PERSONAL hygiene is a topic which has appeared with ever-increasing frequency in the literature of Europe since the late Middle Ages. By the eighteenth century a formidable number of books and tracts presenting the rules of health circulated in many of the European nations. No doubt the inhabitants of Württemberg were duly influenced by these "laws of life." Even if one were to disregard the health cults, the presence of proverbs such as Eile mit Weile (More haste, less speed) would indicate that discipline and moderation were not revolutionary concepts in the lives of Württembergers. The people who formed the Harmony Society had been accustomed to leading well regulated lives, and their communal system gave added stress to personal hygiene.

The Harmonists liked to eat — they did it five times a day: a light breakfast between six and seven in the morning, lunch at nine, dinner at noon, Vesper Brodt between three and four in the afternoon, and supper in the early evening. Not only did they eat often, but judging from their ledgers, daybooks, and family books, they ate quite well.

The members of the Society enjoyed a variety of fruits. Large

apple, peach, cherry, and pear orchards were kept by the Harmonists in each of their settlements. The cherry trees at Economy, instead of being set aside in an orchard, were planted with mulberry trees (for the silkworms) along the streets. Lemon and orange trees were raised in greenhouses at Harmony, Indiana, and at Economy. From time to time the Society's agent in New Orleans would procure citrous fruits and have them shipped up-stream to the Harmonist villages. The making of wine was a major industry with the Harmony Society, and grape arbors were common features of the landscape in and around their towns. At Economy grapevines were even trained to grow along espaliers which were attached to most of the buildings. Grapes were not the only form of fruit enjoyed in a liquid state by the Harmonists. Peach brandy, cherry bounce, and apple and pear cider appear in countless entries in the Society's financial statements, and apparently all of these were enjoyed in the daily menus of its members.

The Society obtained its vegetables through two channels, backyard gardening and barter with neighboring farmers. The women maintained gardens in the yards behind the houses. Enough produce from these gardens was kept to supply the members of the household; the remainder was sent either to the store for immediate distribution or to the preserving kitchens for processing. Many of the people adjacent to the several settlements of the Society carried running accounts with the store. In exchange for staples and dry goods, these farmers supplied the Harmonists with large quantities of vegetables, grain, and meat.

Although much meat, especially pork and bacon, was obtained by the Society from its neighbors, that quantity was small in proportion to the amount produced by the Society itself. The Harmonists raised their own cattle, sheep, and hogs and operated their own slaughter-houses and smokehouses. A full complement of fresh, smoked, and salted meat was available to members of the Harmony Society.

Since each settlement of the Society was located next to a stream of water a supply of fresh fish constituted no problem. At Economy the calm reflecting pool in the Great House gardens served a double purpose. Besides being a noble and impressive piece of landscape art, it was the Society's fish preserve. Fish were caught with nets in the Ohio River and then transferred to the eighteen-foot deep garden pond for live storage.
Each household kept its own cow and several chickens, and in the evenings following milking time the Society's milk wagon made the rounds. Usually a pint of milk per person was kept for the following day and the remainder was taken to the dairy to be made into butter and cheese.

Great fields of corn, wheat, and rye were planted by the Harmony Society, and grist mills and a number of granaries were established at each of their sites. A community bakery was operated at each settlement, and outdoor ovens were located throughout their several villages. The Society's visitors praised its breads, cakes, and pastries. Noodles in various forms and combinations were often served in the households. John Melish experienced considerable qualms when he was first confronted by one of these dishes at Harmony, Pennsylvania. He probably thought that they bore some kinship to platyhelminthes, but after taking a sample he found them to be "tasty." 32

The store supplied the Society with a goodly number of staples. The family books most often mention salt, sugar, coffee, tea, cinnamon, pepper, nutmeg, clove, and "Chocalade." In the light of available evidence it is obvious that the Harmonists were not ascetics in the realm of dietetics. Their recipe books testify to the fact that their food items were prepared with a pleasing degree of culinary frill.

Only during the first two years in America did the Harmony Society seem to suffer dietary limitations. The scanty bits of documentary evidence which have survived from the early years of the Society's existence do not specify these limitations, nor do they describe any of the possible deleterious effects. 33 With the exception of these years the Society was able to provide the essential raw materials needed for a properly balanced menu. Of course, one cannot state positively whether each member took full advantage of the food variety afforded him by the Society. However, the noticeable absence among the Harmonists of diseases caused by dietary de-

33 Both Aaron Williams in The Harmony Society at Economy, Pennsylvania (Pittsburgh: W. S. Haven, 1886), 50-51, and John S. Duss in The Harmonists: A Personal History (Harrisburg: Pennsylvania Book Service, 1943), 21, mention the difficulties encountered by the Society in trying to establish credit with Pittsburgh merchants. Williams goes no further than that, but Duss describes eight days in 1805 when there was no bread and the Harmonists were forced to depend on vegetables and roots for sustenance. He even tells of members being poisoned by some of the roots. Duss mentions another scarcity of food in July of 1806.
iciencies leads one to believe that at least a minimum of balance was observed in their daily eating habits.

There is an old saying that "a good bartender never drinks." This principle seems to have held true with the Harmony Society. Breweries, distilleries, cider and wine presses, and wine cellars were prominent features of the Harmonist villages. These enterprises constituted, to a large degree, the base of their economy. It was an age of heavy drinking, and the German people were noted for their tendencies in that direction. The Harmonists were surrounded by temptation; yet what Dr. Daniel Drake picturesquely called "the pestilence that walketh in darkness" failed to exhibit itself among the members of the Society. Most people at that time considered water in its natural state to be unsafe, and the Harmonists do not seem to have contradicted this belief. Several types of wines and ciders were taken with meals, beer was served on festive occasions, but whisky was reserved mostly for medicinal purposes. Once again the period up to 1807 seems to be the exception to the rule. The amount of whisky consumed by the Harmonists at that time apparently discredits the "medicinal purposes only" theory. Two lines of reasoning may explain this: one is that prior to the religious revival which occurred in 1807 the members of the Society imbibed whisky often and freely, but that the increased religious intensity which produced celibacy and the abstinence from tobacco also pledged the Harmonists to temperance so far as whisky was concerned. The other thought is that due to an inferior food situation in the early years, whisky was used as a medicinal aid to bolster the resistance of the members of the Society. Certainly the latter explanation would be more in line with the general policy of the Harmonists as stated at later times by various trustees, but there exists no documentary evidence at this time that would support one explanation to the exclusion of the other. At any rate, whisky consumption decreased to such an extent after 1807 that it probably was used only as a tonic.

Blankets, cloth, and clothing were plentiful in the Harmony Society. Even during the first year in the United States muslin, wool, flannel, ribbon, lace, hats, and shoes were available. As it became better established, the Society was able to add linen, cotton, silk, and cashmere to the list of fabrics offered to its members. A factor of considerable importance to personal hygiene is that flannel, and later cotton, provided the Harmonists with underclothing which was easily washed. One of the chronic complaints of people ex-
periencing frontier conditions is "the itch." Sometimes "the itch" was scabies, other times it may have been caused by various fungi, but it was always a product of personal filth resulting from a lack of bathing and from dirty underclothing.

The Society had its own tailor, hatter, and shoemaker, and the record books of their shops show that they kept the members well supplied with the products of their respective trades. The Harmonist shoemaker made shoes "impervious to moisture" by coating them with a heated mixture of "one pint of drying oil, two ounces of spirits of yellow wax, two ounces of spirits of turpentine, and one half an ounce of Burgundy pitch." 34 Clothes were designed for comfort and durability. William Faux writing from Indiana in November of 1819 dealt the Harmonists some backhanded flattery when he described them as "looking rather shabby, just as working folk in general look." 35 At least he credited them with dressing appropriately. The ever-complimentary Duke Bernhard presents us with another view of the Harmonist clothing. He noticed that the women had "all preserved their Swabian costume, even to their straw hats," and he praised them as looking "very becomingly." 36 The Duke had a sharp eye for the runde Brust.

Comfort and cleanliness within the dwelling units were of prime concern. Articles of furniture were acquired upon requisition at the cabinetmaker's shop. All beds were made to the measure of the individual. 37

The handling of dirty dishwater in the Harmonist villages was particularly clever. Stone sinks were located in each kitchen. A stone trough ran from the end of the sink, through the wall of the house, and drained into a covered barrel outside. As the barrels became full, the contents were collected and taken to the hog sties to be mixed with the slop. The addition of the dirty dishwater to the slop considerably enhanced its desirability from the hogs' point of view, but in all probability it never occurred to the hogs that the soft lye soap used in dish-washing gave them a swift worming. The

34 "Record of Sicknesses—Recipes for Ink, Cement, Paints, etc., 1833-1834" (MB-2), Harmony Society Manuscripts, Old Economy, Ambridge, Pennsylvania.
35 William Faux, Memorable Days in America (London, 1823), 266.
37 Interview with Dr. Lawrence Thurman, Curator of Old Economy.
whole process was an admirable combination of domestic science, sanitary engineering, and veterinary medicine.\textsuperscript{38}

Insect control was skilfully systematized by the Harmonists. In order to discourage flies they grew tansy in their dooryards. Tansy is a highly aromatic plant which affects flies in much the same way as do modern insect sprays. The filthy cuspidor in the Harmony buildings yielded to a box of cedar chips. The chips quickly absorbed the spittle, and the odors which might normally be expected to rise from such obnoxious matter were cancelled by the cedar. The major effect derived from the use of cedar boxes was that many potential gathering points for flies were eliminated. All rooms were given a lime coating, and in cellars and in kitchens heavy coats of lime whitewash were applied. These treatments prevented the invasion of ants and/or cockroaches since the lime caused these pests to suffer caustic burns on their legs.\textsuperscript{39}

Cleanliness was an everyday thing with the Harmony Society, but twice a year each building received an especially thorough treatment. On these occasions the men organized in crews and ground the floors with sand. The sanding was followed by a healthy mopping with soft lye soap, and then the floors were rinsed clean.\textsuperscript{40} Needless to say, the combination of the sanding and lye soap kept the floors white.

Mental hygiene among the Harmonists is best evaluated in terms of celibacy and the doctrine of honest labor. Concerning the first of these two topics, Sigmund Freud and Alfred Kinsey would have had a field day in any of the Harmonist villages. Nearly all who, at one time or another, have written about the Harmony Society have felt compelled to speculate upon the effects of celibacy. Some writers have said that the practice was only sustained because of the prevailing discipline, balance, and cleanliness. Others saw it in reverse; they felt that it was through the self-denial and sexual sublimation of celibacy that an atmosphere was created in which frugality and industry could become the dominant characteristics of the Society. The old question emerges: which came first, the chicken or the egg? Some of the ramifications of celibacy in the Harmony Society were expressed in a most unique manner by Lord Byron.

\textsuperscript{38} Ibid. \\
\textsuperscript{39} Ibid. \\
\textsuperscript{40} Ibid.
When Rapp the Harmonist embargo'd marriage
In his harmonious settlement (which flourishes
Strangely enough as yet without miscarriage,
Because it breeds no more mouths than it nourishes,
Without those sad expenses which disparage
What Nature naturally most encourages) —
Why call'd he "Harmony" a state sans wedlock?
Now here I have got the preacher at a dead lock.

Because he either meant to sneer at harmony
Or marriage, by divorcing them thus oddly.
But whether reverend Rapp learn'd this in Germany
Or no, 'tis said his sect is rich and godly,
Pious and pure, beyond what I can term any
Of ours, although they propagate more broadly.
My objection's to his title, not his ritual,
Although I wonder how it grew habitual. 41

Anyhow, the practice of celibacy, such as it was, either resulted in an
unselfish devotion to the Brotherhood coupled with new heights of
spirituality, or in the anxiety which results from suppressed emotions.

There is a strain in German literature which idealizes the
Machtweib. Celibacy seems to have decreased the feminine qualities
of the Harmony Society women, and many of them were assigned
to jobs traditionally done by men. In his description of the women
at Harmony, Indiana, William Faux developed the Machtweib theme,
"The women are intentionally disfigured and made as ugly as it is
possible for art to make them, having their hair combed straight up
behind and before, so that the temples are bared, and a little skullcap,
or black crape bandage, across the crown, and tied under the chin." 42
Adlaid Welby also acknowledged the loss of femininity among the
Harmonist women, but in his opinion, beneficial results emerged
from the loss, "The women, to use the phrase of a polite man, are
the least handsome I ever beheld; the Colony therefore may possibly
not be much disturbed by female intrigues, and thus be free from
one other great cause of embroilment among mankind." 43 It can be
said with certainty that Welby's conclusion is a moot point among any
group of people at any time.

Sheer hard work contributed significantly to the mental outlook
of the average member of the Society. Everybody worked at some-
thing or other. George Rapp started the silk industry with the
thought in mind that it would provide many light jobs for women,

41 Lord Byron, Don Juan, Canto 15, stanzas 35-36.
42 Faux, op. cit., 266.
43 Adlaid Welby, "A Visit to North America and the English Settlements in
Illinois," Early Western Travels, 1748-1846, ed. Reuben Gold Thwaites
(32 vols.; Cleveland: Arthur Clark Co., 1904), XII, 266.
elderly people, and children. John Melish noted that the Society even put a dog to work turning the wheel that operated the blacksmith's bellows. The universal cure, all members felt, was work. An honest day's work produced a measure of satisfaction and contentment that was impossible to parallel. Most important of all, work developed a healthy, harmonious and constructive outlook within the individual.

Altogether the Society enjoyed an atmosphere conducive to good health, all the way from sturdy buildings to freedom from "female intrigues," if we are to believe Adlaid Welby. The effectiveness of this environment in promoting health and longevity, along with some of the cures and medical techniques used by the Society's doctor, constitute the next topics of discussion.

**CREAM OF TARTAR AND A LATIN TESTAMENT**

*Ich bin der Doktor Eisenbart,*  
*kuriert die Leut' nach meiner Art.*  
*Kann machen dass die Blinden gehen,*  
*und dass die Lahmen wieder sehen!*

**STUDENT SONG OF THE**  
**EARLY EIGHTEENTH CENTURY,**  
**POET UNKNOWN**

The Middle Ages, the Renaissance, and the Reformation failed to advance medical thought much beyond what it had been in the Ancient World. The works of Hippocrates and Galen were regarded by medical scholars of the Middle Ages as source books to be studied and mastered, but they were not supplemented by laboratory experiences or clinical research. Even at Salerno and Montpellier, strongholds of Medieval medical study, more than one "town and gown" riot owed its origin to popular abhorrence of human dissection. Due to religious beliefs, the acquisition of cadavers through the ages has been considered a sinister auxiliary enterprise of medical instruction.

Graduates of the Medieval universities were considered to be clerics, and as such were forbidden to shed blood. Thus they were restricted from the practice of surgery which, by its very definition, is

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44 Williams, *op. cit.*, 65.  
bloody. Crude barber-surgeons took up the gap, and surgery became frowned upon as being a menial sort of thing. A surgeon was just another tradesman, who gained his knowledge through apprenticeship and practical experience from conventional medical practice because the university graduate was limited to internal medicine.

In addition to the graduate physicians and the crude surgeons, there were a great number of empirical medics roving about the countryside. These “doctors of physik” dealt largely in the realm of internal medicine, but would gladly set a bone, amputate a limb, or extract a tooth if the situation demanded it. Like the surgeons, these fellows became masters of their trade through the apprenticeship system and by years of trial and error. It was just this sort of figure that German students had in mind when they sang their satirical song about the legendary Doctor Eisenbart, who practiced medicine in his own fashion with the results that the lame could see and the blind could walk again.

The Greeks had propounded the theory that there were within the body four humors, each of which corresponded to one of the four elements. There existed among these humors a very delicate balance which, when disturbed, resulted in illness; hence a person was “out of humor.” Imbalance was attributed to an excessive quantity of a particular humor; thus we hear of a “phlegmatic” person or of one who was “choleric.” An imbalance could also be caused by the presence of an unnatural humor. This aspect of the humoral theory was expanded by the seventeenth century English physician, Thomas Sydenham. He held that disease was the result of foreign matter in the body which occurred as a by-product of decay within the humors or which entered one’s system by way of minute particles in the air. Sydenham advocated that such “morbid or peccant” matter be removed through bleeding, purging, and sweating. His enthusiastic disciples carried his theory to extremes, and medicine entered the age of the lancet, the “heroic” laxative dose, and the violent diaphoretics.

These harsh techniques constituted the core of medical practice until the early nineteenth century. By that time new trends in medical practice

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47 The four elements, the four humors, and the characteristics which related them are as follows:

<table>
<thead>
<tr>
<th>Four Elements</th>
<th>Common Properties</th>
<th>Four Humors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earth</td>
<td>Cold and Dry</td>
<td>Black Bile</td>
</tr>
<tr>
<td>Water</td>
<td>Cold and Moist</td>
<td>Phlegm</td>
</tr>
<tr>
<td>Air</td>
<td>Hot and Moist</td>
<td>Blood</td>
</tr>
<tr>
<td>Fire</td>
<td>Hot and Dry</td>
<td>Choler or Yellow Bile</td>
</tr>
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thought had attracted enough followers so that the efficacy of the standard methods was challenged. One of these reforms was Samuel Hahnemann's set of tenets which came to be called homeopathy. The homeopaths believed that diseases were curable by those drugs which produced pathologic effects on the healthy body which were similar to those of the disease, that the effectiveness of a drug is increased by giving it in a minute dose, and that chronic diseases have as their common denominator "the itch." The latter point did not long remain a part of the homeopath rationale, but the other aspects enjoyed widespread popularity.48

Before homeopathy was introduced into the United States by a German physician in 1825, a home-grown revolt against traditional medical practice had already won popular acceptance. Actually the revolt was directed more against the practice of traditional physicians rather than against their theories. A New England doctor, Samuel Thomson, taking the humoral theory of Hippocrates as axiomatic, preached that only through the use of herbal medicines could one restore balance to the system. He condemned metallic purgatives, emetics, and diaphoretics such as niter, antimony, mercury, and arsenic. These compounds, significantly enough, were the stock in trade of the regular medics. By way of his Friendly Botanic Societies, the first truly national sales agency, Thomson drained the country's stomachs with Lobelia No. 6, the "Puke Weed." Thomsonianism, along with hydropathy and phrenology, were integral parts of the surge of democracy which characterized the age of Jackson, locofocoism, and communal experiments.49

The Harmony Society provided its members with the services of a doctor, Johann Christoph Müller. Christoph Müller was born May 15, 1779, in Heimerdingen, district of Leonberg, Württemberg, and migrated with the Society to the United States in 1805. He applied for citizenship in September of 1810, and it was granted to him in October of 1813. Müller withdrew from the Harmony Society sometime after 1831, perhaps in the company of Count de Leon.50

Christoph Müller, like most physicians of his day, was a jack of all trades. The average physician could not earn a living from the practice of medicine alone; hence he had to possess a degree of

49 Ibid., Chapter IV.
50 Harmony Society Membership File, Office of the Curator, Old Economy, Ambridge, Pennsylvania.
accomplishment in other fields, too. Müller was a bandmaster, printer, school superintendent, optometrist, research chemist, botanist, mineralogist, museum curator, apothecary, surgeon, and physician. The very fact that he had the time to support such a wide variety of activities speaks well of the general state of health among the members of the Society. Furthermore, the character of his extra-curricular activities speaks well for Müller, and indicates that he was an educated gentleman.

The precise nature and extent of Müller's education is not known, but judging from the quality of his written expression as well as from the general nature of his medical practice, it is safe to assume that he was a university graduate. Of the books and pamphlets in the Harmony Society Library which pertain to medicine or closely allied sciences, half of them either have Müller's signature in them or were purchased sometime before he withdrew from the Society. He not only read widely in his own field, but he also kept abreast of many of the standard works in other areas.

According to the Society's account books, Müller was a prolific writer. Each year he ordered great quantities of what was termed "quire paper," paper which was bound in small notebooks of about twenty-four pages — very similar to today's examination answer booklets. In these books Müller kept running logs of his experiments in chemistry, metallurgy, and botany, as well as recipes for various herbal medicines and food preservatives which he had developed.

Among Müller's several avocations, the museum usually attracted the most attention from visitors. It contained a number of natural curiosities from the surrounding area, but the item which inspired frequent comment was Müller's mineral collection. Benjamin Heer, visiting the Economy museum on October 20 of 1830, praised it as having an "extensive and well-arranged collection of minerals — better than that in the Phila. Museum — they say it is reckoned the best in the U.S. excepting that of Yale College." 51 The museum became a profitable venture, and starting in 1835 the profits derived from the admission fee were used to meet the Society's medical expenses.52

Müller kept in touch with Christian Wilhelm Buch, a "Medicinal

52 "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts.
Doctor" living in Stuttgart, Württemberg, and was probably aware of late developments in medicine on the continent. The cashbooks and ledgers indicate the names of other doctors with whom Müller might have had correspondence. To borrow a phrase from another discipline, Müller seems to have made an effort to keep himself "professionally alive and growing."

Although Müller had entered his profession by way of university training, he accepted a member of the Society, Conrad Feucht, as an apprentice. This was not particularly unusual, as virtually all American doctors took in apprentices. Müller was successful and trusted by the Society, and from all indications Feucht was fortunate enough to enjoy the same fate.

Müller not only served the members of the Harmony Society, but also those who lived in the immediate vicinity, plus the great number of travelers who frequented the Harmonist communities. The medical records for the years between 1828 and 1836 show that people from as far as New Castle, Steubenville, Pittsburgh, and points in Butler and Armstrong Counties received treatment at Economy.\(^53\) The Society managed to net a fair amount of cash by providing these services. From June of 1811 to the end of 1813 Müller turned over to the Society an average of fifty dollars a month earned through the sale of medicines to farmers adjacent to Harmony, Pennsylvania.\(^54\)

All was not profit. Aside from the initial cost of the drugs, it was an expensive proposition to have them transported. The Society purchased its medical supplies from firms in Pittsburgh, Philadelphia, and New Orleans.\(^55\) As an example of how high shipping expenses could be, it cost the Society $125.62 to have $532.66 worth of drugs sent from Philadelphia to Harmony, Indiana, in 1816. And to show how long it could take, the order for the shipment was made on February 3, 1816, and it was received on June 27, 1816.\(^56\) In the meantime an epidemic could have come and gone.

\(^53\) "1828-1848, Medicine Book—Prescriptions Given to Members" (M-10), Harmony Society Manuscripts.
\(^54\) "1810-1814, Cash Book—Daily Accounts" (CA-12), Harmony Society Manuscripts.
\(^55\) Firms which supplied the Harmony Society with drugs:
   In New Orleans: Field and Morgan.
\(^56\) Unlabeled and uncatalogued account book of drug purchases from February 3, 1811, to January 15, 1851, Harmony Society Manuscripts.
The expenditures made by the Society for drugs and medical equipment varied greatly through the years. Approximately $135 per year was spent prior to 1810, but by 1813 the sum had increased to $675. Three years later a high of $1,450 was paid for medical supplies; however, a steady decrease in this type of expenditure followed, and after 1838 the Society never again put forth more than $200 per year for medicine. Dr. Müller evidently maintained a well stocked medicine chest. When the Harmony Society sold its Indiana property to Robert Owen, $1,112 worth of drugs and medical supplies were included in the deal, and even at that the Society had $550 worth of medicines left over to take with them to Economy.

Drugs for the Harmonist communities are listed in a variety of colorful entries in the account books; as, for example, "Nails and Sundrie Medicines" and "10 tt. Cream Tartar and 1 Latin Testament." At many points it is difficult to distinguish whether an order of herbs and drugs was destined for the doctor or for the dyer, inasmuch as items like indigo, logwood, and saffron were used by both. By combing the Society's ledgers and by probing its few surviving prescription manuals, it is possible to arrive at several conclusions concerning Christoph Müller's medical practice.

The Harmonists received their share of purgatives. An old reliable in America's repertoire of pharmacology since colonial days was calomel, a laxative of dynamic impact. It was prescribed by physicians for all manner of cases, and in appalling quantities. The indiscriminate use of calomel was lamented in the Richmond Inquirer in the year 1825:

\[
\text{How'er their patients do complain} \\
\text{Of head, or heart, or nerve, or vein,} \\
\text{Of fever, thirst, or temper fell,} \\
\text{The Medicine still, is Calomel.}^{59}
\]

57 "Acc't of Society, Families, and Occupations, 1809-1810" (FB-10), "Ledger—Acc'ts with Society—Income from Enterprises" (1811-1812) (L-29), "1813-1815, Society Acc'ts of Various Shops and Enterprises" (L-51), "Family Book—Acc'ts of Various Enterprises" (1813-1819) (FB-5), "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts. Records of medical expenditures are to be found under a number of different headings: "Drugs," "Medicines," "the Doctor," "Christopher Müller" and "Hospital."

58 "Family Ledger—Acc'ts of Various Society Enterprises" (1825) (FB-4) and "1826-1853, Goods Purchased by Society—Fruits of Production—Cash Receipts" (L-33), Harmony Society Manuscripts.

59 "Calomel: An Old Song, Altered and Enlarged," Richmond Inquirer, March 5, 1825, quoted in Shryock, Development of Modern Medicine, 253.
Fortunate for the Harmonists, they received little of the dangerous calomel. It certainly had its effectiveness as a cathartic (which no one could deny!), but it also induced chronic mercurial poisoning resulting often in headaches, extreme nervous tension, and extensive damage to the kidney tissue. The more immediately visible symptoms were ulceration of the gums and other mucous surfaces, loosening of the teeth, and deterioration of the jawbone. Müller occasionally prescribed the drug, but only in cases of extreme fever and, strangely enough, for rheumatism.

Although they had little to do with calomel, the Harmonists possessed a host of equally vigorous cathartics: scammony, manna, castor oil, jalap, senna, aloe, rhubarb, and cream of tartar. All of these drugs except for the cream of tartar were herbals. The most frequently prescribed of these was castor oil. Although a violent purgative, it is the safest of all laxatives. Castor oil has no toxicity—an overdose will do no damage. It is doubtful that Müller realized this fact; he probably advocated castor oil simply as a matter of course.

Whatever the Harmonists may have missed in the line of fun, thrills, and excitement by the conservative use of calomel, they more than regained with the clyster. The enema, which Americans frowned upon as an obscene sort of practice, had long enjoyed popularity in Europe. The Paris élite of the seventeenth century regarded its proper use as a necessary prerequisite to high social standing; and the device was fully incorporated into German medical practice by the late eighteenth century. Müller ordered several clysters; and there can be no doubt that his German sense of thrift and efficiency dictated their frequent use, in spite of how an enema may have affected the celibate sensibilities of the Harmonists.

The members of the Society led balanced lives, and they did not start anything that they could not regulate; so we find them using vitriolated iron, opium, logwood (heartwood from the campeachy tree of Central America), and minute doses of alum to control the bowels. A tincture of opium—ten to twenty drops—was added to sugar as an astringent for heftigen Diarrhoeen (violent diarrhea).

Flaxseed oil, anisated ammonia, peppermint, and valerian root were administered to form intestinal gas which was expelled either through belching or by flatus. Müller's prescription for asthma calls for two drachms of clear ammonia salts, three grains of extract of hyoscyamus, and two drachms of anisated ammonia, all of which were
dissolved in eight ounces of water.\textsuperscript{60} This compound probably did not have much of a positive effect on the asthma, but between the hangover caused by the hyoscyamus and the rumbling exhaust of the anisated ammonia, the patient no doubt often forgot about his asthma.

Emetics, too, were among the drugs given to the Harmonists. Tartar emetic, ipecac, tartrated antimony, and another half dozen of the herbal emetics occurred frequently in prescriptions for dyspepsia and rheumatism. "A healthy vomit" accompanied by a strong purgative was the classic treatment for fevers. However, through such treatment the fever patient was dehydrated at a time when he could least afford it. Müller was guilty of employing tactics of this sort, although he relied far more upon the mild herbal emetics than upon the dangerous mineral drugs. Ipecac, although of organic origin, was quite potent; and Müller, taking no chances, prescribed twice the amount which today's pharmacologists have set as the limit. His contemporaries, however, would have regarded him as a conservative, as the usual dose was twelve times the quantity which Müller recommended.

Many of the Harmonist remedies, particularly those for fevers, caused sweating. The most common diaphoretics were antimony, ipecac, camomile, and camphor. "Morbific and peccant" matter was also driven from the body by means of \textit{emplastrum vesicatorium}, the blistering plaster. The plasters were usually comprised of Spanish fly or of antimony salve. They were located on different areas of the patient's (victim's) body, sometimes "zu den Nacken zu legen" (to be laid upon the neck), and other times "auf den Magengegend" (upon the stomach). Rheumatism seems to have been a favorite topic of experimentation with Dr. Müller; like his contemporaries, if cathartics and emetics were not enough, he also applied the blistering plasters.

Only on rare occasions did Müller receive an order of lancets, artery forceps, or "cupping cups," and the lengthy intervals between orders would lead us to believe either that he took remarkable care of his instruments, or that he seldom used them. The practice of phlebotomy, or bleeding, is not mentioned in the medical records of the Society. At any rate, if Müller had often resorted to bleeding his patients, some word of it would have appeared in his prescription books.

\textsuperscript{60} "1847-1870, Medicine Book, Recipes for Various Kinds" (M-7), Harmony Society Manuscripts. See Prescription No. 1, March 17, 1847.
Generally speaking, nearly all of the medicines used by the Harmony Society were herbals. Each one of the villages had its *Doktor Garten*, and greenhouses were constructed at Harmony, Indiana, and at Economy. The Society's pronounced preference for herbal medicines was probably not so much due to the influence of the Thomsonians as it was to the quarrel which raged between the advocates of vegetable and mineral remedies in Germany just prior to the time the Society departed for the United States.

As was seen in the discussion of emetics, Dr. Müller was amazingly moderate at a time when an extremely heavy dose was the norm. His moderation might well have been inspired by the homeopaths he had seen practicing in Germany. One of their principles was the doctrine of the infinitesimally small dose, but he never went to the extreme of the homeopath in Indiana who devised this prescription, “Hang two starved pidgeons in the kitchen window so that their shadow falls into a ten-gallon pot on the stove. After the shadow has boiled ten hours over a slow fire, give to the patient one drop of the mixture in a glass of water every ten days.” 61 Samuel Hahnemann’s works and several other treatises on homeopathy were in Müller’s library, and it can be assumed that their ideas influenced his practice to some degree, even if he did fail to prescribe ridiculously tiny doses.

On the other hand, the major sin of the regular practitioner of the day was the tendency to prescribe excessive dosages. Often this was the result of little or no effort to make accurate measurements. It has been mentioned above that the potent purgative, calomel, was commonly prescribed in “heroic” doses. Dr. Müller’s largest dose of calomel on record was ten grains, although his customary dose was about four grains. The normal dose at that time was about twice as much, twenty grains. The dose today is two or three grains of calomel, often less. Although he comfortably steered clear of the two extremes of his day, Müller’s doses often exceeded the maximum limit now recommended for the same drugs. We must keep in mind, however, that the highly concentrated drugs which are available on today’s market were unknown then. This fact tends to place Dr. Müller’s prescriptions within the margin of safety.

Müller’s notebooks contain recipes for a great number of tonics, cough syrups, and the common patent medicines of the time. Whisky

or other forms of alcohol were even more basic than calomel. He prescribed whisky more often than anything else — it was even administered to the animals! The frequency of whisky and tonics as remedies indicates that colds, coughs, sore throats, headaches, and indigestion comprised the vast majority of the Harmonists' chronic illnesses.

Many of the standard fever remedies are to be found in the Society's pharmacopoeia. Müller carefully copied several cures for "ague and fever" (malaria) from the pages of the *Niles Weekly Register*. The settlement in Indiana was constantly threatened by malaria, and especially serious outbreaks occurred in 1814-1815 and in 1822-1823. The normal death rate in the Society was about six to eight deaths per year, but the figure jumped to 49 in 1814 and to 70 in 1815. The outbreak of malaria in 1822-1823 did not take as heavy a toll — 25 members died in 1822, 20 in 1823. Dr. Müller valiantly fought the malaria epidemic of 1814-1815 with Cinchona, or Peruvian bark, and most of the known purgatives, emetics, and diaphoretics. Quinine was not isolated until 1820, but Müller followed the common practice of the day and employed Peruvian bark (Cinchona), the raw substance from which quinine is derived. Refined quinine did not come into its own on the American frontier until the 1830's, but in 1823, during the second outbreak of malaria, Müller was making use of the substance.\(^6^2\)

The Society assured itself of permanent relief from the "ague and fever" in 1824 by abandoning the unhealthy lowlands along the Wabash.

Rheumatism, as we have seen, occupied a good part of Müller's attention. Not only did he purge, vomit, and blister in an effort to effect a cure, but he also followed the trend of the times by trying to shock it out of existence with a static electricity machine of his own manufacture. He also conducted experiments in the use of indigo as a cure for epilepsy. This remedy was applied with what was considered varying degrees of success by a number of physicians in those years. The medical records show that Müller administered indigo compounds to epileptics from outside the community, but there is no indication that the condition existed among the membership of the Society.\(^6^3\)

\(^{62}\) *Ibid.*, and "1823, Medicines Given by the Society Hospital" (M-4), Harmony Society Manuscripts.

\(^{63}\) "1828-1848, Medicine Book—Prescriptions Given to Members" (M-10), Harmony Society Manuscripts.
Dr. Müller was called upon to perform the minor surgery required for cuts, burns, and scalds. A group of working people like the Harmonists no doubt needed this type of medical service more than any other. The prescription books list all manner of antiseptics and burn ointments which Müller had culled from other sources. The tooth key, that primitive instrument of oral surgery, was used for extractions. Catheters, syringes, and even a stomach pump were also present among Dr. Müller's tools of the trade.

The medical practice of Christoph Müller was essentially the same as that of his contemporaries; however, the average life span of his patients was considerably longer. The average age at death of the members of the Harmony Society in the years between 1805 and 1840 was 44.35! The closest available figures, by way of comparison, are for Massachusetts in 1850 where life expectancy was 39.4 years at birth, 40.15 years at twenty, and 28.75 years at forty.\(^{64}\) It is, of course, difficult to establish a valid correlation since the figure stated for the Harmony Society is an average age, not a life expectancy. Under any circumstances the Harmonists did enjoy remarkable longevity, particularly when one considers their frontier environment.

The practice of celibacy, while not rigidly enforced, quite obviously was responsible for vastly reducing infant mortality and death through childbirth after 1807. Presumably, celibacy would have eliminated the possibility of venereal disease among the Harmonists, although congenital syphilis and promiscuous sexual activity prior to membership are factors to be considered. Undoubtedly, celibacy had a positive effect in prolonging life expectancy among the Harmonists, if only by the elimination of infant and child mortality.

It was commonly believed, and not without reason, that if one did not die of a disease he would certainly succumb to the cure. The remedies of the Harmony Society were administered with a higher degree of caution and moderation than was the common practice. The fact that the Society made available to the members a fairly reliable doctor and a well-stocked apothecary shop discouraged the use of the semi-occult home brews which were so much in vogue,

especially among Germans. The indiscriminate use of these potions foreshortened many a life.

Whatever it was that gave added years to their lives, we can be certain that no single influence was entirely responsible. A unique complex of thought and action pervaded the Harmony Society, and their well selected sites, their sturdy buildings, the food they enjoyed, and the medicine they received were the ramifications of this spirit.

There is a great amount of wisdom in the saying which usually is attributed to the Pittsburgh food processor, H. J. Heinz, that excellence and true satisfaction can best be derived from simply “doing a common thing uncommonly well.” This thought expresses the secret of the Harmony Society. The annals of the North American frontier are written to a large extent in terms of “ague and fever,” cholera, dysentery, and numerous other problems which reflect a lack of public sanitation and an ignorance of personal hygiene, but the Harmony Society successfully endured the rigors of the frontier on three separate occasions. Through “low density” building layout, sound construction, balanced menu, adequate clothing, and cautious medical practice the Harmonists were relatively free from the traditional scourges of the frontier. The high level of health enjoyed by the members of the Society was not due to startling and original innovations in the realm of public health and medicine, but was rather the direct outgrowth of careful planning and the efficient utilization of all available resources. The Harmonists had their hearts fixed upon the “glorious second coming,” and their thorough provisions for life’s routine necessities made the long wait tolerable — frequently pleasurable. A high plane of physical welfare was guaranteed by the Society to its members, thus forming a more solid brotherhood in spirit — “the Harmony Spirit,” die harmonische Geist.

Again a day is passed
and a step nearer the end,
our time runs away
and the joys of heaven are our reward.65