

A small historical equipment display

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When I started my tenure-track position in September of 2001, the cabinets in the Morehead State Physics labs were full of “old” pieces of equipment. The three faculty who retired and paved the way for the three newly hired faculty operated the lab on a shoestring budget and saved everything. We began the laborious process of building a new lab with Vernier and PASCO equipment, throwing away much of the older equipment. We did save a number of choice “antiques” with wooden bases and brass fixtures.

For many years these treasures remained hidden away in cabinets. But the many contributions of Thomas B. Greenslade Jr. in *TPT* and *AJP* inspired me. I was determined to assemble a display of antique physics equipment at Morehead State. Several of the pieces in our collection were easily identified, as they appeared in some of Greenslade’s *TPT* contributions: these include a tubular rheostat,¹ a curved grating spectrometer and a grating spectroscope (both by Cenco),² discharge tubes,³ and a van Nordoff color mixer.⁴ Other pieces were identified by scouring Greenslade’s Instruments for Natural Philosophy website, an invaluable tool. Many were identified via numerous communications with Thomas Greenslade himself.

Our oldest pieces date back to the 1920s and are about to qualify as “antique,” but we have many other pieces from 1940-1970 that qualify as “vintage.” In this four-year process, two students (Logan Hankins, biology, and Tanner Mabry, applied physics) became enthusiastic assistants. Through their work on this project, students have learned how to perform literature searches in journals and on the internet. They also learned valuable communication skills via email exchanges with Thomas Greenslade and historical and tech-

Column Editor’s Note: “Little Gems” usually provides ideas for constructing and/or using unique apparatus, but I would like to share a “gem” of advice to which I can relate. Upon retiring, I learned that many pieces of vintage equipment had been disposed of by my unaware, yet well-meaning replacement. It was heartbreaking.

nical staff at Sargent-Welch. Finally, they gained invaluable experience reading and interpreting physics literature from *TPT* and *AJP* and writing small summaries of equipment for a general audience.

Recently, Thomas Greenslade recounted his 50-year adventure collecting, restoring, and reproducing historical apparatus. He also recounts some sad stories of equipment lost and destroyed. These stories rattled me a bit: over the last few years, I learned that many of the pieces that we “chucked” in our early years were, in fact, valuable pieces of our scientific heritage! Greenslade asks, “Who will take on the task of standing up for our apparatus of the past?” I can answer that; for the time being, at Morehead State University I will. With the help of two students and Dr. Greenslade himself, the Morehead State University community now has an interesting historical display with equipment dating back to its days as a teacher’s college beginning in 1923. I encourage other *TPT* readers to do the same with their historical equipment!

References

1. Thomas B. Greenslade Jr., “The potentiometer,” *Phys. Teach.* **43**, 232 (April 2005).
2. Thomas B. Greenslade Jr., “The spectrometer,” *Phys. Teach.* **50**, 152 (March 2012).
3. Thomas B. Greenslade Jr., “Physics Stories’: How the early technologies of high voltage and high vacuum led to ‘modern physics,’” *Phys. Teach.* **56**, 286 (May 2018).
4. Thomas B. Greenslade Jr., “The van Nordoff color mixing apparatus,” *Phys. Teach.* **43**, 602 (Dec. 2005).
5. Thomas B. Greenslade Jr., “Adventures with historical physics apparatus,” *Am. J. Phys.* **88**, 864 (Oct. 2020).



Fig. 1. Most of our historical equipment is housed in a 4 ft high by 12 ft long display case on the ground floor of our science building, Lappin Hall. The display includes 30 items, each with a name, manufacturer, approximate date of production, and a description of its usage.