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Pennsylvania Folklife Vol. 26, No. 4

E. Reginald Good

Gerald L. Pocius

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Louis Winkler

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SPRING 1977



Contributors to this Issue-

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COVER:

The illustration on our cover has the theme of lambing time on an American farm in the 19th Century. It appeared in Gleason's Pictorial, Boston, Saturday, April 22, 1854.

Ontario Schoolmaster and Fraktur Artist E. Reginald Good

While much study has been done on fraktur art in Pennsylvania, little attention has been given to the fraktur art and artists of Ontario, and to the itinerant artists who travelled between Pennsylvania and Ontario in the 19th Century.

Most Pennsylvania-German settlers in Ontario were Mennonites whose political sympathies lay with the British Crown. Three years following the Peace of Paris in 1783 (which marked the end of the British-American conflict) five Mennonite families are believed to have migrated to Ontario and settled at Niagara, near present-day St. Catherines.¹

By 1828, according to the Ecclesiastical Chart of Upper Canada, Mennonites numbered 3,552, and were found in three main settlements — Niagara, Waterloo, and York.²

Niagara was the earliest colony, begun in 1786, with most of its inhabitants coming from Bucks County, Pennsylvania. Here the fraktur technique was perpetuated mainly through the parochial singing schools.³

Waterloo, by far the largest Mennonite settlement in Ontario, was initiated in 1800. Most families here came from Lancaster County, Pennsylvania.⁴ In this area Pennsylvania-German traditions survived longer than in any of the other settlements discussed in this paper.

York, in the vicinity of present-day Toronto, was the last significant colony to be settled by Pennsylvania-German immigrants, beginning in 1803.⁵ Mennonites from throughout both Pennsylvania and the Ontario colonies were attracted here. Many fraktur artists who practised in these Ontario communities are worthy of study. Mention must be made of Jacob Schumacher (itinerant), Samuel Meyer (Niagara), and Christian Hoover (Markham). My own work on Waterloo artists Joseph Bauman⁶ and Anna Weber⁷ goes a small way toward ameliorating the ignorance of scholars regarding Ontario fraktur artists. Among these practitioners is one who deserves more careful attention — Isaac Ziegler Hunsicker (1803-1870).

Isaac Z. Hunsicker was a professional Waterloo County, Ontario, fraktur artist and schoolmaster. He made color drawings and *Schierschnibble* (paper cuttings) for his pupils, *Tafeln* (family records) for parents' Bibles, and *Scheine* (certificates) to record the births, baptisms, and family histories of patrons.

As in Pennsylvania, so in Ontario, the art of fraktur in the 19th Century Mennonite communities "had been chiefly perpetuated by deliberate instruction in German schools by German schoolmasters".⁸ Hunsicker was among "the most prominent teachers from that early period"⁹ and, of these, the most capable artist. In the period 1835-1855, mainly through the efforts of Hunsicker, the quality of fraktur produced in Waterloo County schools reached its peak.

Recognition has come slowly for Hunsicker. Although he produced a large quantity of the Ontario fraktur, much of it signed, he is still listed in the Philadelphia Free Library (which houses the largest public collection of fraktur in the United States) as an "anonymous" Ontario artist. One Canadian writer refers to Hunsicker as the "master of cut-paper angels,"¹⁰ and attributes only two frakturs (both *Schierschnibble*) to his hand.

Isaac Z. Hunsicker was born the twenty-ninth of January, 1803, in Skippack Township, Montgomery County, Pennsylvania,¹¹ and immigrated to Waterloo prior to 1830, when he illuminated the family record ⁶Good, E. Reginald, "Ontario Fraktur Artist Joseph Bauman (1815-1890)," *The Canadian Collector*, XI:4 (1976), 35-37.

¹Epp, Frank H., *Mennonites in Canada* (Canada: The Macmillan Company of Canada Ltd., 1974), p. 56. Frank Epp's book is the first comprehensive volume on Mennonites in Canada. It incorporates the scholarship of earlier local historians. A possible weakness is that the coverage of Swiss Mennonites is not as thorough as that of Russian Mennonites. Frank Epp is currently president of Conrad Grebel College on the campus of the University of Waterloo.

³Burkholder, L. J., A Brief History of the Mennonites in Ontario (Markham: The Mennonite Conference (MC) of Ontario, 1935), p. 25. This is the most thorough and best documented of books dealing with Ontario Mennonite groups. It emphasises the history of the (MC) Mennonites. Burkholder (1875-1949) was for many years Pastor in, and Moderator of, the Ontario Mennonite Conference, as well as historian of that organization. ³Epp, loc. cit.

⁴Eby, Ezra E., A Biographical History of Waterloo Township (Berlin: 1895-1896, reprinted 1974 by Eldon Weber), p. 6. Eby was an important and often quoted Mennonite historian of Waterloo County. His writings were source materials for many historical and genealogical volumes. ³Epp, p. 61.

^{&#}x27;Good, E. Reginald, Anna's Art (Kitchener: Pochauna Publications, 1976). 'Shelley, Donald A., The Fraktur Writings or Illuminated Manu-

Scripts of the Pennsylvania-Germans (Allentown, Pa.: The Pennsylvania-German Folklore Society, 1958-1959), p. 108.

⁹[Pearce, Thomas], "Educational History in the County," 100 Years of Progress in Waterloo County (Waterloo: The Chronicle Telegraph, 1906), p. 23.

[&]quot;Patterson, N. L., "Im Zeichen Der Zwillinge," Waterloo Historical Society, LXIII (197), 25.

WHEN DESIGNATION AND THE PARTY AND THE TOTAL STATE AND THE TOTAL WAR WHEN THE TOTAL WAR WHEN and the second set of the second s 7 iconte aturdo to vill OC and Mapull anode O 1839. Mann wir laum geboren werden M. wom enten Seben witht. 2 The sum takten Grab der Beden Blur im tar somer ner schritt . KI: KI.K. Marine Plank repres taple . Kild negul motor hind , 1.1. Into war find mit isten Salar and in tim Sail now Sall Und ver nich in welder Stunde. Und bie lehgte Simme wicht. Denn. Odt hals mit feinem Munde. Kirrem Manfigen noch entbedt. 1..1. Ber fim Sans non wood bollet . Allet and Freedom and ber Bell , 1 Date Enderpoil bingegen . k I wig a Sterben tann arregen . All min Intang ju sider Brift, Geldgels im Mamen dela Cherift Der flege ben mir Irah und Grat. Bis all mein Ihan im Ende 30. Dater Vin Befeld ity will, Mimm mily town and gang willight adel small man red nom anot a , adag verolese ann affrid 1160 59/01 510 Since from the solution of the of the man the start the doil 3. Stoulder 1861. 17 Birth certificate made by Isaac Hunsicker, for Jacob Kolb, in 1861. Private Collection, Goshen, Indiana.

A facial motif frequently illuminating the fraktur writings of Isaac Z. Hunsicker.

(Figure 2) in the Bible of the Jacob Kolb family, resident there. His strict Mennonite upbringing was probably the more severe because of the church offices held by close relatives. Isaac's uncle, Henry Hunsicker, was the local Bishop, and Grandfather Isaac Hunsicker was a deacon.12 "The Skippack congregation was very slow to adapt to progressive methods . . . due to a few very conservative ministers."13

Menno Simons, one of the earliest leaders of the Mennonites, and the man whose name they bear, wrote that children should be "instructed in reading and writing; bring them up to habits of industry, and let them learn such trades as are suitable and adapted to their age and constitution".14

Mennonite schoolmasters encouraged hard work, and many, like Christopher Dock of Skippack, rewarded diligence with colorful fraktur; often this served as a model for the artistic endeavors of students. Dock encouraged the making of Vorschriften which were often illuminated with stylized birds and flowers. Dock (d. 1771) "has been acknowledged as a major force in the development of the fraktur technique".15

Skippack was a fertile field for fraktur artists, given the high concentration of Mennonite settlement and the encouragement of this traditional art form within the school system. Teachers were frequently masters of fraktur, but not all have left signed examples of their work. It is conceivable that Isaac Hunsicker's schoolmaster, Jacob Humel (taught 1812-1815)16 made the anonymous Skippack frakturs depicting springing deer. This same motif is present in a Schierschnibble Hunsicker made as an adult. See Figure 4.

Isaac Hunsicker was probably neither a strong nor a healthy boy. Most Mennonite youth were destined to be farmers, and only if one were physically unfit for farm labor, would one resort to the teaching profession with its meagre earnings.

Mennonite teachers of the 19th Century were expected to master the art of calligraphy, as it was a basic subject in the curriculum. Possibly Hunsicker imitated the examples of other professionals or paid a retired master to instruct him. Hunsicker became adept at printing in the traditional fraktur style, and learned to make the skillful drawings which decorate hand-printed certificates. Instead of using a flat watercolor, he, like many professionals, often used cherry gum to achieve a glossy intensity in his work. (See Figure 5.)

burten.

16 Do 16 00 00 10 00 00 00 00 00 00 Unno 1781 Den isten tag 21pril bin ich Jacob Rolb auf biefe Belt geboren.

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Unno 1782 ben 21ten tag May bin ide Entharing Clemens auf Diefe 2Belt gebaren,

Unno 1806 ben 13 ten Junius ift uns einen Gohn gur Belt geboren mit Ramen Abraham Kolb Freytage Morgenbs um 9 Uhr, im zeichen bes Stiers.

Unm 1808 ben 4 ten tag Muguftus ift uns eine Lochter zur 2Belt geboren mit Damen maria Rolb Donerstags um f Uhr nagmit. ings, im zeichen bes Steinbods.

Unno 1810 ben 11 ten ing Auguftus ift uns einen Gohn gur Welt geboren mit namen Tobias Kolb Gamftags um 9 Uhr Abends im geichen bes Gteinbods.

Mune 1814 ben 13 ten tag Dlay ift uns eine Lochter gur Welt geboren mit namen Lidin Kolb Freytags um 9 Uhr Ubends, im geichen bes Fifts.

Unno 1818 ben 25 ten tag Geptember ift uns eine Tochter gur 2Belt geboren mit Damen Banna Kolb Freytags um 4 Uhr nachmit . tags, im geichen Des Low's .

Unno 1820 ben 15 ten tag April ift uns et. nen Gohn jur Welt geboren mit Damen Seinrich Solb Gamfings um 12 Uhr nachte im geichen bes 3millings.

Fraktur illumination in the Bible of Jacob Kolb, Waterloo, Ontario. This is the earliest extant work of Hunsicker, circa 1830. Collection of Doon Pioneer Village, Kitchener.

"Part of the master's work was to see that the children's pens were kept properly made and mended, his ability as a teacher being reckoned largely by his proficiency in this line in a time when to read, to write and to cipher were considered sufficient education for ordinary people."17

¹⁷Scherck, M. G., Pen Pictures of Early Pioneer Life in Upper Canada (Toronto: William Briggs, 1905), p. 77.

¹²Wenger, J. C., History of the Mennonites of the Franconia Conference (Telford, Pa.: Franconia Mennonite Historical Society, 1937), p. 275.

¹¹Eby, p. 105. ¹⁴Simons, Menno, The Complete Works of Menno Simons (Elkhart, Indiana: n.p., 1871), p. 275. "Shelley, p. 108.

¹⁶Heckler, James Y., History of Lower Salford Township in Sketches, Commencing with a History of Harleysville (Harleys-ville, Pa.: Weekly News Office, 1888).



Bookmark made by Hunsicker in 1837, as an award of merit for student Joseph Shantz. The J. Schantz Collection, Waterloo, Ontario.

The earliest evidence indicates that Hunsicker was a schoolmaster in Breslau, Waterloo County, early in 1837, for in that year he made an award of merit for a student, Joseph Shantz. Joseph, who was six years old at the time, received a bookmark for outstanding achivement in classes conducted by Hunsicker at the Breslau school. The drawing (Figure 2) is of two disproportionately large birds which have lighted on a minuscule, heartshaped tree.

"Beginning May, 1837, Mr. Isaac Z. Hunsicker taught in the Red Schoolhouse for nine months."" This school, the largest of several scattered throughout Waterloo County, was located on Bishop Benjamin Eby's (Mennonite) church property. During the term Hunsicker served here, a *Preceptor Lied* (Teacher's Song) attributed to him was printed by Bishop Eby's son. The text of the *Lied* reveals that the author was both a schoolmaster and singing teacher — qualifications met by Hunsicker, and the style and quality are comparable to other poems signed by him.

Following is a versified translation of the first stanza:

Ja Preceptor bin ich gennant, Weil ich die Jugend lehre, Es g'fällt mir wohl im led'gen Stand, Dann das ist meine Ehre. Und wann die Schüler singen, So hör ich meine Freud; Gefall ich nicht den Menschen allen Wann ich nur kan Gott gefallen; Das ist meine Lust Und das ist meine Freud.

(Indeed I'm called a Preceptor, Because I teach the youth. I find in lowly service pleasure — That is my honour, truth. And when I hear the pupils sing, My soul is filled with joy. Even if men cannot be pleased, But I find my God's appeased, Then there is happiness And surely I have joy.) As noted, Hunsicker had been in Canada some time prior to 1837. In January of 1836 he made a *Geburtsund Tauf-Schein* (birth and baptismal certificate) for Maria Erb, (b. 1818), who, the author speculates, was probably a student of Hunsicker's. Isaac needed the money he received from commissioned work of this sort. "Teaching was far from a profitable occupation, meagre salaries being obtained through public subscriptions. Even these monies were forthcoming only during winter months when students were free to attend."¹⁹

Considering the insufficient support he would have been able to provide, it is understandable why Isaac long remained a bachelor. He was thirty-six years of age before he met his bride.

Magdalena Erb was half his age — only eighteen years old when, in June of 1839, they are recorded as having been wed in Galt by Anglican minister Reverend John Bayne.²⁰ Magdalena's deceased grandfather was the founder of Preston (now Cambridge), Ontario, and her uncle, Joseph Erb, "conducted his business which then consisted of the grist mills, distillery, general store, and a large farm of nearly 500 acres".²¹

Isaac Hunsicker was assisted in setting up shop in the Erb family grocery store, and in 1839 he advertised his stock in the Berlin (now Kitchener), Ontario, newspaper, *Die Allgemeine Zeitung*. This new occupation, however, did not prevent Hunsicker from continuing in the teaching profession. Teachers at that time were mostly "tradesmen who were engaged in other occupations the rest of the year".²² Hunsicker taught at the Preston school, which was established the same year he set up business there.²³

Isaac Hunsicker and his wife Magdalena lived rather comfortably on the one acre of land which her uncle owned. They had a "good frame house, stable, and shed" for the customers who came to the little store which they called a *Waarenhaus*.²⁴ Here, in 1840, the Hunsickers' first child, Joseph, was born.²⁵

Unfortunately Isaac did not prosper financially, and in April of 1841, Otto Klotz (superintendent of the Preston school) lists the property for sale in *Die Allgemeine Zeitung*.

In January of 1842 the land was sold.²⁶ The Hunsickers moved to Berlin where twins, Mary Ann and

"Pearce, Thomas, "School History, Waterloo County and Berlin," Waterloo Historical Society (Berlin: 1914), p. 31

"[Pearce], "Educational History in the County," loc. cit.

²⁹Der Canada Morgenstern, June 6, 1839, p. 3. Genealogical information regarding the Hunsickers is inconclusive, leading to speculation that there may have been some irregularities in it, such as, for example, a child born out of wedlock. ²¹Eby, p. 155.

22[Pearce], "Educational History in the County," loc. cit.

²³Der Canada Morgenstern, loc. cit.

24 Die Allgemeine Zeitung, April 12, 1841, p. 3.

25 Waterloo County Census Report for 1851

²⁶Records in the Cambridge, Ontario, Registry Office.

Lydia Ann, were born in August of that year.²⁷ Mary Ann died in 1843²⁸ and was buried at Berlin's "East End" Mennonite meetinghouse (now First Mennonite Church). Perhaps Isaac's brother, Deacon Michael Z. Hunsicker, officiated at the funeral. He must have been a capable speaker, because he was ordained as minister in this house about one year later.²⁹

Another girl, Charlotte, was born in 1845.³⁰ As the Hunsicker children grew older, they benefitted greatly from their father's instruction. According to county school inspector, Thomas Pearce, arithmetic was the subject most heavily emphasized by the teachers.³¹ In the course of time, Isaac's son Jacob "became inclined towards the mercantile profession"³² and wrote economic reports for various publications. When Pearce states that "writing is on the whole fair, in a few schools excellent"³³ there is no doubt that he was referring to those in which Hunsicker taught. Isaac, himself a master of calligraphy, instilled the art of writing in his students. Those who excelled were rewarded, often with *Schierschnibble*. (See Figures

- ³⁰Waterloo County Census Report for 1851.
- ³¹Pearce, Thomas, *Report on the Public Schools of the County of Waterloo* (Galt: 1873), p. 5.
- ³²Eby, *loc. cit.*

3 and 4.) These were made by folding paper, drawing off a pattern, and cutting out the design with a knife.³⁴ In the cases of Veronika Schumacher and Lydia Kolb, hand-printed *Geburts-Scheine* were pasted in the blank centres of their *Schierschnibble*. They probably printed them themselves, encouraged and perhaps assisted by their teacher.

Hunsicker must have found real satisfaction in his work. However, in 1854, the sudden deaths of his wife, Magdalena, and youngest child, John, ended his happiness. Both were buried at the "East End" Mennonite meetinghouse.³⁵

Isaac and his three remaining children lived on in the one-story frame lodging with no mother to care for them or guide them. A single cow was the whole of their taxable possessions.³⁶ With the pittance he received as a teacher, Isaac probably could not afford to hire a housekeeper, and his children were almost certainly "farmed out" to live with friends. One record indicates that Hunsicker may even have converted to Lutheranism.³⁷

¹⁷Waterloo County Census Report for 1861. The author, however, tends to question the accuracy of this record. Hunsicker lived with Mennonite families for the remainder of his life and is presumably buried at the "East End" Mennonite meetinghouse.



Elaborate Schierschnibble executed by Hunsicker as an award of merit for student Maria Bauman, in 1855.

²⁷Waterloo County Census Report for 1851.

²⁸Eby, p. 154.

²⁹Burkholder, p. 296.

[&]quot;Pearce, loc. cit.

¹⁴Shelley, p. 79.

[&]quot;Cemetery Records for the "East End" Mennonite Meetinghouse, "Waterloo County Assessment Roll for 1853.



Music book made by Hunsicker August 30, 1844, for pupil Elizabeth Martin. It contains 44 pages of music (copied in Hunsicker's hand) of both German and English tunes.

Soon Isaac Hunsicker was again teaching, this time in Woolwich Township. He led a more itinerant life following the death of his wife, teaching in both Waterloo and Oxford Counties. As Hunsicker was growing older, he taught less in the parochial school system, and more in short-term singing classes which were held for the young people in scattered rural communities. (Figure 7 is the bookplate for a singing book which Hunsicker made for a student.) "The pay the teacher received did not, as might be expected in such circumstances, amount to too much. He had however, free board."¹⁸

Hunsicker's artistic creativity was not curbed, and in 1855 he cut a *Schierschnibble* (see Figure 4) as an award of merit for a student, Maria Baumann, of Woolwich Township. Inscribed are the words:

Maria Baumann

War eine Brave and Fleissige Schülerin. Dies bezeug't auch dieses Bilde hier, Welches ihr Lehrer gemacht für Sie, Im Jahr unsers herrn Jesu Christi 1855.

^{3*}Scherck, p. 74.

(For a hard-working and industrious student. This picture, which testifies to that, Was made for her by her teacher, In the year of our Lord Jesus Christ, 1855.)

The elaborately cut *Schierschnibble* as made by Hunsicker are quite rare. "Most of the cutwork that has survived is the work of only a very few artists."³⁹ It "is more than likely the work of a few European craftsmen who were expert in the tradition and who continued to practice it here after their arrival."⁴⁰

Obviously Hunsicker did not learn the art in Europe, and in his home in Montgomery County, Pennsylvania, no record exists of a *Schierschnibble* school. It may have been an individual accomplishment, influenced perhaps by an example he had seen.

In 1861 Hunsicker is recorded to be living again in Berlin, this time with the Jacob Z. Kolb family. While here, Isaac made a skillfully executed *Geburts-Schein* (Figure 5) for his host. The text is as follows:

³⁹Shelley, p. 68. ⁴⁰Shelley, pp. 79-80.



Schierschnibble (folded) attributed to Isaac Hunsicker. Note heart and bird motifs.

Geburts Schein von Joseph Kolb

Geboren, August den 30sten 1839.

Wann wir kaum geboren werden, Ist, vom ersten Lebenstritt

Bis zum kühlen Grab der Erden, Nur ein kurz gemess'ner Schritt.

Ach! mit jedem Augenblick, Gehet uns're Kraft zurück, Und wir sind mit jedem Jahr, Allzureif zur Todtenbahre.

- Und wer weiss in welcher Stunde, Uns die letzte Stimme weckt?
- Denn Gott hat's mit seinem Munde, keinem Menschen noch entdeckt.
- Wer sein Haus nun wohl bestellt, Geht mit Freuden aus der Welt.
- Da die Sicherheit hingegen, Ewig's Sterben kann erregen.
- All mein Anfang zu jeder Frist, Geschieht im Namen Jesu Christ,
- Der Stehe bey mir Früh und Spat, Bis all mein Thun ein Ende hat.
- Ja, Joseph Kolb bin ich genannt, Mein Leben Steht in Gottes Hand,
- Ich leb' nun jetzt in dieser Welt, So lang es meinem Gott gefällt,
- Und wann mein Leben lauft zu End, So nimm mich aus dem gross Elend!
- Ja, Vater! dir Befehl ich mich, Nimm mich dann auf, ganz williglich.
- Sollt dieses nun verloren gehn, So kann man hier mein Name sehn.
- In Waterloo Caunty wohn' ich, Hier nach vernemlich richte dich.

Joseph Kolb

- Aus Lieb und Andenken an Dich J.K. geschrieben in Hause deines Gross -
- Vaters in dem Taunschip und Caunty Waterloo, und Provinz Canada,

1861. von I.Z. Hunsicker

Birth Certificate of Joseph Kolb

Born the 30th of August, 1839.

- The birth to us which God, He gave, Is the first and biggest stride
- Leading to the mortal grave, Considered small the step is wide.
- Oh with every fleeting hour, Returns to You the gift of power,
- And we are with every year, All too ripe for the funeral bier.
- And who shall know the final time, When at last The Voice shall chime?
- For God to no man ever spoke, Revealing death, his end is cloaked.
- Whoever shall his house prepare, Leaves with joy; his reward is there.
- Do not safeguard with material things, Because this death eternal brings.
- May all my works in mortal life, Be done for Jesus' sake and strife.
- Jesus guide me through the years, Until the end to me appears.
- Yes, Joseph Kolb is my personal name, My life is grace, from God it came.
- I live now on this present Earth, As long as in it God finds worth.
- And when my life runs to its end, Release me from life's painful den.
- Yes, Father I give to you myself, Willingly upwards, this have I felt.
- Should my body become as the dust, My name will here be seen I trust.
- In Waterloo County still I breathe, Here to you my name I leave.

Joseph Kolb

- With love, and in remembrance to you, J.K.,
- Written in the home of your grandfather in the Township and County of Waterloo, and Province Canada,

1861. by I.Z. Hunsicker

Jacob Kolb and Isaac Hunsicker were apparently good friends, and it seems that Isaac taught Jacob the art of fraktur printing.⁴¹ This work continues to survive, passed down through the generations of the Kolb family. Jacob Kolb's granddaughter, Charlea Snyder, is now teaching her granddaughter the art.

Isaac Z. Hunsicker died the twenty-third of May, 1870,⁴² probably on the Kolb homestead near Breslau. At the time of his death, this poor schoolteacher's estate was valued at only about \$500;⁴³ however, his legacy to the world is incalculable: a continuing artistic cultural tradition.

⁴²Berliner Journal, May 26, 1870, p.3.

"Administrative Will, issued in Waterloo County: Folio 388, No. 793.

8

[&]quot;Information obtained from the Kolb family Bible, Doon Pioneer Village, Ontario.

Walls and Fences in Susquehanna County, Pennsylvania By Gerald L. Pocius

In many respects, the northern regions of Pennsylvania, especially those counties which border New York State, can be considered culturally and even topographically as the southern fringe of the New England region. The glaciation that took place in most of New England touched the northern part of the state, and the rolling tracts of stony land resemble those in New England (Watts, 1925, p. 23). The historical and cultural connections, however, are much closer.

By the end of the 18th Century, most farming regions in New England had been settled, and land prices were rising. Younger New Englanders began to look for new regions where farmlands would be cheaper, and a great migration out of New England was the result (Mathews, 1909). The impact of this migration was profound; as Zelinsky points out:

In fact, the cultural geography of nineteenth century America can be described, without serious exaggeration, as the continual pumping and spraying outward to west and south of a great array of novelties, locally invented or imported from abroad, from the New England reservoir (Zelinsky, 1973, p. 84). Stone walls marking the field patterns on a farm south of Montrose. Originally cleared, several fields are no longer used for pasture, and have become overgrown.

Central New York State became the home of many young farmers from Connecticut and Rhode Island, and other seekers soon found that the vast wooded tracts in northern Pennsylvania had not yet been touched by the farmer's ax. By 1810, settlers from New England, especially Connecticut, were arriving in this region, establishing farms in what would later become Susquehanna, Wayne, Bradford and Tioga counties. These migrants found a landscape not very different from the one they left behind in New England; only the trees that covered the valleys and hills seemed foreign to eyes used to symmetrical, cleared fields.

Connecticut Yankees set about to build their farms, quickly realizing that dairying suited this region where summers were short and the quality of the soil was generally poor. As soon as the farmhouse and barn were built, settlers turned to the construction of those material markers which not only kept their own cows and those of their neighbors out of the hay field (Buie, 1964, p. 45; Mather and Hart, 1954, p. 207; Via, 1962, p. 34), but also delineated the boundaries of the ground within which their proficiency and success would be judged. Fences and walls spoke of the farmer's domain on earth, his individuality within the community.

This essay will examine the various types of barriers and fences which have been utilized in one of Pennsylvania's "New England" counties, Susquehanna County, since the beginning of its settlement to the present day. Construction techniques for particular fences will be discussed, using information from various farmers in the county who were familiar with these processes. The extent that each type was used will be examined in general terms, based on several traverses through the county, and personal knowledge obtained through travels in this region during the past sixteen years. Three major types of fencing will primarily be discussed - split rail, stone wall, and barbed wire - each type apparently reflecting the attitudes of residents during the three major stages in the settlement and economic history of the county.



The bottom rails of a deteriorated rail fence, located east of Lynn. This fence had rock supports at the juncture of the rails.

Fences Within the County in an Historical Perspective

Fence-types built in Susquehanna County depended for their forms both on the fences found in the landscape of the settler's New England home, and the features of the landscape in the new region. Stone walls had begun to be built in New England during the period of westward expansion, but farmers coming into the county chose to build another type of fence instead. In fact, several early types were probably built, although evidence is sketchy in this matter.

In many areas of settlement in North America, some type of what is usually referred to as "primitive fence" was frequently used during the first few years of land occupation, although none of the major printed sources dealing with Susquehanna County mention the use of this type. Studies in other regions, however, indicate that stump or brush fences were constructed, and one study suggests that this type was used in the glaciated regions of Pennsylvania (Raup, 1947, p. 1). A brush fence consisted merely of piles of stones, branches, bushes and logs, piled at the perimeters of a field, acting as a crude barrier (Leechman, 1953, p. 220; Martin, 1974, p. 17). Stump fences were built from tree stumps that had been pulled out of the ground, usually by a team of oxen, and stacked side by side along the perimeter of a field, the root system of each stump forming the face of the fence (Martin, 1974, p. 16).

If these wilderness fences were used in the county, it was only during the first years of settlement. Early farmers most likely burned much of the wood that they had cleared from their land, thus ridding the area of obstacles for future cultivation; unlike the Upland South, trees most likely were not girdled before they were felled (Kniffen, 1965, p. 569).

Land had to be placed under cultivation quickly in order to sustain the new settlers. These wilderness fences could be swiftly and easily erected around the newly-cleared fields, but the life-span of the average fence was short. Another type was soon adopted which could be erected in a reasonably short time, but still using the large amounts of the wood that the farmer was anxious to clear from his fields. This fence-type, the split rail, had another advantage in that it lasted more than three or four years, the usual time in which a wilderness fence would have to be repaired or even replaced.

The split rail fence has been used since the earliest settlements in North America (United States Department of Agriculture, 1872, p. 499; Zelinsky, 1959, p. 15), with an early account mentioning its presence by 1621 in Virginia (Via, 1962, pp. 33-35). Some scholars have posited a North American Indian origin for this type (Leechman, 1953, p. 222; Raup, 1947, pp. 2-3), although European origins are more likely (Kniffen, 1965, p. 569). The split rail was an ideal type that could be constructed quickly and cheaply, when the length of time to erect a fence was crucial. This form was used throughout North America, both in the eastern regions of the United States (Glassie, 1968, pp. 225-228) and Canada (Leechman, 1953, pp.222-225), as well as in the more recentlysettled western regions of the continent (Fife, 1967, pp. 51-54; von Miklos, 1972, p. 91). This type required no posts that had to be driven into the ground, no holes to be cut into portions of the fence, or no type of metal hardware, such as nails, to hold it together. Danhof claims that rail fences were common after the initial wilderness types (Danhof, 1944, p. 178), and Hedrick, in his study of New York State agriculture, includes an early print of "newly cleared land" in an unidentified section of the state, showing a field with

^{&#}x27;For the evolution of fence-types in other regions see Myers, n.d., pp. 459-461; Roberts, 1905, pp. 336-337; and Symons, 1958, p. xii.

only tree stumps remaining surrounded by a split rail fence (Hedrick, 1933, plate opposite p. 166). Split rail fences were thus one of the earliest, and certainly the most widespread types used in the eastern United States, and were built throughout Susquehanna County during its initial phases of settlement (Fletcher, 1971, p. 87).

Split rail fences were characterized by their zig-zag construction, which contributed to their stability (Martin, 1974, p. 8), but necessitated the use of a strip of ground up to seven feet in width surrounding the field (Gross, 1926, p. 429; Long, 1961, p. 32; Myers, n.d., p. 474). The actual fence took up only a small section of this strip, and the triangular spaces within the zig-zag were filled with stones that were cleared from the planted fields. In some cases, rail fences were built over these stone piles (Symons, 1958, p. 70; United States Department of Agriculture, 1872, p. 501; Via, 1962, p. 38).

The process of land clearing thus influenced the type of fences that were built during the county's first fifty years of settlement. Removal of trees and large stones was the first priority, followed by the planting of crops. A great amount of time could be spent on fence-building only in later years when a farm was fully operational. Lee Snyder, a farmer from Hop Bottom, commented that rail fences, rather than stone walls, were initially built because it would take

too long to do it, to put 'em up first thing. Then they had t' have something t' get that stone together with when they were first here. Heck, they didn't have nothing much t' plough or anything with, more 'n' a yoke of oxen. There, they want. I don't consider that there was too many walls built at that time. Palettes of stone taken from a nearby wall awaiting pickup by a local mason. The stone will be used to build "rustic" fireplaces. Located near Dimock.

Summing up these reasons, Lee commented: "Well, it's a darn side cheaper and quicker and everything else. It takes time to lay a whole stone row up, stone wall."

As fields were worked after a farm was established, stones were removed each year during ploughing and placed on the periphery of the field, in the space taken up by the split rail fence (Kiebach, 1948, p. 12; Long, 1961, p. 30; Raup, 1947, p. 2). The few existing split rail fences indicate the earliest fencebuilding pattern in the county, and it was not until later that many were replaced by stone walls.

The rapidity with which a split rail fence could be built was soon overshadowed by its limitations. Fences in the county had been erected quickly and easily, but within fifty years had deteriorated badly through contact with rain and snow. In later years, these fences required almost annual repair, since most were not securely anchored into the ground, and the rails were often not tightly locked together. As previously mentioned, the fence itself took up a large amount of space, wasting land, as well as harboring the growth of weeds and brush (Danhof, 1944, p. 179; Hart and Mather, 1957, p. 6). After two to three generations of settlement, good lumber for new fence building and replacement rails was becoming scarce (Murphy and Murphy, 1937, p. 149), a problem which plagued much of the eastern United States by 1850 (Buie, 1964, p. 46; Danhof, 1944, p. 173; Raup, 1947, p. 3).

The solution to these problems was simple to county residents, many of whom still had contact with their New England relatives. Farms were now operational, and a greater amount of time could be spent on tasks such as wall-building. Although the building of a stone wall would take two to three times more labor than a rail fence (Danhof, 1944, p. 180), farms were now relatively stable enough to spare this extra time.

Many farmers, finding that the rail fences that enclosed their fields were in a state of disrepair, turned to this other form. Along the edges of these same fields, within the area occupied by the split rail fence, were piles of stones that had been removed from them. By dismantling the rail fence, a farmer could build a stone wall which maintained basically the same field dimensions, with the needed stone already near at hand for building. Getting rid of the rails was no problem; when asked about the advantages to the early settlers in building a rail fence, Lee Snyder commented: "Yes, there's one awful big advantage and that is if you don't want a fence there any longer, you gotta, you can always burn the rails up. You can't stone." Stone around field perimeters could be used for wall-building, and rows of stone along the edges of fields can still be seen today which were never used for wall-building (Myers, n.d., p. 467).

Surveys recording the percentage of fence types in a geographical region are problematic, since much of the information is usually based on fences built along public roads, rather than the internal and external fences used on a farm. Arriving at statistical data is also difficult, since many types of fences are often seen stretching over any one recording point chosen on a public road. One statistical survey of the county concerning fence-types was completed in 1871, but the methodology is not discussed. Although the figures from this survey cannot be accepted as definite, they may indicate trends that were occurring in the county by the last quarter of the 19th Century (United States Department of Agriculture, 1872).

By 1871, according to the "regular statistical correspondent" of the United States Department of Agriculture in the county, 60% of the fences were split rail, while 35% were of stone. This survey is significant, not only for its rough delineation of fence-types in use at the time, but also because of the date of the survey itself. One year after it was published, barbed wire was invented, and quickly became accepted in most regions of rural North America (McCallum and McCallum, 1965). Thus, it is likely that this U.S.D.A. survey points, at least generally, to the kinds of fences used in the county before this technological revolution. The split rails, as they crumbled, would most likely be replaced with barbed wire after its invention in 1873. The general percentage of stone walls found in this survey would be much more stable, since they were longer lasting (Figure 1). The farmers in the county during its initial years of settlement used rail fences almost exclusively, but as farms became established and rail fences deteriorated, stone walls began to replace them. Perhaps as much as 40% of the fences in the county had been stone walls by 1875.

By the late 19th Century, the county had become a large producer of agricultural products, and the sizes of dairy herds on each farm had increased. The amount of time available for chores such as fencebuilding would not be as great as in the past. The new barbed wire fence could be erected quickly, and had many advantages (Hart and Mather, 1957, p. 8; Leechman, 1953, p. 232). Many of the rails from the earlier split rail fences, in fact, were cut and used as posts for the barbed wire fences, according to Lee Snyder (Scherck, 1905, p. 112). Farmers no longer had the time to build walls, or even split rail fences, now attending the larger herds of cows on each farm.

If 60% of the county was covered with split rail fences in 1871, then it is likely that most of these fences have since been replaced by barbed wire. Split rail fences are rare in the county today, and when found are usually dilapidated, and a barbed wire fence often stands over it. In several traverses through the county covering forty-eight miles, only one four foot length of rail fence, which was partially intact, was discovered (Figure 2). Split rails are now used for either barbed wire fence posts, or as a source of summer stove wood (Scherck, 1905, p. 112; Symons, 1958, p. xiv).

Stone walls are also gradually disappearing from the county, especially during the past fifty years, having been used for several purposes. During the 1930's, under W.P.A. supervision, many roads were paved, and most utilized stone from nearby walls as a foundation (Gross, 1926, p. 430; Kiebach, 1948, p. 14). Karl Gesford, a farmer from Dimock, recalled:

At that time, we didn't, all these roads around here were dirt roads, y' know. It started around 1931, that's when it started. The first road they built around here was from Dimock to Rush, and they didn't use stone on the bottom. They put gravel on the bottom, and it didn't hold up. Then they started gettin' these stone walls.

Farmers would give the stone walls to the road crews, not caring about remuneration. In the past few years, however, this attitude has changed.

Stone walls are now being sold to masons who are working within the county. The stones are being used for fieldstone fireplaces becoming chic among farmers, increasingly exposed to commercial advertising dealing with alternative styles of house decoration. Instead of gathering these stones in pastures, masons are now buying entire stone walls, and can load them directly onto their trucks. Farmers who sell their walls are sometimes expected to load the stone onto wooden palettes, and these are sold for \$42 apiece (Figure 3). Walls are often sold from sections of a farm where fences are no longer needed; if a boundary marker is still needed, barbed wire is used to replace the wall.



Top of a stone wall near Springville showing the two parallel faces and the rubble fill placed between them.

The Construction of the Split Rail Fence

When settlers arrived in Susquehanna County from New England and New York in the early 19th Century, they came upon a region heavily forested by a wide variety of tree species. In spite of this abundance of numerous types, settlers preferred specific kinds of wood for building rail fences.

Lee Snyder commented that chestnut was the type of wood used most extensively for fence-building, mainly because of its durability. Ash and oak were also used, but chestnut was preferred (Anon., 1859, p. 174; Deane, 1797, pp. 134-135; Fessenden, 1840, pp. 205-206; Kalm, 1964, I, pp. 238-239; Long, 1961, p. 34; Martin, 1974, p. 7; Via, 1962, p. 38; Withers, 1950, p. 225). Chestnut trees in the region were greatly reduced in number by the blight that struck many regions of the eastern United States around 1904 (Kiebach, 1948, p. 12; Via, 1962, p. 39), but this reduction occurred after the construction of rail fences in the county had, for all practical purposes, ceased.

A tree that was to be used for the fence rails would be chosen in the forest, then felled. All branches would be trimmed, and the log would be cut into ten to fourteen foot sections, ready for splitting (Anon., 1859, p. 175). Lee Snyder remembered that a stick was usually employed to measure the length of the log. The length of this stick was not crucial, and might be only half or a third of the desired length of each rail. It was used as a guide, however, to ensure general uniformity in length, since constructural stability depended on dimensional uniformity.

Once the log had been sectioned, it was ready for splitting (Esarey, 1953, p. 77-78; Symons, 1958, p. 56). It was subdivided into halves, quarters, and finally eighths, using a number of wedges and a large hammer, known as a maul (Withers, 1950, pp. 226-227). Each rail was not individually removed, but the log was always subdivided. As Lee Snyder pointed out, "If you try to split just one side, it will eat right off." Originally, both wedges used for splitting, and the maul itself, were made of wood. Lee remembered: "They used to use, they used wooden wedges a lot. Even had a wooden maul that they'd, ah, pound the wedge with so it wouldn't go to pieces." The head of the maul was cylindrical in shape, and, in Lee's words, "have bands of iron shrunk right onto" each end of this cylinder, preventing it from splintering after repeated use. The iron bands were first heated until white hot, and then placed over the ends of the maul, as they shrank, they contracted, ensuring a tight fit. A long handle was inserted into the cylindrical section of wood, and the maul was ready to use.

When the splitting of a log began, a series of wedges was driven into the log linearly along its length. The farmer would begin by driving one wedge in fairly deep near the end of the log, and continue with another wedge about 1½ to 2 feet away. If all went well, the log split linearly, and the wedges would be driven in a straight line. If the split would begin to deviate from the desired plane, the next wedge driven into the log could be used to direct the split back to the desired plane. As Lee Snyder commented:

If you, ah, if you take and, ah, and just, ah, just take a small piece off, it'll, ah, before it goes great ways, it'll run, and then if it gets t' runnin', why drive a wedge or take an ax and, and eat it over on the big side so's to keep 'em near equal as possible.

After the rails wre split, the bark was removed since it trapped water behind it, hastening the rotting process.

The simplest form of rail fence generally consisted of a series of rails stacked one over another. Each rail from one long section of the fence was laid on top of a rail from the next section at the point of junction, much like corner-timbering in a building without the notching. The rails would overhang at this junction approximately one to two feet; the angle of intersection generally was greater than ninety and less than one hundred and thirty degrees.

The bottom rail of each fence section was usually placed on some type of support, to keep it from rotting in the dampness of the ground, as well as providing support. In the county, stones were often used for this purpose (Anon., 1859, p. 175; Henning, 1967, p. 7; Long, 1961, p. 33). Karl Gesford commented about this practice: "You start out with them [rails], you'd generally put a pretty good stone on the bottom, on the ground to set your rail on. Get it up out of the dirt, and make it solid." Small pieces of wood were also used for this purpose (Withers, 1950, pp. 227-228); Lee Snyder commented: "They'd lay the rail down on the ground or they'd put a little stake down there for t' lay it into so's to keep it off the ground so's it wouldn't rot."

Rail fences were often built with each section containing six or seven rails. As the fence was built up, however, the upper rails often lacked stability, and various methods were devised in most regions of North America to secure these upper rails. The most widely used method, in Susquehanna County, and in North America generally, was the construction of what is known as a "stake and rider" fence (Fletcher, 1971, p. 86; Hart and Mather, 1957, p. 6).

Before the last one or two upper rails were put on each section, a brace was placed on either side of the junction of the two sections crossing each other, forming an 'X', and wedging over the top of the uppermost rail. These stakes would provide lateral stability for the fence; in the western United States they were known as ''jacks'' (Fife, 1967, p. 52). On top of these cross sections, another rail would be laid, running to the next braced junction. These top rails that fitted into the support stakes were known as ''riders,'' and they would lock the supporting stakes together at their junction.

Several methods were employed to ensure that the junction of the rider and stakes was secure. Karl Gesford remembered: "I've seen 'em when they would lay a flat stone in there and put another one [rail] on. Maybe have two top rails." This stone would hold the rail sitting in the stake junction in place, as well as providing a flat surface for the top rail. Lee Snyder pointed out that small pieces of wood were often forced into the interstices where all the rails would join, much like chinking used between log walls, making all the junctions more secure.

By the latter half of the 19th Century, wire was purchased and used to secure this stake-rider junction with the junctions beneath it (Anon., 1859, p. 175). Lee Snyder described this technique:

They even sold wire years ago a purpose for wiring the corners. And, ah, you took, ah, you put it under one, on the last rail that you's puttin' up. You put it on there and run it under your fence and put it on to this here [rider], and when you raise it up, it would tighten that corner so tight that you couldn't wiggle it noways and lay that on the fence. Well then, you'd put your other fence onto that, or then put, ah, get another one where you'd put a wire around that and it'd just merely tie the fence with wire so's that, ah, they wouldn't fall down. If it was, well, properly wired in that way, why, the wind could blow that fence clear over and it wouldn't get away from itself.

Lee's comment about the possibility of a fence tipping over is no exaggeration, since they were generally not securely anchored to the ground. If a fence were tightly joined at the corners by wire, then conceivably an entire fence section could tip over.

Similar problems were encountered if the fence was built on a steep hill. Lee Snyder pointed out that in this situation, stakes were often driven into the ground along the edges of the fence to keep it from tipping over **en masse**. He commented:

If you's wanted to put up a split rail fence over that hill, you'd put 'em up there and they'd, the weight'd pull ya right down where ya's going uphill. So they would take and drive in a pair of stakes t' every rail ...But your rails was all put in level and they just keep a drivin' stakes in and, ah, t' hold 'em up there.

This type represented a combination of the standard stake and rider fence, with added vertical supports.

Building Stone Walls

The second period of fence-building in Susquehanna County consisted of the construction of stone walls. These walls were built extensively throughout the county, and, indeed, throughout the northern parts of Pennsylvania settled by New England migrants, as well as other regions of the eastern United States (Allen, 1899, p. 23; Glassie, 1968, pp. 99-101; Robinson, 1936, p. 439; Rollins, 1883, p. 54), and the British Isles (Young, 1969, pp. 97-98). Settlers utilized for these walls the large numbers of flat glaciated sandstones found in the northern regions of the state.

The construction of a stone wall on a farm obviously served two purposes. As a farmer removed stones from his field, he piled them near its edges, and as these rows of stone became larger, he could use the material for fencing. Lee Snyder pointed out this dual function of wall-building; their construction "got rid of the stone" and it would "take care of the stock" by creating a needed barrier.

Walls would most frequently be built in the spring of the year, before the agricultural round began. Just as the stars and planets had an effect on the growing of crops, so, too, did they influence the time when a wall should be built. Specific times of the month would be chosen to build a wall, as Lee Snyder pointed out:

I'll tell ya. Wouldn't nobody would agree with me today, but there was an awful, there was one thing about it, ah. They, they, you take and lay stone up one time of year, one time of the moon and the darn thing'd go right down into the ground. Put it down the other time, it will stay on top. A stone wall, according to Lee, will gradually sink down if it's built "at the old of the moon".

A foundation for the wall was generally not dug into the ground (Anon., 1859, p. 110). Instead, large stones, often four by six by one feet in dimension, would be moved into place as the bottom for these walls (Manners, 1974, p. 100; Needham and Mussey, 1965, pp. 56-57). Herbert Wilkins, a farmer from Hop Bottom, described how these were moved into place: "Them walls was built with oxen. They skidded them big bottom stones in with oxen, 'n' they sometimes used maybe two, two teams of oxen to skid those bottom rocks in". After these foundation rocks were placed in position, smaller stones were used to build the remaining portion of the wall. Walls in the county ranged in height from two to seven feet, and from two to six feet in width at the base, usually tapering inward as the walls rose in height.

The two faces of the wall were built simultaneously, usually building up the wall course by course. Guidelines and frames were apparently not used to keep a wall face straight, as in other areas (Manners, 1974, p. 102; O'Neill, 1859, p. 554; Stephens, 1855, II, p. 589). One straight edge of a stone would be laid along the exterior edge of the wall; if the stone had several straight edges, then generally the longest was used on the wall face. Much of the wall was thus two parallel courses of stone, rather than stones running from one face to the other. If need be, a stone could be trimmed to fit into a particular space, using a stone hammer, a tool the size of a normal hammer but with a wedgeshaped head (Anon., 1859, p. 110; Stephens, 1855, II, p. 588). However, the builder often prided himself on making all stones fit without trimming, feeling that every stone had a place along the edge of the wall. Karl Gesford commented on this idea: "But most of them stone that they built stone walls out of, there wasn't too much trimmin' to them. Most all stones have one square face, and ya generally put that on the outside." If a rectangular stone was found with the two shorter dimensions quite straight and parallel, this could be used to run from one wall face to the other, helping to tie the two courses together, although not many of these were used in each wall (Anon., 1859, p. 110).

Each wall face was built with special attention to lapping one stone over another, especially important since no mortar was used in the wall. Karl Gesford described this process:

If you, you might have two or three small stones down, if they was good stones. They didn't have to be a big stone. You could put it on. But then put a, you'd get a bigger one and lap, try to lap it over them small ones. That makes anything made that way'll be stronger. The farmer was always searching the piles for the ideal stone for each joint.

As the two wall faces were built up, smaller stones, often circular and without straight edges, were thrown in between the two faces (Figure 4). "Well, you'd throw anything in there, any shape just t' fill up," according to Karl Gesford. This interior fill was packed tightly within the wall (Kiebach, 1948, p. 13; Long, 1961, p. 31; Manners, 1974, p. 102), locking the two faces together, and providing a good drainage system which kept water from lying in the interior of the wall. Such water would eventually freeze and then thaw, dislodging the stones.

If walls were built of a low height, then stones could be lifted by hand, even if they were of a larger size. However, in some walls, such as those on the old Henry Strickland farm in Springville township, larger stones were placed near the middle or top, and apparently could not have been lifted to such a height by hand. Karl Gesford remembers his grandfather describing a method that was often

Stone wall near Springville with overhanging rocks for a cap. According to some farmers, this prevented sheep from climbing over the wall.



used in these situations, commenting: "Why, they'd, ah, put a track down, and put a roller under 'em." The track or ramp would consist of several planks sloping up to the top of the wall where the builder was working (Fields, 1971, pp. 29-30; Martin, 1974, p. 20; Rainsford-Hannay, 1972, p. 16).

When the desired height for the wall was reached, the final row of stone was often constructed in a special manner. Large stones covering the entire top of the wall were utilized, preventing the interior rubble fill from becoming disturbed. In some cases, the longer sides of rectangular stones were placed perpendicular to the direction in which the wall ran, thus producing an overhanging edge (Figure 5). This overhang may have prevented sheep from easily climbing over the wall (Deane, 1797, p. 135).

Even more widespread was the use of vertical capping, a technique also used in England (Copland, 1866, pp. 684-685; Holme, 1912, opposite p. 110; Jenkins, 1965, p. 170; Manners, 1974, pp. 102-103; Rollinson, 1972, pp. 9, 14-15; Stowe, 1973, p. 43), and Canada (Leechman, 1953, p. 234). Flat stones were placed in a row vertically along the top of the wall, slanting at a slight angle (Figure 6). This slant, in effect, locked the cap together, and contributed to the stability of the top section of the wall (Nicol, 1803, pp. 297-298; Raistrick, 1973, p. 19). When asked why this vertical capping technique was used, Lee Snyder replied: "Because, ah, a lot of people wanted to get up and run on top of it, and if you put, if you stood 'em [the stones] up that way, they never did." Karl Gesford claimed that this capping discouraged livestock from attempting to climb over the wall, since there was no ledge on which to get a proper foothold (Rainsford-Hannay, 1972, p. 39; Rollinson, 1972, pp. 8, 15).

Besides keeping livestock out of planted fields and providing a means of ridding the borders of a field of stone, walls also served other functions. In an early cultural landscape that was frequently changing, stone walls were one of the features which could not be easily moved. Hence, they seemed to have been used in some cases for boundary markers. Karl Gesford cited a case on a neighboring farm:

Over there, they didn't go away. You put a stake in there, use a tree, the tree dies. Your old deeds use t' say 'to a big elm tree', or something, or 'a big maple tree'. Some just had a stake, iron stake drove in there. Or, I suppose years ago they used wooden ones. But this fellow, his fields over, 'cause it joins me over here, I've seen it. He's gotta, his corner he puts a triangle, makes it outa stone there, maybe eight, ten foot. And that's, that'll stay there. You're not gonna move that.

Land boundaries could not be shifted easily when stone walls provided the marker.

Like all types of fencing, stone walls were generally checked in the spring of the year for breakage, and necessary repairs were made. Initially, portions of the wall'that had fallen out were rebuilt with stone. But Karl Gesford pointed out that, "in later years, maybe a piece'd fall over, a chunk right out of it. They just put some wire across there. Couple wires and a couple a fence posts, patch it up." Many portions of stone walls can be seen today (Figure 7) with single strands of barbed wire stretched between two posts where the top stones have fallen (Leechman, 1953, p. 233).



Stone wall near Hop Bottom with a vertical stone cap. This finish helped to stabilize the wall.



Stone wall, with several feel of the top portion removed, now bordered by a barbed-wire fence. Located near Elk Lake.

Barbed Wire Fences

After the invention of barbed wire in 1873, and its widespread acceptance, barbed wire fences became the only type of new fence built in the county, and this remains largely the case today, The most common wire fence consisted of parallel strands of wire fastened to upright posts placed in the ground.

Locust was usually the preferred wood for fence posts, and from the late 19th Century until about ten years ago, locust posts were usually cut on each farm (Greeley, 1871, p. 223). The trees were felled, trimmed, and cut into six foot lengths. These sections were then split using the same techniques that produced rails for fences (Martin, 1974, pp. 95-96). Finally, the end of the post was pointed with an ax.

Today, with a scarcity of locust on many farms, fence posts are often bought, costing approximately one dollar apiece. Karl Gesford related that these "boughten posts" are already sharpened, ready to place in the ground. Scarcity of timber, combined with little available time for splitting rails, led many farmers to disassemble their rail fences, and, as Lee Snyder remembered, "lots of those rails was cut right up into posts".

After the posts had been cut, they were ready to be placed in the ground along a predetermined fence line. When asked how far posts were placed apart, Karl Gesford replied: "Well, that generally depends on really how the money holds out. I put these [posts] pretty close up here. Five paces, they used to say, but that's plenty far." Thus, posts would be separated by a distance of about fifteen feet.

Once the spot where a fence post would be placed was determined, several tools were used to insert it into the ground (Martin, 1974, pp. 97-98). Karl Gesford described this process:

Just take a crow bar. Well, they do have post hole diggers. Take a crow bar and make a hole and put it down there, and getta, have a stool or chair or something to stand on. And then take a twelve or sixteen pound maul and sock 'em right in.

The posts for the entire row of fence would be placed into the ground before the wire itself was fastened to the posts.

After the posts were in place, the barbed wire was strung from post to post. Each strand was strung individually along the entire length of the fence before the next strand. Spacing between strands was usually kept uniform, often using some type of object for measurement. A neighbor of Karl Gesford's "used to take his hammer and he had a mark on there, the hammer, how far apart to put it [the strands]. You known, just quick. It wasn't exact. Give you an idea".

The standard barbed wire fence used four strands. A cheap fence would contain only three, while if the money were plentiful, a five-strand fence would be made. But Karl Gesford pointed out that most farmers can't afford five today. A roll of barbed wire, eighty rods long, now costs \$32. Various types of barbs were available (Martin, 1974, pp. 43-49; Thames and Hardcastle, 1974, pp. 8-14), and the wire was fastened to the posts using steel staples (Martin, 1974, p. 49).

Barbed wire fences required more maintenance than the sturdy stone wall, and, as with the walls, would be checked for damages every spring. Karl Gesford commented on various techniques for repairing the posts on a barbed wire fence:

But the main thing is t', just because ya build it, don't think that that's going t' stay there forever. You gotta go over it about once a year. You'll find a post that maybe was in a kinda wet place and it'll lop over, and they'll work up. Straighten 'em up. And you might get one that was a poor post or somethin' and it'll rot off on the bottom. Well, then, generally stick another one in so it's beside it there like the telephone company do. You've seen them where they fasten 'em onto. And they cut one off generally and put one right on and they tie the wires right around it, and fasten right t' the other.

Instead of replacing fence posts directly, new posts were fastened onto the older posts.

The side of the post onto which the barbed wire was fastened was also significant. The strands of wire would be nailed onto the inside of a post that faced into the enclosure where the livestock were kept. If a cow should poke his head through the fence, pushing against the wire, he would also push against the fence post. If the strands were placed on the outer sides of the posts, the cow would find it easier to remove merely the staples that held the wire, rather than exerting pressure on the post. The end or corner posts of the barbed wire fence were often braced with diagonal stakes running from the top of the post on an approximate forty-five degree angle to the ground. In some instances, wire runners were used instead of the wooden post in the same manner.

Barbed wire fences were used primarily to enclose cattle or horses within a pasture. Smaller animals, however, could fit through the one foot spaces between the strands, and other types of wire fences were developed. Sheep were raised on some Susquehanna County farms, and woven wire fences were employed to keep them within a pasture (Mather and Hart, 1954, p. 202; Symons, 1958, pp. 90,92).

Woven wire fences are made from cylindrical rolls of woven wire purchased at local supply stores. The woven wire consists of a series of unbarbed wire that has been interwoven into a series of squares, approximately four inches to a side. This wire is unrolled along a line of fence posts, and stapled to each post. The close mesh of the fence prohibits smaller animals from escaping. The fence posts are often left purposely higher than the attached woven wire, and a single strand of barbed wire is strung along the length of the fence at the top of the posts, discouraging sheep from jumping over it. Besides the added expense of using woven wire as opposed to barbed wire, there are other disadvantages. Karl Gesford commented that: "Woven wire is a good fence as long as it's kept right up there. If it goes down, it'll always get kinks in it. You never can put it up the same again." This propensity to tangle and its higher cost point to the fact that this fence is used only when necessary.

Fences as Symbol

An underlying attitude among many Americans, common even today, centers on the appearance of an individual's dwelling house and property, and how these are often used to indicate the material success of the inhabitants. If the exterior of the house is properly painted, and the lawns always kept well trimmed, then hopefully this will reflect the orderliness and prosperity of the owner. Success in life is displayed to the world through the size and exterior decoration of the house and its surroundings.

The farmer could keep his house maintained and his garden and flower bed properly weeded to indicate his farm's prosperity. However, unlike his town brethren, his source of livelihood, the farm, surrounded him, and his symbolic expression of success could extend to its very source. If material objects connected with the farm were "better" than a neighbor's, then the farmer's monetary success was indicated. Material objects, including fences, were used by some



Top of stone wall on the Dietrich farm near Springville. This wall is over four feet in width at the top, with a wider base.

farmers as signs of material, and perhaps ultimately spiritual, success. Danhof, commenting on the use of fences, realized that, "indeed, the quality of enclosures was not uncommonly taken as a measure of the farmer's competence (Danhof, 1944, p. 169). On some farms in Susquehanna County, this may have been the case.

The old Henry Strickland farm, located in Springville Township, has always been a source of wonder for residents both within the township, and even in surrounding townships. The farm is now owned by Louis Dietrich, who has been living there since 1950. The old Strickland farm, like many farms in the county, still contains stone walls within its boundaries. However, the stature of these walls is still cause for comment; most are at least six feet high, four feet at the top, and six feet wide at the base (Figures 8 and 9). Local farmers still discuss why these walls are so much larger than even those on neighboring farms.

Dietrich feels that the walls on the farm he now owns were not built in Harry Strickland's lifetime. Karl Gesford, who unlike Dietrich was born in the county and has lived there since a child, believes that Strickland may have built the walls himself as a young man. In any case, the builder must have wanted to fabricate walls that were noticeably larger than those on the farms around him.

The size of the walls cannot be explained by positing that the ground in this area contained more stones than others. When land was initially cleared on every farm, a certain number of large surface stones was dragged to the peripheries of the field, later forming the foundation of the wall. Once a field was plowed, stones were removed that were turned up by the machinery. The removal of stones was not a finite process, according to farmers who were interviewed. Herbert Wilkins claimed that stones have a tendency to work themselves up to the surface of the ground through the action of freezing and thawing. Whatever the reasons, stones can be removed every year from a field, in spite of the fact that this has gone on annually for the past hundred years. Even today, Louis Dietrich still uncovers numerous stones in those fields surrounded by six feet walls during spring plowing.



One of the walls on the Dietrich farm, almost six feet in height.

The farmer who built the stone walls on the Dietrich farm spent many hours removing stones from his fields. This apparently occurred year after year, thus displaying more energy than many farmers in the region. Ultimately, this stone was used to build massive walls, standing as a sign to neighbor and stranger alike that the farm's owner spent long hours working to make his farm productive. Even during winter months, when growing crops could not speak of the farm's productivity, row after row of large walls indicated that the fields were well cleared of stone, thus producing healthier crops, and providing economic success. Not only did the neat farmhouse and barn signal the owner's success in life. Every portion of his farm contained high barriers which spoke of his hard work in contrast to his neighbor's, and even today, although the builder is unknown, farmers still discuss the almost superhuman energy that this farmer must have had. They feel that he must have been one of the most hard-working farmers in the entire county. The symbols of industry in the county have changed, however, now centering on the number of cattle raised on the farm, the kinds of automobiles that the owners can afford, or the degree to which the farm has been mechanized.

The change in the county from rail fences to stone walls to barbed and woven wire signalled changes in technological alternatives, as well as in changing land use and leisure patterns. Like the early stages of settlement, rail fences were fragile, and had to be erected quickly. Stone walls indicated the prosperity that had come to the county, with long hours of work that now could be spent on their construction producing permanent statements of success. Finally, barbed wire fences could be quickly erected, and their components were often purchased, rather than produced on the farm itself. The rapidity of their construction paralleled the split rail fence, but they were of a much more permanent nature. The sophisticated barbed wire fence reflected the increasing division of labor within the country since the late 19th Century.

These changes in the artifacts used for the fencing of the farm reflect the basic attitudinal changes in the county, and are looked upon in a linear sequence by residents. One fence-type has replaced another, and the farmer usually does not express the opinion that he has an option to return to an earlier fencing mode. Although reminders of past forms are all around, only the most recent type can be used.

Barbed wire fences are made today. Lee Snyder recognizes that this type is the only acceptable form. Although his father had built several stone walls on his farm, wall-building cannot be justified in today's highly specialized agricultural economy. If it does occur, it is an anomaly; about this Lee commented: "Oh now, you know, there is some people that wants t' be a little bit odd. Somebody that'd go out and do something for just merely a show. But, ah, for real purpose, no." The construction of walls is not possible on the typical working farm.

The building of rail fences and stone walls occurred in an economy much different than that of today. Karl Gesford was amused that some people looked upon these earlier fence forms as "quaint" or "oldtimey," instead of a source of firewood, or roadbed material. A new ranch-house in Dimock has a small, reconstructed split rail fence along its front lawn, and Karl commented amusingly about it:

Now this fellow up the road here. He's got that [fence] just for antiques. [Oh, you mean they take the whole fence and put it in?] Yeah, you pick it up, what is good, and he made a fence around his door yard up there. I said, 'Well, that must be a mess when you come to mow.' He said, 'I just pick it right up and set it over.'' He didn't have it so high like they did as old, when you turn out the cattle. He had [it] more for an ornament there, an antique ornament. That's what he put it up there for.

The process of disassembling stone walls or using

split rails for fence posts or stove wood signals that these artifacts are former stages of fencing modes that have been replaced in the process of technological evolution. They can only be "ornaments" or "antiques" today, built by "odd" people. Technological and economic progress is irreversible in the minds of county farmers, and numerous artifacts are strewn along the pathways as markers of an earlier age. Generally, it is accepted that this path is only one-way, with each segment superseding and replacing the former. The selling of palette loads of stone from walls brings needed income, just as the selling of older barns to those interested in panelling their recreation room with "real weathered barn wood". The walls and fences of the county may have become icons to city and town folk, but they are products of a vanished social and economic system to county farmers. While the farmer recognizes many of the reasons why his grandfather may have built a stone wall, he realizes that in the society in which he now lives, each palette load of stone which he sells will defray the cost of farm machinery. In an economy where a twenty thousand dollar tractor is now a necessity, even the "antiques" and "ornaments" that surround the fields of the farm must fall, for they are now only a luxury.

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Glossary of Pennsylvania German Terms Related to Construction and Tobacco Agriculture Robert A. Barakat

During the course of numerous interviews with Pennsylvania-German speaking tobacco farmers and carpenters, all of which were recorded on magnetic tape for study, it was discovered that an extensive technical vocabulary exists for construction and agricultural practices. Such a glossary is revealing for several important reasons, notwithstanding the fact that it offers an excellent technical lexicon of two subjects of great importance in Pennsylvania-German culture. Since Pennsylvania German is not really a written language, although attempts have been made to use it as such, the orthography employed here attempts to present the items as they are pronounced using Germanic orthography.1 Whenever possible, both the definite article, singular and plural forms for the nouns are offered. Verb forms are given in the infinitive. Moreover, several items have more than one form or more than one possible Pennsylvania-German term for English equivalents; these are presented whenever they arise in the glossary.

A cursory analysis of this lexicon reveals that a great many of the items are simply English words that have been Pennsylvania-Germanized to fit better into the sound system of the dialect. For example, brace and hinge are rendered as brees and hintsch while joint is tschoint. Articles are also employed so that the words used from English will fit into the grammatical system of Pennsylvania-German. Thus, for example, der brees, der hintsch and der tschoint. Plural forms are of further interest, so that der brees becomes die breese, der hintsch becomes die hintsches and der tschoint, becomes die tschoints, each plural form altering its definite article according to German usage. Those plural forms noted here, at least those for hintsch and tschoint, employ "s"-forms such as would be appropriate in English grammar. Both hintsch and tschoint, in their plural forms, offer excellent

'I should like to thank Phares Hurst and Don Yoder for their expert assistance in not only compiling this glossary but also for suggestions on orthography. For one who is not fully familiar with the sound system of Pennsylvania German many problems might arise in transcribing words and phrases. Both of these men saved me from this fate. However, any mistakes are mine.



Spearing tobacco stalks onto laths.

examples of the rather pervasive influence of English on Pennsylvania-German in that one may observe not only the dialectalization of the nouns in the ge (hinge) sound, j (joint) to che (hinche) and tch (tschoint) respectively but the additional use of -s to form the plural. In a sense, the use of -s is redundant in that the plural article, in both instances die, serves to mark the forms as plural.

Two-word nouns oftentimes combine both an English word and a Pennsylvania-German or German word with appropriate articles for singular and plural forms. Examples of two-word nouns composed of English and Pennsylvania-German or German words are *es hip dach* (English: hip roof or gambrel roof), *der center poschte* (English: center post or middle post) and *die laad duwack* (English: load of tobacco). In their plural forms, *es hip dach* becomes *die hip decher, der center poschte* becomes *die center poschte*, and *die laad duwack* remains the same.

Of course, it is possible to have English words and phrases translated directly into Pennsylvania-German, particularly technical ones having to do with tobacco agriculture. Several tobacco diseases illustrate the point. Griene roschte is simply green rust in English but with an article added to give der griene roschte. Griene and roschte are dialectized forms of the German words Grün and Rost. Similarly, der versoffne duwack for drowned tobacco; der verfrohre duwack for frozen tobacco; schop verbrennte for house burn; and fauli ribbe for rotten ribs, illustrate this tendency. Versoffne is the dialectized form of Versoffen, an adjective meaning, among other things, flooded, while duwack is the dialect form of Tabak. *Verfrohre* is from *verfrieren* (to be spoiled by frost); Schop derives from Schopp or Schuppen (shed) while verbrennte comes from verbrennen, German for to burn. Fauli is the adjectival form of verfault and Ribbe derives directly from Rippe, but is dialectized, the p sound becoming b in Pennsylvania-German.

The remaining group of words and phrases in this lexicon derive directly from German but in dialect forms which render certain sounds in German in ways appropriate to the dialect or they are local inventions. For example, Tenne (threshing floor) is pronounced denn which levels the initial t sound to a d sound. Initial pf — in German becomes b in Pennsylvania-German, such as in blanze for pflanze and so on with numerous other examples. Since Pennsylvania-German is not a fully developed written language, its orthography is not consistent in those attempts to present it in either literary works or in dictionaries, a least, not when one compares these several works with each other. Moreover, many of the dictionaries of this dialect omit Germanized English words on the basis that they are not part of the dialect nor of German.² We argue that any word no matter

²For example, see Marcus Bachman Lambert, A Dictionary of the Non-English Words of the Pennsylvania-German Dialect, The Pennsylvania-German Society Proceedings, XXX (Philadelphia, 1924).



An old tobacco curing shed in Churchtown, Berks County.

what its origin is part of the dialect because it functions just as any German word does.

This list, therefore, represents an attempt to bring together as extensive a corpus of Pennsylvania-German dialect terms as possible that relates in some way to tobacco agriculture and construction. However, we should caution the reader that this list in no way may be considered complete since it simply was collected as part of a larger study of which this glossary is of only peripheral interest. Furthermore, the fact that these materials were gathered in only a very small geographical area of the Pennsylvania German speaking communities in Pennsylvania would indicate that a great deal remains to be done before any definitive glossaries may be written. To our knowledge, only one attempt to date has been made to compile a glossary of technical terms related to construction and barn parts, that being by Shoemaker.3

Shoemaker's work offers an excellent model for any work in dialectology in a highly specialized subject such as construction or agriculture. To illustrate the dialect terms for sections and parts of a tobacco shed, Figures 1 and 2 include them.

GLOSSARY

- ADZE: der dechsel (G Dächsel). Always drop your laths between two rows: Immer dutt mer die lettlin zettle fer zwee roijet nemme. This is a phrase one often hears during harvest when the young children are required to distribute the tobacco laths along the rows in a specific order so that one lath may be used for five or six stalks, depending upon the size of the stalks.
- ANTHRACNOSE: *fleckich (G fleckig)*. A disease usually confined to tobacco seedbeds in which

³Alfred L. Shoemaker, "Barn Terminology," in *The Pennsylvania Barn*, edited by Alfred L. Shoemaker (Kutztown, Pa., 1959), p. 46.

seedlings are grown. It is caused by a bacterium, *Colletotricum sp.*, which creates large lightcolored spots on the leaves. In addition, the lower surfaces of the midrib and the lateral veins develop red-brown, elongated lesions. Plants affected by this disease usually have puckered leaves and are stunted in height.

- BACK: *der buckel (G Buckel)*. This term is used to identify the back side of a piece of lumber as opposed to its face side.
- BALE: die beel, die beele (E bale). Bales of tobacco are made in tobacco presses or bale boxes. Some are sorted and sized leaves, some are unsorted and unsized. These are covered with brown paper and are tied with twine. Weights and sizes of the bales vary but the weights fall generally within the range of from 50 to 70 lbs. Cf. Bale Box; Tobacco Press; Size (to); Sort (to).
- BALE BOX: die beel bax, die beel baxe (E bale + E box). A box specifically designed and built to compact tobacco after it has been stripped from the stalks, sorted and sized, although the latter two steps are being eliminated nowadays. Various designs exist but generally they are of wood, or possibly metal sheets, with hydraulic or hand-manipulated levers for compressing the leaves into the box's form.
- BANKHILL: die eifaahrt (G Einfahrt). In the larger barns in which animals are stabled in the basement and in which threshing is carried out on the second floor, the bankhill or ramp is built up so that a wagon may be driven onto the threshing floor, or *denn*. Tobacco sheds have bankhills on one or both gables. Cf. Ramp; Barn; Tobacco Shed; Barn Floor.

BARK: die rinn (G die Rind).

- BARN: die scheier, die scheiere (G Scheuer, Scheune). This term identifies the large barn on farms in which animals are stabled, and threshing is done, or in which hay is stored. Other buildings are either referred to as haus or schop. The distinction between scheier and haus or schop is quite clear and these are never used interchangeably. Die bauerei scheier, meaning "the farm barn," may also be used but not as often as scheier to distinguish it from tobacco barn.
- BARN FLOOR: *die denn, die denne (G Tenne).* Threshing was once a main chore carried out on the middle section of tripartite divisions on the second story. A common feature of the threshing floor is a ramp leading into it from the banked side of the barn with doors at either end of the floor so that when wheat was being threshed, the chaff would be carried off by the breeze



Distributing laths between rows of cut tobacco.

Pennsylvania farm with field of cigar tobacco.



created by leaving both doors open. In tobacco sheds, the term is used to refer to the barn floor onto which wagons are driven. However, specific reference is made to the 15' by 16' section between frames, a section that also occurs in the same size in the center section of a barn. Cf. Bankhill; Ramp; Tobacco Shed; Frame; Bent.

- BEAM: der darrichzuck, die darrichzieck. A beam is a large structural member that is positioned to extend either longitudinally or crosswise and is set on the foundation walls. Along with the joists and girder, the floor of a building is supported. Cf. Girder; Joist; Floor.
- BENCH: die banck, die bancke (G Bank). When picking seedlings from seedbeds, the pickers sit on a bench-like affair that is, in some cases, simply a long plank with two supports, one on either end, and which extend over the bed. These may be moved as the picker does his job. The use of these is necessary since the beds are either 6' or 9' wide, too large for a picker to select plants from the middle of the bed.
- BENT: die wand, die wend; die denn wand, die denn wend (G Tenne + Wand). This term identifies the transverse section of a tobacco shed formed by the frames and middle and side posts. It measures 15' by 16' but may be 16' by 16' in some sheds. Cf. Barn; Floor; Middle Post.
- BINDER: das (der) binner, die binner (G Binder). When "hands" or bunches of tobacco leaves are made, the stem ends are held together with a large leaf that is wrapped around them and then tucked beneath them. Cf. Hand; Bunch. Bundel binner may also be used.

Mule-driven tobacco wagon in Pennsylvania.



A large tobacco shed in Lititz, Lancaster County.

- BLACK TOBACCO: der schwatze duwack (G schwarz + Tabak).
- BLOCK WALL: *die block mauer (E block + G Mauer).* Formerly, foundation walls were built of native fieldstone but now they are made of 12" cement blocks. Cf. Foundation; Wall; Stone Wall; Brick Wall.
- BLUE MOLD: blue molt; blau molt (E blue or G Blau + E mold). This is a seedbed disease caused by a fungus which distorts the leaves of the seedlings and gives their undersides a downy, felt-like covering, blue in appearance to purplish-gray. Unless checked quickly, this fungus will linger in the soil and may ruin not only the current seedlings but the following year's as well. Also known as downy mildew.



- BOTTOM END: es unnerschte ent (G unterst + Ende). All lumber has sides, this term simply designates the underside of the piece when it is marked for positioning in a building. Cf. Face Marks; Pigtail Face; Curl Side; Back.
- BOX: die duwack bax, die duwack baxe; die blanza bax, die blanza baxe (G Tabak + E box; G Pflanze + E box or G Buchs). When transplanting tobacco seedlings to the fields, the plants are usually placed in boxes with moistened burlap covering the bottoms. The filled boxes are then placed in a shaded area until the plants are ready to be planted in the fields. Cf. Transplant (to); Burlap.
- BRACE: der brees, die breese; der bock, die beck (E brace; PG Buck). Braces serve to stiffen a shed and its several parts, and include such braces as standing, purline, span, frame, etc. Cf. Standing Brace; Purline Brace; Span Brace.
- BRICK WALL: *die backeshtee mauer (G Backstein* + *Mauer)*. Some foundation walls are made of brick in tobacco sheds but this term refers to any brick wall.



Typical ladder-type tobacco wagon.

- BROADCAST TOBACCO (to): duwack same saee. Cf. Sow Tobacco (to).
- BROODER HOUSE: tschickli haus (E chick + PG diminutive ending li; E house).
- BROWN RUST: braune roschte (G braun + Erust). This disease is usually associated with mosaic, or foxy tobacco, and is characterized by small, roundish dead areas on the tobacco leaves. Also known as red rust in some areas. Cf. Mosaic; Foxy Tobacco.
- BUNCH: der bonsch, die bonsche (E bunch). Cf. Hand; Binder.
- BURNED TOBACCO: verbrennte duwack (G verbrennen). Tobacco may be burned from various

sources, including the sun or by a disease in the shed. This is simply a general term for burned tobacco.

- CENTER POST: der center poscht, die center poschte; der middel poscht, die middel poschte (E center + G Pfosten or E post; G Mittel + G Pfosten or E post). Frames used in tobacco sheds generally have their posts set one in the middle and one on either side of the shed, or, two in the center and one on either end of the shed or frame. Poscht may also be spelled poschde. Cf. Frame.
- CHESTNUT TREE: es keschde; for example, der keschde baam, chestnut tree (G Kastanie).
- CHESTNUT WOOD: es keschde hols.
- CHICKEN HOUSE: der hinkel schtall (PG hinkel + G Stall).
- CHIMNEY: der schanschtee, die schanschtee (G Schornstein).
- CHOP OUT A MORTICE (to): mortise hacke (E mortice + G hacken).
- CLAPBOARD: glabbaard (E clapboard); or glabbord. This term applies only to fences on which clapboards are used.
- CLEAT: der kliet, die kliete (E cleat). Vertically ventilators that are not hinged on their sides, usually have a small wooden cleat attached to the inside face which rests on one of the upper ties, ordinarily the third from the bottom of the shed. Cf. Ventilator; Tie.

CORN CRIB: der welschkarn schopp.

- CORNER POST: der eck poschte, die eck poschte (G Ecke + G Pfosten or E post). This term is used to designate the four corner posts in a tobacco shed, one on each of the two outside frames. Cf. Frame.
- CORNICE: der kornische, die kornische (E cornice). This is an extension of the roof laths over thé gables of a building, usually about one foot.
- CRIPPLE INTO (to): grippele; or krippel (G Krüppel, n). Whenever a standing brace is built into the gables of a shed or along the sides, the ties that run into it are cut and morticed into the braces.
- CROP ROTATION: *die crop rotation, die crop rotations (E crop + rotation).* Several kinds of rotation systems are in use in Pennsylvania, among which the 4-year rotation is most popular with steer feeding an integral component.
- CURE TOBACCO (to): duwack drickle (G Tabak + drickeln).

- CURL SIDE: der gringler (G Kringel). When marking lumber for a building, carpenters use blue pencil marks to indicate the sides of the lumber. The "curl" side is the pigtail side, or outside face because it is marked with little curls. Cf. Pigtail Face; X-mark, or Inside Face.
- CUT TOBACCO (to): duwack scheere; or duwack schneide.
- CUT WORM EATEN TOBACCO: cut worm verfresse duwack; or der worm verfresse duwack (E cut worm + G verfressen; E worm + G verfressen + G Tabak). The cut worm is a small worm that eats at the roots and stalks of tobacco plants and must be killed before it decimates a crop.

DAIRYMAN: der dairymann, die dairymenner.

DAMP TOBACCO: *der zaye duwack (G Zähe);* or *feichte duwack.* Tobacco that is sufficiently moist to be stripped.



Tobacco shed with gambrel roof. Stripping room is in the gable. A gable ventilator is built out from the cornice to facilitate air movement at that level.

- DAMPING OFF: *uffdrickle*. Damping off, or bed rot, is a seedbed disease caused by one of two organisms when moist conditions in the soil and in the air prevail. When an excessive amount of chicken manure, cottonseed meal, etc., are placed over the bed under these conditions, bed rot may occur, particularly in older beds.
- DISTRIBUTE LATHS (to): *lettlin zettle (G zetteln).* The verb identifies the act of placing laths along the rows of tobacco during harvest. Cf. *Lath; Tobacco Lath.*
- DOOR: die deer (G Tur). Although this is a general term for door, several other terms exist for

specific doors on a tobacco shed. Cf. Stripping-Room Door; Tobacco-Cellar Door.

- DOWNSPOUTING: *zuner kandel (PG Zuner)*. Many tobacco sheds have downspouting on their corners or along the gables but at a slight angle through which rain water may flow into barrels or onto the ground. Cf. *Guttering*.
- DRIPPING TOBACCO: der duwack dripst; or der duwack ist dropsicht. Oftentimes tobacco might be frozen in the shed while curing, and this results in juices dropping from the stems and ribs as it thaws.
- DRIVEWAY: die darrich fuhr denn, die darrich fahr denne (G durch + fahren; G Tenne). Tobacco sheds have floors through which a wagon may be driven from gable to gable, or in one gable but not the other. This driveway is formed by frameposts. Also called a Runway. Cf. Runway. Also possible der vorweeg, die vorweeg.
- DROP LATHS (to): *lettlin zettle*. Cf. *Distribute Laths* (to).
- DROP THE LATHS FOR FIVE STALKS PER LATH: zettle die lettlin, fer alle finfe schteck en leddli. A rule of thumb for distributing laths during harvest.
- DROWNED TOBACCO: der versoffne duwack (G versaufen + Tabak). Plants, when in field soil that is waterlogged, will suffocate and die. Although death may be the extreme damage, partial wilting may also occur as the result of damage to the root system.
- EARLY PLANTED TOBACCO: *der frieh duwack* (*G frühe* + *G Tabak*). Tobacco is generally planted in three stages several weeks apart; this is simply the earliest planted.
- EAVES: wu s dach driwwer naus langt (G längen). The term identifies the roof overhang along the sides of a building. Cf. Roof.
- END TIE: der ent tei, die ent tei (G Ende + E tie). An end tie is a transverse structural member that is built into the gables and is morticed into the center and corner posts and crippled into the end standing braces. Cf. Gable; Standing Brace.
- END VENTILATOR: der ent ventilator, die ent ventilator (G Ende + E or G Ventilator). Most sheds have large ventilators on their gables to create air flow through the shed from gable to gable. These may be horizontal or vertical.
- FACE MARKS: *die X-marcks*. Carpenters mark lumber intended to be used on buildings. The X-marks are used to indicate the inside face

of lumber or top side.

- FACE SIDE: *die fedderscht seit fum schopp*. The face side of a building is the side one first sees on approaching it or the side most visible from a distance on the road.
- FARM BY HALVES (to): um die helft bauera (G Halfte + bauere). Sharecropping by halves is not uncommon in Pennsylvania; half the profits go to the sharecropper and half to the owner. der helft bauer means the sharecropper.
- FATTEN CATTLE: ochse fiedre (G Ochs + fúttern). One aspect of the 4-year rotation system is the fattening of cattle from whom manure is obtained for fertilizing the fields.
- FILLER: *die fillers (E filler).* Used as a grade of tobacco, the others being wrappers and binders. As a leaf, the term *en filler* is used.
- FIR TREES: es fir hols; or es fir schtock hols.

FIR LUMBER: es fir lomber.

- FLAT WAGON: der flat wagge, die flat wagge (E flat + G Wagen). Flat wagons are generally replacing other types of wagons for hauling tobacco from the fields to the curing sheds. Farmers have to be less careful with their crops now than formerly; thus, the use of flat wagons. Cf. Hay Wagon; Ladder Wagon.
- FLOOR: der bodde, die bodde (G Boden).
- FLOWER: *die blumm*, *die blumme (G Blume)*. Although this is a general term for flower, it is also applied to the flower of the tobacco plant.
- FOOTER: der futter (E footer). A footer is basically the underpinning on which a chimney or foundatin wall is laid. A trench is usually built beneath these footers. Cf. Trench; Chimney; Foundation.
- FOUL TOBACCO: verfault duwack (G verfaulen + Tabak). Tobacco that rotted away from various causes.
- FOUNDATION: es fundament (G Fundament). Many tobacco sheds have foundations beneath them and may be of brick, cement blocks or native fieldstone. Cf. Brick Wall; Block Wall; Stone Wall.
- FRAME: der freem, die freem (E frame). A frame is a basic structural feature of most sheds and consists of posts, ties, span and plate as well as braces of various types. Cf. Frame Post; Brace; Span; Tie.
- FRAME BRACE: der freem brees, die freem breese (E frame + brace). Most tobacco sheds are built with frame braces to stiffen the shed and to give

it strength. These are braces built on the frames. Cf. Frame; Brace; Standing Brace.

- FRAME POST: der freem poschte, die freem poschte (E frame + G Pfosten or E post). Each frame consists of at least three posts, one at the center and one on either end of the frame. It is also possible to have four, two in the middle and one on each end. Cf. Post; Frame; Center Post; Span; Rafter Plate.
- FRAME SILL: *die schwell, die schwelle (G Schwelle)*. Includes both side sills and end sills.
- FRAMER: der freemer, die freemers (E framer). A framer is a piece of lumber that runs from side to side or longitudinally through a shed and helps support the frames on the foundation walls.
- FRAMERS, SILLS, GIRDERS: es gebelk (G Gebälk). The basic horizontal framework of a building.
- FROZEN TOBACCO: der verfrohre duwack (G verfrieren + Tabak). Tobacco that is affected by a heavy frost in either the shed or in the field.

FURROW: die farricht (G Furche).

- GABLE: es giwwel ent, die giwwel ent (G Giebel + Ende). A tobacco shed has two gables, one on each end of the building which consist of the outside frames, doors, etc. Gable ends are always the short sides of a shed.
- GABLE-END VENTILATOR: der giwwel ventilator, die giwwel ventilator; der giwwel ent ventilator, die giwwel ent ventilators (G Giebel + E Ventilator). A gable-end ventilator is simply a large vertical ventilator that is hinged or set on a cleat and that swings out to allow air flow through and out of the shed. Cf. Ventilator; Gable.
- GABLE-END WINDOW: es giwwel ent fenschter, die giwwel ent fenschtere (G Giebel + G Ende + G Fenster). Many sheds have small windows set in their gables just below the peak of the roof or just above the span to allow light in when workers are hanging the upper parts of the shed or for ventilation.
- GATE HINGE: die glowe hintsch, der glover hintsches (PG glooe, glowe).
- GAUGE: der geetsch (E gauge). A gauge is a small piece of wood that has a square or rectangular hole in it and is used for checking the thickness of tenons.

GIRDER: Cf. Beam.

GREEN RUST: der grien ruschte (E green + G Rost).

A disease that affects tobacco plants.

- GREEN SPOTS: scheckich (G scheckig). A disease that infects tobacco when it is hanging in the shed and which creates green-brown spots on the leaves which generally become brittle and stiff. In cured leaf, green spot means that the green pigment has not been removed during the curing process before the leaf dies.
- HAIL-DAMAGED TOBACCO: verschlossner duwack (G schlossen + G Tabak). An imminent danger that all tobacco farmers face is a hail storm which can do considerable damage to a crop.
- HAND: der duwack bonsch; die handful; der bonsch (G Tabak + E bunch; E handful; E bunch). After tobacco is stripped from the stalks, it is tied into "hands" of leaves before it is packed into the bale box. Ct. Binder; Bale Box; Strip (to).
- HANDSPIKE: der hant schpeick (E hand + spike).
- HANG THE PEAK (to): duwack in die faschte henke; in die faschte henke; die faschte fille. When filling a shed with cut tobacco, it is a common practice to hang it first in the upper reaches of the shed just beneath the ridge.
- HARVEST TOBACCO (to): duwack weck du (G Tabak + G wegtun).
- HAY LADDER: der hoi leeder, die hoi leeders (G Heu + G Leiter). This is the hay rack that is used on wagons to hang the speared tobacco onto so that the tips of the leaves hang toward the ground. These are removable when not required in the fields. Cf. Flat Wagon.

HEART WOOD: es hartz hols (G Herz + G Holz).

HEEL: der hiel; der schparra-lor (G Sparren). Rafters rest on plates and on purlines, if there are any used. The outer ends of the rafters are notched if they rest on the plate only but the purline is notched if both purline and plates are used. Cf. Purline; Rafter Plate; Rafter.

HEMLOCK: es hemlock (E hemlock).

HENCH: der hensch, die hensche (E hench). A hench is the one and one-half inch space between the outside face of a mortice or a tenon. Mostly, the hench is used at the corners of a shed where the sills and corner posts meet and the end purline posts where the end of the purline meets the post. Cf. Mortice and Tenon Joint.

HICKORY: es hickeri.

- HINGE: der hintsche, die hintsches; es band, die binner (E hinge; G Band).
- HIP ROOF: es hip dach, die hip decher (E hip +

G Dach). Hip, or gambrel, roofs are common on many tobacco sheds in Pennsylvania. Such roofs provide extra space under the roof for hanging more laths.

HOLLOW OUT (to): dechsle (G dächseln). Cf. Adze.

HOLLOW SIDE: *die hohl seit (G hohl + G Seite)*. The term identifies one side of a piece of lumber with specific characteristics.

HONEYCOMB SOIL: der bodde es beassel gefroha.

- HOOK KNIFE: es hoke messer; or der tschopper (E hook + G Messer; E chopper). Although the exact referent is not clear, it should be noted that corn knives were formerly used to harvest tobacco in this state before shears became popular. This may, then, be a corn knife.
- HOUSE BURN: schopp verbrennte duwack (PG schobb, or G Schuppen + G verbrennen). House burn, pole rot, pole sweat, and a number of other terms, identify a disease caused by small organisms when wet weather prevails for long periods of time in a shed. It actually causes the leaf to soften and decay by attacking the parts of the leaf that give it stiffness and toughness, such as the ribs. Cf. Pole Rot.
- INSECT EATEN TOBACCO: mucke verfresse duwack or flieh verfresse duwack. Insects of various kinds will attack and partially damage tobacco while it is in the fields by eating holes in the leaves.
- JOIN (TO): tschoine; tscheine; weddernanner fitte (E joint; E join; PG wedder + G einander + E fit). These terms are used to refer to the fitting together of two or more pieces or lumber with specific types of joints. Cf. Mortice and Tenon Joint; Hench; Lap Joint.
- JOINT: *der tschoint, die tschoints;* or *der tscheint, die tscheints* (E joint).
- JOIST: *der balke*, *die balke* (G *Balken*). Joists are structural members that are set crosswise or length-wise between the framers, beams and girders and help support the floor above them.
- LADDER WAGON: der leeder wagge; die leeder wegge (G Leiter + G Wagen). This is the older type of tobacco wagon that has hay racks on it. Ct. Hay Wagon; Flat Wagon.
- LAP JOINT: der laep tschoint, die laep tschoints, or der laep tscheint, die laep tscheints (E lap + E joint). A lap joint is usually given to two horizontal pieces of lumber where their ends meet, such as two side sills, or a side sill and an end sill. They may be of various dimensions, such



Sizing cured leaves in "sizing box."

as half lap, one-third, one-quarter and so on.

LATE PLANTED TOBACCO: *der schpod duwack*. Cf. *Early Planted Tobacco*.

LEAF: es blatt, die bletter (G Blatt).

- LEAVES ON SEEDLINGS THE SIZE OF QUAR-TERS (DIMES): *die bletter sin so gross ass wie vartel; so gross ass zehesent schticker*. When seedlings are ready to be picked for transplanting to the fields, the size of the leaves is an important index to their partial maturity.
- LEAVES ON STALKS IN THE FIELD: die unnerschte bletter (lowest); s sand blatt, die sand bletter (sand leaves); s guddi duwack blatt, die guddi bletter (usually the middle leaves); s hatz blatt, die hatz bletter (top leaves before topping).
- LID: *der deckel, die deckel* (G *Deckel*). Type of ventilator that is set at the bottom of a shed along its side like a skirt.
- LOAD: die laad duwack, die laad duwack (E load + G Tabak). When tobacco is cut in the fields, it is usually left to wilt a bit, then it is placed on wagons to be hauled to the shed. A single wagon load, about one hundred laths.

LOAD TOBACCO (TO): duwack laade.

LONG SIDE: *die lang seit* (G *lang* + G *Seite*). Sheds have two sides: the short side, or gable, and the long side, or the side of the shed. Cf. *Gable*.

LOOSE RIBS: loose ribbe (G Rippe + G los).

- LUMBER BILL: n holsbill (G Holz + E bill). The bill presented to the mill that cuts the lumber to the specifications of the farmer or carpenter.
- MAKE BALES (TO): duwack beele (G Tabak + E bale, to). Tobacco, after stripping, is made into hands and then is compacted into bales for delivery to market. Cf. Hand; Bale; Bunch: Binder.
- MAPLE: s meebel hols; der meebel (E maple). rote meebel (red maple); weisse meebel (white maple); zucker meebel (sugar maple).
- MANURE: *mischt* (G *Mist*). Manure from cattle is a very important part of tobacco agriculture since the fields are fertilized with it during the winter as it is hauled from the barn stalls.

MANURE (TO): mischde.

MANURE PILE: der mischt hof (G Mist + G Haufe).

MILK HOUSE: millich haus (G Milch + G Haus).

- MOLDY TIPS: moldy tips (E moldy + E tips); die schimliche tips (G schimmlig + E tips). A disease which causes mould to grow on the leaves of a tobacco plant.
- MORTICE: s mortis (E mortice). A mortice is a hole on the bottom or top of a piece of lumber that is cut to fit a tenon into and then the whole is pegged. Cf. Tenon; Joint; Pin; Hench. Also s mortice un tenon tschoint.
- MOSAIC: foxy duwack (E foxy + G Tabak). A viral infection caused by the tobacco mosaic virus that occurs on plants in the beds or in the field. It is characterized by a mottled appearance on the leaves.
- MUSLIN: *der muslien*; or *die musslien* (G *Musselin*). This material is used to cover the seedbeds while the seedlings are growing.
- NAIL: der nagel, die neggel; or der najjel (G Nagel). der dach nagel (head nail); der finish nagel (finishing nail); geschnittni (hand-made nail).
- NAIL TIE: der nagel tei, die neggel ties; der najjel tei, die najjel teis (G Nagel + E tie). Nail ties are horizontal pieces of lumber that are fixed on the sides of sheds on which the siding is nailed. Cf. Tie; Side Tie; End Tie.

NEEDLE: die noodel (G Nadel). Bale boxes are

usually fitted with small crosswise grooves into which the needle is placed so that the twine used to bind the bale can be run through the box.

NINE A.M. BREAK: *s nein uhr schtick (G neun* + G *Uhr* + G *Stück).* Workers in the fields will usually take a short break at nine o'clock in the morning for refreshments brought to them from the house. Cf. 3 P.M. Break.

OAK: die eeche (G Eiche).

OAK WOOD: s eeche hols.

- PEAK: *die faschte* (G *First*). The area just below the ridge inside of a shed; or possibly all of the area above the square. Cf. *Square*.
- PICKER: der duwack blanze ropper (G Tabak + G Pflanze + G rupfen). When seedlings are about to be picked for transplanting to the fields, the person who does the picking is designated by this term. Cf. Seedbed; Transplanting.

PIG PEN: der sei schtall (G Sei + G Stall).

PIGTAIL FACE: der sei schwanz (G Sei + G Schwanz). The outside face of lumber indicated as such by the pigtail, or curl, marks made by the carpenter. Cf. Curl Side.

Demuth's tobacco shop in Lancaster. It was founded in 1770 and is still operated by the same family.



- PIN: *der zappe, die zappe* (G Zapfen). The peg for a mortice and tenon joint.
- PIN HOLE: s zappe loch, die zappe lecher (G Zapfen + G Löcher). The hole made in a joint to receive the pin. Cf. Pin.
- PIN MAKER: der zappe macher (G Zapfen + G machen). Person who makes the pins for joints.
- PITCHY TOBACCO: pitschicher duwack (E pitchy + G Tabak). In late tobacco, particularly, tars will accumulate in the tobacco while it is being cured in the shed. The presence of this "pitch" is noticeable during the stripping operation.
- PLANT (TO): blanze (G pflanzen).
- PLANT AFTER (TO): duwack naach blanze (G Tabak + G nach + G pflanzen). Once the seedlings have been transplanted to the fields, some will die or simply fall over. Young children have the responsibility of re-setting the already planted seedlings or planting new ones.

PLANTING: die blanzet, die blanzete.

- PLATE: *die pleet, die pleets* (E *plate*). The plate is a piece of horizontally laid lumber that is set at the tops of frames along their sides. The heels of the roof rafters rest on these plates. Cf. *Rafter; Span; Rafter Plate.*
- PLUMB UP (TO): *plumbe*. To make straight, as in a shed's sides.
- POLE BURN: schopp verbrennte duwack. Cf. House Burn.
- POPLAR: s bapler (E poplar).
- POST: *der poscht, die poschte* (G *Pfosten*). General term for post. The post in the cellar that supports the main girder is called *der darrichziek poscht*.

PRIVY: die brivvi (E privy); s scheiss haus (slang).

- PULL TOBACCO (TO): duwack blanze roppe (G Tabak + Pflanze + rupfen). The act of pulling seedlings from seedbeds.
- PULL OFF TOBACCO (TO): *abroppe* (G *abrupfen*). Stripping tobacco after it is cured.
- PULLED OFF STALKS FROM LATHS: *abschtreefe*. (G *streifen*).
- PURLINE: *die perlein, die perleine* (E *purline*). A purline is a horizontal member that is located halfway between the square and the ridge. The roof rafters rest on it. Cf. *Purline Post; Purline Brace; Rafter; Square; Roof Tree.*

PURLINE POST: der perleine poschte.

PURLINE TIE: der perlein tei, die perlein teis (E purline + E tie). The crosswise member is joined at each of its ends to the ends of the purline on each frame.

PURLINE BRACE: perleine breese.

- PUT TOBACCO AWAY (TO): duwack weck du. Cf. Harvest Tobacco (to).
- RAFTER: *der schparre, die schparre* (G Sparren). Rafters are laid to a given pitch, or angle, one end on the place and the upper ends nailed to each other where they meet at the ridge. Roof laths are then nailed to them and the roofing over them. Cf. *Plate; Roof.*

RAFTER PLATE: Cf. Plate.

RAISE (A BARN) (TO): uffschlagge; uffrichte.

RAMP: Cf. bankhill.

RIDGE: *der kamm, die kemm* (G *Kamm*). The upper most part of the roof formed by the ends of the rafters. Cf. *Rafter*.



A side-opening shed along the Susquehanna similar to an English barn.

- RIDGE VENTILATOR: der ridge ventilator (E ridge + G or E ventilator). The ventilator set on top of the ridge.
- RIB: die duwack ripp, die duwack ribbe. Tobacco rib.

ROOF: s dach (G Dach).

- ROOF LATH: *die latt, die latte; die dach latt, die dach latte.* (G Latte).
- ROOF 1REE: der dachschtuhl (G Dach + G Stuhl).
- ROOF VENTILATOR: der dach ventilator, die dach ventilators (G Dach + G or E. ventilator). Many Pennsylvania sheds have this type of ventilator in the gables. It is simply an extension of

the roof laths in the form of a cornice but the siding is nailed on it instead of on the ties, thus leaving a space between the lower siding and the upper parts on the roof. A small d or is built into it that can be controlled by string on the inside of the shed.

ROTTEN RIBS: *fauli ribbe*. A disease affecting the tobacco when curing, causing it to rot, particularly the ribs.

ROW: die duwack roijet (G Tabak + G Reihe).

RUST: der roscht. Rust is a fungal infection on tobacco. Cf. Brown Rust; Green Rust.

RUSTED TOBACCO: verroschte duwack.

SAPWOOD: s saep hols.

- SCAFFOLD: *der skaffolt bock, die skaffolt beck.* For many years it was a common practice for tobacco farmers to place their filled tobacco laths on outside scaffolds for a period of time for partial wilting, then they would place them in the shed for curing completely.
- SCAFFOLDING: *die skaffolting* (E *scaffolding*). Scaffolding inside a tobacco shed on which laths are hung on rails.
- SEED: die same (G Same).
- SEEDBED: s duwack bett, die duwack bedde. Bed in which the seedlings of tobacco are grown before transplanting. Cf. Tobacco Seedbed.

SEEDLINGS: blanzlin.

- SEEDPOD: der same kolwe, die same kolwe (G Kolben).
- SHEARS: *die scheer*. This is the long handled shears now used for cutting tobacco stalks.
- SHED FROZEN TOBACCO: schopp verfrohre duwack (G Schuppen or PG schobb + verfrierer). Tobacco that has been affected by a frost while in the shed curing.
- SHINGLE: *die schindel* (G Schindel). die holz schindel (wood shingle); *die schleet schindel* (slate shingle); *die asbestos schindel* (asbestos shingle).
- SHIP LAP: der schip laep (E ship + E lap). When two boards are overlapped so that the edges are about one third to one half over and under each other, particularly for horizontal siding.
- SHOULDER: *die schulder*. The space around a tenon or a mortice.
- SIDE BRACE: *der seit brees, die seit breeses.* Side braces are commonly standing braces at the corners of a shed.

- SIDE TIE: der seit tei, die seit teis. Side ties are horizontal members that are laid on the sides of a shed between the posts. Usually, there are about three to four tiers of them. Cf. Tier; Post.
- SIDING: *die wedderbaarding, die wedderbaarding* (*E weather-boarding*). *die zung un fedder, die zung un fedder* (tongue and groove).
- SIGNS OF ZODIAC: undergehender (down sign); uffgehender (up sign); undergehender grebs (down sign-Crab).
- SILL: die schwell, die schwell (G Schwelle). Cf. End Sill; Side Sill.
- SIZE TOBACCO (TO): duwack lenge. Tobacco was formerly sized according to preselected sizes ranging up to about 36 inches in boxes designed for this. Cf. Sizing Box.
- SIZING BOX: *die duwack lenge bax; die leng racke; die lenge bax.* A sizing box is simply a series of compartments in two inch intervals held together with boards and placed on the table of the stripping room. As the leaves are stripped they are measured for size and then made into hands and baled.

SMOTHERED TOBACCO: verschmoddert.

- SORT TOBACCO (TO): duwack sorte (G Tabak + sortieren). Tobacco was, and still is, sorted according to grades or quality. Three general qualities are used: wrapper, binder and filler. Cf. Wrapper; Binder; Filler.
- SOW TOBACCO (TO): duwack same saee. (G Tabak + Same + G säen). Cf. Broadcast (to).
- SPAN: *der schpann, die schpanne* (G Spanne). The end plate on the tops of the outside frames running from corner to corner on each gable.
- SPAN BRACE: der schpann brees, die schpann breeses. A span brace is a brace that extends from the upper span to the second or third end ties. It is used in all inside frames to allow wagons to pass through the shed or to the last gable.
- SPEAR: der schpeer, die schpeere: der schpiess, die schpisse. (G Speer; G Spiess). This is placed on the end of a tobacco lath so that the stalks of tobacco can be pushed onto the laths. Cf. Tobacco Lath.
- SPEAR TOBACCO (TO): duwack eifettle; duwack uffetle; lettlin eiffetle. The art of spearing stalks onto laths.

SPEAR UP TOBACCO (TO): uffschpeere. Cf.

Spear Tobacco (to).

SPIKE: der schpeik, die schpeiks (E spike).

- SPINDLY PLANTS: *schnaekeriche*. Seedlings that have not fully developed their root systems or their leaves when in the beds.
- SPLICE: s schpleis (E splice); also s schpleis maha Cf. Joint.
- SPLICE (TO): schpleise, or schpleisse. Cf. join (to).
- SPOUTING: *der kandel*. The term includes both downspouting and guttering. Cf. *Downspouting* and *Guttering*.
- SQUARE: *der schwar, die schware* (E *square*). The upper horizontal member of the frame defines the upper limits of the square.

STAIRS: der schteeg, die schtiegge.

STAKE OFF (TO): *abschtecke;* (G *abstecken*). Before a building is erected, its ground dimensions must be marked with stakes and strings.

STALK OF TOBACCO: der duwack schtock (G Stock).

STANDING BRACE: der standing brees, die standing breeses. A standing brace is set in either the side corners or end corners with its upper ends at just below the upper tier and its lower end set in a sill. Ends are morticed into posts and sills alike. Cf. Post; Mortice; Tenon; End Sill; Side Sill; Hench.

STEM: der schtengel, die schtengel.

- STOCKADE: *der schtockade*. Long poles with metal points that range in length from six to twenty feet and which are used to help push up frames during the raising of barns or sheds.
- STRIP TOBACCO (TO): *duwack schtrippe* (dG *strippe*). Removing the leaves from the stalks after curing the tobacco.
- STRIPPING ROOM: die schtripp schtupp (G Strippe + G Stube). Objects in stripping room: der ofen (stove); der schteeg (stairs); der disch; s fenshter (window); die schtrip schtupp deer (stripping-room door); die keller deer (tobacco cellar door); kohle bin (storage bin, lit. coal bin); die blanck (plank to stand on); die beel bax, or die press (bale box or press; der bodde (floor); die mauer (wall); die schtuhl (stool).
- STONE WALL: die schtee mauer (G Stein + G Mauer). Cf. Foundation; Block Wall; Brick Wall.
- STRIKE A SHED (TO): *duwack runner du*. To take the laths down from the rails after curing the tobacco.

STUBBLE: die schtopel; or die schtupler (G Stoppel).

- STUBBLE END: s schtoppel ent. When tobacco is cut, this is the end that is speared onto the laths.
- SUCKER TOBACCO (TO): duwack sockere (G Tabak + E sucker [to]). To remove the suckers that grow after a plant has been tapped. Cf. Topped Tobacco; Top Tobacco (to).
- SUCKER LEAF: *die sockere bletter*. These small leaves grow out after a plant has been tapped; that is, the flower removed.
- SUNBURNT TOBACCO: sunn verbrennte duwack (E sun + G verbrennen). Tobacco scalded by the sun in the fields after being cut.
- SWEAT TOBACCO (TO): duwack schwitze (G schwitzen). After tobacco has been delivered to market, the buyers will put it through additional fermentation called a "sweat".
- SYCAMORE: s wasserpitch (possibly water beech).
- TAKE STALKS OFF LATHS (TO): Cf. Pull Stalks Off Laths.
- TENON: *s tenon; die tenons* (E *tenon*). A tenon is an extension of the end of a piece of lumber that is created by cutting away two sides, or shoulders; this, in turn, fits into a mortice hole. Cf. Shoulder; Mortice; Mortice Hole.
- THICK RIBS: *dicki ribbe* (G *dick* + G *Rippe*). A disease of tobacco causing the midribs to grow quite large and tough.
- THREE P.M. BREAK: drei uhr schtick. Cf. Nine A.M. Break.
- TIE A HAND OF TOBACCO (TO): der bundel binne; en bundel mache. (G Bundel + G Binden; G Bundel + G machen). Cf. Hand.
- TIER: der tier, die tiers; or der teer, die teers (E tier). A tier represents a single series of horizontal members in a shed on which tobacco rails are laid. Each shed ordinarily has at least four, sometimes more of these, below the square and one or two above the square. Nearly always, the vertical distance between tiers measures about forty-five inches to four feet but a greater distance is possible. The space between tiers is sometimes referred to as a "room"; no term for this has yet been found in Pennsylvania-German.

TILL (TO): uffschaffe.

TILTH: loose bodde; der bodde as schee luckt; der bodde as fein schafft. This term means simply than the soil is tilled to a point where the soil particles are fine and loose; or in a good stage of tilth, or cultivation.

- TOBACCO BUYER: der duwack keifer (G Tabak + G Käufer). A company representative who purchases tobacco crops from the farmers in "barn door" sales.
- TOBACCO CELLAR: der duwack keller, die duwack keller (G Tabak + G Keller). Although sometimes referred to as the dampening room, the purpose of the cellar is to dampen tobacco sufficiently to allow it to be stripped. Objects in the cellar: der duwak keller bodde (tobacco cellar floor); die duwack rieggel (tobacco rails); die duwack keller deer (tobacco cellar door leading from the stripping room); der keller deckel (trap door from floor above).
- TOBACCO CELLAR DOOR: *die keller deer, die keller deer.*



Tobacco shed with gambrel roof in Denver, Lancaster County. Stripping room is on the side of the shed next to the large doors.

- TOBACCO FARMER: der duwack bauer, die duwack bauer (G Tabak + G Bauer).
- TOBACCO FIELD: s duwack felt, die duwack felder (G Tabak + G Feld).
- TOBACCO LADDERS: die duwack leedere. Cf. Hay Ladders.
- TOBACCO LATH: s duwack lettle, die duwack lettlin (G Tabak + G Latte). A tobacco lath is a stick four to four and one half feet long onto which tobacco stalks are speared. These are then hung in the shed for curing of the tobacco.
- TOBACCO PRESS: die press, die presse (E press). Cf. Bale Box.



Cutaway view of roof construction for tobacco shed. Note the Pennsylvania-German terms for the various parts.

- TOBACCO RAIL: der duwack rieggel, die duwack rieggel (G Tabak + G Riegel). Tobacco rails are 16' long rails that are laid horizontally on the ties of a shed and on which tobacco laths are then hung. Most often, these rails are spaced forty-five inches apart so that a 4' lath may be hung on them, or four feet for the 4'6'' laths. Cf. Tobacco Laths.
- TOBACCO RIB: *die duwack ripp, die duwack ribbe.* The large midrib of a tobacco leaf.

TOBACCO SEED: die duwack same.

- TOBACCO SEEDBED: *s duwack bett, die duwack bedde.* Cf. Seedbed.
- TOBACCO SHED: der duwack schopp. A building especially designed for curing tobacco. Cf. Barn.
- RAISE A TOBACCO SHED (TO): en duwack schop uffschlagge.
- TOBACCO WAGON: *die duwack wagge; die leedre wagge.* The later type refers to the hay wagon, while the former is simply any of the two types of wagons used for hauling tobacco to the curing shed. Cf. *Hay Wagon; Ladder Wagon; Flat Wagon.*
- TOBACCO WAREHOUSE: es duwack weerhaus (G Tabak + E warehouse). The building to which baled tobacco is brought for delivery to the buyer.
- TOBACCO WITH HOLES IN IT: lecherich duwack (G löcherig + G Tabak).
- TOBACCO WITH PIGEON DROPPINGS ON IT: dauwe verschisse duwack.
- TOBACCO WORM EATEN TOBACCO: der worm

verfresse duwack. Cf. Cut Worm Eaten Tobacco.

- TOO LARGE BUNCHES: zu dicki bonches. Hands that have too many leaves in them. Cf. Hand.
- TOOL SHED: implement schopp.
- TOP END: *s ewwerscht end*. The top end or side of a piece of lumber. Cf. *Bottom End*; *Pigtail; Curl Side*.
- TOP OF TOBACCO STALK: in field before being cut: ewwerscht end; when in the shed: unnerscht end.
- TOP TOBACCO (TO): *duwack toppe* (G *Tabak* + E *top*). To break off the flower of a tobacco plant. Cf. *Sucker Tobacco* (to).
- TOPPED TOBACCO: getoppt duwack.
- TRANSPLANT (TO): *rumblanze*. Pulling tobacco seedlings from the beds for transplanting to the fields.
- TRANSPLANTER: *der duwack blanzer, die duwack blanser.* A machine.
- TRAP DOOR: *der deckel*. Most sheds with tobacco cellars have doors leading from the main floor into the cellar. Cf. *Tobacco Cellar*.
- TRENCH: *der grawe, die greewer*. This is the trench dug out for a footer. Cf. *Footer*.
- TROWEL: Die kell (G Kelle).
- UNCURED TOBACCO: noch net gekjurt, net gekjurt, net gans gekjurt. (G kurieren + E cure). Tobacco that has been partially cured before stripping it from the stalks.



Inside framing for a tobacco shed with Pennsylvania-German terms.

- UNNEAT BALES: *die verhuddelti beds* (G verhudeln + *E bale)*. Sloppily made beele of tobacco.
- UPRIGHTS: der upreit, die upreits. The main supporting posts in a shed. Cf. Frame; Post.
- UP TO THE SQUARE: *nuff zum schware*. The part of the shed's frames that go up to the span in the gable frames and inside frames.
- VENTILATOR: *die ventilator, die ventilators.* Boards or small windows that can be moved to allow air to flow into and out of the shed while tobacco is curing.
- VENTILATOR ABOVE DOORS: *der gleene, die gleene.*

VERTICAL: uff un ab.

- VERTICAL VENTILATOR: *die grosse ventilator*. This is the large ventilator or ventilators that are hinged or rest on the tier just below the square and are made of siding. Every third or fourth board is made into a ventilator.
- WAGON: der wagge, die wagge. Parts of a wagon; s rad, die redder (wheel); die deichsel (tongue); die langkwitt (connecting pole); die blanck (plank); or der baardwalk; der schpeech, die schpeeche (spokes); der schemel (bolster); der nob (hub); die aechs (axle); der poschte (post); s running geer (undercarriage); hinte wagge (back of wagon); vanne wagge (front of wagon).
- WAGON SHED: wagge schopp. Cf. Flat Wagon; Ladder Wagon.

- WARM, HUMID WEATHER: *s wachsich wedder*. Weather that is sometimes good for tobacco curing but if too long then it can cause many problems, such as pole rot.
- WASH HOUSE: wasch haus.

WEATHERBOARD (TO): gewedderbaard.

- WHITE PINE: s weisse beint.
- WILDFIRE: der wiltfeier roscht. Wildfire may occur either in the beds or in the fields. In both instances it is caused by an organism, *Pseudomonas tabaci*, which causes lesions on the leaves with a center spot of dead tissue, usually white in color. Field wildfire exhibits the same symptoms as wildfire in seedbeds; that is, a large halo with yellow border.

WINDOW: s fenschter.

WOOD SHED: hols schopp.

- WRAPPER: der raepper (E wrapper). A wrapper is both a grade of tobacco and the outer leaf of a cigar. As a grade, it is the finest and as a part of a cigar it must look clean, fine and undamaged.
- YELLOW LEAF: gehl blettrich. Tobacco in the field or in the beds will sometimes be affected by a nitrogen deficiency in the soil in which case growth rate is severely diminished and the color of the leaves changes from green to lemon-yellow to orange-yellow, particularly the lower leaves.

YELLOW PINE: s gehle beinte.

YELLOW TOBACCO: gehl duwack. Cf. Yellow leaf.

WALL: die mauer.

Pennsylvania German Astronomy and Astrology XIV: Benjamin Franklin's Almanacs

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Introduction

By Louis Winkler

Benjamin Franklin's involvements with the Germanspeaking people of America are extensive and deep. Franklin had partners in the printing business of German origin, and his firm printed a variety of German-language items, including advertisements in the *Pennsylvania Gazette*.

Franklin's involvements with astrology are primarily found in the various almanacs he printed. The two titles with German connections are *Neu-Eingerichteter Americanische Geschichts-Kalender* (Figure 1) and a "German edition"¹ of the *Poor Richard* almanac. According to Robert's manuscript regarding Franklin's press, there wre 5,197 copies of the German edition printed and sold from 1752-1765.² Franklin printed, computed and wrote text for the famous *Poor Richard* (Figure 2) almanac.

General Astrological Involvement

Miller indicates that Franklin's name appears as printer or co-printer from 1732-1757 for twelve almanacs titles totaling eighty-nine issues.³ Franklin's

³Clarence W. Miller, Benjamin Franklin's Philadelphia Printing, 1728-1766 (Philadelphia: American Philosophical Society, 1974).



Figure 1: Cover from 1750 issue of Neu-eingerichteter Americanischer Geschichts-Calender.

Sheet Almanac and Barbadoes Almanac were broadsides, and contained the least amount of astrology. The astrology was limited to positions of the moon relative to the zodiacal signs and planetary aspects. The Pocket Almanac, which Franklin also computed, Almanack, American Almanack, American Country Almanack, and the Neu-Eingerichteter Americanische Geschichts-Kalender contained a somewhat expanded version of the astrology of the broadsides in addition to the position of the sun relative to the zodiacal signs and the traditional Almanac Man.4 Various issues of the Pocket Almanac and the Neu-Eingerichteter Americanische Geschichts-Kalender appeared in red and black. This is reminiscent of the ancient almanac tradition which denotes astrologically lucky days in red and unlucky ones in black. Poor Richard almanacs

¹¹⁸⁹⁹ "Notes and Queries," *Pennsvlvania Magazine of History* and Biography, Vol. 23, p. 122. Miller (see reterence 3), nowever, in a private discussion, suggests that the German editions never existed and that "German" may refer to an almanac calculator by the name of Jerman whose almanacs *American Almanack* and *Almanack*, Franklin printed. ³*Ibid.*

⁴For a discussion of the use and nature of the Almanac Man, see Article XIII of this series.

contained the largest variety of astrology and popular astronomy and will be the basis for subsequent discussions.⁵

Franklin employed the pseudonym, "Richard Saunders," in both his *Poor Richard*⁶ and *Pocket Almanac*. The origin of his pseudonym and famous almanac title is fairly obvious if one examines the bound collections of 18th Century English almanacs which were part of Franklin's library and are now in the possession of the American Philosophical Society. Several years before and after Franklin published

"Issues for 1748-1758 are sometimes referred to as Poor Richard Improved.



Figure 2: Cover from 1733 issue of Poor Richard

his first *Poor Richard*, for 1733, the almanacs *Poor Robin* by "Poor Robin" and *Apollo Anglicanus* by "Richard Saunder" (no "s") were being published in England. These two English titles and many others found in Franklin's library are replete with astrology and popular astronomy.

Franklin frequently stated or implied his general belief in astrology in Poor Richard for almost a quarter century. In Poor Richard for 1734 he acknowledges the capability of astrologers to anticipate the future from the stars. In the 1735 issue Franklin describes himself and a contemporary almanac calculator, Titan Leeds, as stargazers and astrologers. In the issues for 1738 and 1751 it is indicated that Franklin spent time in Patowmack (or Potowmack) where an "old stargazer" lived. Further, Franklin's wife, under the pseudonym of "Bridget Saunders" in Poor Richard for 1738, indicated that her husband visited the old stargazer in 1737. In the issue for 1754 Franklin describes John Jerman and Thomas More, calculators for almanacs printed by Franklin, as well as himself, as astrologers. In this same almanac he gives a brief history of astrology.

This writer finds an interesting reaction from people who are knowledgeable about the character of Benjamin Franklin in connection with the terms "astrologer" and "stargazer". There appears to be a protective instinct on their behalf for Franklin. The general reaction is that astrologer means "calculator" and stargazer means "observer," and neither astrologer nor stargazer has any serious connotation of the occult. Franklin, however, even uses the terms in a respectful astrological fashion. In the mid-18th Century, astrology did not have the derogatory association that it has today among those who do not believe in astrology. In any event there is no evidence that astrology is involved in any of Franklin's great political or scientific contributions.

In *Poor Richard* for 1751 Franklin shows sympathy for astrologers but seems to criticize them also. He regrets the "wanton condemnation and abuse" of astrology by the English astronomers Isaac Newton, Edmund Halley, and William Whiston (Figure 3). However, Franklin forgives Whiston because later in life Whiston "repents" and acknowledges the validity of astrology. Franklin recounts the extreme astrological views of Whiston regarding an imminent Millennium." Whiston's complex ideas are based upon interpretation of a wide variety of astronomical phenomena. Despite Franklin's sympathy, he comments as to the classical *ex post facto* prognostication amendments that astrologers exhibit when their prognostications are not precise enough or are incorrect.

'Memoirs of the Life of Mr. William Whiston (London, 1749).

^{&#}x27;The four almanac titles not mentioned amount to seven issues and provide little information. The *Pennsylvania Almanack* and *New Jersey Almanack* are known to exist through advertisements, and the *New Year's Gift* is a pocket almanac. The *American Country Almanack* for the years 1746 and 1747 is preceded by *Poor Roger*, after the calculator Roger More. "Poor Roger" is a mimic of "Poor Richard".

Alignments of Celestial Bodies

In Franklin's first almanac, Poor Richard for 1733, he immediately and effectively employed a form of astrology. He predicted that on October 17, 1733 at 3:29 P.M., which coincides with the conjunction^s of Mercury and the sun, Leeds would die (Figure 4). Leeds was the publisher of the Leeds almanac which was most prominent at the time. Predicting Leeds' demise as Franklin did, shows that this astrology is Franklin styled because the conjunction of Mercury and the sun traditionally have little to do with death. The conjunction occurs rather frequently, about four times a year, making it a rather unauspicious event. Further, according to ancient Greek tradition as enunciated in Ptolemy's Tetrabiblos, only the "malevolent" planets, Mars and Saturn, are associated with death. Nevertheless, Leeds took Franklin's prediction quite seriously. As printer and calculator of the American Almanac for 1734, Leeds indicated that Franklin had made a complex "nativity" calculation as basis for his prediction. This suggests that at the time of Leeds' birth Mercury was in conjunction with the sun but it does not explain why October 17, 1733 was an auspicious date astrologically.

Franklin continued to tease Leeds about his death in *Poor Richard* for 1734, 1735, 1740, and 1742, and in the 1734 issue Franklin even introduces a solar eclipse, a conjunction of the sun and moon, which is a bit more acceptable according to astrological tradition. However, it is likely that Franklin chose the date of the conjunction of Mercury and the sun since it was an event which occurred near the end of the year when people would think about buying their new almanacs. Franklin must have delighted in the apparent success of his ploy, since the 1733 *Poor Richard* went through three impressions.

Franklin's specific belief in "alignment" astrology is seen in several instances relating to eclipses. Eclipses of the sun are in effect a conjunction of the sun and moon, while eclipses of the moon are oppositions.⁹ In *Poor Richard* for 1735-1737 total lunar eclipses portended dire circumstances for Germany as well as other monarchies of the past. Also in *Poor Richard* for 1740 the lunar eclipses signified "grief" and "tears" for women. The moon has been associated with females since ancient times. Traditionally, solar eclipses could be favorable or unfavorable signs, and Franklin refers to astrologers "haranguing" over them in *Poor Richard* for 1738.

Comets

Comets were very much on Franklin's mind, but not primarily for astrological reasons. Halley had made a prediction that the comet which had appeared in 1531, 1607 and 1682 was due to reappear in 1758. This comet would thereafter be called Halley's Comet. and its predicted apparition would be one of mankind's major intellectual achievements. Franklin mentioned Halley or eluded to the anticipated periodic character of comets in Poor Richard for 1749-1751, 1754, and 1757. In Poor Richard for 1750, Franklin makes a traditional astrological reference to comets being "forerunners of national calamities and threateners of divine vengeance on 'a guilty world". Whiston's argument concerning the Millennium, which appears in Poor Richard for 1751, is significantly influenced by comet apparitions. Franklin makes another traditional astrological association with comets and death when he eulogizes Jacob Taylor in Poor Richard for 1747 and 1748. Franklin describes Taylor's soul as a meteor and also mentions a comet in the eulogy.10 One interesting consequence of Taylor's death is that Poor Richard was enlarged or "improved" for 1748, partly as a compensation for Taylor's absence." The different format for the astronomical tabulations and greatly increased text is seen in Figures 5 & 6.

Blood Letting

The traditional Almanac Man appearing in *Poor Richard* for 1734, 1735 and 1738-1741 is associated with bloodletting for cattle and the readers.¹² The association appears in verse form above the Almanac Man in *Poor Richard* for 1738 (Figure 7).

Strangely enough Franklin committed a *taboo* in *Poor Richard* for 1748 by not depicting the Almanac Man. As reported by Sagendorph the year that Foulsham's *Old Moore's* almanac omitted the Almanac Man there were *no sales at all*.⁴³ This fate did not befall Franklin's publications, however, partly because the 1748 issue was a specially "improved" almanac having been expanded from twenty-four to thirty-six pages. Nevertheless, omission of the 1748 Almanac Man may have been for practical reasons. In fact, the depiction of Franklin's Almanac Man in *Poor Richard* for 1747 was noticeably deteriorating. Perhaps the woodcut was wearing out from heavy use. In any event *Poor Richard* for 1749 included a new

"The bodies appear in opposite directions.

¹⁰Meteors and comets are discussed in Article III of this series. ¹¹Leonard W. Labaree, Editor, *Papers of Benjamin Franklin* (New Haven: Yale University Press, 1959). ¹²Article XIII.

^{*}Conjunction means that the two bodies are in approximately the same direction in the sky as seen from earth.

¹³Robb Sagendorph, *The Old Farmer's Almanac Sampler* (New York: Ives Washburn, 1957), p. 6.

A TRUE DOGY is used the moll speech Sciences, has a TRUE DOGY is used the moll speech Sciences, has a price wave mide was a Peac, may any Ganada ab a price wave mide was a Peac, may any Ganada ab a price wave mide was a Peac, may any Ganada ab a price wave mide was a price of the wave devices and con-tained an above mide wave of the wave devices and con-tained to be avenue to the Age we like to b a device in a price wave and the Age we like to b a device in a price of the seven to be any and the seven is a gest block and the seven is a seven to be a seven to be and the seven is a seven to be a seven to be a seven the seven and the seven is a seven to be a seven to be a seven and to it by Cone of as, would never have dated to deprete the first and emines the date we have dated to deprete the first and emines a direct which the seven have dated to deprete the first of the seven is with the seven the seven the seven that and emines a direct wave there done the definition of the boot and form to the first of the first of the best of the seven the seven and to it by Cone of as, would never have dated to deprete the first of the direct of the seven the seven as a seven there are fared Direct of any would never have dated to deprete the seven and the is the seven the balance of the direct of the seven the seven and emines a direct of the seven the dates. If the seven the seven and emines a direct of the seven the dates the dates the seven and emines a direct of the seven the first direct of the seven the seven and direct as the seven as the first direct of the seven the seven and direct of the seven as the first direct of the seven the seven and direct of the seven as a seven in the Memois on the seven and direct of the dates as a seven in the dates of the seven and date to grave, and Commencement of the Addinession the seven and the seven as by from Sciphure Properiors and the seven of the seven as by from Sciphure Properiors and the seven the seven as a birthe a Comine set the Mallession to the seven the seven and I by the Year 1766; and this at only from Schrutze Prophetics, at (take his own Works)------ From the remarkable of stars, and the set of all set of the set of th nathia, Timp, " the Millessium or 1000 Years Rein of Ch

Figure 3: Page from 1751 issue of Poor Richard.

Mosht in this place attempt to cain thy Favour, by declaring that I wrate Alcontocks with no other View than that of the publick Good; but in this I flowing not be incered and Men are now as days to wife to be deceived by Protonera how (pe-cions forver. The plain Truth of the Matter is, I am excellive poor, and my Wife, good Women, is, I tell her, excellive proud (file cannot bear, the tays, to fit fpurning in her Shift of Tow, while I more than once to burn all my Books and Ranting-Traps (as the calls my Inframents) if I do not make fome profitable Ufe of them for the good of my Family. The Printer has offerd me fome con-fiderable finare of the Profits, and I have thus be-gun to comply with my Dame's defire. Indeed this Motive would have had Force enough

to have made me publift an Almanack many Years finee, had it not been overpower'd by my Regard for my good Friend and Fellow-Student, Mr. Titon Leeds, whole Intereft I was extreamly unwilling to hurt : But this Oblacle (I am far from ipeaking it with Pleafure) is foon to be removed, fince inexo-rable Death, who was never known to refpect Merit, has already prepared the mortal Dari, the fa-tal Sifter has already extended her deftroying Shears, and that ingenious Man mult foon be taken from us. He dies, by my Calculation made at his Requeit, on *Oct*, 17, 1733, 3 ho. 29 m. *P. M.* at the very in-funct of the i of \bigcirc and i: By his own Calcula-tion he will furvive till the 26th of the fame Month. This finall difference between us we have disputed whenever we have met their 9 Years pail; but at length he is inclinable to agree with any Judgment ; Which of us is most exact, a little Time will now determine. As therefore thefe Provinces may not determine. As therefore these Provinces may not longer expect to fee any of his Performances after this Year, I think my fell tree to take up the Tafk, and requeft a finite of the publick Encouragement i which I am the more up the hupe for on the Ar-

Figure 4: Page from 1733 issue of

Poor Richard.

XI Mon. January hath xxxi days.

Dick's Wife was fick, and pos'd the Doctor's Skill, Who differ'd how to cute th' inveterate III. Purging the one preferib'd. No, quoth another, That will do ueither Good not Harm, my Brother, Bleeding's the only Way; 'twas quick reply'd, That's certain Death; -- But e'en let Dick decide. That's certain Death ; - But e'en let Dick d Je no great Skill, quo' Richard, hr the Road ; Bat I think Bleeding's like to do most good.

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10 3 △ 万 ♀ fair.	3 217	11	s cent. = 9 day.
11 4 Days 9 h. 40 m.	4 77	10	Spid cog, and rea-
12 5 falling	5 177	10	5 1 ters 9 alt.
13 0 weather.	5h Y 7	9	5 dy money.
14 Tron fair again.	6 127	S	5
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17 3) for the featon.	9 1777	5	5 fould be cript,
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22 H ble, fnow	12187	0	5 If you'd have
23 2 or rain.	1 26	59	6 your poes laft,
24 : 7* 10 6 20	2 156	58	6Fuil 24 day,
25 a Conv. St. Daul.	3 286	57	6at 4 afternoon.
26 sd OD wind	sh 10 6	56	6 put no nails in
27 6 and perhaps	4 266	55	6 'em.
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20 H Bentuageuma	6 220	53	6 Who has de-
CONK CHAI decol	6h m 6	52	6 reis'd thee fo oft
the Hving cloud.	17 536	50	6 as thy jest?
3. Stilling around a	1 - J	-	

Figure 5: Page from 1738 issue of Poor Richard.

Weather

and larger version of the Almanac Man (Figure 8) who, alas, no longer sat on a pumpkin. The issues of Poor Richard henceforth also included woodcut depictions of the signs of the zodiac with each month's astronomical calculations.

Along with the Almanac Man in Poor Richard for 1738, Franklin suggests in verse form that the practice of blood letting was exercised on his wife (Figure 5). Franklin is probably making another traditional association here with women and the moon, since the Almanac Man and blood letting are both intimately associated with the moon. It is not accidential that blood letting is discussed here during the month of January. Astrologically the signs of Capricorn and Aquarius are the best to blood let and cup. The dates in which the sun appears in Capricorn and Aquarius are December 22-February 18 which completely overlaps January.14

Franklin was quite "pleased" with his astrological ability to predict weather accurately to the day. This is expanded upon in different ways in Poor Richard for 1737, 1739 and 1753. It is rather doubtful that Franklin was as accurate as he implied about predicting a particular type of weather "to the day," and he is quite vague about the technique employed. While he sounds serious about weather predictions, he makes hilarious fun of the "astrologers" who predict weather in Poor Richard for 1739 (Figure 9). Franklin indicates that weather prediction is as easy "as pissing abed" and proceeds to make a farce of weather prediction. He says astrologers, for example, look at Taurus (the Bull) through a telescope and observe the bull stomping, swinging his tail, stretching his neck and opening his mouth which in turn produces wind and thunder here on earth, and of course you must take into account the delay caused by the great distance to the stars. He continues his farce with involvements with Virgo, the virgin, and April showers.

[&]quot;Article XIII gives rationales for the appropriateness of bloodletting in Capricorn and Aquarius.

JANUARY. XI Month.	
Lake, on his dying Bed, embrac'd his Wife, And begg'd one Favour: Swear, my dearch Life, Swear, if you love me, never more to wed, Nor the a focond Hufband to your Bed. Anne dropt a Tear. You know, my dear, fays the, Your lead Defrees have full been Laws to me; But from thit Oath, I beg you'd me excute; For Tm already promis'd to J-n H-r.	$\begin{array}{c c c c c c c c c c c c c c c c c c c $
Remark. days, Sc. Orif Ofer Dpl. Afpects, Sc.	$\begin{pmatrix} 21 & 17 & 21 & 12 & 9 & 3 & 26 & 3 & 5 & = c & N. & 3 \\ \hline & & & & & & & & & & & \\ \hline & & & & &$
Remark. days. (S. Ortill Otel) pl. Alpects, C. 1 CIRCUSCISTON. 7 184.42 110 Sirius 10. r0 50 2 Jalling acca- 17 430 17 * 50.7 50 2 Jalling acca- 17 430 13 5 riles 122 2 Ther at the 7 16 44 25 5 tets 8 46 3 beginning, and 7 154 44 25 5 tets 6 16 5 Day 9 34 long. 7 134 47 19 9 maß exalted be, 5 Day 9 34 long. 7 134 47 19 5 maß 6 16 6 EPPH as NY. 7 14 48 13 60 12 30 6 18 6 60 12 7 14 43 20 0 m exalted be, 7 19 Epipth. 7 114 43 20 0 m exalted be, 7 19 Epipth. 7 14 54 18 16 <td< th=""><th>C21 17 26 17 9 4 20 (K) = C(N, 3) D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of the Day of the D Drife Diea.T. On the 10th Day of the Day of the D Drife Diea.T. On the 10th Day and Night are D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Day of the Barth on the Drife Diea. The D Drife Day of the Barth on the Diea. The D Drife Day of the Barth on the Drife Diea. The D Drife Day of the Barth on the Difference of the D Difference of the State of the Barth on the D Difference of the State of the Barth on the D Difference of the Barth on the Barth on the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Control the Difference of the D Difference of the Barth on the Control the Difference of the D Difference of the Barth Difference of the Difference of the D Difference of the Barth Difference of the Difference of the D Difference of Difference of Difference of the</th></td<>	C21 17 26 17 9 4 20 (K) = C(N, 3) D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of this Month, data D Drife Diea.T. On the 10th Day of the Day of the D Drife Diea.T. On the 10th Day of the Day of the D Drife Diea.T. On the 10th Day and Night are D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Diea.T. D Drife Day of the Barth on the D Drife Day of the Barth on the Drife Diea. The D Drife Day of the Barth on the Diea. The D Drife Day of the Barth on the Drife Diea. The D Drife Day of the Barth on the Difference of the D Difference of the State of the Barth on the D Difference of the State of the Barth on the D Difference of the Barth on the Barth on the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Difference of the D Difference of the Barth on the Control the Difference of the D Difference of the Barth on the Control the Difference of the D Difference of the Barth Difference of the Difference of the D Difference of the Barth Difference of the Difference of the D Difference of Difference of Difference of the
7K. Char. behead. 6 5 10 25 10 never found C & p. Epiph. 6 45 5 12 22 again.	High Water at Philadelphia. The last Column among the Planets Places shows the Moon's Latitude.

Apparently Franklin had changing, or internally inconsistent ideas here regarding weather prediction. It appears that he was serious about weather predictions initially because he gives some idea of how he went about it. In his bound collection of English almanacs for 1732 he includes a "Table to make a judgement of the weather in Hartley".

Popular Astronomy

Poor Richard included a rich variety of astronomical discussions, a feature which at the time was popular. Franklin's almanacs probably carried more educational material in the two decades from 1735 to 1755 than all other Almanacs in America at that time, put together. The issues for 1736, 1745, 1749, 1753 and 1754 (Figure 10) include data on the planets and solar system character. This was quite natural since the forefront of astronomy at that time dealt with celestial mechanics. The 1748 and 1752 issues dealt with the history of astronomy and calendars, respectively.

In *Poor Richard* for 1743 and 1753 Franklin gives discussions of the transits of Mercury and Venus.¹⁵ While these are rather technical subjects for the public Franklin includes them because of the importance to astronomy. Observations of these transits will eventually allow astronomers to calibrate sizes and

¹⁵A transit occurs when either Mercury or Venus appear to cross over the disk of the sun.

Figure 6: Two Pages from 1748 issue of improved Poor Richard.

Figure 7: Almanac Man from 1738 issue of Poor Richard.



distances in the solar system.

One of Franklin's practical pieces of education appeared in Poor Richard for 1751. It dealt with setting clocks and watches accurately. As stated in his almanacs, the sun's rising and setting were frequently given since people tended to use this information to set their timepieces. Since almanacs are traditionally computed for apparent solar time, the time one would set a watch for differed by a varying quantity of minutes in the course of the year because watches and clocks run uniformly and measure mean solar time. These corrections, sometimes referred to as the equation of time, were tabulated by Franklin, daily, for the year. Eventually the equation of time corrections would be included in all almanacs and would be listed under "sun slow" or "sun fast" columns.

In Poor Richard for 1752 Franklin included an explanation of the switch from the Julian or Old

Figure 8: Almanac Man from 1749 issue of Poor Richard.



Style Calendar to the Gregorian system. Catholic Europe had made this change in the 16th Century while Protestant Europe and America did not follow until two centuries later. Franklin dutifully explained how the calendar would be kept in better phase with the seasons by eliminating eleven days from the month of September (Figure 11) in 1752 and following new rules for the introduction, or lack of introduction, of leap years.

The year 1752 represented a high point in Franklin's almanac career. He printed six almanac titles that year, more than in any other year. These almanacs were the American Almanack, American Country Almanack, Barbadoes Almanac, Neu-Eingerichteter Americanische Geschichts-Kalender, Pocket Almanack and Poor Richard improved.

The interesting phenomenon of an almanac calculator or printer peaking in his professional career around a major event of astronomical interest has

Figure 9: Page from 1739 issue of Poor Richard.

Kind Reader, Neouraged by thy former Generofity, I once more prefent thee with an Almanack which is the 7th of my Publication. --- While thou are putting Pence in my Pocket, and fluinifhing my Cotinge with Neceffaries, *Poor Dick* is not unmind talk to do fomething for thy Benefit. The Stars are watch'd as narrowly as old *Befs* watch'd her Daughter, that thou mayft be acquainted with their Motions, and told a Tale of their Influences and Effects, which may do thee raore good than a Dream of laft Year's Snow.

Ingnorant Men wonder how we Aftrologers foretell the Weather fo exactly, unless we deal with the old black Devil Alas! 'ris as eafy as piffing abed. For Initance: The Stargazer peeps at the Heavens thro' a long Glafs: He itees perhaps TAURUS, or the great Bull, in a mighty Chafe, ftamping on the Floor of his Houfe, fwinging his Tail about, ftreiching out his Neck, and opening wide his Mouth 'Tis natural from these Appearances to judge that this furious Bull is puffing, blowing, and roaring I istance being consider'd, and Time allow'd for all this to come down, there you have Wind and Thun-der He spies perhaps VIRGO (or the Virgin;) she turns her Head round as it were to fee if any body obferv'd her; then crouching down gently, with her Hands on her Knees, the looks wiftfully for a while right forward He judges rightly what the's abiut: And having calculated the Diffance and al-tow'd Time for it's Falling, finds that next Spring we fhill have a fine April flower. What can be more natural and eafy than this? I might inffance the like in many other particulars; but this may be forficient to prevent our being taken for Conjurers. O the wonderful Knowledge to be found in the Stars! Even the smallest Things are written there, if you had but Skill to read. When my Brother \mathcal{F} or n erected a Scheme to know which was best for his fick Horfe, to fup a new-laid Egg, or a little Broth, he found that the Stars plainly gave their Verdiat for

SEPTEMBER. IX Month.					
Shall Fruits, which none, but brutal Eyes furvey.	COLUMN I				
" Untouch'd grow ripe, untaffed drop away?	ł				
Shall here th' irrational, the faivage Kind					
' Lord it o'er Stores by Heav'n for Man defign d,					
· And trample what mild Suns benigoly raife,					
. While Man mult lofe the Ufe, and Heav'n the Praife ?					
' Shall it then be ?' (Indignant here fhe role,					
Indignant, yet humane, her Bofom glows)	1				
• No !					
Remark. days, Sc. Orif Gfet) pl. Alpects, Sc.	5				
1 3] Wind (1666 15 406 14 m 19 The too ubliging					
2 4 London burnt, 1 5 476 13 1 17 *s rife 8 40	ł				
14 5 and clouds 5 496 11 13 D with by Tem-					
15 6 with 5 506 10 25 h fet 10 20 per	ł				
16 7 Day break 4 24. 5 516 9129 7 24 rile 11 51					
17 A 15 palt Trin. 5 530 7 19 is ever more	H				
18 2 rain, 5 540 1 al/abliging	H				
19 3 Nativ. V. MARY. 5 500 4 13 6 0 3 ujelf.	l				
20 4 then clear 15 576 3 25 Hold your	I				
21 5 St. MATTHEW. 5 596 1 7 Council					
22 6 Days decr. 246 6, 06 C 20 0 in = 6 2 \$	I				
23 7 and 6 15 59 Y 3 before Dinner;	1				
24 A 16 past Irm. 10 35 57 107*s rite 8 0					
25 2 Holy Rood. 6 45 5' 29 the full Belly	1				
25 3 windy 0 515 55 813 hates I bicking	1				
27 4 Ember Week. 10 7 5 53 27 6 8 \$ as wel	4				
28 5 Pleafant 6 85 52 II I as Alling.					
29 OSt. MICHAEL. 0 95 51 25					
30' 71 weather. 10 11 5 49 15 9 D w. 24 * 1, 9	1				
fecond D y of September, the faid Courts of Seffion and Exchequer,					
and all fuch Markets, Fairs, and Marts as af refaid, and all Courts					
aincident or belonging thereto, that be holden and kept upon, or ac-					
fame fhould have been fo kept or holden, in cale this Act had not					
been made; that is to fay, Eleven Days later than the fame would.					
have happened, according to the Nominal Days of the faid New					
and the Nominal Days thereof, are anticipated or brought forward.					
by the Space of Eleven Days ; any thing in this Act contained to the					
con rary thereof in any wife not with franding.					
And whereas, according to divers Cultoms, Prefcriptions; and U-					
Greunde are, on particular Nominal Days and Times in the Year, to					

Figure 10: Page from 1754 issue of Poor Richard.

IANUARY hath XXXI Days. Planets Places. D. H. First Q. 1 at noon. D. 0 1 4 8 9 9 D L 8 9 aft. Full O 25 131 R 8 1 f 4 aft. 16 19 Laft Q. 15 19 1-1 9 25 I 3 mor. 19 26 25 5. New D 23 16 9 6 16 3 mor. Firft Q. 31 20 193 10 15 29 22 12 10 194 N. 27 10 21 14 12 - 22 Deg. 17 16 2 2 II :4 23 10 22 22 21 8 16 13 25 22 12 27 20 31 T. Q. Conclusion of the Piece begun in our laft. 9 24. MARS is the fourth primary Planet 9 25. is properly to be termed a Satellite, or fer . D fet.] D fou. T. 112 396 A. 3 2 M. 39 6 49 3 1 37 7 35 4 2 37 8 26 3510 is properly to be termed a Satenite, of and 2611 24 condary Planet, as refpecting the Earth, and 39 16 12 25 not the Sun, for her Centre. He revolves round 36 10 11 126 the Sun in the Space of near two Years, at the 53 399 16 12 25 not the sum to Space of near two Years, at the 64 36 10 11 1 26 the Sun in the Space of near two Years, at the 7 Moon 11 5 227 Diftance of about 120 Millions of Miles. His 8 rifes 11 58 228 Bulk is reckoned to be much inferior to that of 8 rifes 12 50 the Earth. It is by the Parallax of this Planet, 3 29 the Earth. It is by the Parallax of this Planet, 4 30 that the best Estimate has yet been made of the 12 57 M.58 7 5 31 true Diftance of the Sun from the Earth and IIS 0 17 2 other Planets. He turns round his own Axis in very nearly the fame Time as the Earth, as is gevident by the Spots feen on his Face with Te-diefcopes. It has not yet been difcovered, whe-ther this Planet has any Satellite or Moon be blonging to him or not. That his Orbit is with-2 50 120 3 363 13 10 40 14 11 44 5 Morn. 32 16 12 466 18 I 49 9 17 out that of the Earth, and confequently that 518 10 7 182 58 518 Sihe revolves round the Sun at a greater Diffance 1913 13 49 12 9than the Earth, is evident from his being often 440 21 5 31 10 41 22 Moon 11 36 31 10 41 1 10 feen in the Side of the Heavens opposite to the 2 II Sun. He is fometimes feen through Telefcoper 23 fets. 12A.7 2 12 as the Moon appears in her third Quarter, Port 313 of his dark Side being then turned towards us, 414 which flews that his Light is borrowed from A. 12 52 221 4 15 the Sun. This Planet appears always with a 5 16 troubled ruddy Light, from whence, and from 6 17 the Appearance of the fixed Stars near his Bo-181 232 9 17 3 10 16 3 3 45 11 164 Morn. 5 6 18 dy, Affronomers conjecture that he is furround-7 19 ed with a very grofs Atmosphere, and that the 20 7 19'ed with a very gross Attraction upon his Face 20'Appearance of Belts or Fafeia upon his Face 12 58 12 105

Figure 11: Page from 1752 issue of Poor Richard.

been discussed twice in this series. Egelmann's contributions reached a high point around the second predicted apparition of Halley's comet.¹⁶ Christoph Saur, Sr., peaked around the switch to the Gregorian system,¹⁷ and so did Franklin. The *Poor Richard* almanacs around 1752 (1751-1754) have a much bigger content of astrological and astronomical information and include the clock-setting discussion. These four issues, along with issues for 1748-1750 containing history, played no small role in establishing the

¹⁶Article VII.

"Article X on Saur.

popular magazine tradition in America. Of the principal almanac calculators in America at that time the only ones including the switch to the Gregorian calendar were Theophilus Grew and John Jerman. Franklin printed the *Almanack* for 1735 and *Barbadoes Almanac* for 1752, computed by Grew, and various issues of *Almanack* and *American Almanack*, computed by Jerman. Two calculators who did not make the switch in 1752 were Thomas

who did not make the switch in 1752 were Thomas More and Nathaniel Ames. Franklin printed various issues of *Almanac* and *American Country Almanack*, computed by More, while Ames was a New England almanac calculator.

David Rittenhouse

David Rittenhouse was by far the most outstanding member of the Pennsylvania German community to become involved with national endeavors regarding astronomy.¹⁹ He also computed for a number of almanacs, including two in the German language.

Biographers of Rittenhouse have drawn parallels between him and Newton. Both Newton and Rittenhouse as youths were influenced by available almanacs. As explained by Babb¹⁹, Rittenhouse read *Poor Richard* and tried to observe two total eclipses of the moon. At about age eleven, Rittenhouse witnessed the eclipse of October 1, 1743 at 10:00 P.M. with his uncle. Rittenhouse eventually played an important part in making observations from his Norriton farm observatory of the transit of Venus. The transit of

*Article VIII.

"Maurice J. Babb, 1932, "David Rittenhouse," Pennsylvania Magazine of History and Biography, vol. 56, pp. 204-206.

Figure 12: Page from 1742 issue of Poor Richard.

Courteous READER,

"HIS is the ninth Year of my Endeavours to ferve thee in the Capacity of a Calendar-Writer. The Encouragement I have met with muft be afcrib'd, in a great Meafure, to your Charity, excited by the opin 1 on A Declaration I made of my Poverty at my first Appearance. This my Brother Philomaths could, without being C to rate different; and Poor Richard's Succeft, has preduced ye a floor Will, and a Poor Robin; and no doubt. Poor 7 bn. &c. will follow, and we thall all be in Name what fome Folks fay we are already in Fait, A Parcel of poor Almanace Makers. During the Course of these nine Years, what Bufferings have I not full fined ! The Fraternity have been all in Armit. Honeft Titan, deceas'd, was rais'd, and made to abufe his old Friend. Both Authors and Printers were angry. Hard Names, and many, were beflow'd on me. They deny'd me to be the Author of my own Works; declar'd there never was any juch Perfon; afferted that I was dead 60 Years ago ; prognofticated my Death to happen within a Twelvemouth : with many other malicious Inconfiftences, the Effects of blind Paffion, Envy at my Success; and a vain Hope of depriving me (dear Reader) of thy wonted Countenance and Fa-vour.---Wbo knows bim? they cry: Where does be live?----But what is that to them? If I delight in a private Life, have they any Right to drag me out of my Retirement? I have good Reafons for concealing the Place of my Abode. 'Tis time for an old Man, as I am, to think of preparing for his great Re-move. The perpetual Teofing of both Neighbours and Stran-gers, to calculate Nativities, give Julgments on Schemes, erect Figures, different Thieves, detect Horfe-Stealers, deficible the Route of Run-aways and ftray'd Cattle ; The Croud of Vih-ters with a tooo trifling Quefitions; Will my Ship return fafe? Will my Mare win the Kace? Will her mext Cost be a Pace? When will my Wife die ? Who shall he my Hafkand, and HOW LONG frif?? When is the beft time to cut Mair, teim Costs, or fow Sallad? Thefe and the like Impertmences I have now neither Taffe nor Leifure for. I have had enough of 'em. All that thefe aneur Folks can fay, will never provoke me to tell they any Right to drag me out of my Retirement ? I have good that thefe angry Folks can fay, will never provoke me to tell them where I live. I would eat my Nails first. My last Adverfary is J. J ----- n, Philomat. who declarer

My laft Adverfary is J. J -----n, Philomat. who declarer and preteflavian his Preface, 17,41) that the fails Prophecy put is my Almanack, concerning bins, the Year before, is alterether falle and unture z and that I am one of Baal's fails Prephets. This fails, fails Prophecy he specks of, related to his Recondlistion with the Church of Rome; which, notwithsflanding his D claring and Protefling, is, I fear, too true. Two Things in has degiae Verfas confirm me in this Suplicion. He calls the First of Noneember by the Name of All Mallerer Day. Reader; does not this findl of Popery? Does it in the least favour of the pure Linguage of Friends? But the plain: Thing is, his Advertance. Venus had been discussed by Franklin in some of his Poor Richard almanacs.

Conclusions

Benjamin Franklin understood and used astrology in the non-occult sense of the word as used in the 18th Century, and had sufficient mathematical ability, as exhibited in his almanac calculations, to be an astrologer. His friends and neighbors frequently made requests (Figure 12) of him to make astrological judgements requiring horary diagrams whose erection and interpretation require the utmost in astrological facility.²⁰ Although Franklin described himself as an "astrologer" there is insufficient evidence to attach the label to him. Furthermore Franklin indicated that he neither had the time nor inclination to practice the requested astrology.²¹ In most cases Franklin treated the subject with tongue-in-cheek.

Franklin's astrological knowledge was most effectively used for entertainment and educational purposes in *Poor Richard*. His stylized and humorous approach in prose and verse very likely increased his almanac sales.²¹ Franklin's astrological knowledge also somewhat colored his views of certain areas of national circumstances, women's behaviour, the home remedy of blood letting, and possibly weather prediction.

While Franklin's astrology was varied and copious, his contemporary, Saur, also displayed a respectable variety and supply of astrology in his *Hoch Deutsch Americanische Calender*.

Franklin and Saur very likely provided the American people with the greatest assortment of astrology in their time. *Poor Richard* contained a great deal of practical information along astronomical lines. Furthermore, its readers were made aware of the most interesting intellectual ideas in the forefront of astronomical research at the time.

Franklin's involvement with astrology appears limited to his writings in *Poor Richard* and therefore represents his perspectives before he had reached the age of fifty. During his last thirty-four years there does not appear to be any substantive involvement with astrology as evidenced in the literature. The astronomy gleaned by Franklin through his astrological and popular astronomy involvements generally helped him in his professional life in dealings with astronomers of importance at the national and international level.

In view of the fact that *Poor Richard* appeared in colonial times when communications in the colonies were relatively limited, Benjamin Franklin helped to shape astrological thought of the populace in early America.

²²Franklin's astrological knowledge was sprinkled into almanac verse via medieval alchemy. In *Poor Richard* for 1733 he refers to Saturn and lead; for 1748, to the sun and gold; for 1758, to the moon and silver; for 1756, to the conversion of lead into gold.

²ª Poor Richard for 1742.

Poor Richard for 1742.

Wilhelm Nast and the German Universalists Edited by Don Yoder

A major figure in the world of American-German religion in the 19th Century was Wilhelm Nast (1807-1899), a native of Stuttgart and descendant of a distinguished family of Lutheran clergymen. In 1828 he emigrated to America, where he is remembered as the founder of German Methodism, the German-language wing of the Methodist Episcopal Church, which until the 20th Century had its own conferences, colleges, periodicals, and other institutions. Two major biographies have been written of Nast, (1) Paul F. Douglass, *The Story of German Methodism: Biography of an Immigrant Soul* (New York: The Methodist Book Concern, 1939), which begins with Nast's life and continues with a detailed history of his church; and (2) Carl Wittke, *William Nast: Patriarch of German Methodism* (Detroit: Wayne State University Press, 1959).

Both works appear to have missed the correspondence about Nast in the *Trumpet and Universalist Magazine* (Boston), Volume X (Volume I, New Series), for Saturday, January 17, 1829. This issue of the American Universalist periodical, edited by Russell S. Streeter and Thomas W. Whittemore, includes an article based on an autobiographical

Duncan's Island, Perry County, Pennsylvania, Nast's first American home.





Wilhelm Nast (1807-1899). Frontispiece to Douglass, The Story of German Methodism.

letter sent by Nast to Editor Whittemore, plus a letter by Dr. H. R. Schetterly, a Pennsylvania German living in the vicinity of Harrisburg, Pennsylvania, on the prospects of a German-language mission to preach the Universalist gospel among the Germanspeaking population of Pennsylvania. This was the period when Universalism - a liberal and antirevivalist denomination centered in New England was making a number of influential converts in Lancaster, Berks, and adjoining counties. In connection with this mission a new religious periodical entitled Der Fröhliche Botschafter began publication in Marietta, Lancaster County, beginning in 1828. For details on this little-known religious movement among the Pennsylvania Germans, see my article, "Der Fröhliche Botschafter: An Early American Universalist Magazine," The American-German Review, X:5 (June 1944), 13-16.

Nast's connections with the Pennsylvania Germans include his residence in the Susquehanna Valley (on Duncan's Island near Millersburg) in 1828, where he first became acquainted with Methodism through the circuit-riders of the Baltimore Conference. He also appears to have corresponded with various Lutheran and Reformed clergymen as well as the German Universalists. He declined a call to Gettysburg Theological Seminary to go to the U.S. Military Academy at West Point to teach German. He later was invited to Kenyon College at Gambier, Ohio.

Ohio rather than Pennsylvania appeared to be Nast's destiny. There he met a German Methodist evangelist named Adam Miller, an ex-Amishman from a Somerset County, Pennsylvania, family, who was instrumental in his conversion to the Methodist view of religion. In 1835 Nast was appointed as German Evangelist for the Ohio Conference. He settled in Cincinnati which he made the center for the new German Methodist mission in the United States. There he founded the journal *Der Christliche Apologete* (named for the English-language Methodist *Christian Advocate*) and remained its editor until his son Albert J. Nast took over in 1892.

German Methodism, despite its minority status in the Methodist Episcopal Church, made some innovations in introducing the deaconess system into the work of the church, in philanthropic and hospital projects, and above all in introducing Methodism in its American variety into Germany and Switzerland, where theological seminaries and publishing houses were operated in Frankfurt and Zurich.

In taking Methodism as a missionary movement into Germany in 1849-1850, Nast's German Methodist movement pioneered in introducing the "free church" system into state-church territories on the continent of Europe. The Evangelical Association (Evangelische Gemeinschaft), a German-American denomination based on Methodism and founded in Pennsylvania by Jacob Albrecht (Albright) about 1800, followed with a mission on the continent. The Evangelicals are of course today a part of the new United Methodist Church, founded in 1959 as a union of the Methodist Church (itself a union of 1939 of the Methodist Episcopal Church, the Methodist Episcopal Church, South, and the Methodist Protestant Church) and the two Pennsylvania German "daughter" denominations, the United Brethren in Christ and the Evangelical Church (formerly the Evangelical Association).

Nast's "Universalist" correspondence was only a temporary phase in the orientation of an American emigrant to the American Protestant religious system of the 19th Century. The university-trained, talented young emigrant was evidently wooed by the Universalist forces, but his real destiny lay with the Methodist mission to the American Germans. We publish the letters as they appeared in the *Trumpet and Universalist Magazine* in 1829 for the light they shed on a hitherto hidden period of Wilhelm Nast's life — his brief flirtation with Universalism before he became committed to Methodism — and as a little-known chapter in the religious history of the Pennsylvania Germans. — EDITOR.

ANOTHER GERMAN CONVERT. "Europe her best tribute brings."

Several weeks since we received a letter from a respectable physician, in Pennsylvania, communicating the intelligence, that the Rev. Wm. Nast, "a young gentleman of great abilities," had recently arrived in that place from Germany, whence he had been driven in the consequence of his belief in Universalism; that he was engaged in, and had nearly finished a translation of Rev. H. Ballou's Treatise on Atonement, and Notes on the Parables, into the German language. In answer to a letter addressed to our highly respected correspondent, we have received another epistle from him, and one from Mr. Nast himself. Having resided but three months in America, Mr. N. finds great difficulty in the use of the English language; yet he expresses himself as well as could be expected of any person, who, being a total stranger to it, had studied it no longer. The following account of this gentleman will be interesting to the reader.

His father was a councillor of the king of Württemberg. His parents were of the Lutheran denomination, and died while he was a child. His family belonged to that class of pious people, who, like the Methodists, but without their fanaticism, believed themselves, in a more particular sense, converted to God. He was educated strictly in these religious principles. In the fourteenth year of his age, having made the necessary progress in Latin, Greek and Hebrew, he was adopted into one of the first seminaries in his native country, and thus saw his greatest desire fulfilled. His associates here were a set of "merry fellows, not at all thinking about their future destiny". Here he studied ancient literature, the higher branches of philology and universal history. These were preparatory to the study of philosophy and divinity at the University. The striking contradiction between the doctrines and the lives of the professors, gave him a contemplative turn of mind. He rather shunned society. His religious feelings became very ardent, and he read the writings of Zinzendorf and Swedenborg. "But," says he, "the more ardently I prayed, the more an uneasiness, inexplicable to me, was increasing. I felt myself every day unhappier. The world being too narrow for my heart, I fell into a discord with myself, and of course, with God. Comparing good and evil, I found so horrible a superiority of evil, that I shuddered. - From this darkness Jacob Boehmen's Aurora delivered me. It was a twilight, not the full blaze of the meridian sun. This world appeared no more a painted sepulchre. From a subsequent course of reasoning, I became fully convinced, that all sin and death must be swallowed up by eternal life, as revealed in Christ."

About this time he entered the higher Seminary of

the University, where he studied philosophy, poetry, and divinity. At the sight of the established orthodox system, he shuddered, to use his own words, "as if he had seen the head of Medusa". -- He resolved to fight against this darkness. Cowardice he felt himself incapable of, since he had seen such glorious light. He openly confessed and defended all his views by treatises and disputations. He was informed he could not, in his situation, long pursue his present course. This he well knew, and was rather surprised at the patience manifested by his orthodox professors. The reason of this indulgence he states to be, that one of the highest clergy in the country, who was also the President of the Consistory, was a brother-in-law to him. - "In this strict orthodox man," says Mr. Nast, "he having been not a little disappointed at my preceding heterodox piety and 'mystical fancifulness,' now arose a holy wrath. After having pursued the first course of divinity in this Institution, I declared to him my determination to abandon this religious school and apply myself to other sciences, not willing to swear a terrible oath to preach a doctrine I did not believe. He, calling back the forlorn child of God, threatened me with his everlasting indignation, representing the consequences and misfortunes that would doubtless befall me. At last he assured me I would not receive a cent from my family to prosecute my studies farther, and that he would never grant me any professorship in my native country. This answer I had anticipated; and having provided sustenance already by publishing some of my writings, I left the Seminary. All my pious sisters wrote me farewell letters, full of the warmest tears, particularly that dearest one, the wife of the very man above mentioned. Like the woman mentioned in your paper, she told me how severe and hard her duty was, how she struggled to alienate her affections from her brother, once beloved above all others of the family, but now become an enemy to God by embracing such erroneous sentiments. Looking on these scenes as being connected necessarily with this world, and turning off from the study of theological systems, I soon got rid of my grief; and beholding the glory of the Father full of grace and truth, I lived with a few beloved friends in a world of our own; i.e. in a high, beautiful and imaginative world, where we met the poets of olden time, and the philosophers and lofty spirits of all ages." -

The close of Mr. Nast's letter shall be given in his own words: ---

Here I must conclude. It would be a great satisfaction to me, to give you, at last, an account of my abrupt departure from my native home, and particularly my views of the doctrine once delivered to the Saints. But I find myself unable to proceed to further particulars. Indeed! what has been written was done with much labor, and in a language, to the idiom of which I am almost a stranger. I could not well express, what I had intended. Perhaps you are able to read German. If so, please let me know, and a full communication, if desired, shall soon follow; if not, I shall delay it until I find more leisure, and become able to write in the English language, to which I am devoting all my spare time.

My object in coming to this country was, and still is, to promote knowledge untrammeled by any human authority; but I feel a particular desire to disseminate truth, as it is in Jesus, to which all my feeble endeavors shall be directed to the utmost of my power. May I soon have the pleasure of hearing from you again, and enjoy the fellowship of a sweet communion with the servants of our Lord! With the deepest feelings of friendship I bid you, for the present, adieu!

Rev. T. Whittemore.

Yours respectfully, WILLIAM NAST

The following extract of a letter from Dr. H. R. Schetterly, the correspondent before referred to, will communicate some additional information concerning Mr. Nast, viz: that he has finished the translation of Ballou's Treatises, and has received an invitation to teach the languages at a German Seminary in Pennsylvania. It contains also some highly interesting information on other topics.

Esteemed Friend - Sixteen numbers of the "Trumpet" have come to hand. They have been the means of transporting my mind beyond the confines of the narrow sphere, in which it has been accustoned to move. From them I learn that the Rev. Hosea Ballou is not, as I had imagined, the only eminent servant of the great Jehovah. Oh no! the East, the birth place of light in my native hemisphere, furnishes many like luminaries, whose voice, it is hoped, has been heard far and wide, and will ultimately extend, even unto the end of these beloved U. States, until the mountains shall re-echo the praise of the Lord, to the downfall of an idolatrous and fanatic priesthood, who, God forgive them! instead of preaching the Gospel, as commanded by the great high priest of our and their own salvation, are daily engaged in contending, with all their might, against that very doctrine, which they profess to teach. Yet, strange as it is, some of them have privately confessed to me, that they believe in the final reconciliation of all; but that "this doctrine is not calculated to be preached to the people at this time". As though the bright effulgence of the meridian sun, would involve the wearied sojurner in the deepest gloom of night.



Wilhelm Nast and two of his children. Albert Nast (left) succeeded his father as editor of the Christlicher Apologete.

We have no Universalist preachers, nearer than Philadelphia, but there are many believers. Yet, alas! most of them do not know, that it is explicity taught by the Bible, having been so much benighted by the Orthodox perversions of it, that they have not read and thought for themselves. A superstitious veneration for the sacred treasure, exists among the people, rather than a pious estimate of its contents. -Methodistical fanaticism enshrouds a large portion of the community, but notwithstanding all their exertions to stifle truth, here and there, among their own sect, a few are beginning to obtain a glimpse of the true light, as may be learned from their daily admonitions to guard against the heretical doctrine, (as they are pleased to call Universalism,) as well as from other sources.

There being but few English readers in my

immediate vicinity, I have, as yet, not been able to procure any subscribers for the "Trumpet". Indeed, I estimate it so highly, that I feel loth to send any numbers to my distant friends, where it would recommend itself much more powerfully, than anything I could say in favor of it, as I have concluded to preserve and have them bound for the use of my rising family.

I feel great joy on account of the news from Lancaster County, contained in the "Trumpet," and have written to Mr. Myers to forward the "Prospectus" (for *Der Fröhliche Botschafter*). There is no doubt but I shall be able to obtain a goodly number of subscribers for it, among my German friends. What joyful anticipations of good may not be indulged to result to Pennsylvania, from that publication, aided by the spirit of the omnipresent God?

Universalism is not confined to the Eastern Counties of this State alone. Since I have made it the subject of my private conversation, I have met with many persons from various parts of the State, who confessed their belief. In three of the neighboring Counties, Union, Mifflin, and Perry, perhaps 20 or 30 might be counted within my own knowledge, and there are doubtless many more with whom I have not conversed. But there being no preachers, and the ministers of darkness and death suppressing liberal principles, wherever they find them, very few indeed are bold enough to avow their sentiments openly, and in the face of day. Thus the infant children, of the "one and only true God" are doomed to walk under cover of moral darkness, and in the shadow of death.

Mr. Kay, the Unitarian minister of Harrisburg, occassionally preaches to us, and is admired by many, as well as myself, for the clearness and force of his reasoning; but, his sermons want many of the beauties of the Gospel, on account of his never speaking of the grand, and final destiny of the human family as revealed in the sacred volume, he being privately an advocate of annihilation.

Mr. Nast has finished his translations of Rev. H. Ballou's treaties on "Atonement" and the "Parables," but unfortunately, in consequence of his misfortunes, is not able to get them printed at his own expense. Although he is not perfect in the English language, so as to write composition, he has finished the translations, as far as I am able to judge, in an energetic and superior German style, without any detriment whatever to the sense, or the lucid manner in which the subjects are handled. We are trying to find some person, who will undertake to print them in this country, before he sends them to Europe; and I have no fear but we shall be able to succeed, in some way or other, to accomplish this noble object also. — Mr. Nast, as yet, has no stated employment. He has, however, received an invitation to teach the languages in the Lutheran Seminary at Gettysburg.* If no other prospect should offer, he will, I expect, embrace the proffered boon, until he can do better. Let fortune direct him whither he will, he will be devoted to the great cause of disseminating truth.

I have directed my book-merchant Mr. Henry McGowan of Harrisburg, to procure me Rev. Mr. Balfour's three Inquiries, Rev. Mr. Ballou's three Treatises, and Mr. Loveland's Greek Lexikon, which, when they come to hand, shall be lent to such of my friends as will read. — There is no doubt but many copies of these works might be sold in this State, if they were in market; indeed, a number of persons have asked me where Ballou's works could be had, but all my efforts to get them have uniformly been frustrated.

If any of your travelling brethren ever come to this State, will you be so kind as to send them into this moral wilderness.

Here I must conclude, and do so, with grateful feelings of friendship for all those, particularly, who have engaged actively in the service of Jehovah. Tell Mr. Ballou, I have cherished and shall never cease to cherish for him the fondest attachment.

REV. T. WHITTEMORE.

H. R. SCHETTERLY

*Theological Seminary, Getttysburg. - The Lutheran Church is said to be extending rapidly in New York, Pennsylvania, Maryland and Virginia, and especially in the West. It has not generally encouraged theological education. Their Seminary, however, which commenced operations in Oct. 1826, is rising; and efforts are making to support a second Professor, to fill the office from Germany, and to afford every facility for the study of German Literature. Ten persons have subscribed 100 dollars each, on condition that 100 shares shall be subscribed in 12 months. — Recorder.

Vegetables in the Pennsylvania Cuisine:

Folk-Cultural Questionnaire No. 47

Benjamin Rush and others commented as early as the 18th Century on the types of vegetables grown by the Pennsylvania farmers, particularly the Pennsylvania Germans. Above all they mentioned cabbage which was made into the staple dish, sauerkraut. Travelers in the 19th Century commented on Pennsylvania's elaborate kitchen gardents. Since vegetables form so basic a component in Pennsylvania cookery, we send out this questionnaire to gather materials from our readers on the types of vegetables grown historically in Pennsylvania and how they were used on Pennsylvania tables.

1. Garden Vegetables. What were the principal garden vegetables grown in Pennsylvania kitchen gardens in the past? What vegetables common to American cuisines today were not usually grown in the 19th and early 20th Centuries?

2. Wild Vegetables. What vegetable products were used from the fields or woods, for example, dandelions and other greens, artichokes, and mushrooms?

3. Storage of Vegetables. How were vegetables stored for the winter? Describe the cellars, vaults, caves, bins and other storage places for vegetables. Describe the burial procedures for potatoes, cabbage, and other vegetables that were needed for winter use. Where in the house or outbuildings were vegetables normally stored? Do our Pennsylvania German readers remember the term "Speicher," used for a small building erected specifically for food storage?

4. Preservation of Vegetables. Vegetables which we now freeze or can were earlier preserved by souring, fermenting, or drying. Will readers describe as many of the ways of vegetable preservation as they remember. What vegetables were pickled and what processes and formulas were used to pickle them? What vegetables were dried and how were they dried? If you are familiar with the "dry houses" that used to stand on Pennsylvania farms, please describe those known to you, adding drawings if possible.

5. Sauerkraut. Will readers describe the process of making sauerkraut as they remember it. Were cabbage planes (Pennsylvania German: Grauthowwel) used for slicing the cabbage? How was sauerkraut "stomped"? Was it ever, in your memory, or in the memories of your parents or grandparents, "stomped" by foot, as grapes are (were) pressed out in some of the Mediterranean countries? What types of crocks and other implements were involved in the preparation and storage of sauerkraut? Where was it stored in the farmhouse to "ripen," and how long did the ripening process last? 6. Cooking of Vegetables. Describe the dishes made of cooked vegetables that you remember from your childhood. What vegetables were cooked alone, which were cooked together with others? Which vegetables were cooked with meat? How much spicing or flavoring of vegetable dishes, with herbs, vinegar, or other condiments, do you remember? Which vegetable dishes involved sauces?

7. Vegetables in Salad Form. Which vegetables were used for cold salads? How were these cold dishes prepared? Were cold salads served the year round on Pennsylvania tables? Pennsylvania Germans have a preference for hot salads — lettuce or other greens with bacon dressing, hot potato salad, etc. Will you describe these dishes as served in your parents' or grandparents' homes?

8. Marketing of Vegetables. If your families "tended" market in any of the Pennsylvania towns, describe the marketing of vegetables as you remember it. Were prepared vegetable dishes — salads, cole-slaw, sauerkraut and other specialties — marketed along with fresh vegetables?

9. Vegetables as Animal Fodder. Which vegetables were used for feeding the farm animals? Where were they stored? Were these fodder vegetables ever cooked before feeding?

10. Dialectology and Lore of Vegetable Cuisine. Will readers share with us the lore associated with vegetables and vegetable dishes — songs, stories, rhymes, proverbs, or sayings that you remember. Also write down for us names of vegetables and vegetable dishes, particularly the unusual ones, in English, Pennsylvania German, or other ethnic languages of Pennsylvania.

Send your replies to:

Dr. Don Yoder Logan Hall Box 13 University of Pennsylvania Philadelphia, Pennsylvania 19174





For The Folk Festival Brochure Write To: **PENNSYLVANIA FOLKLIFE SOCIETY** College Blvd. and Vine, Kutztown, Pennsylvania 19530



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The Kutztown Folk Festival is sponsored by the Pennsylvania Folklife Society, a nonprofit educational corporation affiliated with URSINUS COLLEGE, Collegeville, Pennsylvania. The Society's purposes are threefold: First, the demonstrating and displaying of the lore and folkways of the Pennsylvania Dutch through the annual Kutztown Folk Festival; second, the collecting, studying, archiving and publishing the lore of the Dutch Country and Pennsylvania through the publication of PENNSYLVANIA FOLKLIFE Magazine; and third, using the proceeds for scholarships and general educational purposes at URSINUS COLLEGE.

