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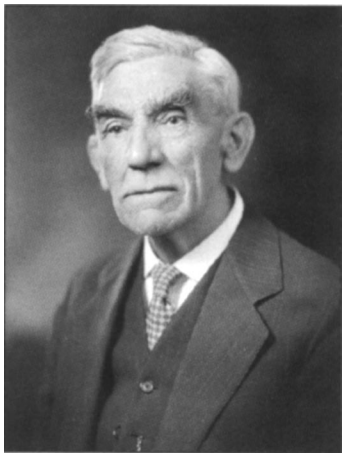
The Observatory That Never Was

ASTRONOMY has been taught at the University of Nebraska since it first opened its doors in 1871, but for almost half of this time the university had no telescope larger than a 4-inch Brashear refractor. Goodwin DeLoss Swezey, the astronomy professor at the turn of the century, had a small observatory built on campus to house this and other astronomical instruments.

Despite Swezey's ambitions for a larger telescope, the university's resources were limited. So he proposed to build a 12-inch refractor himself with the help of Charles S. Minnich, a nearby country doctor and amateur astronomer. Not only could Minnich set broken legs, pull teeth, and dispense medicine, but he had installed the first telephone system in the area, poles and all. He promised Swezey that he would grind the crown and flint elements for the 12-inch telescope.

Minnich apparently never charged the university for his labor, time, and expertise; he did it merely for the love of creating something worthwhile. Meanwhile, Swezey drew up 44 sheets of blueprint for the telescope tube, mounting, and drive mechanism. He was able to persuade the engineering department to assign the actual construction to students. In this way, the 18-foot-long tube, 12-foot-high base, and all the various parts of the mounting and positioning system were cast and machined, little by little, over eight years.



University of Nebraska professor Goodwin Swezey.

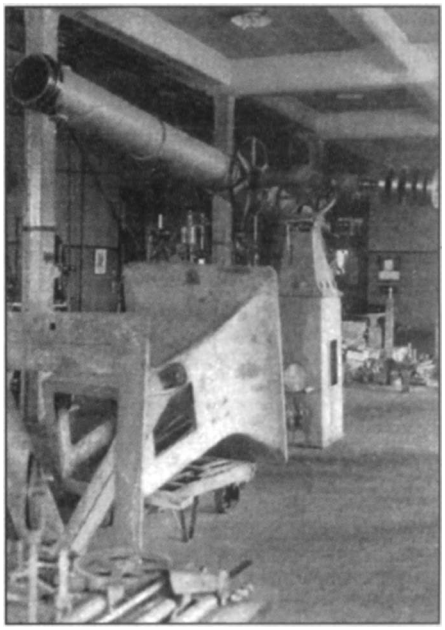
Next, in 1916 Swezey obtained $25,000 from the board of regents to build an observatory. It was to be a splendid, two-domed facility complete with a lecture room, library, darkroom, and shop. But when there was a cost overrun on construction of another building on campus, the board rescinded his appropriation. The observatory was never built. Sadly, Swezey wrapped the precious lenses in a silk cloth and placed them in a box.

Swezey finally retired in 1932 at the age of 81, and his department was absorbed by that of mathematics. The editor of the student newspaper summed up Swezey's career: "Hampered by inadequate equipment, his dream of expansion someday has been the more bitter by the realization of a fine telescope owned by the university and stowed away in a steam tunnel. His work has been careful and his eyes have grown weakened by search of the heaven's depth. And now his very department is sacrificed in an attempt to balance a heartless budget." Swezey moved to California to live with his daughter and a year later he died.

The Minnich lens was stored in various places over the years: in a vault in the administration building, under the stands of the football stadium, in a steam tunnel, and also in the inventory department. But it was never to be aimed at the heavens. Eventually the telescope tube, mounting, and drive mechanism were all melted down for scrap.

Then in 1973 the department of physics and astronomy received a letter from Cdr. Charles B. Minnich, the grandson of the country doctor who had ground the lens. He knew of the lens and asked if he could have it back if it wasn't being used. But by that time the lens had disappeared. He offered the department $5,000 if they could find it, but a very intensive search failed to come up with the lens.

Above: **Throughout his 38 years at the University of Nebraska, Swezey taught astronomy with the 4-inch Brashear refractor pictured here.**



Right: **The only surviving photograph of the ill-fated 12-inch refractor is this 1915 view, showing the instrument carried by the upper section of its pier; the lower section rests on its side in the foreground. Photographs courtesy Eugene Rudd.**

However, the younger Minnich had inherited his grandfather's generosity. In appreciation for the search effort, he gave the astronomy group a 6-inch lens that had also been ground by his grandfather, and it was this lens for which Donald Taylor designed his ingenious coudé mounting. Minnich also donated $10,000 toward the telescope's construction and $23,000 for an astronomical computing center.

Sad though the story is, the country doctor would be pleased that there finally is a Minnich telescope on our campus. And Swezey would be impressed by the expansion of astronomy at the university where he labored so many years with so few resources.

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At the University of Nebraska, Lincoln, Rudd is emeritus professor of physics. His special interest is antique telescopes.

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