instruct medical officers from the Navy and Army in neuropsychiatry.<sup>4</sup> However, the war also drew physicians away to service and the hospital was short staffed during this time.<sup>5</sup> Simultaneously, there was a focal shift to medical issues outside mental health, as is demonstrated by this lantern slide training set, and the diversity of examples within it. Approximately one-third of the set are brain-related slides, whereas



**FIGURE 2.** An example of one of the lantern slides from a World War I lantern slide training set depicting the histopathology of a parasitic infection by *Schistosoma japonica* in the intestine. (National Museum of Health and Medicine)

the remaining slides show an assortment of infections and parasitic diseases.

The rise in cases of certain infections and parasitic diseases during World War I was primarily due to the poor conditions endured by soldiers in the trenches. Trench fever, a disease transmitted by body lice, was an illness often seen in soldiers with poor hygiene on the front lines living in close quarters. Trench fever is a Rickettsial disease, for which parasites such as fleas, ticks, and lice are vectors. The teaching set features several infections such as Rocky Mountain spotted fever and typhus that would have been comparable to trench fever.

Other examples in the training set include parasitic worms such as blood-flukes (Schistosoma) (Fig. 2) and tapeworms (*Taenia echinococcus*), and protozoa such as the ones that cause malaria and amoebic dysentery.

Collections such as the Blackburn-Neumann Collection from St. Elizabeths represent both an institutional history and a broader medical one. World War I lantern slide training sets provide a snapshot of a specific moment in time and history, and help us to better understand the effect that war had on institutions such as St. Elizabeths Hospital.

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