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Report of the President, Bowdoin College 1895-1896

Bowdoin College

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OF THE

PRESIDENT OF BOWDOIN COLLEGE

FOR THE ACADEMIC YEAR

1895-96

TO WHICH ARE APPENDED THE REPORTS OF THE LIBRARIAN

AND THE SPECIAL COMMITTEE ON THE LIBRARY

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REPORT

OF THE

PRESIDENT OF BOWDOIN COLLEGE.

To the Trustees and Overseers of Bowdoin College:

I have the honor to submit the following report for the academic year 1895–96:

Hon. Stephen Jewett Young, LL.D., died on the sixteenth of July, 1895, in the fifty-sixth year of his age. He was a graduate of the College in the Class of 1859; Professor of Modern Languages from 1862 to 1876; Librarian from 1863 to 1869; Treasurer and Trustee from 1874 to 1895. Thus with the exception of three years immediately following his graduation, when he was in Europe preparing himself for the work of his professorship, he has been intimately connected with the College for a period of forty years. A faithful and efficient instructor; an energetic and prudent treasurer; a wise and influential trustee; he is remembered with gratitude by a generation of appreciative pupils; he has left his impress upon every aspect of the material equipment and every detail of the financial policy of the College; he will be missed as a personal friend by Trustees, Overseers, and friends of the College who for years have looked forward to his cordial greeting as one of the brightest features of their annual return to Brunswick at Commencement. Identified so closely with the intellectual work, the business interests, the local traditions, and the personal friendships of the College, he brought to it a personal influence in the determination of its policy which greatly enhanced the value and importance of his official services, and renders his death the greatest individual loss that could have befallen the College.

Hon. Lemuel Grosvenor Downes, A.M., died on the fifth of December, 1895, in the fifty-seventh year of his age. Mr. Downes was a graduate of the College in the Class of 1860; and since 1880 had been a faithful member of the Board of Overseers. A recognized leader in the professional and political life of Eastern Maine, he generously gave his attention and influence to the interests of the College in his section of the state.

Hon. William Whitney Rice, LL.D., died on the first of March, 1896, in the seventieth year of his age. He was a graduate of the College in the Class of 1846, and had been a member of the Board of Overseers since 1870. Though actively engaged in the practice of his profession, for many years a member of Congress, and closely identified as trustee with the University and the Polytechnic Institute of his own city, he never allowed remoteness of residence or pressure of duties to diminish his devotion to his *Alma Mater*, his interest in her welfare, and his affection for her sons.

The Course of Study.

For ten years the course of study has been subjected to continuous, and in some points radical, revision. Two great improvements have been accomplished. The scattered and unrelated courses which kept the student jumping from a term of this to a term of that, without continuity of discipline or rationality of connection, have almost disappeared, and in their place we have continuous connected courses, occupying each four hours a week for a year; and in nearly every case followed by advanced courses in the same department extending over one or more years. The required work has been strictly confined to the languages, mathematics, rhetoric, and English composition. All other subjects, comprising more than two-thirds of the course, are elective.

The following table shows the number of students in each study, for each year of the course. The unit of work is four hours a week for a year. Fractions indicate parts of that unit, ($\frac{1}{3}$) indicating four hours a week for one term.

FRESHMAN YEAR. Number in class, 64. All studies required.
Latin, 64. Greek, 64. French, 64. Mathematics, 64. Hygiene, ($\frac{1}{12}$) 64. Elocution, ($\frac{1}{6}$) 64.

SOPHOMORE YEAR. Number in class, 60.

REQUIRED.

German, 60. Rhetoric, ($\frac{1}{3}$) 60.

ELECTIVE.

Latin, 10. Greek, 7. Mathematics, 11. French, 36. History, 20. Physics, ($\frac{2}{3}$) 40. Astronomy, ($\frac{1}{3}$) 46. Logic, ($\frac{1}{3}$) 56. Botany, ($\frac{1}{3}$) 54.

JUNIOR YEAR. Number in class, 61. All studies elective.
Biology, 37. Chemistry, 57. English Literature, 55. German, 28. History, 23. Political Economy, 49. Mathematics, 1. Physics, 2. Latin, ($\frac{1}{2}$) 3. Greek, ($\frac{1}{2}$) 5.

SENIOR YEAR. Number in class, 45. All studies elective.
Physiology, 11. English Literature, 38. German, 11. Chemistry, 18. Sociology, 27. Philosophy, 45. Political Science, ($\frac{2}{3}$) 27. Geology, ($\frac{1}{3}$) 22. Latin—optional teachers' course—($\frac{1}{3}$) 12. Greek, ($\frac{1}{2}$) 2. Mathematics, 4.

This table shows that there was a real demand for the courses offered for the first time two years ago, at considerable expense,—Sophomore history, Junior political economy, and Junior English literature. It shows that all the general courses are elected by large divisions. The only courses not taken by a considerable number of students are the advanced courses in Latin, Greek, and mathematics, which follow four or five years of drill in these subjects in the preparatory school, and in the first years of the College; and the advanced course in physics, which is highly technical, and could not accommodate a large number.

The table also shows that the humanities are abundantly able to maintain their place in free competition with the physical sciences; provided that the humanities are really human and alive; filled with positive contents and modern interests, and not confined to the formal traditions of the past.

Thus in the Junior and Senior years, biology has 37 and 11; politieal economy and soeiology have 49 and 27; ehemistry has 57 and 18; English literature has 55 and 38; geology has 22; politieal seienee has 27; and philosophy, 45.

If choices of courses extending over one-half or one-third of a year are regarded as having one-half or one-third of the signifieanee of ehoiees of full eourses, the ehoices as a whole are distributed as follows: language and literature, 194; mathematies and physieal seienee, 208; history, philosophy, logic, politieal economy, political and soeial seienee, 201.

In view of the faet that the requirements are exelusively in language and mathematics—ehiefly in language—while no seienee, history, philosophy or political economy is required, it is evident that under the system of free eleetion the ehoices are very wisely distributed. No one of these groups is negleeted, and no one of them is sought to the detriment of another.

The Next Step Forward.

The College, by its broadened basis of requirement for admission, by its extension of the eleetive system, by its subdivision of departments, and by the timely ereetion and equipment of its seientifie laboratories, has barely eseaped falling behind sister institutions in the rapid edueational advanee of the past decade. As it is, the College on all these essential points stands to-day fully abreast of the most progressive edueational movements of the time. To have failed or to have fallen behind in either of these four essential points would have been disastrous. The attainment of these ends, while a souree of honest satisfaction, is something for whieh we eannot take great credit to ourselves. In the first three movements we have merely been following, sometimes at too long a distanee, the example set for us by more enterprising institutions; and the laboratories and their equipment was the outright gift of a generous friend.

The next step forward in eollege edueation will be in the direetion of greater personal attention to the individual student.

It would add greatly both to the efficiency and to the reputation of Bowdoin College, and it would be an important contribution to educational progress, if we could afford to take the lead, and make the initial experiment in this direction. Like all improvement and experiment this will cost money; and we have strained our resources so seriously in doing what we have done, that there are no funds available for even a promising educational experiment. Still, to prevent the danger of too great self-complacency in our present condition, and in the faint hope that some friend of the College and of education may be moved to give us the means to try the experiment on a small scale, I venture to outline the next step forward.

The light of an incandescent lamp represents about one per cent. of the power expended to produce it. The efficiency of a locomotive does not exceed six per cent.; that of the best triple expansion engine is about twenty per cent. The efficiency of the average college falls somewhere between that of the engine and that of the lamp. In education, as in engineering, some of this waste is inevitable and some is needless. It is the problem of the educator, as it is the problem of the engineer, to discover and remove the causes of the needless waste.

One way to meet the difficulty is to resort to bigger engines and to burn more coal. This has been the method of the College for the past twenty years. The colleges are rare that have not doubled the number of students and the number of instructors, and the amount of their endowment and the value of their plant. We hear these things at each alumni dinner; and it would be good ground for boasting were it not true that every other college has done the same. Magnificent buildings, splendid equipment, an enriched curriculum, and increasing classes are common to us all.

There is, however, a limit to the mere size of things; and in our unwieldy classes that limit is already reached. The next improvement must be in intensity rather than in mere expansion. It is not larger but more efficient institutions that we need.

The weak spot in college education is the lack of personal

eontaet and oversight. Mark Hopkins at one end of a beneh and James A. Garfield at the other is the ideal of eollege edueation. To multiply the dullness and indifferenee of the individual student by forty is to divide the inspiration and effieiency of the instruetor at least by ten. Some of the work of instruetion ean be done effieiently in large elasses, and some of it cannot. The broad presentation of a subjeet ean be made to forty or fifty students at onee. That is the work of the professor. The introduetion of the subjeet to the individual mind, its adaptation to individual diffieulties, its triumphal entry in spite of indifferenee or hostility in the individual student, its insinuation through mazes of dullness and miseoneeption, eannot be aeeomplished in large elasses, and eonsequently in the Ameriean college to-day it is done very imperfeetly, and in many cases is not done at all.

The reason is obvious. Teaehing in large classes is cheap and easy ; teaching of individuals is eostly and hard. The tremendous pressure brought upon the eolleges by the rapidly widening range of subjects to be taught, liberty of eleetion to be granted, and methods of instruction to be adopted, has eompelled every institution to spend every eent it eould get, and many institutions to spend in addition what they expeet or hope to have, in order not to be distanced in this raee which all are foreed to enter. We are all rowing in boats of the same model and with oar-blades of the same broad pattern ; the only differenee being that some are taking the long, slow stroke of three or four subjeets at a time for each student, while others have adopted the short, jerky stroke whieh allows a student to take six or seven different subjeets at the same time, eaeh eoming only onee or twiee a week. This short stroke looks the fastest, and these one and two-hour eourses spread out well upon the eatalogue ; but it is a serious question whether it brings a crew the quieker or in better condition to the finish.

The way to strengthen this weak spot is to employ, as supplementary to the work now done by the professors, and under their direction, tutors to do the kind of work which the professors now

are compelled to leave for the most part undone. These tutors should be young men, fresh from university studies, who expect to become professors in due time. It should be their duty to meet each student individually for a half hour, at least as often as once a week, to review with him thoroughly and critically a specified portion of the work done in class during that period; to discover difficulties; to remove misconceptions; to correct wrong methods of study; to point out errors and superficialities; to insist on accuracy and thoroughness; to stimulate interest; to suggest lines of reading; and by personal influence to bring the subject home to the student as a living reality.

In the physical sciences this is already largely done in connection with laboratory work. In rhetoric and English composition it is being introduced with very beneficial results. In a few institutions it is done in the department of history. In mathematics, work at the board gives opportunity for a large degree of individual work. It is in language and literature, in economics and philosophy, that there is most need of the application of this method.

For the classics it is the only way of salvation. It has long been claimed that Latin and Greek have great value as disciplinary studies. So indeed they have, if efficiently taught. These subjects, however, are not taught efficiently in American colleges to-day. It is impossible to teach them efficiently to the great mass of students, according to the methods in vogue, and with the limited force employed. As a result the study of Latin and Greek is little better than a farce as pursued by the lower half of every college class. A half hour of hasty and superficial comparison of two or three pages of text with two or three pages of "pony," in view of the possibility of being "called up" to render five or ten lines of Latin or Greek into a few halting sentences of questionable English, and to account for three or four of the more mysterious constructions, represents the total amount of energy expended by these men on a lesson in these "disciplinary" branches. The few who bring to the study an interest and an

enthusiasm of their own, provided they survive the deadening and depressing influence of the low level of the required work during the first year or two, and press on into advanced electives, do excellent work and derive substantial benefit. But to the rest, who unfortunately are in a majority, Latin and Greek as taught in our colleges to-day, in spite of the earnest efforts of the able men who are teaching it, is the most enervating and debilitating mental exercise in which they engage during their entire college course.

Let these men look forward with absolute certainty to reading a considerable consecutive passage to a tutor, who will insist on a thorough appreciation of the force of each Greek or Latin form and phrase, and its idiomatic and elegant equivalent in English, in a hand-to-hand encounter, where no adventitious aids, whether in print or in pencil, or even hastily transcribed upon the tablets of a mere unintelligent memory, can be made to serve, and the study of Greek and Latin, from being the idle farce it is at present, will become the highly disciplinary and intensely profitable exercise it ought to be. From this time forward Greek and Latin will have to stand upon their merits in the College curriculum. Potentially the most valuable, they are actually, when required of large classes, the least valuable courses taught in colleges to-day.

What is true of the classics is in less degree true of modern languages, philosophy, history, and economics. It is a common complaint of professors in professional schools and universities that the German which college graduates have acquired is of little or no use to them for practical work with German sources and authorities. A man of long experience as a professor in a theological school remarked to me the other day that there are only two colleges in New England whose graduates get sufficient grasp of the problems of philosophy to be of any use to them as a foundation for theology. I have heard frequent complaints from professors of economics and sociology and political science that it was impossible to assume that students who come fresh from courses in history know enough about it to furnish a solid basis for economic or political science instruction.

The trouble is that, in trying to do a large work on a small capital, we have resorted to mechanical expedients because they are cheap. Now students are as keen to devise mechanical methods of meeting mechanical expedients as we are in devising the expedients. A written examination or a class recitation is an enormous saving, from the point of view of instruction, as compared with a personal interview with each individual student. But unfortunately the student knows ways of meeting that examination or recitation which are an enormous saving in study as compared with that required in preparation for a personal, individual, prolonged cross-examination. So he takes his chances of being called up in the class, trusting to his verbal memory to help him to conceal his lack of understanding, and to the sympathy of the class to "back" him in his frantic efforts for the few minutes he is on his feet; and then makes a great "brace" just before examination in order to be able to regurgitate upon the paper the crude matter of the lessons, the significance of which he has failed to assimilate from day to day and week to week.

Lectures, class recitations, and written examinations all have their place and value; and it is not proposed to do away with any one of these agencies. Let instruction be given in classes; let the application of instruction be made in the recitation of individuals before the class; let there be severe and impartial examinations in writing as at present. In addition to all this there is need for personal contact with the individual student which none of these devices gives.

In order to see how this plan would strike a body of students I stated it without argument to a class of forty Seniors in psychology, and asked them to think it over and write out their impression of it the following day; stating in figures, also, their estimate of the added value, if any, it would give to a college course. Thirty-seven out of the forty were confident that it would greatly "tone up" habits of study, correct mistakes and misunderstandings, stimulate the lazy and indifferent, and help

the earnest and ambitious. Three, while thinking the plan would benefit some students, were doubtful about its general success. Four estimated the added value it would give to a college course at 25 per cent., three at 30 per cent., one at 33 per cent., four at 40 per cent., eighteen at 50 per cent., two at 60 per cent., five at 100 per cent. Thus the average estimate of these forty students was that the addition of such a body of tutors would increase the value of the college course nearly fifty per cent. Something is perhaps to be deducted for the unconscious persuasion which creeps into even the most impartial statement of a scheme that one believes in; and something, too, for the tendency of youth to see the defects of the real and the merits of the novel in exaggerated proportions.

This plan is not a reproduction of the English tutorial system, though it has points in common with that. In the English university the student selects his own tutor or coach. The English system is aristocratic. According to the plan proposed the College would provide the same tutor for all members of a class or a division. That is democratic, as everything in American education should be. The plan is not a reproduction of the German seminar, though it has some features in common with that. The German seminar takes a few choice students for advanced work, and herein is intellectually, though not socially, aristocratic. The plan proposed is to take each student one by one; and aims to benefit the dullest as well as the brightest in proportion to his capacity and need.

The employment of such a body of tutors would be a great help to the teaching profession, and greatly raise the standard of efficiency in college professors. At present there is no satisfactory apprenticeship for the work of college teaching. Our so-called tutors are merely young and inexperienced men trying to do the work of an experienced professor. What wonder that they so often fail. The man who has completed his preparation and taken his doctor's degree has to face the alternative of waiting two or three years with nothing to do, or else going at once into

the full charge of college classes. The former course is expensive, discouraging, mortifying. For the latter in nine cases out of ten he is unfit. His unfitness consists, not in lack of knowledge of his subject, but in lack of knowledge of students, appreciation of their ways and needs, and tact in meeting them. By serving two or three years as a tutor under the supervision of an experienced professor and in co-operation with him, carrying home to individual students the lessons presented in the class-room, the young doctor of philosophy would gradually acquire that appreciation of the student point of view in which he is too often sadly lacking.

There are plenty of candidates for college positions who would be glad to serve such an apprenticeship for a year or two on the modest salary of $500. Especially in physics, chemistry, mathematics, classics, and history there is a great excess of supply over demand. In all these lines there are scores of men who have taken their doctor's degree who are well qualified for this work and who would welcome such an introduction to college teaching. Yet, much as we need such men and ready as they are to come, it is impossible, without special gifts for the purpose, to offer them even the modest sum sufficient to enable them to meet their expenses during their period of service.

To meet each member of a class of sixty students once a week, for a half-hour interview, would employ a tutor five hours a day. It would be an invaluable training for the tutor, in appreciation of the difficulties, interests, and point of view of the student. It would be a powerful stimulus to every earnest student; an occasion of definite and unavoidable responsibility to the indifferent; while to the dull student, the student who comes poorly prepared, the student who does not know how to study, such assistance would give the needed guidance and encouragement.

The College could profitably employ ten or twelve such tutors; one for each of the leading departments. Such men ought to have $1,000 rather than $500; though in view of the opportuni-

ties for gaining experienee and eollege standing, and in view of the exeess of supply over demand at present, it would be easy to fill sueh positions temporarily for the smaller sum. It is not necessary or perhaps desirable to begin in all departments at onee. The suggestion is thrown out in the hope that some one who is at once a friend of the College and a believer in edueational progress, will give us the opportunity to make a beginning in at least one or two departments: Greek, Latin, German, Freneh, history, or literature. In the seienees we have made an approaeh to this, but on a very inadequate financial basis, in the appointment of laboratory assistants. If the literary side of the College is to keep paee with the seientific, it too must resort to laboratory methods, and the individual eontaet of instruetor and student, whieh is one of the most valuable features of the laboratory method. The sueeessful working out of this prineiple would mark an era in college edueation, and would place the college whieh should be fortunate to aeeomplish it first, for the time being in the forefront of educational progress.

Instruction in Drawing.

I desire to eall attention to what I regard an important improvement in the methods of instruction in the seiences, in the hope that the limited means neeessary for it may be put at our disposal before the opening of another year.

Individual observation of forms is a great part of the present system of seienee instruction. The student is required to examine and report upon an objeet in nature. His deseription in words must be aeeompanied by a representation, in outline at least, which alone ean give evidenee of the student's visual impression. Drawing is desirable in all eourses in seience, and in some is of absolute necessity. Work in whieh the microscope is employed is very largely dependent for its value on the observer's ability to reeord in a drawing the results of his work.

The ability to make a correct drawing is of course indispensable to the original investigator. If any proof of this were

necessary it could be had by a glance at any published articles reporting investigations in any branch of science whatever. Our students are taught by men who are themselves investigators and whose most valuable efforts in teaching are expended in directing experiments or investigations which to the student are original. The student's note-book will depend for its value quite as much on his drawn illustration as on his verbal description; both mediums of expression are necessary, each furnishing a complementary support of the other.

Our facilities for science teaching in the Searles Building are now ample. The student labors, however, under the disadvantage of endeavoring to make his notes without previous instruction in the art of drawing. To mention a single case, the professor of botany requires as a matter of course evidence of his pupil's observation of a given form. To fail to teach the elements of the art of drawing and to expect the practice of it is manifestly illogical. It would be hardly less unreasonable to expect a professional botanist to be also an artist, technically qualified to give the necessary instruction in drawing.

The expense of furnishing the elementary technical instruction referred to would be slight, and the benefits in my judgment would be far-reaching.

Scientific Investigation.

Experiments of Professors Hutchins and Robinson on the so-called X-rays of Roentgen have added materially to the usefulness of these radiations. They have succeeded in making tubes which give out the rays with greater intensity than any others, and have made photographs through opaque objects in one-fifth of a second. It is worthy of note, also, that all the apparatus used in making and exciting their tubes, as well as the tubes themselves, was constructed by them or under their direction in the Searles Science Building. This illustrates better than anything else the facilities for practical work which that building affords.

The Proposed Athletic Field.

For several years the foot-ball, base-ball, and track-athletic teams of the College have felt the need of a suitable athletic field. Two years ago it was proposed to build a cinder track on the College delta, but nothing was done, because a survey showed that it would involve the sacrifice of a beautiful grove of pines.

Last year it was suggested that an athletic field might be built on the Brunswick plains. At a mass-meeting of the under-graduates a committee was chosen to take the matter in charge. The site on the plains was found to be unsatisfactory. It was too far from the College, difficult of access from the main road, and unattractive in its surroundings.

The committee decided that the triangular lot between New Meadows Road and Bowker Street was a more desirable location. A part of this was College land, and the rest, at the request of the committee, has been purchased for the College with a portion of the athletic field fund. The committee now ask that the whole lot shall be held by the College for athletic purposes, with the understanding that the treasurer of the College shall receive subscriptions for building the field and shall audit the accounts.

The estimates obtained show the probable cost of this field to be as follows:

Land (not including College land),	$880
Clearing the College land,	500
Quarter-mile track built of clay and cinders,	755
220-yard straightaway,	315
Fence around the field,	500
Grading the field,	550
Grand stand and dressing-rooms,	1,500
Total,	$5,000

Two thousand five hundred dollars has now been subscribed, a large part of which was given without solicitation by the alumni and friends of the College. About 200 yards of cinder track is already completed and is being used by the track-athletic team.

At Commencement the Boards will be asked for permission to cut the pines that interfere with the completion of the track.

The Art Collections.

Professor Henry Johnson, Curator of the Art Collections, presents the following report:

Since my last report the Misses Walker have made numerous and important additions to the collection placed by them in the Sophia Walker Gallery of the Art Building. The rare and valuable objects thus added include, principally, five original drawings and one etching by Sir Edwin Landseer; one oil sketch by J. Foxcroft Cole; three oil sketches by Walter Crane; twelve choice East Indian miniatures; two five-pound Victoria jubilee gold pieces in fine state; English army medals of various campaigns—Peninsular, Crimean, South African, Egyptian, Abyssinian, and others; medallions, Old Italian and English; various rare objects in silver, including an antique silver-gilt sword belt of fine workmanship, also choice examples of Old German and Old English *repoussé;* numerous Old English engraved seals in gold, silver, bronze, and stone; four cameos; one Keltic bronze brooch; Old Italian and English ivory carvings; large sword from the battle field of Culloden; Louis XV. snuff box, and gold watch and chatelaine enameled; and a small collection of arrowheads from various parts of Scotland.

G. W. Hammond, Esq., of Yarmouthville, has given to the College a rare ancient Mexican vase ornamented with heads in relief.

Professor William Cranston Lawton has given a bronze copy of the medallion struck in 1893 in honor of Professor H. von Brunn by American friends.

Mrs. Filomena Pochlla has given a piece of marble from the basilica of St. Paul, Rome.

Miss Virginia Dox has sent to the College the amount paid her for the collection of American antiquities and other works of art marked by her name and secured by the generosity of O. C.

Stevens, Esq., of Boston, with whose consent the collection stands now as given by Miss Dox.

Mrs. Levi C. Wade of Springfield, Mass., has loaned to the College the valuable oil painting by William Morris Hunt, known as "The Girl and Kid"; a silver-mounted cabinet formerly in the possession of Ernest Augustus, late king of Hannover; an Old German glass vase with cover and ornamented with the arms of the city of Braunschweig, 1627; a large German cut-glass goblet with cover, engraved; six pieces of rare German china, decorated; and a silver ship or nef, an excellent example of *repoussé* work.

At the request of the Curator, the artist, Mr. A. V. Currier of Hallowell, has loaned to the College three oil paintings executed by himself in Paris, "The Mandoline Girl," "Santé," and "Portrait of a Young Woman"; also several drawings and sketches in oil, water-colors, and crayon.

With the approval of the donors of the building and with the consent of the College authorities, the Curator organized in February of this year a school of art, under the instruction of Mr. A. V. Currier. The thorough training of the instructor in some of the best American and foreign schools and studios, and his later experience as a successful practical teacher, combined with the art resources of the College, furnish conditions exceptionally favorable. Any considerable popular support of such a measure cannot be expected at once; it gives me satisfaction, however, to state that the endeavor has met the approval of many friends of the College competent to judge in such matters. It is certainly in accord with the ultimate complete use of the building.

The number of persons visiting the Art Building even in vacation time is constantly increasing. Between July 1st and September 30th of last year, 1,945 visitors were counted by the attendant.

Central Heating Station.

It has long been felt that economy and efficiency would be greatly promoted by a central plant for heating all the College buildings. Mr. Isaiah H. Simpson, the engineer of the Searles

Science Building, has secured careful estimates of the cost of such a plant, based upon actual measurements and drawings made by an experienced and reliable engineer. In order to make it perfectly clear, ground plans of the entire construction are given on adjoining pages. As will be seen by inspection they include, first, a central boiler or power house, a brick building in size 72 x 52 feet, with granite trimmings, containing the necessary boiler, engine and storage rooms, and located a little south of the Gymnasium; and second, pipe connections from this to all the College buildings. The estimated cost of the whole plant completed and connected to all steam pipes now used in the College is $28,952. It should be remembered that these figures are not roughly made, but represent an actual bid for the work as minutely specified, and are accompanied by a guarantee that certain definite results shall be accomplished in its working; such results as the College treasurer, Mr. I. H. Simpson (engineer of the Searles Building), and Professor Robinson deem necessary.

To those not acquainted with the modern methods of heating groups of buildings by central stations, it may seem a long distance to conduct steam, and that there will necessarily be a great loss; but so carefully made are the pipe trenches and so perfectly protected are the pipes that the loss by radiation is practically nothing. As to the efficiency of such a plant there can be no question. As to the gain in comfort and health in recitation rooms and dormitories, those who have endured the present conditions can judge.

But after all, actual economy is the main reason for advocating the change, and careful comparison of present expenses for fuel and service with what they would be under such a system, shows that the College would gain financially even if it should hire money for its erection. Figures taken from the treasurer's books show that it cost the College last year $5,302.14 for fuel and service in burning it. The most conservative estimate is $3,237.60 for the same items with a central plant. The difference seems large, but it is not too large. One great reason for the difference

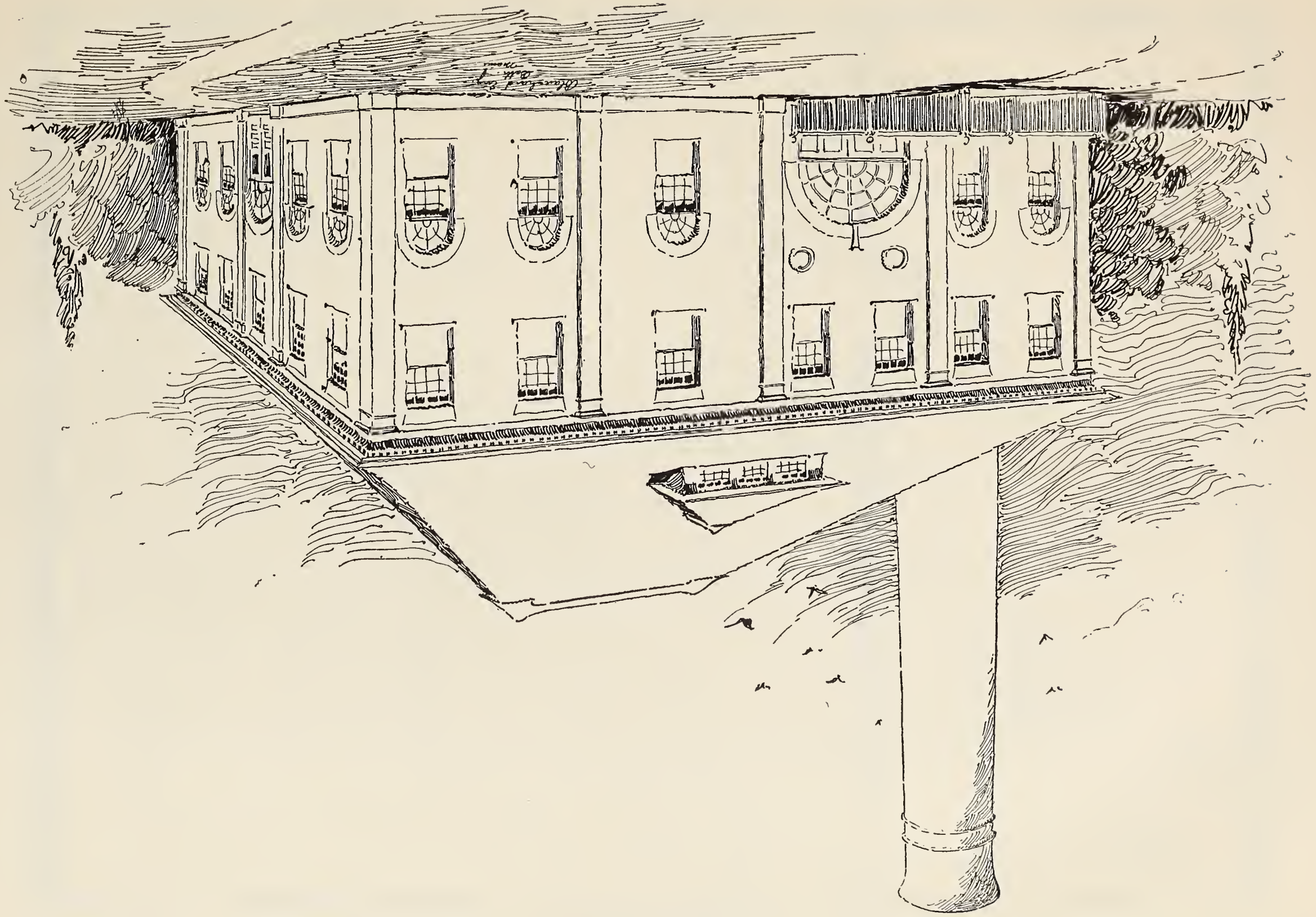
is that a central station would use coal of one kind and that the cheapest, whereas now many kinds, and most of them the very highest in price, are used. If four per cent. interest on $29,000, the estimated cost of the plant, or $1,160, is added to the cost of running it, a saving of $904.54 to the yearly credit of the new plan still remains. When we consider further the fact that with but little extra expense, water and electric lights for all College purposes could be provided in the same plan, and that the building is estimated with that in view, we see another large item of expense saved to the College.

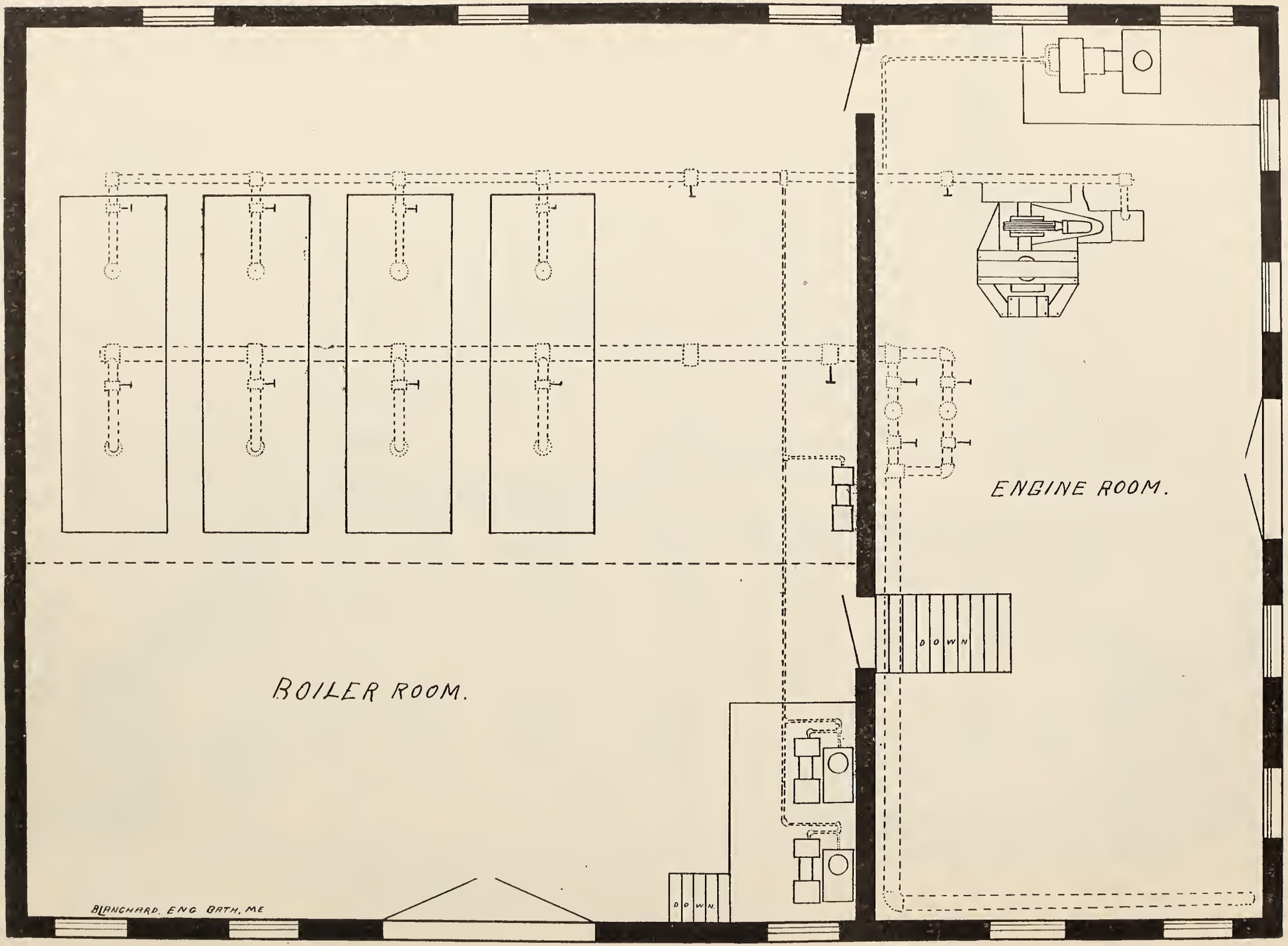
As the College grows in size, it becomes more and more necessary to manage it on strict business principles. The opportunity to save one thousand dollars a year or more, while at the same time improving the efficiency of the heating, and making a considerable saving on water and light, demands the prompt attention of the Boards. In connection with the excavation incidental to this work there will be an opportunity to procure needed material for continuing the work of grading the College campus.

Appleton and Winthrop Halls are in urgent need of that thorough remodeling which was made in Maine Hall three years ago. But it is not advisable to undertake this until it can be done in connection with a central heating station. Memorial Hall is without proper ventilation; and a competent architect has declared that the only satisfactory way to introduce ventilation there is in connection with steam heating. There are upon the campus 150 halls and rooms which are at present heated by about 75 separate fires. Economy, security, and efficiency all combine to demand the central heating station as the next stage of our material development.

The Garcelon and Fayerweather Bequests.

An able presentation of the interests of the College in the Garcelon case has been made by our attorneys, and Judge Hawley of the United States Court has just rendered an exhaustive opinion upholding their claims on all points at issue. In the Fayerweather




ENGINE ROOM.
BOILER ROOM.
DOWN
DOWN
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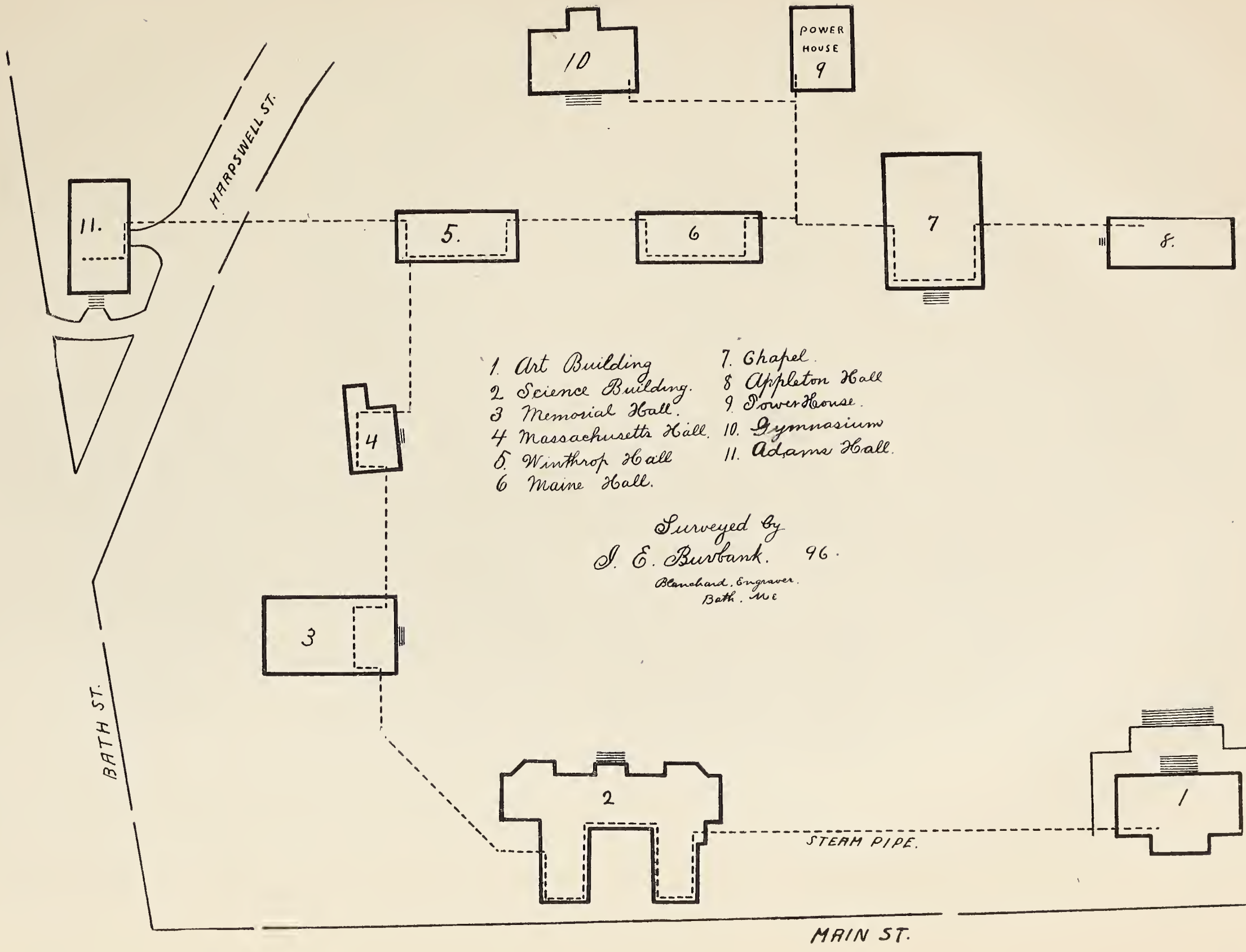

1. Art Building
2. Science Building.
3. Memorial Hall.
4. Massachusetts Hall.
5. Winthrop Hall
6. Maine Hall.
7. Chapel.
8. Appleton Hall
9. Power House.
10. Gymnasium
11. Adams Hall.

Surveyed by
J. E. Burbank. 96.

Blanchard, Engraver.
Bath, Me

case progress is reported by the five colleges immediately engaged in conducting the litigation, as follows:

AMHERST, MASS., March 2, 1896.

"Five colleges, Amherst, Williams, Dartmouth, the University of Rochester, and Hamilton, instituted a suit about three years ago in the Supreme Court of the State of New York to compel the executors of the estate of Daniel B. Fayerweather to distribute the residuary estate among the twenty colleges named in the ninth paragraph of his will, in accordance with the intention of the testator, and the promise and trust which the executors had assumed.

"This action resulted in a judgment establishing the trust in favor of the twenty colleges, and directing the executors to distribute the residuary estate among them in equal proportions, and also awarding $100,000 to the Northwestern University. From this judgment an appeal was taken by the executors, and the judgment was affirmed by the Appellate Court. We are now informed that a further appeal is to be taken by the executors to the Court of Appeals of the State of New York. If the judgment is sustained, Bowdoin College (in connection with the other institutions named in the ninth paragraph of the will) will receive a proportion of the residuary estate, amounting approximately to $150,000 for each institution.

"The expense of conducting this litigation thus far has been borne exclusively by the five colleges. These expenses have been large. The litigation has been conducted by the counsel employed by the five colleges, and their services have been laborious, and thus far extremely advantageous. It seems to be only reasonable that the fund realized for the whole twenty colleges through this litigation should bear the burden of the expenses, and that the actual disbursements made by the five colleges and reasonable compensation to the counsel for the plaintiffs, should be paid out of that fund before its distribution."

[Signed.]

MERRILL E. GATES, *President of Amherst College.*
W. J. TUCKER, *President of Dartmouth College.*
M. WOOLSEY STRYKER, *President of Hamilton College.*
DAVID J. HILL, *President of the University of Rochester.*
FRANKLIN CARTER, *President of Williams College.*

With the approval of the Finance Committee I have expressed to the five colleges our appreciation of the reasonableness of their request, and the probability that the Boards will contribute their share of the expense incurred.

WILLIAM DEWITT HYDE.

BRUNSWICK, ME., June 9, 1896.

ANNUAL REPORT

OF THE

LIBRARIAN OF BOWDOIN COLLEGE,

FOR THE YEAR ENDING JUNE 1, 1896.

To the Visiting Committee:

Gentlemen—The number of volumes now in the library, inclusive of 3,600 books belonging to the Medical School, is 58,169. The accessions for the past twelve months have been 3,000, the largest since my connection with the institution. Of these, 1,335 were purchased at an average cost of $1.39; 154 were obtained by binding periodicals and pamphlets, and 1,511 were presented by various donors. These gifts exceed in number and value those of any previous year in the history of the library with but two exceptions. First to be mentioned among them is the remainder of the selection from the library of the late Hon. Robert C. Winthrop, LL.D., made by his son, Robert C. Winthrop, Jr., Esq., a portion of which was received during the last academic year. The entire gift numbered upwards of 1,000 valuable volumes, beside many duplicates, which have been used in exchange with other libraries. Mrs. Frederick W. Upham of New York City presented us with books relating to Biblical research from the library of her husband. From Miss Edith Agnes Salter of Boston was received a large number of medical books from the library of the late Dr. Richard Henry Salter, selected with special reference to deficiencies in the library of the Medical School of Maine. Mr. Dennis M. Bangs of the Class of 1891 has given us a copy of the *edition de luxe* of the elaborately illustrated work, "The

Army and Navy of the United States, 1776 to 1891," published by George Barrie of Philadelphia. Rev. Edward C. Guild has presented a unique and valuable collection of books illustrating different German dialects. The private library of the late Rev. Dr. Thomas T. Stone, of the Class of 1820, has been forwarded to the College but not yet placed upon the shelves.

Among the purchases may be mentioned, Fürtwangler, Masterpieces of Greek Sculpture; Hübner, Exempla Scripturæ Epigraphicæ Latinæ; and the new edition of Pauly's Real Encyclopädie der classischen Altertumswissenschaft, made possible by the generous gift of Professor William A. Packard, D.D., of the Class of 1851; Reclus, Universal Geography in 37 volumes; and upwards of two hundred volumes of recent French literature.

In expressing my great satisfaction that the annual appropriation for the purchase of books, after being diminished one-third in 1894, was last year again placed at what seems the smallest amount that will ensure the normal growth of the library, I may also call your attention to the fact that the number of books bought has been greater than in any previous year, though the amount expended remains about the same.

Circulation.

The total number of volumes loaned has been 7,080, a material advance over that of last year. As has been stated in previous reports, the circulation is not a fair criterion of the usefulness of a reference library. The addition of a dozen popular novels may increase it by almost as many hundreds, while the vital service of the collection to different departments of instruction through the use of "reserved books" does not appear at all in these statistics.

Expenditures.

The itemized bills on file at the Treasurer's office are roughly classified in the following statement, to show the character of the expenditures and the sources of the library's income:

RECEIPTS.		EXPENDITURES.	
Appropriation,	$1,500	Books,	$1,850
Bond Fund,	410	Binding,	298
Sibley Fund,	156	Periodicals,	250
General Library Fund,	150	Transportation,	100
Smyth Fund,	74	Library Supplies,	250
Ayer Fund,	52		$2,748
Sherman Fund,	50		
Sale of Duplicates,	252		
G. S. Bowdoin Fund,	54		
Gift of Prof. W. A. Packard,	50		
	$2,748		

The Urgent Need of the Library

for room to grow, as set forth in my report of last year, has not been met. We have more books than the shelves in the library will accommodate. The makeshift employed has been the removal of books to other buildings. One thousand volumes, which seemed least likely to be called for, have been placed in bookcases in three different recitation rooms; about two thousand more must shortly be removed to a small room in Adams Hall which the treasurer has kindly provided with shelves. This practice of removing the less used books, which at first thought may appear the natural way out of the difficulty, is known by every librarian of experience to be a delusion and a snare. It strikes at the essential characteristic of a library, viz., that it is a *collection* of books catalogued and arranged so as to be readily consulted. Just as soon as the library is divided into two parts, one of which is available and the other only to be consulted after the delay of an hour and with special trouble and expense to the administration, the usefulness of the latter portion is well-nigh destroyed. Aside from the inevitable tendency to underestimate the value of the books so withdrawn, is added the practical consideration that books out of sight are out of mind. Again, while it is possible to select from any library of the age of our own a

limited number of volumes which can be stored elsewhere without great inconvenience, to do this repeatedly is a task from which the wisest must shrink. A college library in the main is made up of carefully chosen books, purchased with reference to real wants that are almost sure to recur in succeeding years. The passing judgment every twelve-month on all the purchases of his predecessors, and the deciding that this volume is worthy to remain, that another is not, could be seriously attempted only by a librarian of unlimited conceit.

Of almost equal moment with the need of shelving on which to place our new books, comes the demand for increased and better accommodation for workers. I have realized the past year more than ever before the loss in efficiency the library suffers from this lack of proper accommodation for the carrying on of reference work within its walls. On several occasions we have been unable to provide even with chairs all of the students who wished to use the library for purposes of study. The apartment formerly occupied by the Art Collections and fitted up with book-cases in 1894, has not, partly from its position, partly from insufficient means of heating, afforded the addition to our resources in this direction that was hoped.

A New Library Building.

In a word, a new library structure is essential not only to the growth but even to the maintenance of the present efficiency of the library. That the special committee appointed last year to consider the entire question has unanimously reached the same conclusion, leads me to hope that definite action will be taken the present Commencement towards obtaining the funds necessary for its erection. The advocacy of a recognized want of an institution that has a national reputation and governing boards composed of gentlemen of the highest standing and the widest influence, surely ought not to be left to the individual who for the time being chances to be in charge of the department most affected.

GEO. T. LITTLE, *Librarian.*

Brunswick, Me., June 10, 1896.

REPORT

OF THE

SPECIAL COMMITTEE ON THE LIBRARY.

To the Trustees and Overseers of Bowdoin College:

Gentlemen—Your committee chosen to report "what measures will in their judgment best promote the efficiency of the library and accommodate its increasing accumulations of books;" also "what may be done to supply the pressing need of more and better recitation rooms to accommodate the many different classes," respectfully submit the following:

We believe that it is impossible to maintain the efficiency of the library and to provide proper accommodation for its annual accessions, unless there is erected a new building adapted for library administration and planned to meet the inevitable increase of a collection of books designed for reference and study. The plan which was presented in 1893 to provide needed room by increasing the shelving in the present home of the library, and which was earnestly advocated last year by the librarian, would undoubtedly accomplish that object, but only for a period of ten years, and at the cost of some diminution of the already too scanty space that is assigned to readers and students. Furthermore, the permanent fitting up of the wings of the chapel for the storage of books would prevent their use for the other pressing need, that of new recitation rooms, for which they are in our judgment better fitted by their size and position.

The importance of the library to the institution as a whole, and in particular to the departments of instruction relating to literature and the life of man, is so manifest that more than a

mere reference to it is unnecessary. We feel that delay in affording the material facilities and accommodations which the library enjoys in other colleges of equal age and size, will check its growth, injure its usefulness, and indirectly but seriously affect the character and quality of the instruction given here. Hardly a college in America that has celebrated its centenary, is destitute of a handsome library building. No one of the New England colleges, with a library of half the size of Bowdoin, is without a special structure for it. Our present quarters afford table or desk room for about thirty-five workers, while the requirements of instructors occasionally call classes of nearly twice that number to use the library for purposes of reference and study at the same or nearly the same hours. In a word, the efficiency of the library as a means of culture and an aid to instruction depends upon the conveniences which it offers for the consultation of books. This fact convinces us that a building which can afford these, must be secured.

The cost of such a structure would be upwards of $100,000, an amount which we can hardly ask of any one individual. Benefactions of such size and importance come from the few who have alike great means and generous hearts and whose munificence is not generally called forth by personal appeals.

The difficulty of the situation is increased by the urgent need of immediate accommodation for the library accessions. The College has 58,000 volumes; it has proper shelving in the chapel for only 56,000 volumes. The accessions of the year just closed were 3,000, and an annual increase of at least 2,000 is essential to the maintenance of the present value of a reference library of the size of ours. If, for instance, the library should, for the next three years only, curtail its purchases of new books, discontinue one-half its periodicals, and fail to keep up the serials it is now receiving, the usefulness of the entire collection would be diminished at least twenty per cent.

Realizing, therefore, that however large or expensive a library structure may be erected, there will be sometime a necessity for

its enlargement, considering the great danger of changing the character of our collection of books by failure to provide room for new ones, and remembering the urgent need of recitation rooms with modern conveniences and facilities for instruction, the committee recommend what under other circumstances they might approve with hesitation. Provided means for the erection of a complete library building cannot be secured by June, 1897, we advocate the construction that year of the "book room," the essential feature of such a structure.

The southern portion of the campus is the only suitable site for a new library building, since future growth may cause that structure to eventually form a quadrangle. The needs of the College for the next twenty-five years, however, can be met by a main building, facing north, with a wing running back at right angles from its easterly end. This wing would be the "book room" just referred to. It must be substantially built, of brick, but can be severely plain in both interior and exterior. Its position behind the main building and at a distance from the street eliminates occasion for architectural adornment. Its erection would at once relieve the library shelves, provide for future growth, and allow at least one of the wings of the chapel to be used for recitation rooms. It is of course understood that our recommendation includes the making by a skilled architect of detailed plans of the entire structure of which this "book room" is a part, and the raising of the $20,000 needed for its erection and equipment. The committee have already procured sketch plans and estimates from an experienced architect, which show the feasibility of the scheme, and they have the hope, though no assurance, of obtaining the amount needed from a single source. It is believed that in view of the generous gifts that of late years have been made to public libraries that the above-mentioned amount could be secured within the State of Maine, for an institution that has done so much for its people, and has built up for their use as well as for its own the largest collection of books east of Boston.

To temporarily provide for the needs referred to us, as far as is possible the present year, we recommend that lower Memorial Hall be fitted up with individual seats for use as a recitation room, and that $300 be appropriated for new book-cases for the use of this year's accessions.

William DeWitt Hyde,
J. L. Chamberlain,
Edward Stanwood,
J. P. Baxter,
O. C. Stevens,
Geo. T. Little.