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# TENNESSEE'S EARLY TECHNICAL AND SCIENTIFIC JOURNALS, 1825-1861

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### ABSTRACT

At least 19 technical and scientific journals were published in Tennessee before 1862. Surviving issues offer a unique and little used source of data on the culture of a frontier state.

#### Introduction

In November, 1861, war forced suspension of *The Nashville Journal of Medicine and Surgery*, the last antebellum scientific or technical journal published in Tennessee. Before November, 1861, each publication listed in Table 1 made its own unique contribution to the cultural development of Tennessee and the western frontier. The present study is a first step toward a comprehensive knowledge of early journals. The study has three objectives. First, it tries to list all antebellum technical and scientific journals (Table 1). Next, it reviews the literature on early scientific and technical publications in Tennessee. Finally, it calls attention to a few early publications that were truly extraordinary. For convenience, agricultural, medical, and general journals are considered separately.

### AGRICULTURAL JOURNALS

On November 25, 1825, a new publication came off the press in Jonesboro, Tennessee. It was called The Farmer's Journal and whether it was, or was not, a technical journal is difficult to decide. In our modern society it is hard to define terms like "technical journal." It is even harder to look back across 150 or more years and recognize a culturally equivalent unit in a different and less sophisticated society. The first issue of The Farmer's Journal made it clear that one of its functions was to publish official communications from the Washington County Agricultural Society, a Jonesboro group. The first issue also contained letters to the editor from as far away as Murfreesboro. Letters suggest that the editor planned to market his new publication over a wide geographic area. Finally, in the first issue the editor, J. Howard, tried to define the mission of his new publication by saying that it would emphasize agricultural information, although it would also treat other subject matter.

A society relationship, an apparent desire for interregional readership, and an agricultural orientation combine to suggest that *The Farmer's Journal* was planned as a technical journal. The content of the first issue places some slight emphasis on agriculture. Most later issues are virtually free of technical content and

eventually *The Farmer's Journal* became a local newspaper. Perhaps it fell victim to the practicalities of meeting a weekly deadline.

Whether *The Farmer's Journal* was ever a technical publication is debatable. It has historical significance, nonetheless, for it gave rise to Tennessee's first long-lived technical journal. In 1832, *The Farmer's Journal* joined in forming a newspaper called *The Washington Republican and Farmer's Journal*. This was purchased in 1833 by Thomas Emmerson, a Knoxville man. Soon after he took charge, Emmerson began to lay solid groundwork for a regionally oriented journal of agriculture which he called *The Tennessee Farmer*.

The first issue of *The Tennessee Farmer* appeared in December of 1834 with Emmerson as editor and J. F. Deaderick as publisher. It was a commercial success, selling throughout East Tennessee. Perhaps it succeeded because the editor-owner, Thomas Emmerson, was a well known legal and political figure. While much of his life is well documented, standard biographies of Emmerson make no mention of his involvement with *The Tennessee Farmer* (e.g. Beaumont, 1903; 1904).

Emmerson died on June 6, 1837, and editorship passed to the publisher, J. F. Deaderick. Jonesboro continued as the place of publication, and the journal survived the transition. Under both Emmerson and Deaderick The Tennessee Farmer was a rather average frontier agricultural journal. A precise and detailed analysis of content lies beyond the scope of the present study, but in most issues the volume of republished material exceeded the volume of original articles. Further, most articles that were original presented opinions or reported news. The journal, in its early stages, made few original contributions to science and technology. Its primary function in the culture of the mid-1830's was to gather the contributions of others and bring a succinct package of information to the farmers of East Tennessee. It was a commercial venture and it succeeded in a day when collossal economic and cultural problems faced the publisher of periodicals in Tennessee (Riley, 1962).

In 1839, editorship of *The Tennessee Farmer* shifted to Professor L. F. Clark of East Tennessee College. The place of publication also changed, from Jonesboro to Knoxville. Once again, the journal survived. Since the new editor was a professor of chemistry and related subjects, the journal soon took on a new character. It became more strongly oriented toward original articles of a scientific nature and there was an overall intensification of its technical-scientific character.

In December of 1840, under pressure from a statewide agricultural society and from other sources, The Tennessee Farmer merged with another Tennessee journal, The Agriculturist (Anonymous, 1840). In the merger, The Tennessee Farmer was simply absorbed. Subsequent issues of The Agriculturist retained the style and scope this journal adopted when it began publication in January of 1840.

In many ways, The Agriculturist was the best technical or scientific journal published in antebellum Tennessee. It was one of the best in the nation. Like all technical journals of its era, The Agriculturist carried republished material; but unlike most contemporary journals, The Agriculturist usually maintained high standards in its original contributions. There were two reasons for this, the readership and the editors. The Agriculturist was the official organ of a learned society, The Agricultural Society of Tennessee. As long as the society remained healthy and vigorous, the journal was assured of a basic income from society dues. Further, in early issues the most knowledgeable members of the society were assigned the task of writing articles on topics they knew the most about or on topics that most needed discussion. This approach got the journal off to a strong start. Another great strength, evident from the first issue, was professional specialization at the editor level. Three men of great ability served as co-editors. The most evident co-editor was usually the Rev. Tolbert Fanning, who founded Elm Crag, a Nashville institution that claimed to be the first agricultural school in North America. He also founded Franklin College, another prominent Nashville institution, and played a broad role in Tennessee history (Wilburn, 1969). For most issues, co-editor Fanning was the manager and "hack" writer who handled the routine affairs of the journal. Fanning did his job well and freed the other co-editors for less routine assignments.

The Agriculturist grew out of a state-wide society. Throughout its history the journal was deeply and positively involved in many state-wide or regional organizations that developed within agricultural fields: silk groups, horticultural groups, etc. One co-editor, Dr. John Shelby, emerged as the contact man and promoter of society affairs. He would chair virtually any meeting and try to promote any reasonable cause. He was the perennial president of the Agricultural Society of Tennessee and a prominent Nashville intellectual leader.

In many ways the third co-editor was the dominant member of the triumverate. Dr. Gerard Troost was a Dutchman who emigrated to the United States in 1810. By 1812 he was founding president of The Philadelphia Academy of Sciences. He was still president in 1817 when the Academy began one of the first learned journals in North America that was explicitly and exclusively focused on the sciences. Thus, Troost knew something about founding successful journals. Unlike the other co-editors, he also had experience in writing scientific articles for the learned journals (Rooker, 1933). Troost was an international figure in the sciences. He had published articles in four languages; when The Agriculturist began, he had been a central

figure in North American science for 30 years. On rocks, on soils, and on natural resources few men in the world spoke with an authority equal to that of Troost. His participation as co-editor lent the journal both expertise and prestige.

The Agriculturist was clearly one of the stronger antebellum journals published in Tennessee and seems comparable with the best in the nation. It merits study beyond the level achieved thus far (Corgan, 1976b). All of the old journals appear to warrant study, but this is beyond the limits of the present investigation. Here, it is only possible to comment on one additional agricultural journal, The Cumberland Farmer.

No modern library has a copy of The Cumberland Farmer, but two issues did appear in the fall of 1838 (Anonymous, 1838; Durham, 1972, p. 348-349), On several later occasions (e.g. Anonymous, 1839) the publisher, J. A. Browning & Co. of Gallatin, circulated a prospectus; but no further issues were published.

To a modern scholar, each of the antebellum agricultural journals had many undesirable features. The editors often lacked impressive academic credentials and typical issues included a lot of republished material: extracts from other agricultural journals, chapters out of textbooks, and descriptions of agricultural meetings that were reprinted from newspapers. To the editors, publishing this type of material was often more desirable than publishing original articles by local experts. Each agricultural editor viewed his journal as the only professionally-oriented printed material that reached his farmer-readers. Editors of Tennessee's early medical journals had a very different readership and a far greater emphasis on original content.

#### MEDICAL JOURNALS

Tennessee's pioneer medical literature has received more attention than other scholarly publications of the antebellum era. Many years ago, Hamer (1930) catalogued the antebellum medical journals; his excellent listing has stood the test of time. Many subsequent publications use Hamer's list with significant change (e.g.: Platt and Ogden, 1969; Christie, 1969; Watkins, 1941; Bruesch, 1948).

The first true medical journal published in Tennessee was the Southwestern Medical Advocate, which appeared in July 1847. In total, three single numbers and one double number were published. Like most of Tennessee's pioneer medical journals, the Southwestern Medical Advocate was the house organ of a medical school. In this case, the school was the Memphis Medical College.

While the Southwestern Medical Advocate was the first medical journal published in Tennessee, it was not the first serial publication devoted to medicine in Tennessee. In 1830, the Tennessee Medical Association was founded at Nashvillle. From 1830 until the present, a state-level medical society has generally published professional literature. In the antebellum years, this publication was normally called the Transactions of the

society (Table 1) or the Proceedings. It was largely devoted to matters of society business but often carried a few articles, generally the text of speeches made at annual conventions. In typical years, a significant percent of the physicians of Tennessee belonged to the state society. Thus, its publications reached a relatively broad readership. Many of the other medical serials were never widely read. For some, perhaps it is just as well that the readership was small.

A purist might not classify Tennessee's second "medical" journal, the Medical Reformer, with the true medical journals. It was published by the Botanico Medical College of Memphis and supported the Thompsonian approach to medicine, which stressed dietary and steam treatments. The journal existed from May 1850 through February 1851, completing one volume of eight issues. Most of the other journals that flourished in the 1850's were associated with more conventional medical schools. One journal, the Nashville Journal of Medicine and Surgery, was produced by the very stable Medical Department of the University of Nashville. It weathered the War, after suspending publication in November 1861. None of the others survived into the post-bellum era.

In addition to serial publications by medical schools and medical societies, antebellum Tennessee gave rise to another kind of professional medical literature. These reports, which did not appear on a regular basis, seem somewhat comparable to the Special Papers and Memoirs of modern learned societies. When a medical society came into being, one co-creation was a mailing list. Often a society could not afford to publish all the addresses made at its formal meetings. A complete text could be distributed later, at the author's expense, to everyone on the society's mailing list. Even when the society paid, a separate mailing of a special publication was sometimes the best way to handle long manu-

Today, many Tennessee libraries have an odd assortment of little pamphlets that were authored by Tennessee physicians and distributed to colleagues in antebellum times. Most look official, but what tie did they really have with a sponsoring journal? Who paid the bill? Did an unwelcome quack use the journal's published mailing list? The first of these journal-related, nonserial medical publications grew out of the first statewide medical meeting (Yandell, 1830?). There were dozens of comparable items issued during the next 32 years. Some have great value today, for they include Watson's treatise on the nosology of Tennessee and Wright's statistics on Memphis weather (Watson, 1852; Wright, 1857). Thus far, no one has attempted to deal with this confusing plethora of non-serial medical publications. Tennessee's medical historians have focused on serials.

Hamer (1930) provides adequate histories for the other medical journals listed in Table 1. Only one merits a more extended discussion. In many issues, the Southern Journal of the Medical and Physical Sciences verged on being a general scientific journal. One of the editors, Dr. Richard O. Currey, had been

professor of geology at East Tennessee College. Through the Southern Journal he authored a dozen or more geological articles. This journal was also especially prone to publish historically-oriented accounts of public health institutions, articles that catalogued occurrences of diseases in the state, and similar kaleidoscopic reviews. Actually, much of medicine in the antebellum years had a touch of general science. In most journals, "Medical Topography" and "Nosography" were favorite topics. Doctor-authors focused on relationships between health problems and the distribution of limestone in Tennessee. Doctors knew that health problems were different at different elevations, that water chemistry influenced body chemistry, etc. Some consciousness of geology is evident in most of the early medical journals but none of them actually matured into a general scientific journal. The closest approximations to general science journals in antebellum Tennessee were two serials published by Franklin College in Nashville.

#### GENERAL JOURNALS

When The Agriculturist closed, one of the co-editors promised to publish a new journal, sponsored by Franklin College, that would serve much the same readership (Fanning, 1845). It appeared, in January 1846, with the impressive title of The Naturalist and Journal of Natural History, Agriculture, Education, and Literature. It was co-editored by four members of the Franklin College faculty. Twelve issues appeared, with articles treating most branches of knowledge. Science received hearty emphasis. In December 1846, the journal ceased publication for lack of financial support, but in the year 1850 Franklin College funded a second general journal. This journal was edited by Tolbert Fanning and was called simply The Naturalist. It began with volume 1, number 1, and never mentioned the earlier journal with a similar name. Twelve issues were published, running from January to December. All scientific articles were authored by Fanning and all focused on geology and pedology (Corgan, 1976c).

Apparently The Naturalist was the last general journal published in antebellum Tennessee that gave significant emphasis to science and/or technology. In addition to journals listed in Table 1, there are a few journals, listed in Table 2, that were announced but apparently never published. Perhaps some actually were published and will eventually turn up in uncatalogued collections of 19th century books.

#### SUMMARY AND CONCLUSIONS

The main function of this study is to establish a minimum inventory of antebellum technical and scientific journals that were published in Tennessee. The stock of known journals (Table 1) and possible journals (Table 2) totals 25. The fact that Tables 1 and 2 are the first attempt at a comprehensive inventory is an assessment of the general level of scholarly involvement with the history of science and technology in Tennessee. Historians like Davenport (1941) and Riley (1962) have treated technical journals and scientific societies as part of the general intellectual history of antebellum times. While the quality of their studies is laudable, the local history of science and technology seems to merit more frequent, more intense, and more empathetic study. More scientists and technologists should become involved in studies of intellectual history.

# TABLE 1: Early Journals and Journal-like Publications

- 1. The Farmer's Journal. 1825-1832. Jonesboro. (1)
- 2. Transactions of The Medical Society of The State of Tennessee. 1830-Present. Nashville. (2)
- 3. The Tennessee Farmer. 1834-1840. Jonesboro and
- 4. The Cumberland Farmer. 1838. Gallatin. (3)
- 5. The Southern Cultivator. 1839-1840. Columbia. (4)
- 6. The Agriculturist. 1840-1845. Nashville. (5)
- 7. The Naturalist and Journal of Natural History, Agriculture, Education, and Literature. 1846. Nashville.
- 8. Tennessee Farmer and Horticulturist. 1846. Nashville. (6)
- 9. Southwestern Medical Advocate. 1847-1848. Memphis.
- 10. The Naturalist. 1850. Nashville. (7)
- 11. Medical Reformer. 1850-1851. Memphis.
- 12. Nashville Journal of Medicine and Surgery. 1851-1861. Nashville.
- 13. Memphis Medical Journal of the Progressive Medical Sciences. 1851-1852. Memphis.
- 14. Medical Recorder. 1852-1858. Memphis. (2)
- 15. East Tennessee Record of Medicine and Surgery. 1852-1853. Knoxville.
- 16. Memphis Journal of Medicine. 1853-1857. Memphis and Holly Springs, Miss.
- 17. Southern Journal of the Medical and Physical Sciences. 1853-1857. Nashville and Knoxville.
- 18. Tennessee Farmer and Mechanic. 1856-1857. Nash-
- 19. Nashville Monthly Record of Medical and Physical Sciences. 1858-1860. Nashville. (2)

### Footnotes to Table 1

- 1. By the terminal date The Farmer's Journal had evolved into a local newspaper.
- 2. This publication was known by more than one name. Hamer (1930) discusses synonymous names.
- 3. No known library has a copy of this journal.
- 4. Discussed by Corgan (1976a).
- 5. Discussed by Corgan (1976b).
- 6. Discussed Fanning (1846).
- 7. Discussed by Corgan (1976c).

# TABLE 2: Enigmatic Records.

- 1. Central Medical and Surgical Journal. ? 1849. Nashville. (1)
- 2. The Southern Agriculturist. ? 1851
- 3. East Tennessee Medical Times. ? 1857. Knoxville. (1)
- 4. Nashville Medical Bulletin and Hospital Gazette. ? 1859. Nashville. (1)

- 5. Southern Medical Quarterly. ? 1859. Nashville. (1)
- 6. The Southern Homestead. ? 1860. Nashville. (3)

## Footnotes to Table 2

- 1. This proposed publication and all other medical serials treated in Tables 1 and 2 were discussed by Hamer (1930)
- 2. Discussed by Fanning (1850).
- 3. This proposed journal and most non-medical publications listed in Table 1 were discussed by Clark (1942)

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