



LIBERTY HIGH SCHOOL



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F O R E W O R D

THIS BOOKLET is issued for the citizens of Bethlehem and interested friends. By formal resolution, the Board of Education committed the task of preparing and assembling the material to a Publication Committee, appointed by the Board as elsewhere named. Directors contributed the sections dealing with their respective departments; the Secretary-Manager, that on the cost of the building program; Prof. Alpha A. Diefenderfer, that on the laboratories; Principal James D. Howlett, the paragraphs on class-rooms and library and the afterword, other members of the committee collaborating. Photographs of buildings that embellish and supplement the narrative are the work of Mr. L. F. Sterner. The attractive cover design was drawn by Miss Alda Froelich, a senior in the high school.

All that the succeeding pages set forth is attributable, in the last analysis, to the progressive spirit of the citizens of Bethlehem. That spirit has come to expression in Liberty High School. That spirit hallows the noble structure as a Memorial and invests it with power for ministry to the youth.

Dec. 9, 1922.

THE EDITOR



AUDITORIUM Fifteen hundred pupils and teachers in morning Assembly

Introductory

IBERTY High School represents one of the great achievements of the City of Bethlehem. This is high claim. The history of the community, reaching back to colonial days, has been notable. Its one hundred and eighty years have been marked by accomplishments and services, varied and distinguished. Among them the rearing of Liberty High School deserves to be ranked. Planning and completion of the noble structure fell in a time of extraordinary import and gravity. Consolidation of independent towns into the City of Bethlehem with the absorption, in quick succession, of large tracts of adjacent territory brought on the need of such a school. By a right estimate of values, the erection of it came to be the first great undertaking of the united city. Momentous for Bethlehem, at that very time, was the entrance of America into the World War. By reason of its giant steel industry, the city became one of the great arsenals of the land. Phenomenal increase of population followed and made more imperative the enlargement and improvement of the entire school plant. As plans matured and work proceeded in "the days that tried men's souls", the idea took form that the new high school, designed, in the first instance, to further the well-being of the youth, should stand, also, as a War Memorial, commemorat-

ing the valor of Bethlehem men who went to the front, the sacrifice of the heroic dead and the manifold contributions and productions of the city toward bringing the war to swift and just conclusion. Hence, the name Liberty High School. As a community project, Liberty High School is wholly creditable, as a War Memorial, altogether worthy. The building has style and distinction. Its grounds are ample, centrally located, and their contemplated treatment is strikingly open to the inflow of community interest. In all parts and to the last detail, the buildings and the grounds are adapted to the use of the pupil, benefit of citizen and the furthering of worth while purpose. They have come so to be, because, in liberal measure, the thought and energy of the citizens and their accredited representatives have been focused upon them. Members of the Board of Education and the Executive Staff who planned and guided, civic authorities who encouraged, the press which gave publicity instructive and informing, the public and private organizations that approved, churches that gave their sanction, citizens who voiced helpful criticism and voted bond issues by convincing majorities, united to carry the splendid enterprise, through many difficulties, to gratifying completion.



MEMORIAL HALL Entrance to the auditorium



LIBERTY HIGH SCHOOL Front view showing approach and terrace

IBERTY HIGH SCHOOL is an interesting adaptation of the Adams style of architecture to school design. Dignity and simplicity characterize the structure and emphasize practical use. Ornamentation, within and without, has been applied with nice discrimination. It just suffices to relieve the plain, strong lines of severity and to clothe them with attractiveness. The main facade, with its projecting end pavilions, is effectively

General Features

set off by the broad, open approach, which, tiled and terraced, admits to the auditorium on grade level. Stately columns outline the entrance portico. They are surmounted by sculptured urns and flanked by circular bas-reliefs bearing symbols of industry and progress. The arched entrance doors are glazed ornamental iron grills that admit a flood of light to the entrance hall. Over the middle arch a shield sets forth the State seal. Carved panels on the end pavilions and between the windows present figures and devices that typify the arts and sciences or bear inscriptions.

More than passing interest attaches to the inscriptions. Eight in number, they are carved in bold lettering over the side entrances to the building as well as on the end pavilions of the main facade. Even he who runs may read. Illustrations of this souvenir booklet reproduce these



PRINCIPAL'S OFFICE

In this office are located the telephone switchboard connected with all rooms and the master-clock which controls all the secondary clocks in the building. maxims in the form and manner of their appearance as mural inscriptions. They have been selected with care. They are the utterances of the great and the wise of different ages, nations and faiths. They are sententious. They are positive. They urge their message upon student and visitor as translatable into the terms of life and practice.

The construction of the buildings is of fire-proof materials, with floors of reinforced concrete and walls of solid masonry. Light buff tapestry brick, granite base and steps, cornices, sills, panels and insets of Indiana limestone give to the exterior the impress of massiveness and dignity. There are four stories in the main portion of the building, while the rear wing, housing the gymnasium, swimming pool and boiler and machinery rooms, is three stories high.

Interior arrangements of the structure, as set forth in the floor-plan illustrations, are readily understood. The heart of the general plan is the auditorium, flanked by open courts. Surrounding these, in the figure of a hollow square, are broad corridors from which open principal's office, class-rooms, laboratories and shops. The open courts furnish abundant light for the auditorium and the corridors and are a striking architectural device of the interior. Certain features, not reflected by the illustrations nor elsewhere described, deserve mention.

The main entrance vestibule, hall and main stairways are given special architectural treatment in keeping with their importance in the plan. The entrance hall designed in the Greek Doric style, with massive, fluted columns and marble walls, provides for war and community memorial features. Spaces are set apart for inscriptions, panels and mural paintings to commemorate war services and notable passages of community history. Ceiling and cornices are here tastefully modelled in low relief and decorated in the subdued colors inspired by Greek prototypes.

The spacious auditorium delights the eye with its lines of strength and grace. It is designed in the Adams style, with segmental vaulted ceiling, panelled and decorated in low relief. The cornices and mouldings are refined and accented by delicate tints of color in keeping with the style. The proscenium arch has an ornamental panel colored in low tones with accents of stronger color. Over the proscenium arch and on the side walls appear a series of painted panels, representing prose, poetry, music and other subjects suggestive to the scholar of studies he may follow in college career or in later life. The main floor of the auditorium and the broad balcony are equipped with comfortable opera chairs. The stage is fully provided with curtains, draperies, scenery and foot-lights, so designed as to lend itself to concerts, recitals, theatricals, lectures and community meetings of every sort. There are dressing rooms of easy access from the stage, and centered in the rear



ONE OF THE STUDY HALLS

Equipment of the room and supervision during study periods encourage proper use of time.



FLOOR PLANS OF LIBERTY HIGH SCHOOL



FLOOR PLANS OF LIBERTY HIGH SCHOOL



A STAIRWAY

The two main stairways are given special architectural treatment in keeping with their importance in the plan of the building. of the balcony there is a moving-picture booth. The seating capacity is 1564. The stage will seat three hundred more. The acoustics are excellent. The general effect of light and color is bright and cheerful.

Certain features of the structure are peculiarly adapted to convenience and sanitary consideration. On each of the four floors of the main portion of the building there are, for boys and girls, separate locker rooms, readily reached, and equipped with individual steel lockers of the modern school-house type. Adjacent to the locker rooms are rest rooms, well lighted and ventilated. There are separate rest rooms for men and women teachers. Two electrically operated passenger elevators afford easy access to all floors. The sanitary heating and ventilating systems are of the best known to modern engineering. Direct heat radiation is supplemented by a forced system of fresh air supply. Exhaust fans expel the foul air. A vacuum cleaner system, centralized in the machinery room, insures means for keeping the building clean at all times. A complete telephone system, connecting rooms and departments with the office, affords the needed intercommunicating facilities. A clock and program bell system as well as a complete fire-gong system have been installed.



THE FIRST PUBLIC SCHOOL IN BETHLEHEM

1853 Located on Wall Street on the site of the present Neisser School.

Historical Note

LIBERTY HIGH SCHOOL has noble community traditions behind it. In some sense, it is the outgrowth of conditions enriched, through one hundred and eighty years, by fine educational theory and practice. Bethlehem was founded, in 1741, by members of the Moravian Church. They established this and other settlements in the American colonies with avowed missionary and educational purpose. Soon engaged in extensive missionary operations, they were, quite as soon, led, by their own principles and the conditions they faced, to emphasize educational work.

To their way of thinking, development of sterling character, growth in grace and in the knowledge of the truth were impossible without an instructed, intelligent mind. Moreover, the Moravians were the conservators of the principles of Comenius, one of their bishops and renowned educator, who was a pioneer in advocating the equal education of the sexes, the system of object teaching, the necessity of physical training and the importance of aiming to develop the whole human being.

Informed of such principles and ideals, they found the educational needs of the Pennsylvania colony to be very great. It was the day of beginnings. The whole region was sparsely settled by whites. There were not more than three hundred thousand of them in the colony. In most parts of it they were battling with the wilderness. In few localities was there anything deserving the name of school. The "Log College on the Neshaminy", to the south, had reached only its teens. In the language of one of the Moravian leaders there was "almost no one who made the youth his concern." And the situation was little or no better in the neighboring colonies.

Naturally, therefore, the Moravians made much of educational effort in their plans. Their zeal for training the young blossomed out in schools of various kinds, particularly in Pennsylvania. Wherever they organized a congregation or posted a preaching station, they organized a school. Notable, too, were their schools among the Indians. Wherever they obtained a foothold among the aborigines, with a prospect of doing good, they built a school-house and opened a school. Wickersham, in his "History of Education in Pennsylvania", pays the Moravian mission schools this tribute, "Even Carlisle and Hampton, with all their merit. have less to recommend them as schools for the Indians than had the old Moravian towns of Gnadenhuetten, Friendenshuetten and Friedensstadt."

In all these schools educational accessories were, indeed, limited, but the qualities of character and spirit of the teachers were fine. Efforts in behalf of their charges were to refine, to enlarge sympathies, to fit for good citizenship, to render more easy the attainment of the birthright of the child of God. The teachers taught their pupils to know facts and grasp principles, and they disciplined their minds to use the knowledge. They threw religious influences about the pupils calculated to strengthen the will, warm the heart, clarify conscience, purify motives, furnish self-mastery and to seat hope upon life's throne.

Little did these pioneers of one hundred and eighty years ago, with all their faith, comprehend the abundant harvest of all these years enfolded in the seeds they cast into the soil of the wilderness. When, in their log cabins, they introduced children to the fundamentals of knowledge or led young men and women of rustic habit forward into the beauties of classical literature and the practical demonstrations of science, a cloud covered from their vision the development which, in five generations, should not only contribute much to fill the region of their self-denial with the fruits of culture, but from that very region, too, send forth the abundant offerings of learning, science and refinement, in hallowed union with religion, across the continent and to the ends of the earth.

Administrative centre of all this activity, educational as well as missionary, during the colonial days, was Bethlehem. From here missionaries and teachers—at one time there were no less than fifty went forth into many parts of Pennsylvania and the adjacent colonies. Northward, these intrepid men went as far as Maine, southward, as far as North Carolina and Georgia, westward into the Ohio region and beyond. To the industries of Bethlehem, more than thirty in number, they looked for support, to the authorities located here they turned for direction. Hither they sent their reports. Educational program and method, as exemplified here, they introduced to many localities. brightening for the youth many a crude and primitive situation.

In Bethlehem itself school-work began before the settlement was a year old. George Neisser was the first school-master. He was a man of parts, well educated, a musician and the first historian of the place. With the years, school work of the community developed into many forms. To the earliest educational efforts two present day institutions of the city trace their origin, the Moravian Preparatory School, of honorable career, and the Moravian Seminary and College for Women, the oldest boarding school for girls in the country. Bethlehem came to be known as an educational center, and, as such, various educational foundations of later days have given it fame and renown. The Moravian College and Theological Seminary, one of the oldest divinity schools of the land, has entered upon the second century of its service. In 1865, it was announced



SOUTH SIDE HIGH SCHOOL

that the Hon. Asa Packer proposed to crown his successful enterprises and public benefits by founding in "Bethlehem South" a great polytechnic institute, which should provide for "a complete professional education" and to call it Lehigh University. Its story is well known and may be read in many a publication. Under the auspices of the Protestant Episcopal Church, Bishopthorpe Manor, a finishing school for girls, was opened in 1866. The Bethlehem Preparatory School, founded in 1878, by William F. A. Ulrich, is one of the favorably known secondary schools of this part of the Eastern States. Prominent in the educational history of South Bethlehem have been the several parochial schools of Roman Catholic and Greek Catholic parishes.

The beginnings of the Public School system of Bethlehem are intimately interwoven with the Moravian schools of the village. For some years, the Moravian schools had served, in fact if not in name, as public schools. At a time when their re-organization was contemplated by the village authorities, the Act, creating the Bethlehem School District, identical in extent with the Election District, and authorizing the levying and the collection of school taxes and the election of School Directors, was approved by the State Legislature, on April 1, 1836. The first Board of Directors, elected within a month, consisted of James T. Borhek, Abraham L. Huebener, John M. Miksch, John F. Rauch, Owen Rice and Charles

C. Tombler. All but the last named had been members of the previous village School Board. The contemplated re-organization of the village day schools had amounted, therefore, to simply converting them from parish schools into District Schools under the Pennsylvania schoollaw. The newly elected directors determined "to raise, for the current year, a sum, in addition to that determined on by the Delegate Meeting, equal in amount to the County Tax for the present year." This first school-tax in the district amounted to \$469.79. John C. Warner, was appointed collector at a commission of \$8.00. In December, the Board resolved to employ Margaret Opitz, at a yearly salary of \$8.00, to sweep the school-rooms twice a week. At a later meeting, the services of "Gretel" were thought to be worth more, and in the following February, her salary was raised to \$10.00 a vear.

The first report rendered to the State Superintendent, Jan. 9, 1837, gives the average number of pupils enrolled in the three departments operated, at that time, as one hundred and twenty-five. These departments were the school for boys taught by Jacob Kummer, that for boys and girls taught by Matthew Christ and his wife, with various assistants at intervals, such as Mrs. Theodora Beear, and the Misses Henry, Caroline Warner, Sarah Eberman, Josephine Leibert, Sarah Rice and Elizabeth Weiss, and the day school department for girls connected with

the Moravian Seminary, in charge of John G. Kummer, Principal, into which girls were statedly advanced from Mr. and Mrs. Christ's school, under a contract made by the School Directors with that institution for \$150.00 a year. The pupils were distributed into these departments, because they had to be guartered in various Moravian buildings then available and because such an arrangement was suited to the teaching forces then obtainable. The total paid on account of salaries for the first year, including the \$150.00 paid the Moravian Seminary, was \$750.00. The only other expense was about \$4.50 for fuel. The school-rooms cost the Directors nothing. Some needed equipment was procured, at various times, by the village authorities or through private contributions. The first State appropriations were \$45.59, in 1836, and \$129.48, in 1837. From the County the sum of \$136.77 was received. These amounts, with the first year's district tax, \$469.79, and other receipts, \$10.34, made a total of \$792.15. In May, 1837, the district tax was fixed at "fifteen cents per \$100.00 on occupation and three cents per \$100.00 on other subjects of taxation."

For some years the public school classes of the community were operated in separate units, even after the village of Bethlehem had been incorporated into a Borough, in 1845. In 1853, the *disjecta* membra of the free schools were collected and organized in the first public schoolhouse built in Bethlehem, on Wall St.,

where the Neisser School is now located. The first teachers were the Rev. A. R. Horne, principal, Mrs. Mary Gross (nee Cole), Miss Susan Spinner and Miss Jemima Yerkes.

Subsequently, the needs of the School District led the Directors to decide upon erecting a school-house "commensurate to the needs of the district". In the event, Franklin building was completed, in 1871. William N. Walker was the first man elected, 1872, as Principal of Bethlehem Schools. Lifted then to a higher plane, the public schools have steadily progressed. With growth of the Borough, school facilities were increased by the addition of the Penn building, in 1888, the Jefferson building, in 1890, and the Neisser building, in 1892, honoring the name of the first school-master of Bethlehem.

Meantime, a small community had come into being on the west side of the Monocacy Creek. It came to be known as West Bethlehem. For its needs a modest schoolhouse was reared, in 1856, known as the Vinevard Street School-house, though not located on Vineyard St. Thirteen years later, a somewhat more commodious structure took its place, on Spring St. After this had long been inadequate, Fairview building was erected, in 1884. Upon the incorporation of West Bethlehem as a borough, 1886, population increased rapidly, necessitating the additional school accommodations secured by the erection of the Higbee building, in 1891.

With the annexation of the Borough of West Bethlehem to the Borough of Bethlehem, in 1904, the schools of the two communities were naturally merged. Soon, thereafter, the High School classes assumed larger proportions. For their accommodation extensive addition to the Franklin building was effected, in 1911. Steady increase of the school population led to the building of Calypso School, 1916, and the Lafayette School, 1917, on the west and east sides, respectively. To the proportions outlined by the buildings named, the School District of Bethlehem had grown prior to consolidation.

The public school system of South Bethlehem developed from the most humble beginnings to an extent and character of which its people were justly proud. When the Borough was incorporated, in 1865, it had a small brick school-house, built in 1858, near the line of Packer Ave., between the present Adams and Webster Sts., and another small building, devoted to school purposes, built in 1860, in a field, some distance to the east of the first school and nearer the Lehigh River. For a time. school was conducted, also, in the grainhouse of A. Wolle and Co., at the northwest corner of New and Second Sts. These modest school accommodations were soon outgrown, as the population increased with the phenomenal expansion of the Bethlehem Iron Company, later known as the Bethlehem Steel Company. In 1869, the Penrose School was built, on

Vine St. It remained in use until replaced by the Central High School building, in 1892. Next, in order, was the Melrose building, 1870, at the corner of the present Fourth and Pierce Sts. In 1902, it gave place to the Quinn building. A high school was organized, in 1872, occupying a room in the Penrose building, until, in 1886, it was transferred to the Excelsior School, on Fourth St., erected, in 1879, and enlarged, in 1885. Six years later. the High School took possession of the Central building. After the unification and consolidation of the Borough school system under a Superintendent had been effected, in 1889, the Webster, 1889, Packer, 1890, and Madison, 1897, buildings were added. Teachers of the early days were A. A. Campbell, C. H. Cline, Jacob Nickum, John L. Maughan, Griffith Perkin, George Getter, J. A. Campbell and the Misses Margaret Halpin, Sallie Bitters, Mary Navlor, Elmira Whitman, Another, O. R. Wilt, became the first superintendent.

With commendable foresight, the school authorities of the Borough projected new accommodations for the high school, their plans being realized in the completion, 1918, of the South Side High School building. It is a large, handsome structure, modern in appointments and equipment. In the event, it came to answer larger purposes than had been anticipated. For four years, it served admirably as high school center for both parts of the consolidated city, though its



VESTIBULE Entrance to Memorial Hall accommodations were severely taxed by overcrowding. These data record, in brief outline, the development of the School District of South Bethlehem.

With consolidation of Bethlehem and South Bethlehem a new era opened for the public schools of the City of Bethlehem. The two borough systems had to be united, in fact as well as in name. The situation they presented was rendered more complex by successive annexations of territory, bringing in the schools of North Bethlehem, housed in the Hamilton Monocacy and Fox buildings; schools to the west, inadequately accommodated in the Keiper and Kichline buildings; the schools of Northampton Heights, located in the Washington and Brodhead buildings, and the small Limekiln School of the Saucon Park region. The delicate and difficult problem of complete reorganization was thrust upon the men constituting the new City Board of School Directors and the Executive Staff they selected.



-Emerson

Inception and Development of the

City School Program

ENTERED and completed in Liberty High School are plans reaching back five years. With the beginning of 1918, consolidation of Bethlehem and South Bethlehem was effected. At that time, the newly elected Board of Education confronted a problem as complex as it was unusual. Two school systems, differing in habit, tradition and method, had to be welded into one that might deal effectively with the needs of the children of the newly established city. Neither system had adequate housing or equipment. Neither had quite kept pace with the rapidly advancing standards of education. The situation they presented was complicated by annexation of city territory and, again, annexation of territory in nearly every direction of the compass. And, in addition, the exigencies of the World War imposed heavy burdens and injected confusing considerations into the problem.

At the outset, the Board was fortunate in its selection of a Superintendent of Schools. The experience, wisdom and energy Mr. James N. Muir brought to the task have approved the choice. Associated with him, members of the Board took their stand on two sound principles of action:

1. Every child in the City should have educational opportunities second to none in the United States, and

2. All expenditure of money should be made with the sole object of attaining this aim.

Application of these principles pointed, in the first instance, to a building program. Neither of the borough school systems had an adequate plant at the time of consolidation. And there were clear indications that the school population would speedily increase. Within a year, the Board found that the school enrollment had gone, by more than a thousand, beyond accommodations then available. Some idea may be gained of the rapid increase of school population when it is remembered that at the time of consolidation it was a little less than five thousand and that by the end of

November, of the present scholastic year, the total enrollment had risen to 10.174 and the net enrollment to 9,907. Taking the net enrollment figures, as of Nov. 30. 1922, we find that there has been an increase of 5000 pupils, in the five year period. Of these approximately 1300 were brought into the system by annexation of territory. The remaining 3700 constitute the pupil increase mainly within the limits of the city as they were drawn after consolidation. Hence, the extensive building program. In the working out of its details, the Board of School Directors availed itself of professional counsel and service by engaging Mr. Verus T. Ritter. of Philadelphia, as architect.

Building plans were painstakingly elaborated and energetically pushed. Exhaustive surveys by the superintendent and the architect disclosed where the new buildings should be located and what should be their dimensions. They, also, made clear what needed to be done to make the buildings already in use safe and sanitary. By unanimous vote of the



THE NEW QUINN BUILDING

Board, upon canvass of the situation with the Superintendent, it was determined to proceed, at once, with the erection of three school buildings, a combination elementary and junior high school building for the West Side, on the site secured at Union St. and Ave. J, an elementary school for the South Side, on the grounds adjacent to the Quinn building, and the high school on the sixteen acre plot, bounded by Linden St., Laurel St., Pine St. and Elizabeth Ave.

The Quinn building in equipment and appointments is a thoroughly modern elementary school. The class-rooms, in size, equipment and furnishings, were so designed, as to be best adapted to instructional purposes. They meet the most rigid school-code requirements. Threefourths of the building has been completed. the remaining one-fourth will, in due time, replace the old Quinn school-house, which is still in use. The Nitschmann building, so named in honor of the founder of Bethlehem, is unique in its arrangement and adaptation to usefulness. It has the same type of class-room as designed for the Quinn building. It has, also, rooms and shops that serve admirably the requirements of junior high school work. A noteworthy feature of this building, as of the Quinn school, is the spacious auditorium. In each case, two-thirds of the floor area is level, equipped with movable chairs and adapted to all social centre purposes. The architect, Mr. Ritter, drew the plans of both buildings, as well as of the Liberty High School. The F. F. Speck Construction Co., of Bethlehem, were the builders of the Quinn building; F. J. Groman and Sons, of Bethlehem, of the Nitschmann building and Cramp and Co., of Philadelphia, of Liberty High School.

The care exercised in working out the building program may be illustrated by the last named structure. Its plans did not spring from any one mind. Deliberations, extending through more than half a year, were occupied in the assembling of ideas, the preparation of preliminary plans, study and revision of the plans until members of the Board and the Super-



THE NITSCHMANN BUILDING

intendent were satisfied that the plans finally drafted met sane educational standards and city needs. And similar attention was bestowed on the other structures. In developing the plans, it was the common conviction that to put up cheap, inadequate buildings would be as wasteful as to rear unnecessarily ornate or foolishly pretentious structures. And it was, further, felt that buildings substantial and dignified, with every part designed for use or worth-while purpose, would impose only reasonable burden on the citizens and would prove true economy in the long run.

With the phenomenal growth of the system, it became necessary to recast the form and methods of its business department. Upon the advice of competent authority, a thoroughly modern system of book-keeping and accounting was introduced. Matters of finance and all thereto relating are now administered in a manner entirely business-like and as being the discharge of public trust.

More difficult, because more delicate, was the task of building up the teaching organization. Thought and effort, unstinted and untiring, have been given to the fixing of standards and the selection of the staff of directors, the corps of teachers. Five years ago, one hundred forty-four teachers were employed in the newly constituted Bethlehem School Now the number is three District. hundred. The bare figures, however, can give but scant idea of all that has been involved in assembling the additional forces, in the filling of vacancies and the adjustment of personnel to the many de-

partments of work. Suffice it to say, that effort in this direction has been unceasing and thorough-going. The Superintendent has succeeded in assembling a cabinet of capable directors. Mr. James C. Tucker, formerly connected with the Trade Schools, operated by the State of Connecticut, at South Manchester, is a seasoned director, trained and skilled in trade-school work. Miss Nellie J. Apgar, director of the art department, heretofore engaged in the Rockville, Conn., and other school systems, is an unusually well trained teacher and has proven a good organization leader. Miss Selma M. Konold, for some time music director of schools in Ridgewood, N. J., capable and of charming personality, succeeded in amalgamating the Bethlehem school system for music teaching and training the teachers for music work. After one year of work in Bethlehem, she entered the State Department as assistant to the Director of Music. Miss A. Louise Morris, of the Johnson High School, St.

Paul, Minn., well trained in music and as a teacher, has continued the work with marked success and is rapidly building up the music course. Miss Gertrude O. L. Dustin, for some years professor of home economics in Temple University, an experienced and cultured director, is rapidly developing the work and program of the home economics department. Mr. E. H. Nelson, formerly of the Highland Park High School, Mich., has recently become a member of the staff as director of physical education, having been highly recommended as well as thoroughly trained for this work. Mr. James D. Howlett, well qualified by training for secondary school work and a man of ripe experience, has been secured as the principal of Liberty High School. He is a director of the Board of College Entrance Requirement Examinations. The staff of executive officers and directors inspires confidence. One need only read the clearcut statements of aims by the Superintendent, the Director of Vocational and Industrial Education, the Directors of Art and Drawing, of Home Economics, of Music, of Physical Education, as these have been published from time to time, to note that the objectives are sound and that there is steady progress within the lines laid down.

In barest outline, these have been the planning and the toil that have led to all that is symbolized in Liberty High School. It has been a period of reconstruction for the public schools of Bethlehem. Naturally, all that has been done has come under the keen scrutiny and criticism of the citizens, particularly, because the press of the city has always given liberal attention to school affairs and the Board of Education has, from time to time, given extended account of its stewardship. It is gratifying that public sentiment has swung more and more to substantial approval of what has been accomplished and what becomes now the vantage ground for further effort that shall be necessary.



Cost of the Building Program

INTERESTING and instructive are the figures showing the expenditure involved in constructing and equipping Liberty High School, and the manner in which the necessary funds were provided. This can best be shown by the following tabulation:

Cost of	Land (16 Acres) \$	5 105,000.00
	Building	
	Equipment	225,000.00
	ement of grounds	93,000.00

Total\$1,634,000.00

At the same time that the Liberty High School was being constructed, two other buildings were being built, the new Quinn Building, on the South Side, at a total cost of \$430,000.00 and the Nitschmann Building, on the West Side, of which the cost was \$376,000.00. The grand total cost of the building program, begun in 1919, is \$2,440,000.00.

The financing of this program was distributed over the years during which the buildings were in course of construction and equipment. First of all, a series of articles was prepared and published in the local press showing the public the need of additional facilities, and the electors were asked for their assent to an issue of bonds amounting to \$866,000.00. The election proved favorable and the bonds were issued and sold, in 1919. This issue consists of serial bonds maturing in approximately equal amounts annually from 1929 to 1949.

In 1920, as the buildings progressed, the Board of School Directors issued and sold bonds amounting to \$725,000.00, these bonds maturing in approximately equal amounts at intervals of five years, from 1925 to 1950. This issue was not submitted to the electors since the Board was well within its limit of borrowing capacity prescribed by the state constitution.

In the fall of 1920, as the buildings approached completion and funds had to be provided for their equipment, another publicity campaign was launched to acquaint the public with the necessity of again increasing the indebtedness of the District for this purpose. Through the columns of the local press, by means of talks before the various Parent-Teachers Associations and other organizations and by letters sent home with the pupils to their parents, the facts were presented squarely and openly to the voters. When the ballots were counted, the electors had given their consent by a majority of 4 to 1 to an increase of the indebtedness in the amount of \$675,-000.00. These bonds were issued and sold, in 1921, and were drawn to mature in equal amounts at intervals of five years from 1926 to 1951.

Again, in 1922, the Board found it necessary to issue bonds amounting to \$150,000.00 to complete the equipment and improve the grounds about the new buildings. This last issue consists entirely of bonds maturing in 1952. The balance of the money needed was drawn from current funds.

From the inception of the building program, the Board had faith in the willingness of the public to co-operate for the advancement of its schools when the facts were squarely presented. The splendid response in the two elections at which huge increases of indebtedness were authorized proved that this confidence was well founded.



-Drummond



James N. Muir Superintendent of Schools



Harry W. Lewis, President 1917-1920



Edgar W. Speck, President 1920-



Fred J. Wilt, Secretary-Manager

OFFICERS OF THE BOARD OF SCHOOL DIRECTORS



Mahlon Ritter, Vice President 1917-1920

James Ruth, Vice President 1920-



Herbert J. Hartzog, Solicitor



Lawrence J. Broughal, Treasurer

OFFICERS OF THE BOARD OF SCHOOL DIRECTORS

School Board

Board of School Directors July 30, 1919 Board of School Directors 1922

Harry W. Lewis, *Pres.* Mahlon Ritter, *Vice Pres.* Wm. N. Schwarze Robt. M. Bird Harry T. Morris Philip M. Palmer Edgar W. Speck Stewart A. Shimer Patrick F. Enright Edgar W. Speck, Pres. James Ruth, Vice Pres. Mahlon Ritter Franklin A. Stein Henry J. Mack A. Newton Roberts Earl H. Getter Harry W. Lewis Patrick F. Enright

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- Robert M. Bird
- Patrick F. Enright
- Earl H. Getter
- Henry J. Mack
- Harry T. Morris



Philip M. Palmer

A. Newton Roberts

William N. Schwarze

Stewart A. Shimer

Franklin A. Stein



OUTSTANDING FEATURES OF

LIBERTY HIGH SCHOOL

L IBERTY HIGH SCHOOL was designed to meet the requirements of the senior high school and one of the junior high school units of the City. Other junior high school units are domiciled in the South Side High School and the Nitschmann School, respectively. This distribution of high school activities was decided upon as strategic and best adjusted to the needs of the school population. The high school offers six courses of study, viz., the Latin Scientific, the English Scientific, the Commercial, the General, the Home Economics and the Industrial Course. As serving the requirements of pupils occupied with these courses and their well-being while so engaged, certain features of building appointment and equipment, their use and purpose, deserve particular notice.



A TYPICAL CLASS ROOM

The Class Room



James D. Howlett Principal, Liberty High School

The class rooms vary in size from a type seating twenty-eight pupils to a type seating forty pupils. This makes for economy in seating different sized groups for class exercises.

Each room has ample blackboard space, a cork composition bulletin board and shelves for books and supplies. Almost a whole wall is given to windows, affording abundance of light and, in every case, from the left of the workers. An outstanding feature of the room is the absence of the old time desk, which has served so long as a sort of school straitjacket. In its place is a chair specially designed for the comfort and convenience of the pupil. The whole equipment and spirit of the room give a most happy impression.



SCHOOL LIBRARY

Pupils come to the Library to consult reference works, to find good material for general reading and to cultivate taste for and method in the use of books.

The Library

HE school library is on the second floor, directly over the front entrance, and looking out upon the William Penn Highway. It is easily reached from all parts of the building. On its shelves will be found about ten thousand volumes; on its racks and tables, leading newspapers and magazines. The equipment is very complete, comprising chairs and tables for upwards of a hundred pupils, bulletin boards, charging desk for the librarian, combination display cases, and the latest filing devices installed by the Library Bureau. This room will be not merely a place for reference work and general reading, but, with a trained librarian in charge, will be a center for the cultivation of taste and method in the use of books and periodicals. In location, in equipment, and in the spirit of the service it is fitted to render, the library will be the very heart of the school.



-Marcus Aurelius


THE GENERAL SCIENCE LABORATORY

The Laboratories



Alpha A. Diefenderfer

Member of the Board of School Directors, 1919—1921, Engaged by the Board to supervise the installation of all Laboratory Equipment.

I N MAKING elaborate provision for the enlargement of the scope of the work of the Science Department in the Bethlehem High School, the Board of Education has foreseen the increasing interest in matters scientific and technical, which is manifesting itself in the youth of Bethlehem as the result of this city's fortunate position in the heart of the great Lehigh Valley industrial region. The industrial and scientific enterprises, numerous and varied, in Bethlehem and vicinity, require the services of an increasingly large number of young people well grounded in science. To prepare these young men and women to take up such work intelligently, or to pursue more advanced work in college, is the aim of the Science Department.

With this in mind, there has been provided in the Liberty High School a Scientific Department which compares favorably with the finest in the United States -one which will bring to every student a knowledge of science and scientific practice and a conception of the possibilities of science which will stimulate in him that genuine interest that makes study a pleasure. Spacious and well-equipped Physics, Chemistry, and General Science laboratories, an up-to-date lecture room and numerous smaller rooms for various purposes connected with the Department. are located on the third floor of the Liberty High School.

The Chemistry Laboratory

The Chemistry Laboratory is a welllighted and well-ventilated room equipped with the most modern apparatus and teaching facilities. This laboratory has work-table accommodations for 96 students, who can be cared for in sections of 32. The tables are what are known as unit type instruction tables. They are fitted with hot and cold running water. A porcelain sink in the middle of the table is so arranged that it may be used as a pneumatic trough as well as sink, thus eliminating the unsightly troughs from the regular laboratory equipment. In addition to this, each table is supplied with vacuum, blast and gas. The top and shelving of the tables are made of Alberene. Each table accommodates four students at a time, and there is a narrow aisle between tables, allowing the instructor to talk to each student without disturbing the rest of the students working at the table.

Along the outside wall, directly in front of the window, is a special table fitted out with gas, vacuum and blast. together with five sets of electrical service controlled from switchboards in the instructor's charge. At this table specialized work may be carried on, without interfering with the regular routine of the laboratory. The noxious gases formed in special tests are taken care of in fumehoods provided for this purpose. These hoods are directly connected to a special fan exhausting air from each hood at the rate of one hundred cubic feet per minute. These hoods are also supplied with water, gas, air and vacuum.

The Physics Laboratory

The Physics Laboratory contains four tables for general work in the instruction of Physics. A well on each end of the table contains gas, vacuum and blast connection and, also, a series of electric outlets which can be supplied with current of any description by the use of the motor generator set in the lecture room or by the use of a separate set on wheels which can be brought into the laboratory and connected here, while the student receives instruction in its use. In this way the student will be able to handle work of much larger character than is ordinarily undertaken in physics laboratories, and in this way he may become acquainted with the problems met in every-day life.

The Lecture Room

The Lecture Room is exceptionally well-planned. It is located between the Chemistry and Physics Laboratories. There is a dark room and a preparation room for the Physics Laboratory; one of each, also, for the Chemistry Laboratory. The dark rooms contain the vacuum and blast set for the laboratory and lecture room tables. The preparation rooms with their working tables will be a delight to the hearts of active and inquiring teachers. Each room is fitted out with working table, hood and apparatus case; and a special feature is found in movable tables for demonstration purposes, which can be wheeled into the lecture room after the demonstration has been arranged at the instructor's leisure in his own work room. The rooms, also, provide a place where the instructor may carry on individual experimentation and thus keep himself in touch with his subject.

The Lecture Room itself is equipped with combined Chemistry and Physics lecture table over which is a fume hood directly connected with an exhaust fan of its own to carry off noxious vapors from the lecture table. Electrical outlets controlled from the switchboard and

THE CHEMISTRY LABORATORY





THE PHYSICS LABORATORY

motor generator are set directly behind the table and in such a position that they can be changed at will during the lecture. Illuminated meters record the current used at all times. The walls of this room are aluminum-coated on the north and south sides, that pictures may be projected from the end of the lecture table to either wall at the will of the instructor.

The lecture table as built into the room

may be augmented by the movable lecture tables in care of the instructors in Chemistry, Physics and General Science. As stated above, apparatus can be arranged in private work rooms and then wheeled in to the main lecture room on the movable table and demonstration can be given without delay.

The room seats approximately 125 students. It will lend itself to the use of other Departments, besides the Science Department, for lecture and demonstration purposes. This is especially true of the electrical branch of the industrial course.

The Balance Room

At the north end of the Physics Laboratory is situated the combined Balance Room for Chemistry, Physics and General Science. This room is well-lighted and contains wall tables on which the delicate balances can be placed and kept with absolute safety. The room will be free from fumes of all kinds, thus insuring the longest possible life to the balances it contains.

The Repair Room

Adjoining the Balance Room is the Repair Room. This is a work room in which the general repair work for the various laboratories of the Science Department will be carried on. Every facility to make such repairs will be at hand here, and in this way the student in science will again get first-hand information of a practical nature.

Other Rooms

On the north side of the building we find a laboratory for General Science fitted with the latest approved pattern of a general science working table, which has running water, gas and electrical outlets. Demonstration table and preparation room in connection with this laboratory will aid in making this course one of great interest.

The laboratories of Biology and Bacteriology and the conservatories are located on the same floor. The laboratories have tables set diagonally, of ebony wood top. They are supplied with wall tables and several movable tables for demonstration purposes. The conservatories contain apparatus rack, aquariums and movable tables built of alberene.

The General Science and Biology Laboratories have lantern screens for the projection of pictures so that demonstrations can be made that will appeal to all.

A large, well-lighted room at the northeast end of the building is now fitted up with apparatus cases, blackboards, sink and work table. The floor has gas, vacuum, blast and electrical outlets. Should at any time either Chemistry or Physics outgrow quarters assigned to them, this room can be fitted up for either or both, or it can be converted into an electrophysics laboratory.

No one can predict the growth of these various departments at this time, but the facilities have been provided to meet any need that may arise at any future time.



THE BIOLOGY AND BACTERIOLOGY LABORATORY



DRAFTING

The inventive mind of the young draftsman here finds expression in design drawing. As in any industrial establishment, his drawings are complete working plans in the school shops.

Department of Industrial and Vocational Education



James C. Tucker Director of Industrial and Vocational Education

E ARLY in Bethlehem the Comenian principle was recognized that, to arouse interested doing, thinking, and making among school children, it was only necessary to give opportunity for hand work in the schools. The early Moravian schools introduced among the girls during school-hours, sewing, embroidery and similar tasks. Later, boys in our public schools were interested in wood working problems and the manufacture and finishing of wooden objects.

Since the consolidation of the cities north and south of the Lehigh, a far larger development of these principles was envisioned for the Bethlehem Public School children and the Superintendent convinced the City School Board that the public schools should offer, not only excellent academic preparation to those girls and boys who wish to go through higher institutions, but that the schools should also meet the variety of needs of that much larger group of girls and boys who, actuated by ambition to earn or by disinclination to book-study or perhaps forced by economic necessity, dispense with all educational opportunities beyond those offered by the tax-payers through their public educational system.

These things were being done in neighbor states and the Board appointed a member, H. T. Morris, to accompany the Superintendent on a visit to some New Iersey Vocational Schools. Broad minded officers of the Bethlehem Steel Company became interested in Mr. Muir's vision and delegated Captain John Lund, Superintendent of Machine Shops and Foundries, also, to accompany him on this visit. The visit was made on May 9th, 1010, and a report was presented to the Board on May 14th. The Board, thereupon, proceeded to enlarge rapidly upon the manual training courses then being offered in the South Side High School and in the Franklin Building, so as to develop full vocational courses.

The Boys' Trade School was established in the Excelsior Building, the vocational courses for boys in the South Side High School were perfected; and the Industrial course in the Liberty High School was formed with its training for six distinct trades. All of these vocational courses are built on a broad, general training in English, History, fundamental Mathematics, and Civics. In the Liberty High School, the principles of science, of physics and of chemistry are taught in unusually well equipped laboratories.

Through the generosity of the Bethlehem Steel Company and special interest of Messrs. E. G. Grace, President, H. E. Lewis, Vice-President, and R. A. Lewis, General Superintendent, large quantities of machinery and apparatus were made available for the metal working departments of all these schools. These machines have been supplemented by new metal working machines wherever need existed. Wood-working machinery, sheet metal machinery, electrical motors, measuring devices and auxiliary apparatus, printing and binding machinery with complete typographic equipment, have all been supplied in the variety necessary to make completely equipped shops.

The Industrial Department of the Liberty High School is now equipped to teach six major trades, printing, drafting, pattern making, machinist, sheet metal work and practical electricity. With the opening of this school, September 5, 1922, one hundred sixty boys were enrolled in these courses.

The entrance requirements to the indus-

trial courses are the same as to any other course in the high school. A pupil should possess a normal mind with normal physical development, an aptitude for the particular trade chosen and industrious habits.

One-half of the pupil's daily time, during the entire four year course, is devoted to practical work in the shop at his chosen trade. The other half of his time is given over to class-room work in the study of Science, Mathematics, Drawing and Trade Theory as related and applied to his trade, also to a full course in English, Civics and History.

A broad, practical training in the various branches of the printing trade is given in the

Printing Shop

to boys who wish to become superior workmen, prepared to accept attractive positions as printers. The equipment in this shop is the result of expert engineering, coupled with a vision of the practical requirements of the trade from a production standpoint.

The students are impressed with the business like atmosphere and are inspired by their instruction to turn out a high type of work.

Graduates from this course should be able to enter the printing business as job printers, foremen or as skilled workmen in any of the several branches of the printing trade.



PRINTERY

Here the spirit of Benjamin Franklin still inspires this generation of young men in the "Art Preservative of All Arts." Every contrivance necessary to modern job printing is provided. Pamphlets and forms are turned out regularly for the schools. The boy with an inventive mind finds opportunity of development thru layout and design in

A Modern Drafting Room

equipped with furniture built in the school shops, a complete outfit of instruments and measuring tools and library of the best reference books on the subject of mechanical drawing. This drafting course is intended to develop superior workmen with ability to design and make working drawings for machines, furniture, general mechanical equipment and electrical installations. Instruction is here given in the planning of work for all departments, as well as in the technique of the trade. All designs requiring castings or moulded shapes first take form in the constructive work of the

Pattern Shop

The pattern making trade calls for an unusual amount of skill and accuracy, good judgment and a fine sense of proportion, as well as a fundamental knowledge of modern metal manufacturing conditions. Boys who possess the elements of these requirements will find opportunity to develop themselves thoroughly into skilled pattern makers in a shop equipped with modern woodworking machinery and tools. The shop is, also, provided with substantial steel work benches, fitted with vises designed and built in the school shops.



PATTERN SHOP

Aided by adequate machinery and hand tool equipment, these boys are developing the skill and judgement and acquiring the technical knowledge and experience necessary to make them high grade pattern makers. In addition to regular pattern making work, considerable cabinet making work is carried on in this shop, consisting of cafeteria tables, sewing tables, drawing tables, cabinets, cases and a variety of small furniture, much of which is used in the various departments of the city schools.

Those who select the machinist trade find

The Machine Shops

fully equipped with modern man-size machines with individual motor drives, representing the principal kinds of machine tools used in the trade, together with a full equipment of small tools. The shops are well lighted and ventilated, making the working conditions equal to those in the best commercial shops in the industries.

The course is intended to train the young man to enter the machinist trade with a high degree of skill and intelligence, such as will enable him to make rapid advancement into leading positions. The student is given a thorough knowledge of the fundamental operations of the principal machine tools and practice in a wide variety of high grade machine work.



Typewriter Desk A product of the school shop which is used exclusively in the Commercial Department.



MACHINE SHOPS

Two machine shops contain every kind of man size metal working tools, providing experience ranging from the simplest beginners' problems to the intricate precision work for the advanced pupil about to graduate as a journeyman machinist.



ELECTRICAL SHOP

These embryo Edisons undertake with equal success the simple and the difficult problems in electrical installation, testing or practice. They maintain the entire school electrical system, which affords an unexcelled variety of experience in the training of journeymen electricians. A complete equipment of rolling and forming machinery and necessary auxiliary small tools are provided in

The Sheet Metal Shop

Modern building specifications call for a wide variety of sheet metal shapes, requiring the highest type of creative skill. Demands for this kind of work come from automobile, domestic and other sources. This course will open in September, 1923, affording excellent opportunity to learn this trade.

Electricity has always been attractive to the inventive minded boy.

The Electrical Shop

is provided with complete power equipment, electrical machinery and auxiliary apparatus and a complete outfit of meters and testing instruments. The students are given instruction and practice in the testing and maintenance of direct and alternating current motors and generators, meters, instruments and of transformers and storage batteries, of interior wiring in houses, stores, factories and public buildings, and of automobiles, installation, care and operation of electrical motors, generators and switch boards, in locating and repairing defects in electrical equipment. All of the electrical service and power in the shops and in the Science laboratories in the Liberty High School have been installed by the boys of



IDEAL KITCHEN

A part of the home-making unit, where attractive equipment adapted to facility in food preparation serves as an ideal and as an incentive for interest in this part of home-making work.

Department of Home Economics



Gertrude O. L. Dustin Director of Home Economics

THE chief purpose of the home economics department is to train pupils for worthy home membership. The training given aims to cultivate high ideals of right living and of happy, satisfying home making. It aids the pupils to appreciate the benefits to the family and to society from well ordered family life. It teaches the pupils how to carry on intelligently and skillfully the necessary and desirable processes in right living and in wisely balanced home making. It gives practice and encouragement in making some of these processes habitual.

A subordinate purpose is to train pupils, whose schooling must end with gradua-



ELEMENTARY FOODS AND NUTRITION ROOM

Meals planned for in advance, so that they may be health-giving and yet economical, form a part of wisely balanced home making.



UNIT KITCHENS

Working in these home sized kitchens, with family size equipment, utensils and recipes, girls are given a better appreciation of habits of work needed in their own home kitchens. tion from a high school course, in lines of work which will lead to economic independence, such as dressmaking, millinery, some phases of home management and of food preparation.

Facilities offered by the Liberty High School in rooms and equipment make it possible to realize these aims. Seven rooms are devoted to home economics work, besides the home economics office and the cafeteria, the latter being a part of the home economics department. Two of the seven rooms are each divided into three rooms; one into a bed room, bath room and recitation room, which make up the "welfare" unit, and the other into a kitchen, dining room and living room, the "home-making" unit. A laundry, two textiles and clothing rooms and two foods and nutrition rooms, each with adjacent storage rooms, complete the space assigned to this department.

Rooms were so planned and equipment was so chosen that conservation of the pupils' time could be effected, without prejudice to the full purpose of home economics education. One foods and nutrition room is designed for advanced work and one for elementary. There are, besides the complete kitchen in the home making unit, three other complete kitchens in the latter foods and nutrition room. These kitchens are differently equipped. There is a very modest kitchen with a slate sink, oak furnishings and agate ware cooking utensils, and there is



ELEMENTARY TEXTILES AND CLOTHING ROOM Knowing how to make hats will help these pupils in the thrifty planning of the seasons' wardrobe.

50



ADVANCED TEXTILES AND CLOTHING ROOM

A study of costs of the individual garment and of the yearly clothing need, and of durability, adulteration and weave of fabrics, forms a part of all instruction in garment construction. an ideal kitchen furnished completely in white. Each kitchen is equipped, as is each cooking desk, with cooking utensils which permit of the preparation of food in family size quantities. Other equipment in the foods and nutrition rooms provides, for each set of four pupils, two cooking tables, a full size gas range and a sink. Each room is further equipped with storage facilities for utensils, foods and cleaning equipment and with locker space for aprons. A set tub and sink are provided for the use of students appointed as housekeepers.

The larger foods and nutrition room accommodates twenty-four pupils, twelve in the complete kitchens and twelve at the cookery tables. The smaller one accommodates sixteen, two at each of eight cookery tables. Two doors lead from this room into the home-making unit, one into the dining room and one into the kitchen. Students taking charge of serving meals work in this kitchen and dining room, while the instructor carries on a lesson in the adjoining room with the remainder of the class.

All class instruction dealing with foods aims at the planning, preparation and service of meals. Usually, the first meal prepared by the pupils is served to the foods and nutrition instructor and class members. As the pupils become more proficient they serve meals, planned and prepared by themselves, to groups ranging in size from six to thirty, arrangements being made with the director of the department by any party wishing a luncheon served.

The dining room, living room and bed room furnishings are being selected by home economics classes studying home furnishings and management. These rooms are used for the purpose of teaching pupils the essentials of home management and child welfare.

The laundry is equipped with six double laundry tubs, six ironing boards, a table, a clothes drier, a locker and an exhibit case. A washing machine is to be selected through tests made by the pupils. Family size laundry work is done. Classes in textiles and clothing also use this room for garment renovation work, such as washing and pressing ripped up garments to be made over, stain removal and dyeing.

One of the textiles and clothing rooms is equipped for the elementary classes in this work and for millinery, the other for the more advanced classes in garment construction. Each of these rooms seats twenty-four at the work tables. As classes rarely number more than twenty, this leaves space for pupils who need 'to devote extra time to complete a garment. Besides locker, storage and exhibit space, there are in each room ten sewing machines, one full length three-way mirror, two ironing boards and magazine racks. In the room for elementary work two additional three-way millinery mirrors are provided. Opening from the room for

advanced classes is a fitting room suitably furnished. Most of the garments made are for the pupils themselves or for members of their families. Some order work is done. Equal emphasis is laid upon choice of clothing and upon clothing construction.

The full course in home economics begins with the ninth year of school and continues to graduation, at the end of the twelfth year. In the ninth school year, eight forty-five minute periods of home economics and art are required, the remainder of the work being academic. Beginning with the tenth year, the curriculum is made up of half academic work-English, science and history required with electives in foreign language, mathematics and additional science or history-and half home economics work. Following two years of home economics work, required of all seventh and eighth year girls, and including elementary clothing construction, housekeeping, laundering, child care and meal preparation, the course in the ninth year consists of lessons emphasizing wise consumption. Such subjects as adjusting personal finances, budgeting and ways of practicing thrift, hygienic personal habits, social deportment, ways in which community practices affect the home, selection of suitable clothing with its care and repair, selecting, preparing and serving healthful food combinations and choosing home furnishings are given consideration. The lessons in home fur-

nishings and in clothing are closely tied up with the art lessons. The lessons in home economics emphasize utility, durability, efficiency, construction and cost, while design, color and placing are being studied in the art classes. From the tenth year on, required courses in home economics consist of dressmaking, dress reconstruction, millinery, children's clothing, home management, home problems, home economics as related to the community and to industry, meal preparation and marketing, large quantity cooking and serving and dietetics. In the twelfth year, choice may be made of drafting and draping or of lunch room management and of catering or of any phase of home management, clothing or foods work. Art work closely connected with the home economics work is required. Upon completion of such a curriculum, the aims of general home economics work should be quite fully realized. In addition, if a girl wishes to prepare for remunerative employment in clothing construction. catering or tea room management, or certain phases of home management, then, on the basis of work done in the previous three years, she may avail herself of specialized training in the twelfth year. This curriculum is not intended to prepare girls for college, but, with the right choice of electives, it is possible to qualify for admission to institutions that have liberalized college entrance requirements.

In addition to the above, home eco-



LAUNDRY

Textile conservation through proper laundering and renovation aids in teaching pupils thrifty home management. nomics work is required of all ninth year girls, except those electing the Latin Scientific course. Beyond the ninth year, specialized branches of the subject may be elected in any course except the Latin Scientific, and may supplement the Latin Scientific. The home economics work required in the ninth year, in any program, is similar to that required of students who have elected the full home economics curriculum.

Students in home economics have selected furnishings for the faculty rest rooms in the Liberty High School. Some of the clothing classes have formed "Better Clothing" Clubs, with the aim of learning how to choose more suitable clothing for themselves, and, through talks, posters and a dramatized dress review, written by interested students in the Senior English class, to spread the idea of what constitutes suitable clothing. Pupils also help to meet local needs, as in preparing baskets for the needy at Thanksgiving time, in constructing clothing for orphan children and baby layettes for use by the Red Cross Service Section, and through giving food and clothing sales to raise funds for school or charitable needs.

Furthermore, volunteer work is done by pupils, such as undertaking hostess duties at various entertainments, and conducting group meetings of those interested in any one particular phase of home economics work.



CAFETERIA

Well planned arrangement and orderly procedure facilitate the daily serving of over six hundred pupils in forty-five minutes. The cafeteria kitchen is equipped with modern labor saving devices, adapted to speedy and sanitary preparation and service of food. Connected with the home economics department by administrative control and practical operation is the

Cafeteria

Here, a noon a la carte luncheon, planned by and prepared under the direct supervision of a trained dietitian, is served daily at a cost to cover food and labor charges. The menu offered consists of a soup, two main hot dishes, two vegetables, milk, cocoa, sandwiches, bread or rolls and butter, salads and desserts. Prices range from one cent to five cents for any dish except some of the meat dishes, for which six to eight cents may be charged. The purchaser pays directly over the counter for foods selected. The traffic rail arrangement necessitates going only to that part of the counter from which the desired food may be obtained. Over six hundred pupils are served in the two lunch periods in less than ten minutes for each period.

The dining room tables, eighty-two in number, were made by pupils in the industrial department. At these tables, five hundred and eighty four may be seated comfortably, though the tables may accommodate seven hundred and thirty-six.

The cafeteria facilities lend themselves, on occasion, to dine some of the larger assemblies that meet in Bethlehem, such as the local Teachers Institute and the Pennsylvania State Educational Association.



ARTS AND CRAFTS STUDIO

The pupils are offered a choice from about twelve different crafts, any one of which may be profitably continued in their homes

Department of Art



Nellie J. Apgar Director of Art

THE Art Department of the Liberty High School appeals to both the talented few and the less talented many. To both, it offers that which will be of permanent value in their lives. To the former, it gives intensive training in the work for which they are especially fitted, to the latter, it gives a basis for a discriminating choice, and a feeling and appreciation for beauty wherever it may be found. The courses are broad in scope and varied in content.

Provision for the requirements of the various courses has been made in two studios on the third floor, especially designed for the purpose. Adjustable table desks, with ample and convenient space for materials, are being constructed in the school shops. The sinks are of colonial buff porcelain which harmonizes in color with the warm wall color. One room is equipped with electric plugs and electric stove, to be used in craftwork. The cupboards have been made a part of the room. Unusual care has been bestowed on their arrangement. They are admirably adapted to care for the equipment needed in all courses.

The general art course is elective. It is intended for pupils who have shown marked ability in drawing, design or color and are planning to make art their vocation or avocation. It is, also, suited to those interested in the work who may wish to discover whether their talent is worthy of development. This course gives a comprehensive art training in the principles of design and color, and in the technical handling of the various mediums commonly used in the commercial and fine arts. So thorough is the work in this course that it serves the further purpose of laving a firm foundation for work in technical and advanced art schools.

Arts and crafts is another elective course. It is offered to meet the needs of those who, in view of the increasing leisure time of people industrially employed, wish to fill spare time with a permanent right interest or who may wish to have a means of self-expression otherwise denied them. This course aims to

develop right attitudes in several directions. It inculcates an appreciation for the fine work that has been done and is being done by craftsmen, for beauty of workmanship, of design, and of color. It points to a realization of the limitations of the material and through this of the inherent possibilities that would lead to its mastery. It stimulates a desire for original research, both scientific and aesthetic, and for an increasing technical skill. Only those crafts will be taught which can afterward be continued in the home. Pupils may choose from among the following-basketry, bookbinding, clay modeling, dveing, embroidery, etching, jewelry, leather tooling, lettering, and illuminating, metal work, stenciling, weaving, wood block printing, and wood carving.

Other courses make a wider appeal. From the standpoint of art, the majority of people are buyers and consumers, not artists or designers. They, therefore, are more vitally concerned with the ability to buy wisely and to appreciate beauty wherever it may be found rather than in the technical production of beautiful things. For pupils who may or may not have technical ability, but who wish to be able to appreciate and choose the beautiful rather than the commonplace or ugly in clothing, house furnishings, and other commercial products, courses in art appreciation, dress design, and home planning and furnishing are offered. The last two courses are required of all ninth

year girls except those electing the Latin Scientific curriculum. Dress design is required also of all girls electing the clothing courses in the Home Economics Department. The course in art appreciation includes the history of art, painting, sculpture and architecture, illustrated with reproductions, photographs, and lantern slides. An appreciation and love for the fine and truly expressive creative works of the painters, sculptors and builders of all ages and countries is developed through an analysis of the artist's interpretation of his subject and of the fundamental principles of design underlving each production. The students become familiar with the great artists and craftsmen, their lives, their manner of working, their environment, and their influence upon other workers.

Dress design begins as a very personal subject. The girls learn to know themselves, to choose and design dresses, coats and hats which will be becoming in line and color and suitable for the season and the occasion of wearing. They learn how to combine colors, what styles of hairdressing are becoming to the different types of faces and how to choose accessories. Many of the dresses planned are made in the clothing class, thus limiting the designs to practical models. The more advanced pupils pass from the personal problem to that of designing clothes for others, either from the standpoint of the dressmaker who develops the idea in ac-



STUDIO IN ART DEPARTMENT

Classes in art appreciation, dress design, home furnishing and technical art keep this room filled to capacity. tual material, or of the one who does fashion drawing and sketching. In these advanced classes the history of costumes and the influence of different periods upon modern dress is studied. This source material is utilized by the pupils in their original designs.

The course in home planning and furnishing also proceeds along eminently practical lines. The students plan a house and furnish it, taking into consideration comfort, beauty, convenience, and cost. They study furniture construction as well as the beauty of line and design. Comparison is made of the various possible materials used in the building and furnishing of a home, not only from the viewpoint of design but also from that of utility and cost.

The girls and the boys in the eighth grade, where the art work is required, are placed in separate classes. The girls are given intensive work in color and design, reviewing and applying the principles taught in the first seven grades. The work with the boys is divided into three units, viz., lettering, house planning and

house furnishing. Approximately onethird of the year is given to each unit. The lessons on lettering develop the history of alphabets and printing, the influence of the medium upon the form of the letter. They lead to an appreciation of beautiful lettering and printing and of fine spacing in books and posters and the application of the craft in the making of posters, block printed cards, book plates, and similar problems. They note the influence of color in advertising. The lessons on house planning discuss the house from the standpoint of builder, buyer and renter. The objective of study is a minimum of cost compatible with a maximum of comfort, convenience and beauty.



Floor plans are made and criticized and elevations are projected from these plans. The design principles underlying all works of art are found to apply here as well as in pictures and sculpture. Architectural styles are briefly studied and are noted in photographs of structures as well as in the actual buildings found in the vicinity of the school. Lessons in house furnishing follow in order. Furnishings to be chosen for the homes planned are discussed again from the standpoint of the buyer. Boys, as well as girls, should have a critical appreciation and knowledge of the things pertaining to homes and home furnishings that will serve as a basis for later construction and equipment of homes.

The courses thus prescribed are constantly in the process of development, never fixed. The criterion by which the worth of any problem is decided is not "Is it interesting?", but "Will it function in the present or future life of the child?" Thus the work possesses vital content changing with the needs of the class but always remaining significant.

-Lincoln



CHORUS CLASS IN MUSIC ROOM

Every student in Liberty High School belongs to a chorus class. Chorus classes meet once a week.

Department of Music



A. Louise Morris Director of Music

M USIC is the most universally appealing of all arts. It is one of the most powerful socializing factors. Feelings of goodwill and comradeship are developed more quickly through music than any other art medium. Music is potentially great in the refining and uplifting of man. Under its influence, man is able to rise above the commonplace to the heights of imagination. Music is a universal language. It appeals to people of every nation. No other art so completely influences the individual, the home, the community and the nation as music.

In high school, the characters of young people are influenced each day. They must, indeed, be trained to earn a living. They must be taught, also, to enjoy profitably their leisure time. Nothing else will fill leisure time quite so satisfactorily as music. Hence, music takes its place beside reading and writing in educational importance. Aside from its appeal as something desirable because of its aesthetic beauty, music has the power to develop keen mental activity-alertness, concentration, imagination and discrimination. High School music is calculated to give every student an opportunity to know good music, vocal and instrumental. It aims to develop appreciative listeners even though the students may not be gifted with special musical ability.

Never before in the history of the Bethlehem High School has the music department had a room wholly devoted to its own use. In Liberty High School, a large room has been planned and equipped especially for the Music Department. This music room is equipped with piano, phonograph, library of music, records, music dictionaries, reference books, magazines and orchestral instruments owned by the school. The room measures twenty-eight by thirty-six feet and has many windows, allowing an abundance of light and fresh air. It seats comfortably eighty people. There are fine cabinets for the filing of music and books. This music room, so equipped, made possible the unfolding and developing of plans that had been cherished for a long time in the minds of people who see in the understanding of good music great possibility for a richer and better life.

It was felt that the music department should touch each student in the school. This department should give the less talented students an opportunity to enjoy and profit by its socializing and refining influence. It should give the more talented an opportunity to study in school and receive credit for courses in Theory and Practical Music, and thus begin to prepare themselves, if they wished, for the musical profession.

In the Spring of 1922, a new course was adopted. This course provides that every student in the high school shall belong to a Chorus class, and each class shall meet for one school period each week. It was deemed best to make these chorus groups smaller in size than the average chorus-not more than sixty to eighty students in each-in order to provide for more personal instruction. As occasion arises, several choruses, which have been working on the same cantata, or chorus, are taken together for the final presentation. In these chorus classes, the primary idea is the singing of much good music, and there is the further idea to incorporate in this activity some knowledge of Musical Form and Theory, and as much genuine Musical Appreciation as possible.

For each year's work in such a class, onequarter credit is given.

It was decided, also, to give credit in Applied Music, or the outside study of voice and instruments; the credit in voice, pipe-organ or piano to be given when the student takes the high school course in Theory and Ear Training, and in orchestral instruments when the student plays in the high school orchestra. The student's instructor must send in satisfactory bi-monthly reports as to the student's progress in his private lessons. The student must, also, pass a satisfactory yearly examination. Credit is then given as follows:---one-half credit for Theory and Ear Training, and one-half credit for private lessons in voice, pipe-organ or piano: or, in case of members of the orchestra, one-half credit for orchestra work, and one-half credit for private lessons in any of the orchestral instruments.

One credit may also be gained through the course in the History and Appreciation of Music. This is a subject requiring preparation and daily recitation.

For the more musical students who have good voices and enjoy singing together, there are the Boys' and Girls' Glee Clubs. These are limited in number to forty, but waiting lists are posted of students who are next in eligibility to the members. Each Glee Club rehearses twice weekly, and one-quarter credit is given for the year's work.



GIRLS' GLEE CLUB, BOYS' GLEE CLUB AND ORCHESTRA These organizations give a number of concerts each year and contribute selections to various other school programs.

The high school orchestra rehearses twice weekly, each rehearsal being two hours long. One-half credit is given for the year's work. As explained above, if combined with satisfactory outside study of instruments, one credit is given.

From time to time during the year, concerts are given by the Music Department. Most of these concerts are free, but a small admission fee is charged to one or two programs during the year. The money received is credited to the music department treasury for the purpose of buying new instruments for the orchestra. and for helping to carry on class instruction in the study of instruments. As it is impossible for many of the high school students to purchase orchestral instruments and to take private lessons, the Department buys as many instruments as possible, loans them to students, and, also, conducts class lessons in the plaving of these instruments for a very small charge.

The Christmas Concert and Carol Sing given by the grades and high school has become a festive annual event. A Mid-Winter concert is given by the High School Music Department alone, and a final concert in June which aims to reflect the different phases of public school music. Besides these stated programs, others are given on special occasions. Since there is now so well equipped a stage in Liberty High School, it is planned to give several cantatas, and at least one opera or operetta each year.

Such a music course as Liberty High School now offers is in line with the musical traditions of Bethlehem. From the earliest days of the Moravian settlement here, music has occupied an important place in the life of the community. Teachers of music were employed in the Moravian schools as early as 1756, and every effort was made to develop musical talent among the young people. In 1895, the first music teacher was employed in the public schools of South Bethlehem. and, in 1898, in the schools of Bethlehem. Musical organizations, vocal and instrumental, flourished here as early as the year 1744. Some of the greatest oratorios and symphonies including Havdn's "Seasons" and "Creation" had their first American presentation in Bethlehem. These early musical societies and choral unions were worthy forerunners of a later organization which has won distinction for itself and the City of Bethlehem. In 1898, the Bach choir was organized under

the magnetic leadership of Dr. J. Fred Wolle. The year 1900 marked the beginning of the famous Bach Festivals. The choir has grown in number of singers from eighty to almost three hundred. It has become one of Bethlehem's famous institutions.

The traditional musical spirit of Bethlehem has influenced even her industrial organizations. It deserves mention that the Bethlehem Steel Company have devoted themselves to promoting good music in the city. Great credit belongs to them for having equipped and maintained one of the finest bands in the country, for having given free instrumental instruction to young boys interested in band instruments, and for having developed a male chorus of exceptional artistic achievement.

With such a musical background, and with ever increasing opportunity for a musical education in the public schools, the students should develop a fine sense of discrimination which would cause them to be satisfied with only the best in music. And some of the students, by reason of particular musical talent, should add new lustre to the musical traditions of Bethlehem.



-Penn



THE GYMNASIUM

Students are trained and tested in correct posture. Correct posture is closely related to the best mental development and serious consideration is given to this phase of a pupil's education.

Department of Physical Education



E. H. Nelson Director of Physical Education

PHYSICAL education is always considered of great significance in any modern scheme of education. Any fair test bears out the importance of this conception. The history of mankind shows that play activity is the primary source of all education. Men have come to believe in the development of play activity that will make for better citizenship and better health.

The program for health education at the Liberty High School is of particular significance. It aims for a broader appeal and more comprehensive results than calisthenic drill. It is the desire of the De-



CLASS IN PHYSICAL EDUCATION

A strong body is an important part of a complete education. Every prescribed course of study at Liberty High School includes work in this department.



EVOLUTION OF THE "OLD SWIMMIN' HOLE"

Swimming is the best all-around exercise known and every pupil is encouraged to learn to swim under competent instruction. The pool adds materially to the interest of the Physical Education Course and constitutes a distinct educational asset partment that the boys and girls may achieve a motor education that will function through life for physical and mental betterment. The program includes everyone. Interscholastic competition is based on organized inter-class and inter-group work in the school itself, and does not over-emphasize a chosen few. The program is broad enough to provide something of interest and value to all.

The equipment for service in the Department of Physical Education is unexcelled. Indeed, the features of buildings and grounds designed to supply this equipment constitute a splendid laboratory for the promotion of health and motor ability. A spacious gymnasium, well ventilated and lighted, is a center of activity. A large dividing net can be extended across the gymnasium, making two courts of it, thereby economizing time and utilizing space. The gymnasium can thus give double service. A one-sixteenth mile track. with proper radius and incline, is a part of the gymnasium structure. On the south side of the gymnasium is a large locker room for boys. Showers, toilet rooms, store room and Director's office adjoin. A similar arrangement for girls is found on the opposite, or north, side. Special features to be noted in the girls' sections are forty-two individual shower and dressing rooms and twelve hair driers.

The swimming pool is up-to-date in every respect. Best tile construction is used throughout. At one side is a con-



GROUND PLAN OF ATHLETIC FIELD Now under construction venient shower room. Much space has been allowed for spectators at meets and exhibitions. The water is tested twice each week by a bacteria count. Modern filtration and purification methods are used. Careful attention regarding cleanliness is given to those using the pool. The water is changed when the occasion demands. There are swimming classes for girls and boys in charge of careful and competent instructors. In addition to the regular instruction classes, recreational swimming for both students and adults is scheduled on the program.

Leaving the gymnasium from the east

side, one steps directly on a playground that is a tribute to the wisdom and foresight of our educational leaders. Twelve acres have been converted into a playfield that is complete in its appointments. Here may be found space for outdoor gymnasia for boys and girls on separate areas, each measuring 100 by 220 feet. The field has an excellent one-fourth mile cinder track, football field, baseball diamond, tennis courts, volley ball courts, hand ball courts and a basket ball court. Provision has been made for a field house and a grand stand. Arrangements have been made to flood a portion of the field for skating. Later development will include an open air Greek theatre, to be located just north of the school building. This will have a seating capacity of five thousand people. It will be splendidly adapted for pageantry, open air concerts and similar activities.

Besides functioning for the school, the entire plant is sure to become a center for community service and recreation, the year round, where wholesome and well selected entertainments and supervised gymnasium and pool activities will furnish the basis for suitable employment and real enjoyment of leisure time.



-Epictetus

A F T E R W O R D

T HE great school, described in these pages—with all its parts, from class-room to playground, from library to laundry—constitutes what has come to be known as a "comprehensive" high school. The purpose of this type of school is to carry on in one place, with one organization, and one common life and spirit, all high school activities; and to make the scope of these activities sufficiently broad to meet the educational needs of pupils of widely diverse tastes and capacities; in a word, to make some worth while contribution to the education of "all the children of all the people".

So large and inclusive a purpose Liberty High School is designed and equipped to serve. Measured by the gauge of exacting educational standards, tried by the letter of law demands, tested by the testimony of the expert, it is timely to express approval of what Liberty High School now is and confidence for its future.

Ultimately, the worth of the noble structure, and all that is within it nobly done, will be proved by the results. These will be embodied in the young women and the young men who shall go forth from this School to live and labor who, like the living "jewels" of the mother of the Gracchi, are the best of all fruits and witnesses of usefulness. Liberty High School will prepare some for higher institutions—college, technical and normal school; it will fit some for offices and business houses; it will train others to be leaders and skilled workers in the great industries of the city; it will school many for more worthy home-making and a broader social service; and it will teach all to live and work together happily and helpfully in a great democracy. As the school itself stands a pledge of a people's faith in education so shall the activities of its full, rich and loyal life be a pledge "That government of the people, by the people, for the people, shall not perish from the earth."

