THESIS.

The Planning of College Young Men’s and Young Women’s Christian Association Buildings.

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College Young Men's and Young Women's Christian Association Buildings.

The wise architect who desires to produce the most satisfactory design for any particular building will first study the development of the particular class of buildings to which it belongs, in order not to repeat prior errors, and that he may profit by prior successes: secondly, he will consider the object to be obtained by the proposed building, whether it is to divert trade to some business enterprise, or to inspire reverence in those in attendance upon Divine service, or whatever its purpose may be, he must have a clear idea of what is to be accomplished, thirdly, he will endeavor to produce the design which will best serve the desired end; one which shall have a pleasing appearance both internally and externally; economical, but not cramped in plan, and convenient in arrangement.

The history of these Association buildings is but a brief one, but it is of sufficient magnitude, considering the outlook for the future of the movement, to be worthy of careful study by architects. As late as 1866, there was not a single Young Men's Christian Association building on the continent, yet according to the Year Book for 1894, issued by the Associations of North America, in but a little more than a quarter of a century, these Associations have (in 1894) invested in 291 buildings the amount of $15,155,950 and
have ready for further building, in cash and subscribed funds, the additional sum of $452,900; yet we are told by the most competent judges, that this is only a small part of what this enterprise may be expected to become in future. And it appears that this prophesy is well founded, when we consider that within the last seven years, or about one-fourth of the entire time of the duration of the movement, the sum of $9,449,297 has been spent upon Association buildings, or considerably more than one-half of the total amount thus expended during the entire twenty-nine years of its history.

The history of College Christian Association buildings begins some years later than that of those for the General or City Associations. It was only in 1879, when at a cost of $20,000, the Young Men's Christian Association of Princeton College built Murray Hall, which was the first College Christian Association building. Yet, during the brief space of sixteen years, the movement has grown, until the College Associations of North America now (1895) have invested in their twenty-one buildings $428,710; to show that the movement is still growing, we have but to say, that at this time twenty-one colleges are now collecting subscriptions for building funds, or are engaged in erecting buildings; evidence that as much work is projected during this year, as during the previous sixteen years of this movement.

As this College movement commenced some years later than did
the General, or City Associations, and with the temporary character of the membership in College Associations, it is not singular, that in many cases the planning of these buildings was mostly in accordance with the views of the Secretaries of City Associations, but who, in most cases, knew almost nothing of the requirements of a College Association building, yet very naturally supposed that a building satisfactory for a City Association should be equally so for a College Association. It was only when a number of local College Secretaries began to use these buildings and to arrange their work, that they realized how many things, which were at first thought suitable, were undesirable and often useless, as well as that other accommodations were demanded for meeting the needs of a different kind of work. Wide differences were found in their uses, and the planning of similarly designated rooms in City and College Associations has almost invariably been found to necessarily differ.

While it may be said that in all Association buildings, the "Home" idea, that is the provision of home comforts and of social life, for young men or young women absent from home, is a prominent feature, yet it is most prominent in the College Association.

The elaborate provisions for information and employment bureaus have been found almost unnecessary in a College building, since they are only useful for a few weeks of the earliest part of each term, and in planning such a building, it is easy to arrange a suitable alcove in the Reception Hall to receive a movable desk.
for this purpose, and which can be removed when no longer required, and this space then being used for other purposes. This statement is based on the evidence of College Secretaries with long and varied experience in this work, and on my personal observation during six years of membership in such an Association. Yet in the recent competition for the new Association building at the University of Illinois, several of the designs submitted had an area for public offices, and available for no other purposes, sufficient to accommodate the public office of the Central Department of the Chicago Association, which Association carries on as much or more of information and employment bureau work as any other Association on this continent. Space requiring to be heated and which is still useless is positively detrimental to any building, where economy in running expenses must be so carefully considered, as in College Christian Association buildings.

These statements sufficiently emphasize the necessity of careful study by designers engaged on this particular section of this class of buildings, if they desire to obtain the most satisfactory results; further differences between City and College Association buildings will be developed in the description of each room and its uses.

We will next consider the general purposes for which such buildings are intended. In every educational institution of worthy
character, a considerable number of students is generally found; a majority of which, in many cases, come from families possessing moderate means, and these find it necessary to practice the most careful economy in order to continue their attendance. This question of economy naturally first operates in the choice of their rooms, the smallest and least home-like rooms in uninviting localities being most frequently taken, because they are inexpensive. It is likewise for the same reason that they must forego the pleasures of membership in various fraternaties and clubs. Because man is a social being, his nature requires social privileges. Many of these students seek society in the widely-open saloons, and in other places, which tend to debase their moral and religious natures, to darken and ruin their bright prospects of future success in life. For these reasons, it has appeared wise to the Christian Associations to provide for the domestic and the social needs of these young people absent from their homes, and to place these privileges within the reach of all, even of those with very limited resources; hoping by this means to keep them from falling into sin, and to enable religious influences to surround them and to reach their hearts.

Keeping this object in view, the Associations have called upon benevolent people of wealth for aid and money, and have found ready responses to their requests for assistance in commencing the work, but they have almost invariably found it easier to raise large sub-
scriptions for equipping a very complete building, than to raise funds from year to year to defray a part of the current expenses. As before stated, it is necessary to keep the cost of the privileges of such a building within the means of those for whom it is intended.

Here is a problem to be best solved by the ingenious architect. The building must be so planned that without lessening its usefulness for its purposes, it shall be made as nearly self-supporting as may be possible, even if its first cost be considerably increased. This problem is presented to the architect for solution, and he is bound to give to it his best thoughts.

The problem thus presented to the architect is two-fold: a proper regard for economy, and the best manner of obtaining these privileges for the young men and young women of the college or university. A skillful designer will make the solution of one part aid in that of the other.

The problem of current expenses is usually of less magnitude in denominational institutions than in state institutions, for if a Board of Trustees so desires, they can usually contribute a portion of the expenses, and this is frequently done. The Association sometimes provides the College gymnasium, bath rooms, some class rooms, a lecture room, or even a Chapel, and in lieu of rent for these, the College authorities heat and light the building from their own central heating plant, or they may pay a cash rent. With this aid
the remaining current expenses are easily paid by a small membership fee, and by voluntary contributions.

In State Colleges and Universities, good reasons make it unwise to depend, even to a very limited extent, upon aid from the Trustees of such institutions, through payment of rents. Legal decisions on such matters in some of the states are to the effect, that Boards of Trustees of State institutions do not have power to bind their successors in office by lease or otherwise. Therefore it would be imprudent for any person or corporation to provide rooms especially designed and fitted up for renting to Trustees of State institutions, when leases could not be made to run for more than two to six years, the probable duration of the same Board of Trustees. So that it is necessary to look elsewhere for revenue.

Some Associations have Endowment Funds, the income of which is used for current expenses, but it is always desirable to make these Endowment Funds a part of the building. Therefore, dining halls, restaurants, stores, barber shops, bath rooms, auditorium, swimming pools, gymnasium, tennis courts, and lodging rooms for men, have all been tried with results more or less satisfactory.

In providing these rooms, it is always best to put in those which will attract students to the building, strongly in preference to those for the use of mere citizens; for if a student finds it necessary to go to the building on business, he is likely to drop into the reading room for a moment, and if well pleased, to come
The Association may thus throw its influence around him. The entrances to these business rooms should be so placed, that persons on business need not pass through any of the special rooms of the Association, but should also be so arranged that in passing in or out, one may see as much as possible of the attractions of the building; he should feel that he would be welcomed in the rooms of the Association. A genial atmosphere should exist, and this may be much enhanced by a good design prepared with this object in view.

The Christian Association building for a co-educational institution presents a different and in some ways a more difficult problem than a similar building for a college attended by men or women alone. The Young Men's and Young Women's Christian Association then frequently occupy the same building where some rooms would be used in common, but each Association should have its separate apartments, with different means of access, yet arranged to be thrown together when required for social purposes, though entirely separate and distinct at other times. This forms a problem that requires much ingenuity and careful study to obtain a solution.

In colleges for men or women only, the rooms are to be arranged entirely with reference to their convenience to each other, thereby greatly simplifying the problem.

We may now intelligently consider the use and description of
each room.

The Entrance should be of pleasing design, sufficiently large to accommodate all persons in the building at any one time. It may be made much more dignified by a spacious porch. The building may be very pleasant and attractive internally, but if the approach to it is uninviting, this may keep some from entering, so that they may never realize the attractions within.

The Vestibule is properly a part of the entrance, and should be sufficiently large to not be cramped, but not too large, being an expensive part of the building to keep in order. Wherever possible, it should have a floor of tiles or mosaic, but it should otherwise have an oil-finished hard wood floor, which can easily be washed.

Reception Room.—Experience has shown that is is wisest to make the Reception Room no larger than absolutely necessary to afford space for suitable entrances to all, or most of the rooms on the first floor, as well as for a large staircase. This main staircase should start very near the entrance to the vestibule, so that those going to the auditorium, which is usually on the second floor, are not compelled to cross the Reception Room. A great deal of dirt and annoyance would thus be produced without any corresponding advantage. But it is very desirable that persons passing up the staircase should pass through one corner of the Reception Room, since they can thereby see the attractions of the building. Stu-
dents, attracted to the building by an interesting lecture, might be so much pleased by a view of the interior obtained while passing up the stairs that they would enter the Association rooms at another time. A square, slightly oblong, or octagonal room is more desirable than a long one. Wide and deep arches, as entrances to the various rooms, give a pleasing effect and aid in bringing these rooms more completely together, which is almost indispensable for social uses. A heavy paneled wooden ceiling increases its effect, and a fine open fireplace is also very attractive. There should be a small alcove near the entrance doors to receive a movable desk to be used as a public office during the first few weeks of each term, but afterwards, by removing the desk and placing seats around the walls, this would form a cozy adjunct to the Reception Hall, as a little nook for a few friends to gather during a brief chat. The entrance to the Secretary's office should either pass through the alcove or be very near it, for convenience when this is used as a public office; there should also be a small closet lighted by a window to receive a telephone. This should open out of the Reception Hall near the entrance to the Secretary's office.

Coat or Cloak Room.— If the building is used by two associations, it is only necessary to provide a small coat room for gentlemen on the first floor near the alcove, for the public office. The ladies would use the ladies cloak room near the ladies entrance hall described below. In case the building is for ladies only, the
ladies entrance would be omitted, and a cloak room put in its place. The coat room should be fitted up with hooks for coats, shelves for hats, etc., and a staircase should lead from it or near it to the gentlemen's toilet room below.

Gentlemen's Toilet Room.—This should be furnished in the usual manner for gentlemen's toilet rooms. As an annex to it, tub, shower, and sometimes plunge baths are provided, with lockers and dressing rooms, and the Gymnasium and Bowling Alley are often entered from this room, though there should be a small hall for the staircase from above, from which the various apartments in this group might be entered. The tub and shower baths are used so often that they need no further description. The plunge bath should have its near entrance a shower or rain bath, which should have separate drainage. Therefore, those using the plunge bath may first use this so as to go in the water of the plunge while clean, since others must use the same water.

The General Secretary's private office should be connected with the Reception Hall by a short passage, so that it may be more quiet, yet sufficiently near that he can be called to the Reception Hall at once by a bell. The room is sometimes used by him for conferences with committees, unless these are held in a parlor or special committee rooms. But is especially a place for private religious personal advisory conversations. Since he has very frequent interviews of this nature, it is necessary to provide a place where they
can be held quietly, yet not too distant from his other duties in
the general supervision of the building and of the work carried on
therein. A file for records should be placed in this room, which
should be made cozy and comfortable, though not large.

General Reading Room.— This name is somewhat misleading, for
in a College Association it is not usually a reading room, especially
if the College has its own well-equipped library and reading
room. The student desiring recreation, seldom goes to a reading
room. He has enough of that in his College work, but does like to
sit with his friends during a pleasant chat in a nice and attractive
home-like room. The Reading Room is intended to satisfy this need,
and to supply a home sitting room with all its pleasant surround­nings, to the student absent from home. For this object, it is de­
sirable to imitate the nicely fitted and attractive sitting room
at home, though on a larger scale. Window seats, alcoves, fire
place, small tables with dainty coverings, a few magazines and il­
lustrated papers, easy chairs, divans, rugs, will all contribute to
this end. The ceiling should not be too high, and the room should
open into the Reception Hall near its center with a broad doorway.

Parlor.— This is usually reserved for members only, while the
Reading Room is free to all students during good behavior, whether
members of the Association or not. The Parlor should be furnished
like the Reading Room, and is used by the members for the meetings
of Committees, for entertaining visiting friends, and for the same
purposes as the General Reading Room. It should also have a wide
doorway opening into the Reception Hall. There should be a separate
parlor for each Association occupying the building.

Lecture or Devotional Room.—This is most convenient if on the
first floor, where made possible by the plan. It should be arrang-
ed to receive the smaller devotional meetings of the Association.
In some large Universities, such rooms are provided for each College
class, when too numerous to meet together. The room should be seat-
ed with movable chairs, and it should be connected with the Recep-
tion Hall by two double doorways, with a small vestibule between the
rooms for cutting off sound when desired, and to prevent noise in
the Reception Hall from interfering with devotional services; by
opening these doors the room will be in intimate connection with the
Reception Hall, if both are on the same floor. It can then be used
for banquets at social gatherings or for social purposes; it should
then have a dumb waiter to the kitchen, which is frequently in the
basement. This dumb waiter should be in a ventilated closet, the
connection with the room being by a tight fitting door, to keep un-
pleasant odors from the kitchen out of the room. The Lecture Room
or Rooms are sometimes placed beside or around the auditorium with
movable partitions to be used to increase the seating capacity of
the auditorium when desired. Separate rooms of suitable size should
be provided for young men and young women, where they occupy the
same building, with similar rooms for each College class, where
Ladies' Entrance Hall.— This room, only necessary if two Associations occupy the same building, is the room entered from the ladies' entrance, which should then always be provided. It need not be very large, its size depending on the number of young women in the College. It is auxiliary to the Reception Hall, and should be connected with the main Reception Hall, either directly or by a short passage. Opening into it should be a small room for the executive committee, where the records of the Young Women's Association could be kept; by opening the door and placing a desk in front of it, this may be used as an office during the first weeks of each term. A door should also open into the Ladies' Parlor. The Ladies' Entrance Hall is sometimes used as a cloak room, but it is better to provide a small adjacent room for this purpose. All the pleasure of entering such a building would be spoiled by first seeing the walls covered by outer garments in more or less disorder.

The Cloak Room.— The Cloak Room is an adjunct to the Entrance Hall, and is sometimes fitted up with shelves and hooks only; but it is still more convenient with separate lockers for each person. The toilet room should be entered through this room, or by a passage opening into it, and a number of stationary seats should be provided for use while adjusting rubbers, etc. Some designers have found it convenient to use the space under these seats for lockers. If lockers are used, great care should be taken to see that they are
Toilet Room for Ladies.— This should be fitted in the usual way. The Cloak Room is sometimes quite small and is only used by those who are in the building for a short time for leaving outer wraps. The Toilet Room is usually in the basement, and is fitted with a large number of separate lockers. Shower and tub baths are often provided in addition to the Toilet Room, especially if the young ladies use the Gymnasium. There should be but one entrance to the Ladies Toilet and Bath Room, and this should be through the Ladies' Cloak Room and the Entrance Hall.

Ladies' Rest Room, or Private Parlor.— This should be a small room opening from the Ladies' Parlor, but as remote as possible from the Reception Hall to obtain quiet. It should have sufficient length for one or more comfortable couches. The room is intended as a place for young ladies who are weary, have headaches, or are otherwise ill, to obtain quiet rest at any time without returning to their rooms, which are frequently distant; also for those taken suddenly ill, until they can be removed to their rooms or homes.

Library.— This should be a small room, not exceeding twelve or thirteen feet in width and sixteen or eighteen feet in length, with closed cases for five hundred or one thousand volumes. If properly equipped, it would contain a choice collection of books on the Bible, missions, Christian biography, and spiritual life, as well as similar periodicals. It should be placed in the most quiet
portion of the building. Direct connection with the Reading Room or Reception Hall is unsatisfactory on account of the noise in these rooms, which interferes with quiet study, but it is sometimes desirable to have indirect connection with the Reading Room, such as a small staircase leading to another floor. It should be near the room for the Mission Band if this is provided. A door between them might be convenient, and this room should also be near the room for the Bible classes, since it would be more used by the Mission Band and Bible Classes, than by others. The same room is used by both Associations.

Mission Band Room.— This room is not often provided, as should be the case. It is a small room where the "Student Volunteers" for missions, meet for study or devotion. It would undoubtedly tend to draw them closer together. It should have a long table in the center of the room around which the members can gather for study. Used by both Associations.

Yoke-Fellows Room.— This is similar to Mission Band Room, which might be used for this purpose, since the Yoke-Fellows band is chiefly composed of the members of Mission Band. In that case the room for Mission Band should be somewhat larger.

Bible Class Room.— This room is similar to the last, but should be somewhat larger. Used for classes in Bible study. A black-board is required.

The Preparatory Branch Meeting Room.— Rooms for the Prepara-
tory Branch of the Young Men's Christian Association are often re-
quired in the larger institutions, and consist of a meeting room
similar to the Lecture Room already described, with a small room for
Executive Committee and a Record Room.

Auditorium.— The Auditorium should be sufficiently large, or
capable of being enlarged so as to seat all the students of the Col-
lege or University. It is usually placed on the second floor for
economy in construction, and if so arranged, must have ample stair-
ways, both for ordinary use, and for emergencies. In a large room
there should be exits at both front and rear of the room for emer-
gencies, though not for ordinary use. A stage of sufficient size
for concerts and amateur theatricals is usually provided, with suit-
able dressing rooms, which may be used for other purposes when not
required. It is desirable to have the Auditorium so arranged by
grouping Society, Class, Lecture, and other rooms about it, that
its capacity can be varied to avoid the expense of heating and
lighting more space than is required. This can probably be best at-
tained by grouping these rooms around it in one or two stories, then
lighting the main Auditorium through sky-lights. The room is used
for larger meetings of the Associations, for concerts, lectures,
etc., and is sometimes rented for other purposes, or sometimes for
a College Chapel, and other public meetings. The room is essential
to the work of the Association, and income obtained from these ex-
ternal sources is so much gain. With proper management, sufficient
revenue from these sources might be obtained to pay the expenses of maintenance, the Associations then having the use of the room without cost. The Auditorium should have a vestibule of sufficient size to avoid confusion, with a small ticket office, for use when paid admissions are required.

Game Rooms.—— These rooms are sometimes provided in connection with the General Reading Room, when they are small and simply furnished rooms where various parlor games may be played. They are not regarded with as much favor as formerly, and the games are distributed in the various rooms so as to make a more home-like effect.

Correspondence Room.—— These rooms are very rarely necessary, as students usually prefer to do their writing at their own rooms; a table with writing materials may be placed in an alcove of the Reception Hall and would be sufficient.

General Secretary's Apartments.—— A sitting room and a small bed room with a large closet should usually be provided for this purpose, and be placed in a quiet portion of the building.

Emergency Room.—— In Colleges without a Hospital near at hand, an Emergency Room may be useful (especially while foot-ball is such a popular College sport) for students taken ill, or injured by accident. It is similar to those in Railroad Association buildings for the temporary care of sick or wounded railroad men.

Trustees' Room.—— This might be desirable in some cases, but generally some other rooms might be used for such meetings, and it
would not be necessary to provide a separate room especially for this purpose.

Pastors' Room.— In some cases a suitable room for city pastors' meetings might be desirable. They might be willing to furnish such a room, and this might obtain their more hearty co-operation, which would be worth far more than the cost, though this depends entirely upon local conditions.

Music Rooms.— If small rooms were so arranged that sound would be cut off from other parts of the building, and they were supplied with instruments, a considerable revenue might be derived from their use by students as practice rooms. The pianos belonging to the Associations could then be moved into other rooms on the same floors for Association uses.

Dormitories for Young Men.— These have been tried in some buildings, but are usually unsatisfactory, from annoyance by the high spirits of the occupants. These objections do not apply to suites of rooms for unmarried professors, which might prove a satisfactory source of revenue, if so planned and located as to be desirable by this class of tenants.

Society Rooms.— In every College or University there may always be found numerous societies and clubs of professors or students which would often gladly pay a liberal rent for a well furnished room for society purposes.

Dark Room.— Many students are amateur photographers, and a
properly fitted Dark Room for members would be greatly appreciated, being an additional inducement to these men to join the Association.

Bicycle Stalls. — It is some annoyance to a wheelman to dispose of his wheel during attendance on classes. Bicycle stalls for members will induce many persons to join the Association. If young men and young women both occupy the same building, there should be separate rooms for this purpose, or different parts of the same room might be used. The central rooms of the basement are lighted with difficulty, and may be used for this purpose.

Laundry. — In some City Young Women's Christian Associations small laundries have been fitted up with drier, laundry tubs, etc., as in a good residence, the members being allowed the use of the laundries for washing laces, handkerchiefs, and delicate fabrics, which they do not wish to send to the laundry. This has there been found a great convenience, but young ladies at College would hardly care to use such a privilege, and it would not be a profitable feature of a College Association building.

Lunch Room. — Where a large number of students live at a distance, and bring lunches with them, it is a great convenience to have a suitable room for eating lunches. The utility of such a room would entirely depend upon local circumstances.

Restaurant. — A first class restaurant should pay well near any large College or University. It requires a large dining room with several smaller private rooms for small parties to dine together, as
a Professor and his family, or a student with friends visiting him. With this Restaurant should be an ample kitchen fitted with modern appliances and ample pantry and storage space. With a Restaurant in the building a special Association kitchen is unnecessary, but in the lease of the Restaurant the use of the kitchen may be reserved when the Association requires it; the lessee of the Restaurant usually supplies refreshments for social meetings of the Associations, so that all that is necessary is to have a dumb waiter connecting this room with that in which refreshments are to be served. Without a Restaurant in the building, a suitable kitchen and pantry should be provided for the Associations.

Store Room.— The most satisfactory store for a College Association building would be one for students' supplies, including goods for athletic purposes, stationery, draughting instruments, artists' materials, etc. This would pay well if supplies were sold at a reasonable profit, so that a good rent could be obtained for a room suitable for this purpose.

Barber Shop.— A well appointed Barber Shop with one or more chairs is a certain source of revenue in colleges or universities.

Gymnasium.— Most of the larger Colleges and Universities have well equipped free Gymnasiums and it would be useless for an Association to compete with them. But if no College Gymnasium is provided, the Association can sometimes arrange with the College Authorities to receive compensation for the care and repair of appa-
ratus, and for the salary of the physical director for the work, the Association assuming the responsibility for the management of the Gymnasium, charging a small fee for its use as rent for the rooms occupied and the care of its management. The influence of the Association is thereby much extended which is always desirable. The Gymnasium should be thoroughly equipped in the best manner and it should have a main room with running track, gallery for visitors, also a physical director's room, with examining room adjacent, and direct connection with bath and locker rooms. If two Associations use the building, by locking the doors opening into the men's locker and bath rooms and unlocking those into the women's locker and bath rooms, the young women would have separate use of the Gymnasium at certain hours daily. The best location for the Gymnasium is in the rear of the main building and in a suitable annex, if area of lot is sufficient.

Locker Rooms.— There should be locker rooms, even though there be no Gymnasium in the building, for extra wraps, umbrellas, tennis shoes and rackets, etc., and they are absolutely necessary with a Gymnasium. Great care should be taken to ventilate each locker. This can be best accomplished by lining the backs of the lockers with perforated metal or wire screens leaving a space between the backs, connected with a ventilating shaft. Various modes of locking are used. Combination locks or padlocks are most satisfactory; mortise locks for keys are objectionable because the keys are frequent-
ly lost and then the door must be injured to open it.

Bowling Alleys.— These are often found desirable attractions, affording healthy exercise and amusement not obtained in the Gymnasium. They require a greater length than is always possible in the smaller buildings, being at least sixty feet long. They should always have direct communication with locker and bath rooms, though they may also have an entrance for visitors.

Swimming Pool.— This is very desirable for members, and would prove very attractive.

Heating and Ventilating Apparatus.— Space in the basement is usually provided for boilers, fuel, and other apparatus for heating and ventilating the building, but it is more satisfactory to place this apparatus in a separate building, reducing the danger from fire and cost of insurance, with less dirt and annoyance in the main building. The building should be provided with ample ventilating flues, and if possible it should have mechanical ventilation. Although the first cost of the last is considerably greater, the heating apparatus should be so arranged that only rooms in use need be heated, to reduce current expenses.

Janitor's Rooms.— There should be a Janitor's work shop and store room in all cases, and it is probably best to provide a Janitor's residence in large buildings, but not in smaller ones. A suitable Janitor's closet should be provided on each floor for brooms, waste baskets, dusters, etc.
In this description of the rooms in a College Christian Association building, I have not attempted to fully describe each room, but to give such data and information about each one, as would be valuable to a designer, well acquainted with buildings in general. This information would then merely supplement his general information about buildings of this kind.

It is not assumed that all of these rooms would be required or even desirable in any one building. Local conditions modify requirements. But I have described or mentioned all the different kinds of rooms that have been tried in College Christian Association buildings, as well as some that have been proposed for use in projected buildings.

Having progressed so far in a general description of College Christian Association buildings and their different rooms, the solution of a few special problems may now be taken up.

For the first problem, I have taken a building suitable for the use of the Young Men's and Young Women's Christian Associations at the University of Illinois assuming all existing local conditions and providing for future requirements. This building must also satisfactorily meet the requirements of the work of the associations, when the attendance at the University shall have increased to not exceeding two thousand students. Reasoning from the experience of other state Universities, the associations would have a
membership of five to eight hundred. Plan No. I was prepared for this membership.

Basement Plan. The slope of the lot is such that when the ground at the building line is raised to a suitable grade from the building line to the street curb, there will be a fall of five feet from front to rear of the building, so that by placing the first floor six feet above grade line in front, the rear basement floor will be level with the ground. Therefore I have arranged the rentable rooms in the building along the rear wall and have provided a hall eight feet wide, extending from side to side of the building for this purpose, thus making these rooms easy of access, and giving each room sufficient outside wall space for proper lighting, without making the windows of the basement large enough to materially injure the design of the building.

The front and less valuable portion of the basement has been utilized for toilet, locker, and bath rooms, and others of like character, which do not require the most valuable space.

First Floor Plan. The first floor is arranged in accordance with the preceding description of the rooms and of their relation to each other, in a College Christian Association Building occupied by two associations.

The special features recommending this plan are; the manner in which the rooms are grouped about the reception hall, making this floor perfectly adapted to large social gatherings, there being a
close connection of the ladies' apartments, but with easy communication with the reception hall; the fine view from the main staircase; the short distance to be traversed in going to the second floor; the nearness of the secretary's office to the reception hall, but retaining its quiet location; the possibility of using the public office for other purposes; the isolation of the lecture rooms by vestibules; the dumb-waiter to the men's lecture room; the quiet place for the "Rest Room" and its connection with the ladies' parlor; the staircase leading from the reading room and the women's lecture room to the library; and the convenient stairways to the various toilet rooms.

Second and Third Floors. The special features of these floors are an auditorium lighted by skylights, symmetrical in plan, seating four hundred and fifty persons, with rooms grouped around it on two floors thereby increasing its capacity to twelve hundred sittings, so arranged that just the rooms needed may be added to seat any audience of four hundred and fifty to twelve hundred persons without making it necessary to heat or light unused space. These rooms may be used for other purposes. The ample staircases at both front and rear of the auditorium afford exit, and the quiet corner for the library, and its close connection with the room for "Mission Band" and the "Reading Room" beneath are very desirable. The dressing rooms on the third floor could be used for practice rooms, and the Gallery rooms will make very satisfactory rooms for
class.

Cost of this building, and expense of maintenance.

At nine cents per cubic foot the building would cost $45,000.00.

The Restaurant occupies 1600 square feet of space, comprising a large dining room seating sixty persons, kitchen, pantry and a smaller private dining room to seat twenty-five; it is estimated that these rooms will rent for $60.00 per month for nine months.

The room for a supply store has an area of 440 square feet and would rent at $20.00 per month for nine months.

The room for the barber shop has an area of 240 square feet and would rent for $15.00 per month for the entire year.

Assuming the auditorium to be rented to outside parties at least twenty times per year for twenty-five dollars each. (This rate has been offered for the use of the auditorium by the Phil-Adelphic lecture committee for a course of six lectures per year.)

The regular membership fee for membership in such an association is usually $3.00 per year with an additional fee of $1.00 for the use of the swimming pool, baths, and bicycle stalls. Take the membership at 500 and those paying the additional fee at 250.

Adding these sources of revenue:

<table>
<thead>
<tr>
<th>Source</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restaurant 9 Mo. at $60.00</td>
<td>$540.00</td>
</tr>
<tr>
<td>Supply Store 9 Mo. at $20.00</td>
<td>160.00</td>
</tr>
<tr>
<td>Barber Shop 12 Mo. at $15.00</td>
<td>180.00</td>
</tr>
<tr>
<td>Auditorium 20 nights at $25.00</td>
<td>500.00</td>
</tr>
<tr>
<td>Membership fees, 250 at $3.00</td>
<td>750.00</td>
</tr>
<tr>
<td>&quot; 250 at $4.00</td>
<td>1000.00</td>
</tr>
<tr>
<td>Total, ...</td>
<td>$3150.00</td>
</tr>
</tbody>
</table>
Expenses:- The expenses of such buildings are as follows:-

<table>
<thead>
<tr>
<th>Item</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Janitor at $40.00 for 12 Mo.</td>
<td>$480.00</td>
</tr>
<tr>
<td>Assistant at $30.00 for 9 Mo.</td>
<td>$270.00</td>
</tr>
<tr>
<td>Steam heating by the Central Heating Plant.</td>
<td>$1200.00</td>
</tr>
<tr>
<td>Lights, etc.</td>
<td>$800.00</td>
</tr>
<tr>
<td>General Secretary's salary</td>
<td>$900.00</td>
</tr>
<tr>
<td>Incidentals</td>
<td>$500.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$4150.00</strong></td>
</tr>
<tr>
<td><strong>Less</strong></td>
<td><strong>3150.00</strong></td>
</tr>
<tr>
<td><strong>Deficiency</strong></td>
<td><strong>$1000.00</strong></td>
</tr>
</tbody>
</table>

This must be met by the income from a founding fund, or by a special subscription. I have taken these expenses at the maximum and they might be less so that this additional sum would probably be somewhat lessened.

Problem Two. A building for a single association either for young men or young women, at an institution having an attendance of five to eight hundred students. The association is assumed to have the privilege of using the College Chapel for its larger meetings, and that it is not desirable to arrange for any rentable rooms.

This plan is very simple and is sufficiently illustrated by sketch plan No. 2. At nine cents per cubic foot, the building will cost $8,294.40 which would be a very high estimate for that kind of a building.

Plan III was jointly submitted in a competition for the building at the University of Illinois by Mr. C. W. Noble and myself. It is in accordance with the required program of the competition. The entrance vestibule and stairs to the auditorium are well arrang-
FIRST STORY PLAN

PLANS OF DWIGHT HALL
YALE UNIVERSITY
ed in this design, and the plan of the first floor is very good excepting that the reception hall is too long, so that its area is not as available as in a plan more nearly square.

To further illustrate special cases, a plan of Dwight Hall at Yale University is presented. The extreme dimensions of this building are 100 X 108 feet and it cost $50,000. The building is one of the most satisfactory for its particular requirements. The classes at Yale are so large that it is found wisest to provide separate rooms for the meetings of each College class. From correspondence with the General Secretary of the Yale Association, I have learned that the principal objection to the existing building is its size, the meeting room being much too small. The cost of maintenance is paid by the University Trustees.

The plans of the building for the Young Men's Christian Association at the University of Tennessee are presented because they have been found most satisfactory of any, where a gymnasium is incorporated in the building. The University of Tennessee had no gymnasium, and so arrangements were made with the Trustees by the association to furnish the University with a gymnasium. The Trustees pay the cost of its maintenance.

The peculiar form of the lot on which the building is situated (on a side hill) makes it possible to enter the building on a level with the upper floor.

The extreme dimensions of the building are 53 X 80 feet and
it cost $1800.00. The meeting room in this building is also too small.