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Introduction

The history of Millbrook Village has been carefully described by James Sheire of the Historic Preservation Team, Denver Service Center, National Park Service.1 While his narrative is informative and thorough, Sheire was repeatedly frustrated during the course of his research by the lack of primary source material pertaining to the Village. Much of what he wrote depended on poorly documented local histories. One source constantly cited was James Snell’s History of Warren County, New Jersey, one of the earliest written accounts of the town, and probably one of the most accurate.2 Published during the years when Millbrook Village was a thriving town, featuring "a grist-mill, blacksmith-shop, Methodist Episcopal church, schoolhouse, hotel, store, and about a dozen dwellings,"3 Snell’s book highlights the civic, geological, and historical significance of Pahaquarry Township where Millbrook was located.

The following brief history of Pahaquarry Township and Millbrook Village is a summary of Sheire’s more complete report and is meant primarily as a background to this Furnishing Plan of the Millbrook School. The primary materials relating specifically to the Millbrook School are extremely limited. A small number of interviews with former students are the most reliable sources for information concerning the interior of the school. There has not yet been an Historic Structures Report completed for the Millbrook School nor has there been an archaeological examination of the site, both potentially important sources of information concerning the original features of the school interior and the artifacts that might have been used.

There is, however, rich and varied material concerning one-room schools in the nineteenth century which is applicable to the Millbrook School. Information about other New Jersey rural schools, as well as more general material about

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3Ibid., p. 699.
similar schools in other parts of the United States, correlates those memories of former Millbrook students. While further research at the school site may uncover evidence that refutes this analysis, one can, in the meanwhile, feel secure that what has been proposed for the schoolhouse interior reflects the typical features found at schools throughout the state and, in some cases, throughout the country.

While written accounts of one-room schools have been very useful, the most enlightening information has come from conversations with a number of individuals with special and relevant incite. It was my great pleasure to speak at length with Mrs. Isabelle Hartrim, from Montague, N.J., who was a school teacher in one-room schools in Northern N.J. for 38 years. Her vivid memories clarified some of my questions and reinforced some of the conclusions I had reached from reading a variety of historical materials. I would like to thank George Warner of the Warren County Cultural and Heritage Commission for sharing his extensive knowledge of the area with me. I appreciate the help I received from Len Pallera, President, MARCH (Montague Association for Restoration of Community History), Suffolk County, N.J.; Jane Ott, Warren County Historical Society; Julia Y. Lewis, Hardyston Heritage Society; Priscilla Hayes, Robbinsville, N.J.; and Martha Smith, Ocean County Historical Society. Special thanks to Susan Kopczynski, Cultural Resource Specialist, Delaware Water Gap National Recreation Area for her help and support throughout this project.

The first chapter of this report will be a brief discussion of the history of Millbrook as it relates to the life of its nineteenth century inhabitants. The next chapter will describe one-room rural schools in general and New Jersey schools and public education in specific. The third chapter will focus on the interior of Millbrook school, offering suggestions for furnishing the room based on written and oral accounts of this particular school and other similar schools of the period.
Chapter 1:
Millbrook Village in Pahaquarry Township
Warren County, New Jersey

The most northern township in Warren County, N.J., Pahaquarry Township was formed in 1824 from Walpack Township, Sussex County. Its name derives from the Indian name, "Pachaqualong," for the mountain which forms its southern boundary.\(^1\) There are numerous accounts of a Dutch settlement in this vicinity as early as the mid-seventeenth century\(^2\), but no record of a permanent settlement has been found before 1732. This was the date for the purchase by Colonel Abram (or Abraham) Van Campen (1698-1767) of a 1,666 acre tract of land, encompassing the northern half of the township.

While not a resident of Millbrook, Van Campen is responsible for its name as the founder between 1732 and 1750 of a mill along the banks of the stream. It was this mill that gave the stream its name. The exact location of Van Campen's mill is unknown, although Scheire speculates that it was near the Van Campen home in Calno.\(^3\) It is believed that a number of men settled in the vicinity of Millbrook Village between 1800 and 1830, and by 1832 a grist mill had been built at Millbrook by Abram Garis. For the next several decades Millbrook served as the "center of the Pahaquarry agricultural community," offering to farmers in the surrounding area the services of a blacksmith, a merchant, a shoemaker, a distiller as well as satisfying their religious, cultural and political needs.\(^4\) According to Scheire:

"The community was self-sufficient in a number of essential areas. At his store (Francis) Stires sold consumer goods and provided an

According to Sheire, HRS, the Indian name was Pahaqualin (p. 1).

\(^2\)See, for example, Snell, History of Warren County, p. 696-697, and Cummins, History of Warren County, p. 221-222.

\(^3\)Scheire, Historic Resource Study (henceforth HRS), p. 3.

\(^4\)Scheire, HRS, p. 6.
outlet for the farmer's surplus crops. The church and school functioned. A blacksmith kept the farm animals shoed and made basic iron products such as nails and hinges. The wheelwright repaired the farmer's wagon and the shoemaker, carpenter, and cabinet maker provided their services.\textsuperscript{5}

The years from 1860 to 1880 were ones of stability for the village of Millbrook. Maps of 1860 and 1874 show 17 and 19 buildings, respectively.\textsuperscript{6} (Fig. 1) It is estimated that the village had a population of between 60 and 75 during this period.\textsuperscript{7} In his history of Pahaquarry township, Snell listed the buildings of Millbrook in 1880-1881, as "a grist-mill, blacksmith-shop, Methodist Episcopal church, schoolhouse, hotel, store, and about a dozen dwellings.\textsuperscript{8}

After 1880, however, Pahaquarry township suffered a gradual decline; by 1900, both the township and the village had lost at least one half to three quarters of its population. As agriculture became more specialized and the small farmer was squeezed out by more efficient farmers with greater acreage, small rural villages like Millbrook declined. Furthermore, in the cities on the east coast, factories offered higher paying jobs to the sons of farmers who had found their wealth in the land. Between 1867 and 1905, the value of a tract of land in Pahaquarry Township dropped from $3000 to $500. Another cause of decline for Millbrook was the arrival of the railroad, which by-passed the community. Local farmers found cheaper goods in railroad towns. From all these factors, Millbrook lost its status as a "service station village" and gradually became a mere cluster of buildings at a crossroads.\textsuperscript{9}

Millbrook Village is today within the Delaware Water Gap National

\textsuperscript{5}Scheire, HRS, p. 7-8.


\textsuperscript{7}Scheire, HRS, p. 9; p. 17.

\textsuperscript{8}Snell, History of Warren County, p. 699.

\textsuperscript{9}Scheire, HRS, p. 27. Scheire defines a "service station village" as a community in a rural environment which provides a majority of the economic, social, cultural, and religious services for the farmers and villagers in the area around it. (p. 18)
Fig. 1 a. Mill Brook, Pahaquarry, in F. W. Walling, "Map of Warren County, New Jersey, 1860," (New York, 1860)

Fig. 1 b. Mill Brook, Pahaquarry Tp., in F.W. Beers, "County Atlas of Warren New Jersey," (New York, 1874).
Recreation Area, where it is a featured historical site visited throughout the year. Were it not for the intense loyalty and interest of a small number of local citizens in conjunction with the custodianship of the National Park Service of land formerly slated to be consumed by the Tocks Island Reservoir Project, Millbrook would remain an anonymous community which had passed away in the early twentieth century, "the victim of agricultural and technological change."

For, as James Sheire has written:

"There is nothing historically significant about Millbrook. No famous man was born or lived there. It was not the site of a famous discovery, a well-known battle, or important political events. Descriptive phrases such as "transportation hub" or "location of an

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10 Millbrook Village was purchased in 1972 by the National Park Service. This agency restored many of the surviving structures, including a barn, several houses and the school. A reconstructed church was built in order to replace the 1860 building that had previously been vandalized and burned, and a general store was moved from a different location to the site of the original Millbrook store. [George K. Warne, A Look at Warren County (Belvidere, NJ: Warren County Cultural and Heritage Commission, 1991), p. 69.]

11 In 1955 a disastrous flood on the Delaware River prompted the Army Corp of Engineers to plan a reservoir 37 miles in length from Tocks Island to Port Jervis, New York. As designed much of Pahaquarry Township would have been put under water. In order to implement this plan the U.S. Army Corp of Engineers purchased property in the township with plans to relocate the resident population. Many years after these plans were drafted, the project was dropped, but the land purchased from landowners is now largely in the hands of the National Park Service and the New Jersey state government. [Ibid., p. 68] The Millbrook Village Society, consisting of historically-minded local residents, cooperates with the National Park Service "to preserve not only the buildings in the village, but a way of life once common in the valley. The village 'comes alive' during the first weekend of October when the Millbrook Days celebration occurs." ["Millbrook Village: A Self Guiding Tour" (Delaware Water Gap National Recreation Area brochure, n.d.)

12 Sheire, HRS, p. ii.
important industry" are not a part of Millbrook's past.\textsuperscript{13}

Millbrook is, however, typical of villages where millions of Americans grew up, and its institutions and businesses reflect the changes that increased technology and urbanization brought on agricultural communities.

The Millbrook that visitors see today is described as

"a representation of a late 19th century rural community rather than an exact restoration of the original Millbrook. This scene represents the many villages that dotted the landscape during the last century and played a special role in the growth of our country. Here we remember a way of life led by millions of Americans until they abandoned it for the cities."\textsuperscript{14} (Fig. 2)

For the purposes of this report, the period from approximately 1860 to 1880, the height of Millbrook's vitality, will be the one featured in the Furnishings Plan. Fortunately, records concerning New Jersey public education during this period are extremely rich, so while information regarding Millbrook's school is scanty, much can be extracted from more general sources about the educational experience in a rural school, the teaching materials commonly used and the arrangement of the classroom.

The following chapter will focus on these general sources in order to set the stage for the proposed furnishing plan.

\textsuperscript{13}Ibid.

\textsuperscript{14}"Millbrook Village: A Self-Guiding Tour."
Chapter Two:
The Tradition of the One-Room School in Nineteenth Century New Jersey

Our public schools are the safeguards of the republic; they are the crowning glory of institutions, and as such they claim the most hearty encouragement and the most liberal support of the people and the State. That they may be made most efficient in accomplishing the great good for which they were established, let each district be provided with a neat, comfortable and convenient school-house; let all the necessary funds be provided for maintaining free schools in which the poor can enjoy equal advantages with the rich; let parents give to the schools their warmest support, to the teachers their most hearty co-operation, and to their children all needed help and encouragement; let the teacher consider well the true nature and responsibility of his profession, and prepare himself for his great work.  

In 1868, when this passage was written, the Millbrook school was erected on the banks of Van Campen Brook, joining a host of other one-room school houses then in existence throughout New Jersey and the United States. Students from the community had previously been schooled in the basement of the Millbrook Methodist church, but after a new church was built and the ceiling of the original church basement appeared to be in danger of collapsing, the residents decided to appropriate the structure for a new purpose. The building was moved about 150 yards from its original location.

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2James Snell's History of Warren County, New Jersey is the source most often cited concerning the Millbrook School. According to Snell, "The first school in this township was in 1840-1841. In those years the Methodists erected a small frame building on the hill near the graveyard at Mill Brook, under which was a basement, built and used for school purposes until 1868, when the frame was moved down the hill to its present location and converted into a school-house." [Snell, p. 700] Scheire stated that Millbrook had had a school since 1839, but he gives no source for this information. (H.R.S., p. 26.) One source states that when the congregation at Millbrook sought to build a new church at "Millbrook corners"
Resembling the proto-typical one-room school, Millbrook District 82 school is a simple one story wood frame building (20' x 28') with an interior containing classroom and a vestibule across the first six feet. (Fig. 3) The school is nearly identical on the outside to one illustrated in Julia Webber's diary of her years teaching in rural New Jersey. In her account, she describes her first impression of the Stoney Grove school:

"It gave me a strange excited feeling as I drove up to the front door of the clean, white box-like structure, shining in the sun. I have a deep faith in one-teacher schools and in the opportunities they afford to prepare children for a continually developing creative and democratic life ... I paused for a moment at the door and looked around at the woods surrounding the little schoolhouse. The recent rain made the leaves shine and the woods smelled so nice."3

As romantic and appealing as this description sounds, the condition of these rural schools varied greatly from district to district in New Jersey in the second half of the nineteenth century.

For many years prior to 1876 when free public education was mandated in the state, proponents of free public schools had been trying to achieve state funding for education. In 1845 the state legislature authorized the appointment of a State Superintendent of Schools whose "professional duties included working for the advancement of schools and providing information to the public."4 Beginning with this appointment, the state superintendent was required to submit an annual report to the legislature, along with the township superintendents whom he appointed. These reports are filled with "recurring complaints about the poor condition of the schoolhouses, the inadequate preparation of the teachers, the

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in 1860 they used materials dismantled from the German Lutheran and Presbyterian Church at Walpack. The new church was erected for $1500 and was dedicated in the fall of 1860. [Dan Silver, "The Old Millbrook Church," Pahaquarry Township, Warren County, New Jersey: Tercentenary Report 1664-1964 (Blairstown, N.J.: printed by the Blairstown Press, 1964)]


Fig. 3. Exterior photographs of Millbrook School No. 82 as it appears in 1993, a building in Historic Millbrook (N.J.), Delaware Water Gap National Recreation Area. (Author's photographs)
... the clean, white, boxlike structure, shining in the sun.

indifference of the public, and the lack of funds. These annual summaries suggest that the quality of the schools and their teachers varied dramatically from township to township and district to district.

One report, by Charles Morrow of Wantage, Sussex County, in 1864 is typical:

"There are in my township twenty-two schoolhouses, six very good, eight fair, and the remaining eight horrible, where the floors are broken through, and the children cluster in the corner during rain storms, and shiver as the wintry blasts whistle through ... Paint being a taxed article is scarce, while mats and scrapers are even more scarce; floors answer for spittoons and they are well used by teachers and pupils; furniture is rude and sadly cut up - ventilation is complete though unpatented - viz: through broken windows, dilapidated doors, roofs and knot holes."

A great advance in educational reform came in 1866 when the New Jersey State Board of Education was established by the legislature. Their duties were to include appointing the State Superintendent of Public Instruction, recommending changes in school law, and making an annual report to the legislature. In addition, in the same year, a section of school law was repealed, namely that portion that provided for the distribution of a portion of public funds to religious schools, thereby reserving all public moneys for public schools. In 1871 the New Jersey state legislature passed an act mandating that all public schools in the state be entirely free, with a fixed tax of two mills on a dollar for all property in the state, to be distributed to all counties according to a school census of children between five and twelve years of age.

Previously, families of school-age children were "obliged to pay tuition fees - the state simply paid a part of the expenses of maintaining the schools, and thus reduced the amount to be paid by the patrons." As the State Superintendent wrote, "By the passage of the free school act our whole school machinery is very

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5Ibid., p. 29.

6Ibid., p. 36.

much simplified, and the full benefits of a public school system is accorded to all the children of the State.8

Finally in 1876, the New Jersey state constitution was amended to include the following changes of vital importance to education:

"The Legislature shall provide for the maintenance and support of a thorough and efficient system of free schools for the instruction of all the children in the State between the ages of five and eighteen years. The Legislature shall not pass private, local or special laws providing for the management and support of free public schools."9

With these amendments, New Jersey took the lead in educational reform, outstripping other states "in the liberality of (their) provisions for free education."10. The amended laws governing New Jersey public education assumed the form in 1876 that they have today, providing for a free public school system "for the education of all the children of all the people."11

The condition of public education improved tremendously in New Jersey between 1860 and 1880, the years when Millbrook was at its height and the period which is represented in the interpretive plan for the village. As Maurice Beerley, County Superintendent of Cape May County, wrote in his annual report of 1876, "The last decade has been more fruitful and exhibited more energy and advancement in education than we find in the nine decades of the last century that preceded it."12 Steady progress was made during these years in the building of new schoolhouses, education of teachers, and development of curriculum. While limited funding prevented significant change in some rural areas of the state, the reports of county superintendents consistently mentioned improvements in their schools over the course of these twenty years.

The Annual Reports of the State Board of Education and State

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8 Ibid.

9 Ibid., p. 45.


11 West, Elementary Education in New Jersey, p. 45.

12 Ibid., p. 45.
Superintendent of Public Instruction provide rich data as well as detail for the discussion of public education in New Jersey during these twenty years. In each volume, the report of the State Superintendent was succeeded by those from the county superintendents as well as the superintendents of city schools, whose reports reflected a very different set of concerns and populations. Examination of 36 consecutive years of these reports for this project has resulted in a wealth of material which, although rarely specific to the Millbrook School, provides us with substantial relevant information about a range of aspects of public education.13

These reports also serve to debunk many myths about those nostalgic days of the one-room schoolhouses, so steadfastly clung to by modern-day romantics. Indeed much of what these superintendents wrote confirms "the long list of imperfections that critics of one-room-school education had complained of for so long: poorly trained teachers, poorly equipped schoolrooms, want of books, voluntaristic education, and insufficient time for recitation as teachers hurried from class to class."14

The principle categories addressed in these annual reports include, curriculum and texts, the training of teachers and the quality of their teaching, the length of the school year and attendance of students and school facilities including the school house, furnishings and exterior grounds. Information from many of these categories is potentially relevant to the interpretation of the Millbrook School.

Curriculum and texts

The common subjects taught in one-room schools included, "in order of importance, reading, arithmetic, writing and spelling; then, in no particular order, grammar, history, geography, literature and physiology," but no specific curriculum was legislated by the State of New Jersey in the period from 1860 to 1880, so

13During the years in question, Pahaquarry consistently had the smallest group of students of any township in Warren County, ranging from close to 200 to less than 100 children between the ages of 5 and 18. With between 3 and 5 schools in the township, Millbrook appears to have been the largest, with between 35 and 50 students per year. (See Appendix A).

there was no prescribed course of study, particularly in the rural schools. One
guide to teaching could have been followed, should a teacher have so chosen - the
"Course of Study in the Model School" in Trenton, as published in 1869. (See
Appendix B) But in general teachers were left on their own, with only infrequent
supervision by the County Superintendent and the opportunity for a short (five
day) "refresher course" offered yearly in the form of an "Institute," offered under
the auspices of the State Teachers Association.16

As one early teacher remembered:

"In those days, you weren't supervised as much... It was a pretty big
job when you consider that you were completely alone. You had no
teacher next door or anyone to go to if there had been any accidents
or big discipline problems. You really were on your own. "17

An important job of the county superintendent was to visit schools within
his jurisdiction, hearing recitations, noting teaching methods, and encouraging
students to greater accomplishments. Having observed 2 or 3 times a year at each
school during the course of the year, Ephraim Dietrich, Superintendent of Warren
County in 1872, remarked on the "slavish use of the text-book" that hindered
creativity in some classes. He was critical of those "who make no special
preparation for each day's work; who read no educational works, and who make
little or no use of such aids in teaching as the globe, blackboards, &c."

In general, he claimed, "the majority of our teachers confine themselves too

15Fuller, The Old Country School, p. 11. It was not until 1896 that the State
Board of Education moved to guarantee uniformity of curriculum in each county.
In that year the county superintendents were "charged with the responsibility of
preparing a uniform course of study for their respective counties and were
authorized to issue county diplomas to eighth graders who successfully completed
the prescribed course of study." [Carolyn M. Campbell, M. Peryl King, Martha T.
Smith, Chickaree in the Wall: A History of One-Room Schools in Ocean County,

16Subjects covered at these annual gatherings included practical instruction on
all the major subjects as well as more general lectures relating to discipline,
educational methods, and teaching materials.

17Carrie Papa, Stones and Stories: An Oral History of the Old Munroe School
closely to the text-books." He felt that teachers who confined "themselves to the words, the order, and the methods of the book" were destroying "mental life." Instead of "slavish adherence to text-books in recitation," Joseph S. Smith, Superintendent of Warren County in 1878, encouraged "more teaching and less lesson hearing." In his report of 1880, the State Superintendent went as far as to try to quantify the number of teachers who adhered too closely to the textbook in hearing recitations. In Warren County, he found 25 of 123 teachers guilty of this practice. Such strong sentiment would no doubt have been passed on to teachers in that county and may well have influenced classroom practice in the Millbrook school, among others.

While dependence on the text for teaching was frowned upon, the standardization of text books used throughout the county was encouraged. When making his report to the State Superintendent in 1872, Warren County Superintendent Dietrich deplored the current lack of uniformity of text-books within any given school district.

"I have found in the same school two different series of spelling books and readers, four different series of arithmetics, two series of grammars and geographies, making the number of classes greater than the whole number of children enrolled." In the following year's report, however, Dietrich pointed to his success in "breaking up the almost endless variety of text-books. Instead of but twelve there are now sixty-six districts [out of a total of 92] in the county having the same text-book, and I think that a little further

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20Report of the State Board of Education... for the Year Ending August 31, 1880, p. 40.

21Report of the State Board of Education... for the Year Ending August 31, 1872, p. 91.
effort will make the uniformity general. This once attained there will
doubtless be no necessity for a change in a number of years.\textsuperscript{22}

A number of advantages of centralization of text book purchase are described in
the State Superintendent's report of 1880:

"A liberal discount is obtained in the purchase of the books. The
books pass from class to class, and may be used until they are worn
out. Children are supplied with all the books they require at once
when they enter school, and the complete organization of the school
is effected without loss of time, which is inevitable if the parents must
be depended upon to purchase the books."\textsuperscript{23}

Likewise standardization in terms of curriculum in the form of "a course of
study for the school" was adopted at the 1879 meeting of the State Superintendent
and the Township Boards of Trustees. The new curriculum was immediately
published and given to the teachers who were said to react favorably. It was
hoped that this "advance step (would) effect much in stimulating both teachers
and pupils to do more and better work."\textsuperscript{24}

\textbf{Homework}

There was little consensus about the necessity for and advantages of
homework during this period. Those who favored homework felt that

"for one pupil injured by over-work in school, there (were) ninety-nine
who do not by mental effort accomplish anything like as much
as they are capable of accomplishing. Every child with ordinary

\textsuperscript{22}Report of the State Board of Education... for the Year Ending August 31,
1873. Appendix, p. 88.

\textsuperscript{23}Report of the State Board of Education and the State Superintendent of
Public Instruction for the School Year Ending August 31, 1880. (Camden, NJ:
Sinnickson Chures, 1881), p. 31.

\textsuperscript{24}Report of the State Board of Education and the State Superintendent of
Public Instruction For the Year Ending August 31, 1879 (Camden, NJ: Sinnickson
physical endurance should have certain lessons give him to be learned at home.\textsuperscript{25}

But there were also those who felt that too much school work was bad for the health of children and that "the daily school session constitutes quite as great a portion of the twenty-four hours as should be given by the children to mental work."\textsuperscript{26} Accounts of former students of the Old Monroe School in Sussex County suggest that in rural areas, homework was generally not given because of the chores that the children needed to do at home. Recalled one former pupil,

"By the time you got your home chores done, the milking, taking care of the animals, and so on, it was dark. You got all of that studying done in between your classes at school. Miss O. didn't give us work to carry home. She knew we all had work on the farm to do at night."\textsuperscript{27}

**Extracurricular Activities**

While relatively little is said about the specific curriculum in Warren County, observations about extracurricular activities can be found in the county superintendent's annual reports. For example, the 1860 report addresses the issue of singing in school. The superintendent observed, "I have observed with much pleasure that vocal music is practiced to some extent in the schools of almost every township in this county." This official must have stressed music in his local schools, compared to other districts in the state where no more than a quarter of the schools paid "any attention ... to it whatever, and yet its influence in promoting order and good morals is never denied." He encouraged each teacher to include music in his classroom; "if the teacher cannot do it, a pupil may generally be found who can."\textsuperscript{28} Thirteen years later, the Superintendent of

\textsuperscript{25}Report of the State Board of Education... for the Year Ending August 31, 1880, p. 42.

\textsuperscript{26}Ibid.

\textsuperscript{27}Papa, Stones and Stories, p. 19.

\textsuperscript{28}Annual Report of the State Superintendent (1860), p. 50. In a taped interview in 1975, Isabelle Hartrim remembered asking for assistance in music instruction from the "helping teacher," a roving educator who travelled throughout the township.
Bergen County wrote of his disappointment concerning the neglect of music in the public schools, hoping "that when another year rolls around your Superintendent can report a majority of the schools that practice this most pleasing art in the school-room."  

Other extra-curricular activities were encouraged as well. The county superintendent, writing in 1861, lauded the efforts of a teacher in Belvidere who used his own money to erect a "large swing and several gymnastic contrivances, for the purpose of making the attendance at school attractive, and amusing the children during recess." It was his impression "that these things not only make school attractive and pleasant to the children, but contribute materially to their health and happiness."  

Recess was, of course, a standard part of the children’s day, when a variety of games requiring no special equipment were part of each child’s experience. Reminiscences of former students include hide-and-go-seek, drop the handkerchief, Andy over, red line, Simon says, ring around the rosie and blind man’s bluff, as well as baseball and sledding in the winter. On bad weather days there were checkers and dominoes and tic-tac-toe on the blackboard. Teachers were expected to join the children at recess, playing with them until it was time to resume class.  

**Teachers and Teaching**

Some rural school teachers during this period were educated at the State Normal School, established in 1855 and opened in 1856. Considered to be  

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29 Report of the State Board of Education... For the Year Ending August 31, 1873, Appendix, p. 21.  

30 Annual Report of the Superintendent of Public Schools of the State of New Jersey for the Year 1861 (Jersey City: John H. Lyon, 1862), p. 36.  


32 Previously the trustees of each school district chose the teacher. According to David Murray, writing in 1899, these trustees "were generally unable to apply any sufficient test as to scholarship and ... were in too many cases ready to accept for the service the candidate who would undertake it at the cheapest rate." [The History of Education in New Jersey (Washington: 1899), republished as Middle Atlantic Historical Publications Series, no. 2 (Port Washington, NY: Kennikat  

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"strictly speaking a professional school," the school’s principle mission was to train teachers. Consequently, according to the State Superintendent, "Those who resort to it for the simple purpose of gaining a thorough knowledge of the languages or sciences, will be disappointed, and will hopelessly fail in the work of instruction." Admission to the Normal School was contingent upon an examination in orthography, reading, arithmetic, geography, grammar, and United States history or upon the presentation of a teachers’ certificate covering these subjects. Candidates who had already received a diploma at a high school could be admitted to the second year without an examination. No tuition was charged by the Normal School for those students who promised to become public school teachers in New Jersey for a minimum of two years.

Graduation from the State Normal School was not necessarily a prerequisite for a teaching job in the 1860's and 1870's, however. Many teachers started but did not complete their diploma: the state superintendent reported in 1858 that by the end of that year, 264 pupils had been "admitted and 'instructed" at the Normal School, of whom 32 had received a diploma and 114 had never graduated. Due to low pay, well educated men and women were often reluctant to take public school teaching jobs. Prior to 1880, the salary of rural teachers in New Jersey was rarely over $120 or $150 a month for four or six months of the year, out of which salary the teacher paid board. Therefore, many teachers had a minimum of formal training. Reminisced a farmer,

"About 1880 it was the custom for almost every farm community to turn out one or two school teachers. It was not difficult in those days to get enough 'book larnin' to teach a country school. You simply attended the ungraded school in the neighborhood until you could work all the problems in Brooks' Arithmetic, had a smattering of other branches and were able to pass an examination given by the County Superintendent, and there you were."

Press, 1972), p. 44.

33 Annual Reports of the Superintendent of Public School... for the Year 1864, p. 28.

34 Murray, The History of Education in New Jersey, p. 45.

35 West, Elementary Education, p. 56.

36 Fletcher, Pennsylvania Agriculture, p. 538.
The county-administered examinations referred to here were begun in New Jersey in 1867, when the State Board of Education established rules for teacher certification on both the state and county levels. Three certificates were set up for the counties: First, Second and Third. The Second and Third could only be used on a county level, while the First was valid for the entire state. Requirements for these certificates were as follows:

"Candidates for the lowest or Third Grade Certificate had to be sixteen years of age and pass examinations in orthography, reading, writing, geography, practical arithmetic, and English grammar. For a Second Grade Certificate, a candidate had to be seventeen years old, have taught for one year, and have passed the examinations prescribed for the Third Grade Certificate with the addition of History of the United States, Bookkeeping, and Theory and Practice of Teaching. For the First Grade Certificate, candidates had to be eighteen years of age, with two years of teaching experience, and have passed the examinations prescribed for Third and Second Grade Certificates plus examinations in Physiology, English Composition, Algebra, The Constitution of the United States, and the School Law of New Jersey. That these examinations were difficult is attested to the fact that even after ten years (1876), 25 per cent of the 2122 candidates who took the test failed to qualify."\(^\text{37}\)

From 1867, the Warren county superintendents annually reported on the "efficiency of teachers" and their administration of the certificate examinations. It would seem that local administration of the examinations would have given the county officials considerably more control over selection of teachers. Apparently satisfied with this local examination process, Joseph S. Smith, Warren County Superintendent wrote in 1869,

"The examinations have been closely guarded, and those deficient in natural and acquired qualifications have been made acquainted with the fact, and have sought other more congenial pursuits. We have some first-class teachers, of whom no county in the State need feel ashamed, while there are others, who with the requisite experience, will add dignity and perhaps lustre to the profession."\(^\text{38}\)


\(^{38}\)Annual Report of the State Superintendent... for the Year Ending August 31, 1869, p. 622.
And in 1873, Warren County Superintendent Ephraim Dietrich glowingly reported:

"I have no hesitancy in declaring that the standard of excellency in teaching and success in imparting instruction in the great majority of our schools are in advance of any previous year."\(^{39}\)

During the twenty years covered in this report, there occurred in Warren County a gradual shift from male to female teachers until late in the 1870's when both male and female teachers were employed in equal numbers. (See Appendix C)\(^{40}\) Since the eighteenth century, school masters in the United States were usually male, and the public was slow to accept the change. Even professional educators reflected their bias in a statement like the following:

"The male teachers with very few exceptions, are teachers in the true sense of the word, and would undoubtedly stand on a par with the teachers of any other like section. The females are all of good standing, and many of them most excellent teachers."\(^{41}\)

The suggestion here is that men were the intended teachers, while the position of the lady in society was what mattered.

Male or female, teachers were requested to stay more than one year in a position. As Ephraim Dietrich wrote in 1873,

"The school that employs for successive terms a good teacher, finds a great gain in so doing. The readiness in the classification of pupils, and the progress from the point known to have been already attained, prevent great loss of time in commencing the work of a new

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\(^{39}\)Report of the State Board of Education...For the Year Ending August 31, 1873, p.88.

\(^{40}\)In Millbrook, in fact, from 1869 to 1880, when records are available, 8 men were employed, compared to 3 women. In Pahaquarry township between 1857 and 1880, a total of 39 male teachers were listed and 22 women. The reason for the discrepancy between this section of the county and other communities in Warren County may be the fact that Pahaquarry Township was relatively remote and unpopulated, making it a less attractive teaching location for a female candidate.

\(^{41}\)Report of the State Board of Education ... for the Year Ending August 31, 1873, Appendix, p.21.
term. Those districts that have retained their teachers for several years are making rapid improvement, not because of better scholars, but of good and permanent teachers. As the best of teachers can do but little good in a new school in a single term, so to the best of scholars can make but moderate improvement under a frequent change of teachers.42

The job of teacher included a host of duties beyond that of simply teaching: The teacher was expected to clean the school house, minister to sick children, visit their parents, arbitrate of local disputes, plan and implement community programs and serve as counselor to village families. While for some this variety of duties brought them closer to the children, others were overwhelmed by the immensity and intensity of the position or did only a haphazard job of educating the pupils.43

**Length of the School Year and Attendance**

The report received in 1859 from John Zimmerman, Pahaquarry Township Superintendent, was brief. On the unspecified date when he wrote his report, no schools were in operation, little surprise since the public school annual budget from the state was a mere $167.74, divided among 4 schools. The average school year for the Pahaquarry schools at that time was three months, since the families of the students were assessed a portion of the teacher’s salary. Predictably, "owing to the small amount of money raised for school purposes, the trustees frequently (hired) teachers at low salaries, who (were) not well qualified for teaching school."44 While the length of the rural school year was affected to

42Report of the State Board of Education... for the Year Ending August 31, 1873, p. 87.

43Wrote one former teacher, "... Teaching in a one-room school was like being part of a big family. You seemed so much closer to the children then and the children to you. You got to know them personally and to know their families. It was a much closer relationship than now. It was like a family. (Papa, Stones and Stories, p. 45).

44Annual Report of the State Superintendent of Public Schools in New Jersey for the Year 1859, p. 15. Speaking about the Union School in Dillingersville, PA., Andrew Berkey wrote: "One hapless applicant for a teaching position in the school-house at Kriebels's was examined by the Board and rejected by a
some extent by the seasonal nature of farm life, weather and illness, from Zimmerman’s report one can see that finances dictated the timing of the school year to a large degree, until 1871 when public education became free. (See Appendix D).

Even then, however, good attendance was seldom guaranteed. Not until 1885 was compulsory education instituted in New Jersey, and then only for twenty weeks a year. Before 1871 when local funding for public schools was replaced by a uniform State tax, students attended school in Pahaquarry township on the average of between 3 and 5 months a year. After 1871, however the school was open for approximately 9 months, and yet few students regularly attended school for that amount of time. (See Appendix E) The most common causes for poor attendance included parent attitude, cost to families, distance from school, illness, and other family obligations. Needless to say, poor attendance made progress through the first eight grades very difficult.

According to one source, in many rural areas, the school year was divided into two terms: the summer term which lasted from May until August or September, and the winter term which generally started at end of harvest time and continued until spring planting, roughly November until April. It was not until after 1900 that one nine month school year became standardized.45 Since the majority of Pahaquarry Township’s students attended school for six months or less, one might assume that these pupils went to school during the winter term. Limited attendance of the farmers’ children did not, however, reflect a lack of appreciation of education. In fact many subjects covered in school were

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unanimous vote "because he was found totally incapable (sic) to Teach any branch." But the applicant had many friends in the district and he returned to the Board with a lengthy petition signed by the parents requesting that he fill the position in spite of the Board’s decision. Taking note of the petition the School Board relented from their previous opinion but the minutes show they did so unwillingly: It seems that the citizens of said district are absolutely determined to have an IGNORAMUS for a teacher." [Andrew S. Berkey, The School House near the Old Spring: A History of the Union School and Church Association, Dillingersville, PA 1735-1955 (Norristown, PA: Pennsylvania German Society, 1955), p.60.

considered crucial to the overall education of the farmer. As one author wrote in 1851:

"It is not easy to enumerate all the branches of learning appropriate to the wants and the circumstances of a farmer. Geometry, in addition to the branches named, will certainly be of use to him; he cannot measure his own lands without it. Nearly all farming implements involve in their construction the principles of mechanical philosophy. Is it asked how geology can be used by the farmer? The answer is simple. The first object of this science is to furnish him with a knowledge of the component parts of this earth, and of course of the nature of soils. A volume of facts could be given to show this; but a single one is sufficient. In New Jersey there are tracts of land now worth from fifty to a hundred dollars an acre, which a few years ago were not worth fencing. The application of marl has effected the change. Without that knowledge the land would have continued as worthless as at first. And cannot entomology, or a knowledge of insects, be applied to farming?  

### Condition of school buildings

By 1860 Warren County had 80 schools, 69 of which were the property of the districts. According to the county superintendent, 57 of these schools were reported to be "in good condition, 39 furnished in modern style, 58 with blackboards, 18 with outline maps, and eight with globes." These statistics

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46 John L. Blake, *The Farmer’s Every Day Book* (1851), p. 34. In Pennsylvania, as in New Jersey, the development of the public school system was slow prior to 1850, at which time the agricultural press became a leading advocate of common schools and educational programs specifically geared towards farmers. [Stevenson Whitcomb Fletcher, *Pennsylvania Agricultural and Country Life* (Harrisburg: Pennsylvania Museum and Historical Commission, 1955), p. 532.]

47 When the 1860 superintendent’s report was written, Millbrook’s school may not have been included in this inventory, but in so far as the number of schools in Pahaquarry in 1860 was 4, it appears that Millbrook school was counted, probably as one of the schools not owned by the district.

point to the relative proportion of well-equipped and modernized schools in the county.

Beginning in 1864, the state superintendent wrote frequently about the need for well-built, well-furnished, well-ventilated school buildings, "in consideration of the fact that many of the buildings used for school purposes in our rural districts, are but poorly devised, and badly constructed."\(^{49}\) In following reports frequent mention of physical improvements to school facilities are to be found, including drawings of school houses that met with the superintendent’s approval.\(^{50}\)

The exterior and interior of the school buildings were the object of considerable discussion in the State Superintendents’ reports in the 1860 and 1870’s, as were the grounds on which the buildings sat, including outhouses. As one official wrote:

\(^{49}\)Annual Report of the Superintendent of Public Schools ... for the Year 1864 (Jersey City: John H. Lyon, 1865), p. 29.

\(^{50}\)In 1864, for example, the State Superintendent had wood cuts prepared of "district school houses" by C. Graham and Son, architects, of Jersey City, "whose devices for school houses are acknowledged by all to combine elegance of structure with comfortable and convenient internal arrangements for pupils and teachers." [Annual Report ... for the Year 1864, p. 31] In 1873 very precise specifications for school houses were included, for the basement, internal arrangements, ventilation, heating, etc. [Report of the State Board of Education and the State Superintendent of Public Instruction for the School Year Ending August 31, 1873 (Trenton, N.J.: The State Gazette, 1873), pp. 20-25. The following year a variety of plans and drawings of school buildings by Albert N. Dabb, of Elizabeth, New Jersey were included in the State Superintendent’s report. These plans were intended to be a service and to serve as a guideline to rural communities that did not have easy access to an architect. With these plans were included suggestions about the school grounds, foundations and cellars, materials, construction, belfries and ventilation, outside finish, inside finish and arrangements, lights, windows and blinds, stoves, choice and specifications for furniture, windows and doors, floors and stairs, hardware, open partitions, water closets, painting and graining, fences and walks and advice on securing contractors. Report of the State Board of Education and the State Superintendent of Public Instruction for the Year Ending August 31, 1874. (Trenton: Public Opinion - William S. Sharp, Steam Power Book and Job Printer, 1874), pp.24-86.
"The yard should be laid out in neat gravel walks with some trees, shrubs and plants properly disposed. A substantial fence should surround the premises, and a closed board fence should extend from the rear of the house to the rear of the yard. Two substantial outhouses should be erected on opposite sides of the fence, entirely separate and distinct."

This description represented the ideal, rather than the reality. While it was urged that
"special attention should be given to make the country school-room and its surroundings - a place where half the waking hours of childhood are spent - in every way tending to stamp the right kind of character on the young mind,"

more often the site for the rural school was the least desirable in the community.

The proper location of a school in relation to a village was one of "easy access and as near the centre of population in the district as possible." Furthermore, "it should not be in the neighborhood of a hotel where the morals of the children might be contaminated, or near a manufacturing establishment where the noise of machinery would interfere with the school exercises."

Recommendations for the improvement of the educational environment

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51 Report of the State Board of Education ... For the Year Ending August 31, 1873, p. 25. The condition and location of outhouses was frequently deplored in these annual reports. The State Superintendent encouraged proper maintenance, and insisted that "two water closets should always be provided, and placed in the opposite rear angles of the lot." Report of the State Board of Education ... for the Year Ending August 31, 1874, p. 24.

52 Surroundings of School Houses," in J.J. Thomas, The Illustrated Annual Register of Rural Affairs (1881, later published as v. 9, 1893), p. 245. In another article in The Illustrated Annual Register (1868, republished as v. 1, 1886), the author wrote, "We once heard a distinguished traveling lecturer on education assert that he could at once know a district school house from any other building, by its being the worst-looking house in the neighborhood." (p. 156)

53 Report of the State Board of Education... for the School Year Ending August 31, 1873, p. 20.
were not limited to these official state education reports, however. Many other writers in the 1860's and 1870's expressed concern for the health of the children in regards to the condition of their local schools. Both style-setters Calvert Vaux (Fig. 5) and Alexander Jackson Downing included drawings of rural schools in their widely-circulated publications (Fig. 6), and popular magazines such as The Illustrated Annual Register of Rural Affairs featured articles on school houses and "surroundings of school-houses." 54

While the 1864 report of the New Jersey State Superintendent reflects optimism, the brief summary of Pahaquarry township's superintendent is far less encouraging. With relatively few students and a scanty public and private budget (See Appendix A), Town Superintendent George M. Van Campen, a Millbrook resident, wrote,

"On visiting the schools, I am not a stranger to its difficulties, and must say I can sympathise (sic) with teachers who profess to me that neither the trustees or employers enter the school room to encourage the teacher or pupils. The want of attention paid to the tuition of youth is lamentable, compared with its vital importance; and, at the same time, all profess to be lovers of the cause of education. The fact is, parents and guardians pay for more attention to their various occupations, than to the culture of the minds of their children." 55

The following year all three district schools in Pahaquarry township were deemed "unfit for school purposes," a fact which may have motivated the

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55 Annual Report of the Superintendent ... for the Year 1864, p. 179.
Fig. 5. Design for a Village School-house, illustrated in Calvert Vaux, *Villa and Cottage Architecture* (New York: Harper and Brothers, 1864), p. 25.
The accompanying plan (Fig. 8,) may be adopted or not, as may suit the owners. An entrance-hall or lobby opens into a large school room for boys upon one side, and one for girls upon the other. Between these is a recitation room for both together, which may also contain maps, the book-case for the school library, &c.

Fig. 6. Drawings of four school houses designed by Alexander Jackson Downing. These illustrations were included in an article in J.J. Thomas' Illustrated Annual Register of Rural Affairs in 1868. In this article on school houses, the author singled out the designs of Downing as ideal settings for educating children.
Millbrook town elders to have the church building moved down the hill to its new location.\textsuperscript{56} One can speculate about the new location of the Millbrook School as to how it relates to the judgements and recommendations of nineteenth century proponents of educational reform. As was said above, educators urged that care should be exercised in selecting a pleasant location for a school building. Undesirable sites included "a hill, barren of trees or vegetation, where the bleak winds of winter are most keenly felt" or "upon the very road-side, without fence or a rood of play-ground" or "in an out-of-the-way place, where land is worthless because of its sterility, and where no sane man would erect a dwelling for himself, because of the uninviting character of the surroundings."\textsuperscript{57}

While the Millbrook School is located only a few yards from the road, overall its location as it appears today is a pleasant one. The rectangular lot with dimensions of 227' x 120,' as described in a surveyor's report of 1973, was found to be "generally level and partly wooded and brushy. Sound of running water from nearby Van Campens Brook can be heard at the site."\textsuperscript{58} We might conclude, then, that the recommendations concerning the location of a school house were taken into account when the move was accomplished.

Apparently the move of the former church building down the hill and its subsequent renovation improved the learning environment for the children of Millbrook. In 1868 the Warren County Superintendent described the condition of the building (in its former location, one would surmise) as "poor." The following year, however, on its new lot, its condition was considered to be "good," a description that continued to be applied until 1873 when it was downgraded to "medium." From 1878 to 1882 the building was described as "poor," after which the status was upgraded to medium, suggesting the completion of some repairs or additions on the interior.

While the former church building must have been a drastic improvement over the previous school location, the school house was, nonetheless, an old building when it was moved. During its first few years in the new location it may have impressed the county examiners, but soon, in comparison with other,

\textsuperscript{56} Annual Report of the Superintendent of Public Schools of the State of New Jersey for the Year 1865, p. 425.

\textsuperscript{57} Annual Report ... for the Year 1865, p. 375.

newer schools, it may have been seen as merely average. By 1878, ten years following the move, the Millbrook school no doubt paled in comparison with other more up-to-date structures. Furthermore, with a relatively small budget and a static population, there was little room for improvements to either the furnishings or the exterior.

By the end of the 1870's, the economy of Millbrook was already beginning to slow down. The profile of the school as presented in the annual reports to the Board of Education parallels the waxing and waning of the village's history within this twenty year period. In the following chapter, the furnishings of the interior will be discussed, taking into account the general information available in these reports. Knowing what we do about the changing fortunes of the school, one can hypothesize about the furnishings that would have been found there during these twenty years. This documentation, coupled with accounts of former students, provides the basis for the furnishings plan, as outlined in the next chapter.
In the opinion of many of New Jersey's educators, a variety of state-wide problems could be attributed to the poor condition of the schoolhouses and to the lack of qualified and motivated teachers. Writing in 1871, the State Superintendent discussed the problem of poor attendance. While deploring this situation, he blamed the condition of the schools in large part for exacerbating if not actually causing children to skip school:

"The percentage of average attendance of the children enrolled on the register, during the year just closed, is forty-nine - less than half. It is needless for me to refer to the evils of irregular attendance ... To remedy this evil, many talk of a law compelling parents to send their children to school. This would be beneficial and, perhaps, necessary in the many districts already supplied with good, sufficient and pleasant school houses, and competent, earnest teachers; but to the children of those districts lacking these important requisites, I think it would be a wrong and an outrage to compel them to attend. Until all our school houses and teachers are what they should be, it seems to me that we should avoid legislative enactment compelling attendance at the public schools. For the present, at least, we must look to the teacher and parent to remedy this evil. Let them see to it, that the school room presents an inviting appearance, instead of the repulsive frown of a dreary, cheerless, sickly prison, without one attractive feature, either in the teacher or room; let there be a hearty cooperation between teacher and parent - a happy blending of feelings for the welfare of those entrusted to their charge, and good results will ensue."

New Jersey was certainly not unique in its problems regarding funding of public education. Throughout the late nineteenth century, educators were pointing to the educational inequities present throughout the country, the lack of standardization of facilities, textbooks, requirements of teacher training, and so on. Many books were written offering local school districts advice about the design and furnishing of their school building, the goal being to provide

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2Report of the State Board of Education... for the Year Ending August 31, 1867, p. 810.

3Report of the State Board of Education... for the Year Ending August 31, 1871, p.65.
inexpensive and functional plans for communities which did not have access to professional architects and planners. For the state of Colorado, for example, the following verbal description was offered in 1873, along with an accompanying drawing:

"For a very small district, the (school) building may be 24 x 32. Teachers' platform 6 x 10, or 5 x 8, 8 or 10 inches high. Wainscoting should extend entirely around the room and entry. Black boards of liquid slating entirely around the school room in width not less than 4 1/2 feet; 5 feet is still better. The uppermost foot and a half is very useful for permanent copies in writing and drawing; and for other uses. The windows should be so constructed that they may be let down from the top. The heating should be by furnace, or by a ventilating stove."\(^4\)

Closely fitting this model and others described in a number of contemporary sources, the Millbrook School can be considered to be, as it has survived, a representative example of a late nineteenth century rural school. Situated on a lot 227' x 120', Millbrook School is a one story wood frame structure with gable asphalt shingle-covered roof, horizontal lapped wood siding and piled-stone foundation. The windows have a double hung wood sash and shutters. The building contains 560 square feet of floor area with dimensions of 20' x 28'. The interior contains the main room and an anteroom across the front 6' wide. The floors are unfinished wood, and the ceilings and walls have 2" tongue and groove wood facing.\(^5\) (Fig. 7.)

\(^4\)Horace M. Hale, Colorado superintendent of public instruction, in the American Journal of Education, quoted in Gulliford, America's Country Schools, p. 188.

\(^5\)U.S. Army corps of Engineers, Philadelphia District, staff appraisal, tract number 821, James A. MacNeil, signed 9-10-1973. At this date (1993) no Historic Structures Report (HSR) has been completed for the Millbrook School. An HSR would provide the physical research necessary to determine how the building looked between 1860 and 1880. Without this basic research, much of what is needed to determine the original furnishings of the school is missing. Given these limitations, this report attempts to describe what the interior is likely to have looked like, recognizing that with future work, contradictory evidence may be discovered.
Fig. 7. Photographs of the interior of the Millbrook School House. (Author's photographs, 1992).
The Vestibule

Entry into the school room at Millbrook was through a vestibule, which served as a cloak room and storage area for the teacher and the students. Here they hung their coats, fetched a drink of water, stored their lunch pails, and stored wood. The location of the entry at Millbrook was typical and followed the recommendation of the superintendent who wrote: "Cloak rooms or wardrobes should always open into the school room, they are then under the direct supervision of the teacher, and all disorderly conduct, or injury to clothing avoided."6

Mr. Fred Dickinson, in an interview with Albert Dillahunty, described the ante-room at Millbrook:

Yes, you hung your clothes and coats. The water pail was there too. They always sent two of us out for water down to the neighbors, you know. And we got a pail full to start with but when we got up to the school there wouldn’t be much into it. Then we would have to go back. But you know, they had a board across the corner and they put the pail on there, and then they had dipper. Everybody drank out of the same dipper, but it didn’t seem to bother them much.7

Mrs. John Wildrick, Sr., the former Carrie Raub who taught at Millbrook for two years from 1894-1896 also recalled that there were hooks in the entry for coats, and that the children brought their lunches in tin pail.8 Speaking of these pails, Sutton LaBar recalled: "My first lunch bucket was a little R. Buckles coffee pail that had my mother’s block with R. Buckles coffee in it. I still have it at home yet. And then as I grew she furnished a bigger one. They was all pails at

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7Interview with Fred Dickinson, by Albert Dillahunty, June 19, 1971 (DWGNRA files).

8Interview with Mrs. John Wildrick, July 23, 1973 (DWGNRA files).
that time."

LaBar also recalled assisting with the stockpiling of wood in a wood box in the shed:

"Somebody that had wood around here, why the township paid him so much a cord to deliver the wood in here and it was cut 2 ft. long and wasn’t split too much because them old box stoves would take pretty big wood. And then they would just drive up close to the school house and unload it in a pile and the teacher would ask us kind, and we would donate our time at noon time, and we carried it in so that we kept plenty of it in each hall for rainy weather. When there was no storm or anything and the wood was not wet, either us or the teacher if it was a man teacher, would go out and carry an armful to the stove and put it by the stove and that was the way we kept the stove going."

At the present the vestibule is furnished with the necessary components for an entry, a wood box, pegs for coats, benches for removing boots, shelve for storing pails. (Fig.8: photos of entry) The above reminiscences provide us with specific suggestions of a more accurate presentation, such as the installation of hooks to replace the pegs, a larger wood box, and a corner shelf for the water pail and dipper. (Fig. 9)

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9 Interview with Sutton LaBar by Omega G. East, October 5, 1975. (DWGNRA files) Children commonly brought their lunch in old lard pails, syrup pails or tin lunch pails, averaging 9 inches high and six inches in diameter with a close-fitting lid. (Guilliford, America’s Country Schools, p. 193).

10 Ibid.

11 According to one writer, "The pegs for caps, bonnets, cloaks, etc. should be made of wrought iron, never of cast. The kind shown in the woodcut (No. 289) is recommended as most adapted to withstand the daily wear of school use." (Robson, School Architecture, p. 388-9.)
Fig. 8. Photographs of the interior of the vestibule, Millbrook School house. (Author’s photographs, 1992)
289.—Hook for caps, bonnets, &c.

Fig. 9. Hook for caps, bonnets, &c. in Robson, School Architecture, p. 389.
The Arrangement of the School Room

By the 1860's educational reformers had propounded change in the interior arrangements of schools, such as placing desks in rows in the middle of the room, furnishing more air and light, and displaying visual materials around the room with more space between them, all adjustments which were intended "to make easier the maintenance of comfort, of discipline, of efficient learning."2

Arguing for an orderly, well-furnished school room in 1865, the New Jersey State Superintendent of Public Instruction put it this way:

"The child at school must feel and know that the discipline to which he is subject, is calculated to promote his happiness by preparing him to gain the rewards and be earnest and faithful to his work, but cheerfulness must light the way of labor. The child must live amidst the suggestive in order to (facilitate) mental growth; the school-room should therefore be properly furnished; its surroundings made pleasant and attractive; for if there be nothing in its arrangements to excite the eye, and awaken the emotions of the pupil, it has no power to quicken and lead out those virtues which are the pride and glory

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2Fred Schroeder, "The Little Red Schoolhouse," in Guilliford, America's Country Schoolhouse, p. 187. Modern historians have placed the conversion of the interior arrangement of the one-room school as early as the 1850's: "Portrayals of late nineteenth-century schools reveal the disposition to control the character of children's association, to cultivate better their civic sensibilities. In post-1850 classrooms, the arrangements of desks, classification of students, uniform quality of textbooks, and character of pedagogical technologies all signaled the emergence of simultaneously held commitment to individuality and uniformity. In rural classroom after 1850, students no longer sat on benches around the periphery of the school room, but like their urban counterparts in the earlier nineteenth century, sat in rows facing forward. By occupying a single desk, each student became a kind of individual pedagogical unit among an increasingly uniform student body." [Barbara Finkelstein and Kathy Vandell, "The Schooling of American childhood: The Emergence of Learning Communities 1820-1920," A Century of Childhood 1820-1920 (Rochester, NY: The Margaret Woodbury Strong Museum, 1984), p.80-81.]
of manhood."^{13}

More than a matter of just the style of the desk, the *placement* of the desks in the school room was of considerable importance because of the supposed effect the arrangement had on a variety of aspects of the child's ability to learn. As one historian has written:

"Even the seating arrangement in the little school was designed in part to produce order and rarely varied from school to school. As beginners they were seated at the front of the room, where the double desks in which everyone sat two-by-two were small. From there they gradually worked their way to the back, which they finally reached when they were fifteen or sixteen. For the sake of decorum as well as discipline, the girls were normally seated on one side of the room and the boys on the other, but an uneven number of boys or girls made a certain mixture, and often trouble, inevitable."^{14}

Speaking about a more specific benefit of placing the desks to face the teacher, one nineteenth century educator wrote:

"The great leading and most essential requisite in a schoolroom, we have not mentioned. This is, to place the seats fronting towards the north, so that the outline maps may be suspended on the north side of the room, - and that first impressions of north and south may be correct. Unless a child sees a map for the first time placed in the right position, every thing will be turned around through all the rest of his life."^{15}

According to some, the position of the teacher's desk in relation to the children's desks was a matter of importance, as was the location of the windows in the schoolroom:

"One side of a school room should always be blank, having no

^{13}Annual Report of the State Board of Education... for the Year Ending August 3, 1865, p. 376.


^{15}Thomas, Rural Affairs (1868), p. 160-161.
windows; the teacher's desk should be placed against this side of the
room and the pupils, of course, seated to face in this direction...
Children should never sit facing a light, on account of its injurious
effects upon the eyes. The light should always come over their backs
or shoulders. A side light is best. Every school room should have at
least four large windows.16

By the mid-1870's the internal arrangements of one-room schoolhouses
were relatively standardized, to the extent that the following description would fit
most rural schools across the country:

"The teacher's desk, a, is on a raised platform; the pupil's desks are
in front of this and occupy the centre of the room. This principal
aisle runs thro' the middle, separating boys and girls. This should be
four feet wide; the two smaller on either side need not be more than
twenty inches wide. Each pupil is provided with a seat and desk, two
pupils occupying, side by side, the same double seat -- a greater
number should never be placed together, for several reasons, one of
which is, the inner ones cannot leave their seats without disturbing
their neighbors... Every desk should be numbered. The stove is
placed at S. (Fig. 10)

As suggested in these specifications, the number and variety of pieces of
furniture commonly found in the one-room school were limited and predictable.
Schools were furnished simply and conveniently, with little variation. Writing in
1873, the New Jersey state superintendent recommended furnishings for rural
schools throughout the state:

"The next thing to having a good school house, is to have it well
furnished. Everything added to make the school room comfortable,
convenient and attractive, facilitates the work of education. The
desks furnished the children should be of the most approved style.
Care should be taken to see that they are substantially made and well
finished; that they are comfortable to sit upon and that they are
simple in their construction. Several neat settees should be furnished
for purposes of recitation. Two or three cane-bottom chairs are
needed in every room. The teacher's desk should be neat and

16Report of the State Board of Education...for the Year Ending August 31,
1874, p. 27.
Fig. 10. Floor plan of a rural school, Fig. 1 in Thomas', Annual Register of Rural Affairs, p. 157.
convenient. One with a table-top and about nine drawers is an approved style. In each room there should be an eight-day clock and a thermometer.\textsuperscript{17}

With the above information as background, following are recommendations for specific furnishings for the Millbrook School. Several significant changes are proposed. These recommendations are based on the following evidence:

1. The statements of former students.
2. The annual reports of the county superintendent
3. Descriptions of contemporary school houses
4. The interpretive plan to depict a typical one-room schoolhouse during the period 1860 and 1880.

Children’s Desks

Millbrook School, District 82, was one of 90 primary schools, grades K-8, in Pahaquarry Township during the 1860’s and 1870’s. If one were to use the county superintendent’s annual reports as a guide, then Millbrook ranked in the middle of the spectrum of schools in terms of the quality of the building and its furnishings. (See p. 32) While probably not furnished in the most modern style, there is reason to believe that by 1870 the interior did reflect some of the changes recommended by educators of the period.

Currently the school is furnished in the style of the most old-fashioned school house, with slanting desks built in around the room and backless stools facing the outside walls, but accounts of students who attended the school in the late nineteenth century suggest that this may not be an accurate arrangement for the period 1860-1880. (Fig. 11) In fact, from the accounts of former students who attended Millbrook during the late nineteenth century, it appears that the interior of the school reflected the reforms of the second half of the nineteenth century, when children were seated in rows facing the teacher. (Fig. 12.)

\textsuperscript{17}Report of the State Board of Education... for the Year Ending August 31, 1873, p. 24-5.
Fig. 11. Floor plan by Ellwood P. Cubberly, 1914, showing furniture arrangement reflected in Homer's *New England Country School* [Rural Life and Education, in Guilliford, p. 188.]
Sutton Labar, who attended Millbrook School in the 1890's, was asked, "Did you have benches as we have in there now, or did you have desks?" He responded,

"No, we had regular desks. Made out of boards. The seats were boards. No cushions on them or anything like that. And just the regular seats. Your seat, with the back of your seat the desk for the child who sat in the back of you. There were 2 blackboards in the back that covered up part of them. 2 windows in the back of the school house where the chimney is. You couldn’t get into the side because the side was all stationary desks in there nailed right fast to the floor. They weren’t movable or anything like that."\(^{18}\)

A photograph taken in 1961 for the Historic American Building Survey (HABS) shows a portion of a desk which appears to match Mr. Labar’s description, although the quality of the photograph is poor. (Fig. 13.)

Another graduate, Mrs. John Wildrick remembers the desks as "just ordinary. Just a desk on the top and a shelf under. No hinge. There was an opening that you could reach through. Single seats for the pupils."\(^{19}\) Mrs. Wildrick also remembers that there was "not much of a blackboard, not much more than a yard wide." Asked about the number of students who attended Millbrook at the time, she recalled:

"Well - you see - there was desks on the length of the school house. Well they were generally filled up with two - two sat in the desk. They were generally filled up and I can’t remember just the number, but there were somewheres around 10-12 seats in there. Twice 12 would be 24, and the same on the other side. Twice 24 would be 48. There were somewheres between 30-40 children going to school when I went there. Boys on one side, girls on the other.

As discussed in the previous chapter, the attendance at rural schools such as Millbrook varied considerably throughout the year, but the schoolhouse needed

\(^{18}\)Interview by Omega G. East with Sutton La Bar, October 5, 1975. La Bar was born in 1888. (DWGNRA files.)

\(^{19}\)Interview with Mrs. John Wildrick, Sr., July 23, 1973, in DWGNRA files.
Fig. 13. Neg. 000526, Millbrook School, showing on the left a portion of a built-in wooden desk that might have been original to the 19th century (HABS Survey, 1961, DWGNRA files).
to be able to accommodate the full complement of children when attendance was at a peak. For Millbrook, that would have generally been between 40 and 50 during the years 1860-1880, necessitating the installation of at least 24 double desks. With this number of children, Millbrook School would have met the maximum for the ideal one-teacher school of the period:

"Not more than fifty pupils can be successfully taught by one teacher... As a general rule, a room averaging 24 by 25 feet will be found a very convenient size for one teacher... I would earnestly recommend that no one teacher be required to teach more than fifty scholars; forty or forty-five would be still better and the results more satisfactory."\(^{20}\)

While the actual style of the desks used at the Millbrook School between 1860 and 1880 is unknown, circumstantial evidence suggests a simple, somewhat old-fashioned desk would have been used. When the New Jersey Superintendent of Public Instruction wrote his annual report in 1873, he found a range of desks, from the most modern to the most antiquated in schoolhouses across the state:

"All the new (schools) have first-class furniture and many other are furnished with the modern iron stand desks (Fig. 14); some have short wooden box desks with seats attached (Fig. 15), and a few have the old style long desks, set up on posts made of joist, and strung around the school room, with long loose benches which the scholars climb over and sit with their backs to the teacher (Fig. 16; see also Fig. 11)."\(^{21}\)

These annual reports called specific attention to the newest patented school desks and applauded the wise decisions of towns that chose the latest in seating: In reference to a new school house in his county, for example, one superintendent wrote: "The building is 30 x 50, and contains an ante-room and a school room, which is furnished with the Bancroft (Gothic Triumph) desk."\(^{22}\) (Fig. 17)


\(^{21}\)Annual Report of the State Board of Education... for the Year Ending August 3, 1873, Appendix, p. 28.

\(^{22}\)Report of the State Board of Education... for the Year Ending August 31, 1874, p. 88-89.
No. 4.

Double Grammar School Desk.
Length of Desk, 3 feet 10 inches, width 14 to 16 inches.
Size No. 1 to 4, Grammar.
" No. 5 to 7, Primary. (See page 4)

No. 5.

Single Normal School Lid Desk.

This style of desk has the lid or cover, to lift, and furnishes, within, ample space for books and other study apparatus. The support is an iron standard of original, plain, and beautiful design, so formed as to be out of the way of the feet, (an important consideration,) and securing the greatest possible strength. These desks leave nothing to be desired in point of elegance, convenience, and durability.

Length of Desk 26 inches, width 20 inches.

Fig. 14. Double Grammar School Desk and Single Normal School Lid Desk, with iron standards of "original, plain, and beautiful design, so formed as to be out of the way of feet, (an important consideration,) and securing the greatest possible strength. (Illustrated in A.G. Whitcomb, Illustration of Improved School Furniture (Boston: W.F. Brown and Co., 1875), p. 6.
NEW AND DISTINCTIVE FEATURES OF OUR PATENT SCHOOL FURNITURE.

The Gothic Curved-Back Desk, with Folding Seat and Rest.

The Gothic Inclined-Back Desk, with Curved Folding Seat.

The Patent Standard Desk, with Curved Seat.

This handsome Desk has been constructed with special reference to providing a substantial, comfortable and compact Desk for District Schools, as it not only answers the ordinary "Home-made" or Pine Furniture, but for superior durability, comfort and appearance. It has all the advantages of Curved Seat, Inclined Back, Wide Shelf, and could be dispensed with entirely. This is the case with no other Desk wherein a bolt is used in the seat joint, and is a peculiar feature of extreme importance.

The Foot Rest is omitted, as well as the Patent Silvered Ink Well and Cover, an ornamented iron one being furnished in its place. The handsome and strong castings, with compact folding curved seat and wide shelves, will be specially noticed. For a medium priced Patent Desk this is unsurpassed, and is fully guaranteed.

Handsome Castings, that are incorporated in the Gothic Patented Desks as above. The sizes are precisely the same. In cases where the funds are limited, this will be found to be specially adapted, and is positively the Strongest Desk in the market. The Iron Frames can be readily Re-wooded, and will last for generations.

Fig. 17. Advertisement for desk, J.A. Bancroft & Company, Virginia School Report (1874), illustrated in Legato School, p. 57.
And, in the same year, another superintendent enthusiastically described two district school houses which were repaired: "Both these houses have been reseated with the "Excelsior" desk. Another educator urged that the children’s desks should be furnished with folding seats, "so as to allow of freedom of motion in marching, calisthenics, and general exercises." (Fig. 18) 23

In 1875, the Warren County superintendent of public schools evaluated the schools under his jurisdiction concerning their furnishings, particularly in reference to the type of desk used in each school. He wrote, "Of the ninety school houses which were owned by the several districts in the county in 1875, only forty-five of them - fifty per cent - are furnished with patent desks. Those designated "medium" (like Millbrook), "poor" and "very poor" take in all, except two that are not thus furnished." 24 This statement suggests that the desks at Millbrook were not of the patent, most modern variety such as those manufactured by Bancroft & Company, Philadelphia, and others. The modern type of desk, found in half of the Warren County schools, was further described in 1880 as

"either single desks to accommodate one pupil each, or double to accommodate two. They are generally furnished with iron ends, and are made strong and durable. Places for books, pens and ink are provided. Particular attention has been paid to the shape of the seat and back to make them as comfortable as possible for the children. They are carefully finished and appear well to the eye. The competition among manufacturers is so great that they are furnished at small cost. The manufacture of these desks began in this country about twenty-five years ago. The seats in use prior to that date frequently consisted of slabs around the room, and were about as crude and inconvenient as can well be imagined." 25

If Millbrook school’s desks were not of this modern variety, then they probably were a simpler variation, with the back of one seat serving as the front of the next. Fig. 19 " represents the simplest mode of making seats and desks,

23Ibid., p.29.
24Report of the State Board of Education ... for the Year Ending August 31, 1875, p. 73.
Fig. 18. # 264, American Double Desks with seats attached, E.R. Robson, *School Architecture* (London: J. Murray, 1874, 2nd ed. 1877), p. 373.
Fig. 19. Fig. 2 in Thomas, *Illustrated Annual Register of Rural Affairs* (1868), p. 158. This picture "represents the simplest mode of making seats and desk."
yet has an important improvement, by giving a slope to the back of the seats. Desks of this type could have been built in Millbrook by a local carpenter, using available woods (usually pine), after the building had been moved down the hill to its new location. To replicate these desks would be a relatively inexpensive project, following the nineteenth century design, found in Fig. 19.

These reconstructed desks could all be of one size, or they could vary in dimensions, with the desks for smaller children near the front and increasing in size for the older children towards the back of the room, following the recommendations of one writer in 1868:

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26Thomas, Annual Register, p. 158. This same illustration was included in C. Thurston Chase, A Manual of School Houses for the People of the South (Washington: Government Printing Office, 1868). Chase decried these desks as "much better than no desk; but there are grave objections to them. The ends or standards are two feet broad on the floor. The great width interferes with pupils getting in and out of their seats. Dirt accumulates about them and cannot be readily swept or scrubbed away, especially on the inner sides. Uneasy children unconsciously thump their shoes against them, causing confusion in the room. The backs are boarded down low, which with the ends prevent a free circulation of air. The nails work loose in the standards or draw out of the floor and leave the desks in a rickety condition, quite unfit for use.

27Specifications for this type of desk were included in C. Thurston Chase’s Manual on School-Houses an Cottages, p.57. "The height of the seat should be such as to allow the foot of the child to rest naturally on the floor. The front edge of the seat may be half an inch higher than the back, to prevent the tendency to slip forward. The height of the desk corresponds to the height of the child’s body. This may be determined by raising the arm to an easy position for writing or using the slate pencil. The desk may slope toward the pupil about one inch and a half to a foot of the width of the desk. A space about three inches in width at the front edge ought to be level or sloping a little from the pupil to prevent pens and pencils rolling of. Sometime a groove is ploughed out in which to lay them, leaving three inches for an inkwell in front of it. The back of the desk ought to have about the same inclination from a vertical line as a chair back, say two inches to a foot. Where the furniture is to be made by a carpenter at home, it is often desirable to make all the joints square. In that case the desk, seat, and back may be set at right angles. To get the slope for the back, and the inclination for the desk, cut the foot of the standard on a bevel of one inch and a half to the foot."
"The smaller or narrower seats and desks, for the smaller children, are placed nearest the teacher; these seats are about nine inches in width, and ten and a half high, with desk twelve inches wide, and twenty-one high. The larger seats are eleven and a half inches wide, and fourteen inches high, with desks fifteen inches wide and twenty-seven high." (Fig. 20.)

While some lists of mandatory school furnishings included settees for use in recitations, the likelihood is that given the simple wooden desks proposed in this report, the first seat in the room which had no desk would have been the place for the children when reciting. (Fig. 21; see also Fig. 12).

Teacher's Desk

An upright teacher's desk is pictured in an interior photograph of Millbrook school, taken in 1961. (Fig. 22) While it is not certain that this is the same desk in use in the late nineteenth century, it is similar to ones illustrated in early discussions of school furniture. For example in 1874, E. R. Robson describes one such desk as a "pupil-teacher's desk" which was "fitted with perforated trays so that after a writing lesson, the ink-wells may be collected and placed beyond the reach of dust or accident. A locker is provided in which the class register and the teachers' books may be kept. (Fig. 23)

Another common form of teacher's desk was a simple table, with drawers or compartments for storing books, papers, pencils, etc. Some had galleries around the top, others had inclined writing surfaces. The plain tables were more suited to schools where there was a separate teacher's room. Where no such convenience existed, the teacher needed a multi-functional desk such as those illustrated in Fig. 24.

28 Thomas, Annual Register, p. 157.
The above Engraving represents the different sizes according to the ages of Scholars, which are divided into High, Grammar, Intermediate, and Primary Schools. Grammar Desks are sizes Nos. 1, 2, 3 and 4. Intermediate are Nos. 4 and 5. Primary are Nos. 5, 6, 7, and 8. The following Schedule will show the different grades, according to age.

No. 1, size, 14 to 16 years, Grammar School.

<table>
<thead>
<tr>
<th>No.</th>
<th>Size</th>
<th>Length</th>
<th>Depth</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>12 to 14</td>
<td>3 ft. 10</td>
<td>2 ft. 9 in.</td>
</tr>
<tr>
<td>3</td>
<td>10 to 12</td>
<td>3 ft. 10</td>
<td>2 ft. 8 in.</td>
</tr>
<tr>
<td>4</td>
<td>8 to 10</td>
<td>3 ft. 10</td>
<td>2 ft. 7 in.</td>
</tr>
<tr>
<td>5</td>
<td>7 to 8</td>
<td>3 ft. 10</td>
<td>2 ft. 6 in.</td>
</tr>
<tr>
<td>6</td>
<td>6 to 7</td>
<td>3 ft. 10</td>
<td>2 ft. 5 in.</td>
</tr>
<tr>
<td>7</td>
<td>5 to 6</td>
<td>3 ft. 10</td>
<td>2 ft. 4 in.</td>
</tr>
<tr>
<td>8</td>
<td>4 to 5</td>
<td>3 ft. 10</td>
<td>2 ft. 3 in.</td>
</tr>
</tbody>
</table>

All other lengths or sizes made to order.

Fig. 20. Graduated sizes of school desks illustrated in A.G. Whitcomb, Illustration of Improved School Furniture (Boston: W. F. Brown an Co, 1875), p. 4.
Fig. 22. HABS Negative # 000515, Millbrook school teacher's desk and chair, 1961 (DWGNRA files).
Fig. 23. Woodcut 283 - Pupil-Teacher’s desk, in Robson, School Architecture, p. 384.
Fig. 37. Teacher's table, No. 1.

Fig. 38. Teacher's table, No. 2.

Fig. 39. Teacher's table, No. 3.

Fig. 24. Three teacher's tables from Chase, School Houses and Cottages, p. 58.
Whatever the type of desk used by the teachers at Millbrook, it is likely to have stood on a platform at the front of the class. Without an Historic Structures Report, one can not rule out the prior existence of a platform, a structure referred to as an essential part of every school room in most the handbooks of the late nineteen century. Raised about six to eight inches off the floor and measuring, the platform was considered to be

"A liberal provision for the teacher's wants (which) shows an appreciation which can be manifested in no other way so acceptably. Although the teacher is not confined to any particular part of the room, yet custom and convenience have indicated a situation in front of the school, from which the attention of every pupil may be instantly commanded, the signals of order announced, and general and special exercises conducted. A platform about five feet by six, or six feet square, with a table on the front, has been generally adopted. The doors though which the children find entrance and egress are situated at either side of the platform. This enables the teacher to keep them completely in order at the times when disorder is most likely to arise... Of the smaller platforms it may be remarked that their width must be sufficient for a desk or table in front of the teacher, two feet or two and a half wide, for the chair which the teacher occupies, and space behind the chair to move it back on rising."

With a platform elevating a young female teacher above the heads of some of the older boys, she may have felt more authority than she might otherwise have enjoyed. Furthermore the platform served as a stage for recitations, plays, spelling bees, and so on.

The early photograph of the Millbrook School shows an old windsor chair which might have been the teacher's chair in the late nineteenth century. (Fig. 22) A simple spindle-back chair (Fig. 25) or an old slat-back chair with rush seat could also have been used. (See the chair used by the teacher in Fig. 12)

Sitting on the corner of the desk was the indispensable call bell for signalling the end of class and a large hand bell for calling the children into school (when there was no bell tower) and one waste paper basket for each school room. As former Millbrook teacher, Mrs. John Wildrick, Sr., remembered it, she

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29Chase, Manual on School-Houses and Cottages, p. 15.
No. 66—HIGH SCHOOL DOUBLE DESK, with lids and chairs, size 48 by 20, and 42 by 20.
These Desks are made of cherry, mounted on stanchions, plain and ornamental.

No. 67—SINGLE GRAMMAR SCHOOL DESK, with lid and chair, size 27 by 20 in.

Fig. 25. Spindle-back chairs, of the type used by teachers and students alike during the late nineteenth century. Bancroft, Descriptive and Illustrated Catalogue, p. 21.
used "a little dinner bell" to call the children in and "a tap bell" to dismiss the class."³⁰

**Blackboards**

"The blackboard is the teacher's best assistant."³¹

According to former teacher Carrie Raub Wildrick, the blackboard was located on the rear wall when she was a teacher at Millbrook School at the end of the nineteenth century, and perhaps only a yard or so wide.³² Sutton LaBar remembered that there were two blackboards in the back of the room, covering up a part of the two windows. Neither description gives prominence to this important feature in the school room, one which educators insisted was invaluable as a teaching aid. The lack of adequate blackboard space at Millbrook may have been one reason why the Warren County superintendent gave the school relatively low marks.

Speaking of poorly equipped school rooms, one educator wrote:

"Nor is suitable furniture the only prerequisite which these buildings lack. Nearly all of them lack sufficient black-board surface covered with good "slating," or, better yet, of solid slate, as being better and

³⁰Interview with Mrs. John Wildrick, St., July 23, 1973, DWGNRA files. Fred Dickinson, born in 1890, remembered the bell used by his teacher when he began attending Millbrook school when he was five years old. In an interview with Albert Dillahunty, Historian for DWGNRA in 1971, Dickinson recalled, "There was two boys who went to school there, and they brought their dinner in a market basket. And when they would have their lunch, or dinner I would call it, they would both sit down and go to sleep in their seats until 1:00. When the teacher would ring the bell they jumped up. One fellow was full of fun, you know, and the other fellow was mostly asleep. He sat on the outside. I can see Charlie yet. He got all humped up and he shoved Lester right out on the floor." (DWGNRA files) [This narrative also corroborates the use of double desks].

³¹Report of the State Board of Education...for the Year Ending August 31,1874, p. 29.

cheaper in the end. How any teacher can succeed without blackboard, is a mystery to me. Many districts propose to remedy this evil during the coming year, and I am satisfied that it will be done".33

There were various types of blackboards used during the late nineteenth century, some very rudimentary, others more elaborate. Many educators believed that while the initial outlay for a new slate blackboard may be high, these boards lasted much longer than the cheaper substitute (Fig. 26)

"There is no article so important to the live teacher as a good blackboard, and none but the very best should be placed in the school room. The old-fashioned blackboard was a board painted black, from which the name is derived. The desire for something better than this has led to the introduction and use of various kinds of liquid slating which are usually applied to the walls of the room. Some of these slated preparations serve a good purpose, others are worthless. The best, however, will wear out in a few years. They will either turn gray, or become glossy, or crumble and get rough, or the walls will crack. The whole time a preparation of this kind is in use, it is undergoing change. When worn out, it is seldom renewed. In consequence of these objections to liquid slating and all similar preparations, something better and more permanent seems desirable. This is found in the natural slate. The real slate is as durable as the school house itself; it can not wear out. Its first cost is greater than the substitutes used, but considering its durability it is undoubtedly the cheapest blackboard that can be had. Blackboards are usually placed too high. They seem to be intended for the teachers only and not for the scholars. The lower edge of the frame should not be more than two feet from the floor.34

An Historic Structures Report might provide evidence concerning the early placement of a blackboard in the Millbrook School. Based on the recollections of Mrs. Wildrick and Mr. LaBar, one might prefer to locate the blackboard on the rear wall of the school, but a more typical placement would have been behind the

33Report of the State Board of Education... for the Year Ending August 31, 1875. p. 94.

34Report of the State Board of Education...for the Year Ending August 31, 1873. p.24-25.
SLATED BLACKBOARDS.

No teacher or school officer can be insensible to the great utility of the Blackboard in every department of education. No recitation-room can be complete, nor any Sunday school be efficient or successful, without it.

Fig. 26. Bancroft, Descriptive and Illustrated Catalogue, p. 23.
teacher's desk at the head of the class. (Fig. 27) Currently blackboards are located in both locations (as well as a painted cloth serving as a blackboard), but it would probably be more accurate to choose one location or the other. (Fig. 28)

In addition to blackboards on walls, most children of the period brought their own individual slates to school, rectangular piece of slate framed in wood (Fig. 29). Chalk for the blackboard and the slate was available in a variety of colors, as well as white, as were slate rubbers for "cleaning the slate without water." Teachers in rural schools often did not have the perfect round cylinders of chalk we expect today. More often they used lumps of chalk called "crayons." (Fig. 28)

Stove

In every rural school, the stove was literally and figuratively in the center of the room. In the winter, little could be accomplished by the teacher until the room was warm enough for the children to move away and take their seats. Fred Dickinson remembered that some mornings "we couldn't go to our seats until after dinner because it was so cold. You had to huddle around the stove." Sutton LaBar suggested that the stove was located in the center of the room where it could most effectively heat the entire space. In an interview in 1971, former teacher Carrie Raub Wildrick told of the extremely cold winter of 1895-1896 when the children gathered around the pot bellied stove in the center of the school room while she stood on the outside of the circle and suffered frostbite on her feet.

The stove located in the Millbrook School was manufactured by the Keeley Stove Co., Columbia, PA and patented in 1877. Called the Forest Oak Stove, no. 31, it is a representative example of stoves used during the period 1860 to 1880. (Fig. 30; see also Fig. 13) While the brick platform on which the stove currently sits was built in the twentieth century, there was probably some fire-

35 Bancroft, Descriptive and Illustrated Catalogue, p. 32.
36 Guilliford, Country Schools, p. 192.
37 Interview with Fred Dickinson, June 19, 1971.
38 Interview with Sutton LaBar, October 5, 1975.
39 Interview with Mrs. John Wildrick, Sr., June, 1971.
Fig. 27. Teacher's platform, blackboard and interior finish, Clifton School, photograph by Wm. Edmund Barrett, 1969

Fig. 27. Teacher's platform, blackboard and interior finish, Clifton School, Fairfax County, VA. (in Legato School, p. 69.)
Fig. 28. Interior photographs, showing blackboards, Millbrook School (author's photographs).
Fig. 29. Harper’s Writing and Drawing Slate and The Holbrook Noiseless Drawing Slate, featured in Bancroft, *Descriptive and Illustrated Catalogue*, p.14.
Fig. 30. Interior photograph of Millbrook School, showing Forest Oak Stove, no. 31, manufactured by the Keeley Stove Co., Columbus, PA, patented 1877. See also Fig. 28 (Author’s photographs)
proof barrier under the stove in the nineteenth century.\textsuperscript{40} An Historic Structures Report might determine the location and nature of this platform.

The exact placement of the stove will also depend on the configuration of the desks, and should follow the recommendations of nineteenth century educators as much as possible:

"The heating arrangements should be in harmony with the ventilating apparatus. In the winter season it is necessary that the supply of pure air should be warmed before it reaches the pupils. If stoves are used, they should be placed near the partitions separating the room from the halls and stairways. The register for the supply of fresh air, can be placed immediately in the rear of the stove. The air admitted will thus become warm before its diffusion through the room. A stove should never be placed in the center aisle of the room if it can be avoided. In this position it obstructs movements about the room and serves as a screen between the teacher and his pupils, which is very annoying.\textsuperscript{41}

Accompanying the stove were a variety of utensils, including "a poker, shovel, tongs, a sheet-iron ash pail, and a dish for evaporating water."\textsuperscript{42}

\textsuperscript{40}Interview with Mrs. Jean Garis Flood and Mrs. Peggie Flood, June 20, 1971. (DWGNRA files).

\textsuperscript{41}Report of the State Board of Education...for the Year Ending August 3, 1873, p. 24.

\textsuperscript{42}Chase, Manual on School-House and Cottages, p. 63.
Clock

A hanging clock was considered to be a necessity in a rural school, to ensure, along with a thermometer and a bell, "promptness, regularity, comfort and good order."43 Wall clocks were available in the late nineteenth century from a number of manufacturers. Connecticut was a major manufacturing center for wall clocks, with the names of Seth Thomas, The New Haven Clock Company and Ansonia being among the best known. Those with a long drop were referred to as "Regulator Clocks," the term referring to a precision mechanism which was useful for jewelers, watchmen, and railroad controllers who needed to keep precise time. The term was often used loosely by those who chose less expensive mechanisms but used the overall shape and the name "Regulator" across the glass.44 Beginning in the middle of the nineteenth century, an octagonal or round-cornered eight-sided wooden hanging clock with a short drop two- or three-sided case was referred to as a "School House Clock."(Fig. 31)

Considered by some to be the "most popular design for wall-clocks in America," schoolhouse clocks were also found in post offices, shops and saloons.45 These clocks were frequently cheaply made, with inexpensive and poor movements.

Maps, Gazetteers, etc.

Among those items considered indispensable for a late nineteenth century school were maps of the district, town, county, state and country. While it is unlikely that the Millbrook School was fortunate to have one of each of these, the

43Chase, Manual of School-Houses and Cottages, p. 63. According to E. R. Robson, "in each school-room and class-room there should be a thermometer to guide the teacher or caretaker in regulating the temperature. Teachers should remember that, although this as advisable as a check against overheating on the one hand and insufficient warmth on the other, the thermometer forms but a small criterion of the efficiency of ventilation. (School Architecture, p. 389)


Fig. 31. Schoolhouse clock, E. H. Welch Manufacturing Company, Forestville, CT. c. 1850. The molded octagonal frame is of rosewood, with a brass bezel, gilded horse in drop glass; 8- day spring mechanism; calendar-incorporated single dial with calendar hand, white painted tin dial, Roman chapters for time, Arabic numerals for calendar; time, strike, and day. On back, "8 day/ Axtell/ Made by the/ E. N. Welch Mfg Co./ Forestville, Conn. U.S.A. (Anita Schorsch. The Warner Collector's Guide to American Clocks (New York, NY: Main Street Press, 1981), p. 94)
following passage from the Annual Report of the State Board of Education for suggests that the school would at least have owned a copy of Guyot's Map of the United States which had been provided for each school in existence in 1863:

"Several years since, the State Superintendent of Public Schools was authorized to purchase a number of Webster's Unabridged Dictionaries, and Lippencott's Pronouncing Gazetteers, sufficient to supply one copy of each to each public school in the State. These books have been quite generally distributed, and have proved very useful. The friends of public schools everywhere commend the wisdom of the Legislature in providing for the supply of these works. During the past year, Guyot's Map of the United States has been furnished the Schools. Wherever the subject of Physical Geography is understood and esteemed, this map will prove highly serviceable. The supply of Gazetteers is exhausted, and no more copies can be purchased at the prices supplied in the law. The work is undergoing revision, and will shortly appear enlarged, and much improved. The price will, of course, be advanced. It is for the Legislature to determine, whether or not the supplying of this work shall be continued. The law authorizing the purchase of Guyot's Maps limited the number of maps to the number of schools reported for 1863. Many new schools have been organized since, and it is but just that these, too, should be supplied. Indeed it would be well for the Legislature to enact that the Trustees of the School Fund shall purchase the standard works above named, in suitable quantities, from time to time, and require them to be distributed in such manner that every school, and every department of a school, may be possessed of a copy of each of these works."46

According to the Bancroft & Co. catalogue, Guyot's "physical and political wall maps" were all mounted on cloth and rollers, except those in their "Primary Series" which were on cloth and came in a "neat portfolio." (Fig. 32) The Guyot maps of the United States came in two sizes, 6 x 8 and 4 x 5 and could be bought individually or in series.47


47Bancroft & Co., Descriptive and Illustrated Catalogue, p.27. Guyot's maps were described in the Bancroft catalogue as follows: "By the admirable system
The same year, the state superintendent urged the purchase of geological maps of New Jersey for the public schools, as soon as maps made under the direction of the State Geologist were completed:

"The survey which is now prosecuting under the direction of the able State Geologist, George H. Cook, Ph.D., is furnishing valuable material for a series of geological maps of the State. The publication of these maps has already commenced, and I think it quite desirable that a sufficient number of copies should be procured to furnish the public schools of the State. This can be done at small cost. If each public school were furnished with the maps, together with the accompanying reports, the teachers of the State would be enabled to make the facts, developed by the survey, very generally known. This is worthy the attention of the Legislature."

In addition to maps, a variety of wall charts were available through suppliers of school furnishings. These included grammatical, etymological, physiological, phonics, multiplication, American history, astronomical and chemical charts, most mounted on rollers and ranging in sizes from 2 x 3 ft. to 10 x 6 ft. Speaking of the variety of charts available to the teacher, one author wrote:

"Diagrams displayed upon the walls of the school-room serve a most useful purpose. The scholar will intuitively gain much valuable information on variety of subjects in which, by this simple means, he may be interested. Diagrams are also of great utility in direct teaching. Those displayed on the walls should be periodically changed. Some difficulty may perhaps be experienced in choosing a moderate stock from among the immense number of specimen published..."

"...adopted in these maps, the plateaus, mountains, valleys, rivers, altitudes, in fact all the physical characteristics of the Earth's surface, are clearly and beautifully expressed, as also the political features, boundaries, names of cities, &c."


49Robson, School Architecture, p. 394.
XV. *New England School.* Charles Frederick Bosworth, Sr., American, 1852. The one-room rural schoolhouse, in which a single schoolmarm instructed all ages and grades, was not always a model of order and deportment. The adolescent couple behind the teacher would seem to indicate that the young scholars mastered both the love of learning and of each other.

Fig. 32. "New England School," Charles Frederick Bosworth, Sr., American, 1852, illustrated in Schorsch, *Images of American Childhood,* p. 108. A map of the world is hanging on the wall of this one-room rural schoolhouse, for all the students to see.
Some of the better equipped public school in New Jersey had globes, considered by many educators to be a necessity. Only a small percentage of schools were so fortunate, however, and in light of what is now known about Millbrook School, it seems unlikely that this school would have been so well equipped.

Beginning in 1879, metric apparatus were made available free to all the New Jersey public schools and were, we can assume, to be found at Millbrook School at the end of the period we have been studying. Appendix F lists the sets which were available, the simplest at no cost to the school districts, the more elaborate being available at an additional fee. Referring to the metric apparatus, the State Superintendent wrote:

"By act of the Legislature I am directed to furnish each school, applying for the same, one simple set of metric apparatus. Many of the schools desire better sets than can be furnished free under the act, and are willing to pay the additional cost. In order to accommodate such I have arranged the following sets, which are adapted to our various grades of schools. The first is the free set, and either of the others is furnished for the difference, between its cost and that of the free set. (see Appendix E)"

Textbooks

The subjects commonly taught in schools were reading, spelling, arithmetic, geography, grammar, history and penmanship. According to Carrie Raub Wildrick, everybody brought their own school books and slates to Millbrook School, although there may have been a small number of text books available to them, such as Webster's Unabridged Dictionary and Lippincott's Pronouncing Gazetteer, mentioned above on p. 79. While these books were originally purchased in the 1850's, they continued in use for many years. Writing of these standard references in 1880, the Superintendent stated: "Many of these books, although they have been in use for twenty-five years, are still in the school." By

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52 Interview with Carrie Raub Wildrick, 1973.
1880, 1257 schools in the state had dictionaries, and 328 had none. Other books may have been owned by the families whose children attended the school, handed down from parents or siblings.

If textbooks were made available to Millbrook School, they might well have included readers. All readers had a "strongly moralistic and heavily didactic," one of the most popular and widely circulated of the nineteenth century texts being the McGuffey's Readers. According to one source, McGuffey's readers were used by four out of five American schoolchildren and were "read by generation after generation. Often a pupil would learn that his parents, grandparents and indeed his great grandparents had learned to read with McGuffey's." Three times a president of a university, William Holmes McGuffey was selected by Trumand and Smith, a publishing house in Cincinnati, to write books for schoolchildren. In the following years, McGuffey with the help of his brother Alexander, wrote a Primer and six Eclectic Readers, consisting of readings selected from a variety of different sources. The Primer, which later became the First Reader, and the Second Reader were published in 1836, the Third and Fourth in 1837, the Fifth in 1841 and the Sixth in 1851. These books revolutionized education in the United States and affected "educational methods and morals the world over."

While some may suppose that McGuffey readers had a monopoly on the market during the last half of the nineteenth century, this was not the case. Other reader series were published during this period with significant success. Among those were readers by Charles W. Sanders, William Swinton, Richard D. Parker, David B. Tower, Marcius Willson, Lewis B. Monroe, George F. Holmes, J.

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53Report of the State Board of Education... for the Year Ending August 31, 1880, p. 31.

54The Old Monroe Schoolhouse: an interpretive guide (Hamburg, NJ: Hardyston Heritage Society, between 1983 and 1989), p. 6. This guide is an excellent resource for educators and those concerned with interpreting the school experience to young children.


56Ibid.
Grammar was considered to be an excellent avenue for "mental discipline." Children were expected to memorize long lists of rules and definitions. One of the most widely used grammar books during the second half of the nineteenth century was Goold Brown's Grammar of English Grammars, first issued in 1851 and repeatedly reprinted until after the Civil War. This grammar book which was over a thousand pages long had a marked "influence on contemporary and later grammarians." Other grammar books were written by Thomas W. Harvey, John S. Hart, George P. Quackenbos, Alonzo Reed and Brainard Kellogg.

Another source of mental discipline was the study of arithmetic. Typically the child was taught mental arithmetic by the method of the teacher reading the problem, the child repeating the problem and giving the answer without using pencil and paper. Most problems were to be solved "mentally" with the responses given orally. Two of the best known arithmetic texts were by Frederick Emerson and Charles Davies. Emerson's was one of the earliest, his Primary Lessons in Arithmetic having first been issued in 1826. Later he published North American Arithmetic, Part I; Part II; and Part III. Davies first book was First Lessons in Arithmetic and by 1869 nineteen of his school texts were being published. Another well-known math series was written by Warren Coburn.

Spelling lessons consisted of hours of "memorizing lists of words, spelling rules, orthography, and correct pronunciation." Of all the spellers the best known was Noah Webster's Blue-backed Speller, first published in 1787 and one of the all-time best sellers, 35 million copies being sold between 1855 and 1890. By 1880 the only book outselling the Blue-backed Speller was the Bible.

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58 Monroe Schoolhouse, p. 7.

59 Ibid., p. 104.

60 Ibid., p. 140.

61 Monroe Schoolhouse, p. 6.

62 Carpenter, Schoolbooks, p. 150.
In the nineteenth century good penmanship was considered to be a very important skill. Handwriting lessons were practiced on a slate and later transferred to a copy book. Probably best-known of the penmanship texts was that of Platt Roger Spencer whose *Spencerian Key to Practical Penmanship* was first published in 1866. His method relied to a great extent on the invention and common availability of the steel pen which made it possible to draw thin lines and heavy shading.  

History and geography were both important subjects for students of the late nineteenth century. Much of the learning of history was by wrote, with pupils expected to be able to recite such information as all the presidents, their political parties and the dates of their terms of office. One of the best known of the early history books was the *Condensed School History of the United States*, by William Swinton. Geography was also a subject which involved memorization - of states and their capital, countries, oceans, rivers and mountains of the world and the main features of their own state.

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Conclusion

In summary, the following furnishings of the Millbrook School have been recommended:

1. 24 reproduction double desks (to accommodate between 40 and 55 students), simple style. See discussion on p. 46-60 and Fig. 18 (p. 57) or Fig. 19 (p. 58).

2. Upright teacher’s desk, c. 1870, to be set on a platform if physical evidence supports this. See discussion on p. 60 and Fig. 22 (p. 63) and Fig. 23 (p. 64).

3. A teacher’s chair, as described on p. 66, and illustrated in Fig. 22 (p. 63), Fig. 25 (p. 67) and Fig. 12 (p. 48). The current teacher’s chair is also acceptable.

4. A small call bell, a large hand bell, and a metal waste paper basket (see p. 66-67).

5. A small blackboard, to be placed behind the teacher’s desk or on the rear wall. See p. 68-71 for discussion of the blackboard; see also Fig. 26 (p. 70) and Fig. 28 (p. 73).

6. A stove, as discussed on p. 71-76. (The current one is acceptable).

7. Hanging clock, Regulator or School House style, c. 1870. (See discussion on p. 76-77; see also Fig. 31 (p. 78).

6. A copy (reproduction is acceptable) of Guyot’s "Map of the United States," as discussed on p. 77-8.

7. Other maps, perhaps of New Jersey. The Warren County map currently in the school house is acceptable. See discussion on p. 78.

8. Textbooks, while probably not owned by the school district, could be included in the furnishings. See discussion on p. 82-85.

Fig. 33. (p. 87) is a floor plan of the Millbrook School as conjectured with the above mentioned furnishings in place.
Fig. 33. Floor plan of Millbrook School, showing placement of furnishings as proposed in this report.
APPENDIX A
Schools and Students in Pahaquarry Township

<table>
<thead>
<tr>
<th>Year</th>
<th>Schools in Township</th>
<th>Millbrook Total no. of Children</th>
<th>Pahaquarry Millbrook No. of children taught</th>
<th>Pahaquarry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1855</td>
<td>4</td>
<td>190</td>
<td>180</td>
<td></td>
</tr>
<tr>
<td>1857</td>
<td>4</td>
<td>194</td>
<td>170</td>
<td></td>
</tr>
<tr>
<td>1860</td>
<td>4</td>
<td>170</td>
<td>160</td>
<td></td>
</tr>
<tr>
<td>1861</td>
<td>4</td>
<td>168</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>1862</td>
<td>4</td>
<td>168</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>1865</td>
<td>3</td>
<td>145</td>
<td>118</td>
<td></td>
</tr>
<tr>
<td>1867</td>
<td>5</td>
<td></td>
<td>59</td>
<td>158</td>
</tr>
<tr>
<td>1868</td>
<td></td>
<td>150</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1869</td>
<td>5</td>
<td>48</td>
<td>146</td>
<td>39</td>
</tr>
<tr>
<td>1870</td>
<td></td>
<td></td>
<td>132</td>
<td>103</td>
</tr>
<tr>
<td>1871</td>
<td>3</td>
<td>54</td>
<td>123</td>
<td>47</td>
</tr>
<tr>
<td>1872</td>
<td>3</td>
<td>56</td>
<td>122</td>
<td>51</td>
</tr>
<tr>
<td>1873</td>
<td>3</td>
<td>48</td>
<td>122</td>
<td>48</td>
</tr>
<tr>
<td>1874</td>
<td>3</td>
<td>51</td>
<td>123</td>
<td>46</td>
</tr>
<tr>
<td>1875</td>
<td>3</td>
<td>45</td>
<td>122</td>
<td>42</td>
</tr>
<tr>
<td>1876</td>
<td>3</td>
<td>45</td>
<td>144</td>
<td>46</td>
</tr>
<tr>
<td>1877</td>
<td>3</td>
<td>47</td>
<td>128</td>
<td>45</td>
</tr>
<tr>
<td>1878</td>
<td>3</td>
<td>46</td>
<td>124</td>
<td>44</td>
</tr>
<tr>
<td>1879</td>
<td>3</td>
<td>45</td>
<td>121</td>
<td>41</td>
</tr>
<tr>
<td>1880</td>
<td>3</td>
<td>46</td>
<td>125</td>
<td>39</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>102</td>
</tr>
</tbody>
</table>
# APPENDIX B

## Course of Study in the Model School

Trenton, New Jersey, 1869

### PRIMARY DEPARTMENT.

#### Class D.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning the Alphabet, Reading and Spelling</td>
<td>Wilson's Primer (finished).</td>
</tr>
<tr>
<td>Learning to count, adding and subtracting from 1 to 10, multiplying by 2, 5, and 10%</td>
<td>Numeral Frame, Slate and Blackboard.</td>
</tr>
<tr>
<td>Drawing elementary forms, printing letters and figures, exercises on objects, singing—oral exercises daily.</td>
<td>Slate and Blackboard.</td>
</tr>
<tr>
<td>Gymnastics—Daily.</td>
<td></td>
</tr>
</tbody>
</table>

#### Class C.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading and Spelling—Wilson's First Reader (begun).</td>
<td></td>
</tr>
<tr>
<td>Arithmetic—Greenleaf's New Primary (begun).</td>
<td></td>
</tr>
<tr>
<td>Drawing and Printing, as in D Class.</td>
<td></td>
</tr>
<tr>
<td>Exercises on Objects.</td>
<td></td>
</tr>
<tr>
<td>Singing—Oral exercises daily.</td>
<td></td>
</tr>
<tr>
<td>Gymnastics—Daily.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing—Pilas's Graphics.</td>
<td></td>
</tr>
<tr>
<td>Writing—Miscellaneous exercises.</td>
<td></td>
</tr>
<tr>
<td>Vocal Music—Song Garden, No. 2.</td>
<td></td>
</tr>
</tbody>
</table>

#### Class B.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading—Wilson's School Reader (finished).</td>
<td></td>
</tr>
<tr>
<td>Spelling—Wilson's Primary Speller (finished).</td>
<td></td>
</tr>
<tr>
<td>Arithmetic—Greenleaf's New Elementary (begun).</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Grammar—Hart's.</td>
<td></td>
</tr>
<tr>
<td>Weekly exercises in Composition.</td>
<td></td>
</tr>
<tr>
<td>History—United States (Anderson's Grammar School).</td>
<td></td>
</tr>
<tr>
<td>Book-keeping (begun).</td>
<td></td>
</tr>
<tr>
<td>Vocal Music—Song Garden, No. 2.</td>
<td></td>
</tr>
<tr>
<td>Writing—Miscellaneous exercises.</td>
<td></td>
</tr>
</tbody>
</table>

### BOYS' DEPARTMENT.

#### Class A.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading—Hillard's Third Reader.</td>
<td></td>
</tr>
<tr>
<td>Spelling—Worcester's Elementary Speller (begun).</td>
<td></td>
</tr>
<tr>
<td>Arithmetic—Greenleaf's New Elementary (begun).</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Grammar—Oral exercises.</td>
<td></td>
</tr>
<tr>
<td>Writing with pen and ink—(Spencerian Copy Book, No. 3).</td>
<td></td>
</tr>
<tr>
<td>Vocal Music—Mason's Song Garden, No. 2.</td>
<td></td>
</tr>
</tbody>
</table>

#### Class D.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading—Hillard's Fourth Reader (begun).</td>
<td></td>
</tr>
<tr>
<td>Spelling—Worcester's Elementary Speller (begun).</td>
<td></td>
</tr>
<tr>
<td>Arithmetic—Greenleaf's New Elementary (begun).</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Grammar—Hart's, Part I (begun).</td>
<td></td>
</tr>
<tr>
<td>Elementary exercises in English Composition—Letter Writing.</td>
<td></td>
</tr>
<tr>
<td>History—United States (Anderson's Grammar School).</td>
<td></td>
</tr>
</tbody>
</table>

#### Class E.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Textbooks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading—Hillard's Fourth Reader (begun).</td>
<td></td>
</tr>
<tr>
<td>Spelling—Worcester's Speller (begun).</td>
<td></td>
</tr>
<tr>
<td>Geography</td>
<td></td>
</tr>
<tr>
<td>Grammar—Hart's, Part 1 (begun).</td>
<td></td>
</tr>
<tr>
<td>Elementary exercises in English Composition—Letter Writing.</td>
<td></td>
</tr>
<tr>
<td>History—United States (Anderson's Grammar School).</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C
Male and Female Teachers
Millbrook, Pahaquarry Township and Warren Co., New Jersey
1855-1880

<table>
<thead>
<tr>
<th>Year</th>
<th>Millbrook</th>
<th>Pahaquarry Twp</th>
<th>Warren County</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>1855</td>
<td>81</td>
<td>28</td>
<td></td>
</tr>
<tr>
<td>1857</td>
<td>3</td>
<td>1</td>
<td>99</td>
</tr>
<tr>
<td>1860</td>
<td>3</td>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>1861 (4 schools)</td>
<td>3</td>
<td>2</td>
<td>81</td>
</tr>
<tr>
<td>1862 (4 schools)</td>
<td>7</td>
<td>0</td>
<td>87</td>
</tr>
<tr>
<td>1865</td>
<td>1</td>
<td>3</td>
<td>57</td>
</tr>
<tr>
<td>1868</td>
<td>2</td>
<td>1</td>
<td>41</td>
</tr>
<tr>
<td>1869</td>
<td>1</td>
<td>0</td>
<td>52</td>
</tr>
<tr>
<td>1870</td>
<td>1</td>
<td>2</td>
<td>56</td>
</tr>
<tr>
<td>1871</td>
<td>0</td>
<td>1</td>
<td>48</td>
</tr>
<tr>
<td>1872</td>
<td>1</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>1873</td>
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</tr>
<tr>
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<td>59</td>
</tr>
<tr>
<td>1875</td>
<td>0</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>1876</td>
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<td>0</td>
<td></td>
</tr>
<tr>
<td>1877</td>
<td>1</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>1878</td>
<td>1</td>
<td>0</td>
<td>70</td>
</tr>
<tr>
<td>1879</td>
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</tr>
<tr>
<td>1880</td>
<td>1</td>
<td>0</td>
<td>73</td>
</tr>
</tbody>
</table>
APPENDIX D
Significant Legislation Affecting One-Room Schools

1817  State Fund created for schools
1820  Townships authorized to raise money for the education of those unable to pay.
1824  One-tenth of state taxes allocated to school funds
1828  Township authorized to raise money for school building repairs
1829  Common School Act - authorized township committees and trustees
1831 and 1838  Church groups could receive state moneys for schools
1845  Provision made for State Superintendent of Public Instruction
1846  Established public schools
        Created office of Town Superintendent
        Required licensing of teachers
1853  Licensing of teachers begun - replaced system of applying to local school committee
1854  Teachers' institutes provided
1855  Establishment of a State Normal School (Trenton)
        Law provided for state purchase of Webster's Unabridged Dictionary for each school
1866  No further public money to parochial schools
        Formation of State Board of Education with power to appoint State Superintendent
        State Board of Examiners created
        Schools may be established for specific benefit of "colored" children. "Colored" may attend regular school or trustees may establish separate school.
1867  Created position of County Superintendent -- abolished position of Town Superintendent
        Created County Boards of Examiners for issuance of teaching certificates
1871  Free public schools - abolished rate bill (tuition) by which parents paid according to number of children enrolled.
1876  Constitutional amendment: Legislature to provide for maintenance and support of thorough and efficient system of free public schools ... between the ages of five and eighteen years.
1885  Compulsory school law. Children between seven and twelve years of age to attend school 20 weeks each year.

* Adapted from Campbell, King and Smith, Chickaree in the Wall, p. 137-138.
## APPENDIX E

School Attendance in Pahaquarry Township and in Millbrook, N.J.

<table>
<thead>
<tr>
<th>YEAR</th>
<th>total children 5-18</th>
<th># of children attending 9-12 mos</th>
<th># of children attending 6-9 mos</th>
<th># of children attending 3-6 mos</th>
<th># of children attending 0-3 mos</th>
<th>avg.daily attend.</th>
<th>whole # children taught</th>
<th>avg.mos. school open</th>
</tr>
</thead>
<tbody>
<tr>
<td>1855 (Pahaquarry)</td>
<td>190</td>
<td>20</td>
<td>160</td>
<td></td>
<td></td>
<td>180</td>
<td>3 mos.</td>
<td></td>
</tr>
<tr>
<td>1857 (Pahaquarry)</td>
<td>194</td>
<td>30</td>
<td>120</td>
<td>20</td>
<td>120</td>
<td>170</td>
<td>3 mos.</td>
<td></td>
</tr>
<tr>
<td>1860 (Pahaquarry)</td>
<td>170</td>
<td>30</td>
<td>40</td>
<td>140</td>
<td>20</td>
<td>160</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1861 (Pahaquarry)</td>
<td>168</td>
<td>24</td>
<td>35</td>
<td>130</td>
<td></td>
<td>150</td>
<td>4 1/2 mos.</td>
<td></td>
</tr>
<tr>
<td>1862 (Pahaquarry)</td>
<td>168</td>
<td>24</td>
<td>35</td>
<td>130</td>
<td></td>
<td>150</td>
<td>4 1/2 mos.</td>
<td></td>
</tr>
<tr>
<td>1865 (Pahaquarry)</td>
<td>145</td>
<td></td>
<td>98</td>
<td>20</td>
<td></td>
<td>118</td>
<td>3 mos.</td>
<td></td>
</tr>
<tr>
<td>1866 (Pahaquarry)</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
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<td>1867 (Pahaquarry)</td>
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<td></td>
</tr>
<tr>
<td>Pahaquarry</td>
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<td>43</td>
<td>32</td>
<td></td>
<td></td>
<td>3 mos.*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Millbrook</td>
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<td>12</td>
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<td></td>
<td>4 mos.</td>
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<td></td>
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<td>1869</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pahaquarry</td>
<td>146</td>
<td>16</td>
<td>23</td>
<td>24</td>
<td></td>
<td>39</td>
<td>5 mos.</td>
<td></td>
</tr>
<tr>
<td>Millbrook</td>
<td>48</td>
<td>16</td>
<td>23</td>
<td>24</td>
<td></td>
<td>39</td>
<td>5 mos.</td>
<td></td>
</tr>
<tr>
<td>1870</td>
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<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Pahaquarry</td>
<td>132</td>
<td>3</td>
<td>6</td>
<td>21</td>
<td>73</td>
<td>50</td>
<td>103</td>
<td>7 mos.</td>
</tr>
<tr>
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<td>6</td>
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<td>36</td>
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<td>55</td>
<td>10 mos.</td>
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<tr>
<td>1871</td>
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</tr>
<tr>
<td>Pahaquarry</td>
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<td>5 mos.</td>
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</tr>
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<td>19</td>
<td>22</td>
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<td>47</td>
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<tr>
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<td></td>
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<tr>
<td>Pahaquarry</td>
<td>122</td>
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<td>21</td>
<td>69</td>
<td>49</td>
<td>101</td>
<td>6 2/3 mos.</td>
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<td>13</td>
<td>30</td>
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<td>51</td>
<td>9 mos.</td>
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92
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<th>Pahaquarry</th>
<th>Millbrook</th>
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<td>12</td>
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<tr>
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<td>73</td>
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</tr>
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<td>57</td>
<td>20</td>
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<td></td>
<td>108</td>
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</tr>
<tr>
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<td>7 mos.</td>
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<tr>
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<td>117</td>
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<tr>
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<td>7.6 mos.</td>
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<tr>
<td>1877</td>
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<td>8 mos.</td>
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</tr>
<tr>
<td>1878</td>
<td>124</td>
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<td>44</td>
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<tr>
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<td>7.6 mos.</td>
<td>9 mos.</td>
</tr>
<tr>
<td>1879</td>
<td>121</td>
<td>45</td>
</tr>
<tr>
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<td>1</td>
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<tr>
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</tr>
<tr>
<td></td>
<td>97</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>7.3 mos.</td>
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</tr>
<tr>
<td>1880</td>
<td>9</td>
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</tr>
<tr>
<td></td>
<td>21</td>
<td>5</td>
</tr>
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<td>32</td>
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<td>22</td>
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<td>64</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>8.6 mos.</td>
<td>9 mos.</td>
</tr>
</tbody>
</table>

* The average months open for Pahaquarry Township is the arithmetical average of all the schools in the township. During this period there were between 5 and 3 schools in the township.
APPENDIX F

Metric Apparatus Available to New Jersey Public Schools

**Metric Apparatus**

By set of the Legislature I am directed to furnish each school applying for the same, one simple set of metric apparatus. Many of the schools desire better sets than can be furnished free under the Act, and are willing to pay the additional cost. In order to accommodate such I have arranged the following sets, which are adapted to our various grades of schools. The first is the free set, and either of the others is furnished for the difference between its cost and that of the free set.

**Set No. 1.**

- Chart No. 1, cloth back, varnished, on map rollers.
- School meter, 2½ cm., painted.
- Kilogram block, checked into 1000 cc.
- Centimeter block, checked into 10 cc.
- Millimeter block.
- Liter, cm. tin.
- Decimeter, standard form; tin.
- Decimeter, standard form; tin.
- Kilogram weight; Fairbanks’ standard; iron.
- Kilogram weight; Fairbanks’ standard; iron.
- Millimeter block.
- Kilogram weight; Fairbanks’ standard; iron.
- Dekagram weight; Fairbanks’ standard; iron.
- Deciliter block, checked into 10 cc.
- Centiliter block, checked into 10 cc.
- Milliliter block.
- Graduated liter case, with brass U. S. standard rule; glass face.
- Dekilometer tape, in brass-bound case.
- Linea tape, 150 cm. long.
- Meter, 10 fold; Lotus wood.
- Dark rule, 30 cm.; brass-bound.
- Teachers’ Manual.
- Metric Primer for teachers.

18 Pieces. Price $5.

This set is furnished free, upon application. It contains all the pieces needed in small ungraded school districts.

**Set No. 2.**

- Chart No. 1, cloth back, varnished, on map rollers.
- School meter, 2½ cm., painted.
- Kilogram block, checked into 1000 cc.
- Centimeter block, checked into 10 cc.
- Millimeter block.
- Liter, cm. tin.
- Decimeter, standard form; tin.
- Decimeter, standard form; tin.
- Kilogram weight; Fairbanks’ standard; iron.
- Kilogram weight; Fairbanks’ standard; iron.
- Millimeter block.
- Kilogram weight; Fairbanks’ standard; iron.
- Dekagram weight; Fairbanks’ standard; iron.
- Deciliter block, checked into 10 cc.
- Centiliter block, checked into 10 cc.
- Milliliter block.
- Graduated liter case, with brass U. S. standard rule; iron bound.
- Dekilometer tape, in brass-bound case.
- Linea tape, 150 cm. long.
- Meter, 10 fold; Lotus wood.
- Dark rule, 30 cm.; brass-bound.
- Teachers’ Manual.
- Metric Primer for teachers.


Many districts, even the smallest, will find it to their advantage to secure this set in preference to No. 1. It contains all the pieces in No. 1 and twelve additional.

**Set No. 3.**

- Chart No. 1, cloth back, varnished, on map rollers.
- School meter, 2½ cm., painted.
- Kilogram block, checked into 1000 cc.
- Centimeter block, checked into 10 cc.
- Millimeter block.
- Graduated liter case, with brass U. S. standard rule; glass face.
- Dekilometer tape, in brass-bound case.
- Linea tape, 150 cm. long.
- Meter, 10 fold; Lotus wood.
- Dark rule, 30 cm.; brass-bound.
- Teachers’ Manual.
- Metric Primer for teachers.

26 Pieces. Price $7.$00.

This is recommended for small graded schools having two or three teachers. This set not only contains several additional articles but the measures are made of copper instead of tin.

**Set No. 4.**

- Chart No. 1, cloth back, varnished, on map rollers.
- School meter, 2½ cm., painted.
- Loaded and dimpled liter block, polished, and each piece loaded to the specific gravity of water.
- Centimeter block, checked into 10 cc.
- Millimeter block.
- Graduated liter case, with brass U. S. standard rule; glass face.
- Dekilometer tape, in brass-bound case.
- Linea tape, 150 cm. long.
- Meter, 10 fold; Lotus wood.
- Dark rule, 30 cm.; brass-bound.
- Teachers’ Manual.
- Metric Primer for teachers.

26 Pieces. Price $10.00.

This is recommended for small graded schools having two or three teachers. This set not only contains several additional articles but the measures are made of copper instead of tin.

**Set No. 5.**

- Chart No. 1, cloth back, varnished, on map rollers.
- School meter, 2½ cm., painted.
- Loaded and dimpled liter block, polished, and each piece loaded to the specific gravity of water.
- Centimeter block, checked into 10 cc.
- Millimeter block.
- Graduated liter case, with brass U. S. standard rule; glass face.
- Dekilometer tape, in brass-bound case.
- Linea tape, 150 cm. long.
- Meter, 10 fold; Lotus wood.
- Dark rule, 30 cm.; brass-bound.
- Teachers’ Manual.
- Metric Primer for teachers.

26 Pieces. Price $15.00.

This set is recommended for all graded schools in country towns, and for all grammar schools in the cities. No good graded school should be without this or the following set. Not only are the measures of copper in this set, but the weights are of brass and the balance is of much better quality than that included in the preceding sets.

from The Annual Report of the State Board of Education...For the Year Ending August 31, 1979 (p. 32 ff)
2 Liter; wood; sealed to U. S. standard. 
Liter; wood; sealed to U. S. standard. 
Liter, standard form; copper. 
½ Liter, standard form; copper. 
2 Deciliter, standard form; copper. 
Deciliter, standard form; copper. 
¾ Deciliter, standard form; copper. 
2 Centiliter, standard form; copper. 
Centiliter, standard form; copper. 
13 Brass weights Kilo to g. 
Fairbanks' standard scale. 
Decimeter tape; patent-leather case. 
Linum tape, 150 cm. long. 
Meter, 5 fold; Lotus wood. 
Meter, 10 fold; Lotus wood. 
Desk rule, 30 cm.; brass-bound. 
School rule, 30 cm. 
Boxwood rule, 4 fold, square joint, 40 cm. 
Teachers' Manual. 
Metric Primer for teachers. 
Putnam's Metric System. 
Centigrade thermometer. 

46 Pieces. Price $39.00.

This set includes all the pieces needed for the fullest exposition of the subject. Every article, in workmanship and material, is the best manufactured. This is arranged for high schools, and it is also recommended for grammar schools.

In the following table are given the numbers of the various sets that have been furnished the schools, during the year:

<table>
<thead>
<tr>
<th>Set No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Chart No. 1, cloth back, varnished, on map rollers. School meter, 2x2 cm., painted. Loaded and dissected liter block, polished, each piece loaded to the specific gravity of water. Polished mahogany deciliter block, checked into 100 cc. Polished mahogany centiliter block, checked into 10 cc. Polished mahogany milliliter block. Copper graduated liter case, with brass U. S. standard rule; glass face. Deciliter case, divided in cc. or ml.; tin. Centiliter case, divided in cc. or ml.; tin. Milliliter case; tin. Dekaliter; wood; sealed to U. S. standard; iron bound. 5 Liter; wood; sealed to U. S. standard.</td>
</tr>
<tr>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
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McClees and Warren (Philadelphia), *School Merchandise: maps, globes, black boards, etc.* (Philadelphia: The Firm, c. 1890).


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Sterling School Furniture Co. (Chicago) [Catalog] (Sterling, IL: The Company, c. 1875).

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