THESIS

A DESCRIPTIVE SURVEY

O F

THE BILLINGS
POLYTECHNIC INSTITUTE

Submitted by

Arthur Raymond Knapp

In partial fulfillment of the requirements
for the degree of Master of Science

Colorado Agricultural College

Fort Collins, Colorado

June 16, 1930

STATE AGR-CULT'L COLLEGE
FORT COLLINS, COLO.

COLORADO AGRICULTURAL COLLEGE

GRADUATE WORK

August 20 193 0	
I HEREBY RECOMMEND THAT THE THESIS PREPARED UNDER	
MY SUPERVISION BY Arthur Raymond Knapp	
ENTITLED "A Descriptive Survey of the Billings	
Polytechnic Institute"	
BE ACCEPTED AS FULFILLING THIS PART OF THE REQUIREMENTS	
FOR THE DEGREE OFMaster of Science with a major in	
Trade and Industrial Education.	
In Charge of Thesis Head of Department. Recommendation concurred in Committee on Final Examination	
Approved by Committee on Advanced Degrees	

TABLE OF CONTENTS

Title Page	1
Acknowledgements	3
Introduction	4
Review of Literature	6
Brief History	7
Environs	22
Organization	26
Board of Trustees	29
Faculty	30
Student Business Arrangement	41
Enrollment	45
Scholarships	48
Buildings and Equipment	49
Agriculture	62
Self-Help or Industrial Plan	64
Student Industries	67
Library Facilities	7 3
Constitution of the Polytechnic State	74
Student Organizations	86
School of Vocations	87
Academic Schools	90
School of Fine Arts	92
School of Business	94
School of Physical Education	96
Results	98
Summary	101
Conclusion	109
Bibliography	110

ACKNOWLEDGEMENTS

I wish to acknowledge my appreciation for the cooperation of the various members of the faculty of the Billings Polytechnic Institute in my efforts to secure accurate and reliable information. I am also indebted to my
wife for her assistance in proof reading the manuscript.

INTRODUCTION

In September 1928 I came to the Billings Polytechnic Institute as an instructor in college mathematics and electrical subjects. I found what was to me an entirely new type of institution: an institution which was endeavoring to provide an opportunity for all young people to get an education regardless of their financial conditions. One of the unique phases of the school is that it stands with an open door to all, regardless of their age, level of previous school attainment, or financial condi-The slogan of the school is: "The School with the Open Door." At the same time the ideals of the directors of the institution were in keeping with the ideals of modern leaders in vocational education relative to teaching the immediately worth while subjects and skills to those who want that type of instruction. Another unique phase is that the school is able to exist and grow in spite of no endowment. Practically the entire amount of money necessary to conduct the school comes from contributors of small amounts, who respond to the pleas for money. pleas go out from the office of the financial director several times each year.

The problem confronting me was to get a history of the institution covering the period of 21 years since it was founded and in addition gather and compile the a-

vailable facts relative to its present operations.

It has been my intention to make a descriptive survey rather than attempting to rate the various phases of the school against any efficiency factors.

Changes are being made as time goes on. Recently the board of trustees and directors in joint meeting decided that the smaller classes for which there is only a meager demand should be discontinued the coming year and that more stress is to be placed on the subjects of the vocational school. While the ideals of the directors have been to develop the vocational school primarily, yet a study of the institute shows that comparatively little advancement has been made in establishing and maintaining classes of vocational grade comparable to the standards set up by the federal board for vocational education.

Recently the directors divided the work of the institution into five divisions, namely: schools of vocations, academic school, school of fine arts, school of business and school of physical education.

REVIEW OF LITERATURE

The literature available for reference work on a survey of this type consisted of bulletins, circulars, annuals and a recent bulletin of Montana. 2 No complete catalog for the school had ever been published. Each vear a bulletin has been published showing in a brief way the opportunities afforded at the school and the general arrangement of schedules. However it was not intended that any outline as published in these bulletins should be adhered to necessarily, but that it should be altered to suit the conditions and ideas of the faculty at the fall opening of the school. Many bulletins, for advertising purposes, have been sent out from the school to aid in the effort to interest the public in the enterprise and secure contributions. While it has been possible to use some of this information verbatim, it has been necessary in most cases to omit adjectives or re-word the information to make it suitable for a paper of this kind.

¹ Published by the Billings Polytechnic Institute.

² Published by the state of Montana.

BRIEF HISTORY 1

The Billings Polytechnic Institute, "The School with the Open Door", was founded on August 4, 1908. This is the date on which the institution was incorporated under the laws of Montana and came into being as the Billings Polytechnic Institute.

The credit for the foundation and growth of the school goes to two brothers who have labored long and faithfully to realize their dreams of a school which would afford an opportunity for the pioneer and isolated families to obtain education such as that afforded children of more favored circumstances.

In as much as the history of the school has been so closely allied with the history of the lives of the two men who founded it; it will be well to go back to the years preceding the foundation of the school and review the lives of these two men.

"Lewis T. and Ernest T. Eaton were born in the state of Maine of old English stock. They were descendants of John Eaton who settled in Haverhill, Massachusetts in 1638. Lewis is eight years older than Ernest. He learned from experience what it means for a poor farmer boy on the rock ribbed hills of Maine to struggle for an education.

"During the winter of 1886-1887 the Eaton family

¹ Quotations taken from "The Story of the Billings Polytechnic Institute."

came to the pioneer state of Iowa. Here the family suffered severe hardships and reverses. Lewis worked at anything he could find to do. In the winter of 1887-1888 he, at the age of 18, taught a rural school, earning \$30. a month which he gave to the support of the family. He continued teaching and working at odd jobs until in 1890 he had saved up enough money to enter the Northern Illinois Normal School, located at Dixon, Illinois. Here he completed the first year of college work. He then became principal of schools in an Iowa village. Later he completed a four year course at Highland Park College, now Des Moines University. After graduation he became principal of schools at Earlville, Iowa. Later he served for five years as superintendent of schools of Delaware County, Iowa. In 1900 he accepted a position as teacher of history and English at Highland Park College, his Alma Mater. Later he became dean of the Normal department of this college.

"Meanwhile Ernest was working his way thru the Iowa schools. Graduating from high school, he entered Lenox College, a little Presbyterian College located at Hopkinton, Iowa. After graduating from Lenox College, he taught a year in district schools and then entered the University of Iowa for a year of post graduate work. Graduating from the university, he went to Des Moines and was elected assistant principal of one of the schools of that city. In three months he was elected principal and after

one year, at the age of 22, was elected superintendent of schools in one of the districts of Des Moines. In the fall of 1902 Ernest Eaton was called to the superintendency of the schools of Deer Lodge. Montana. He soon realized that the educational needs of this part of the country had been almost entirely overlooked by the outside world. The following are a few of the facts he discovered at that time: In the great states of Montana. Wvoming and Western Dakotas, with an area 30 times that of Massachusetts and with a population of over a million people. scattered over vast distances, in little mining camps and frontier settlements thousands of young people were growing up with little chance of receiving an education. Nothing was being done to arouse the ambition to better and higher living. Often the only center in these communities was a saloon or dance half. Thousands of these people had never attended religious services and had never heard the name of Christ except in profanity. In a few larger towns there were good high schools, but these towns were often 100 miles apart and over fifty percent of the population lived in isolated settlements or on lonely ranches. If a boy from these places was able to attend a town school it would be necessary for him to board in some rooming house without the influence of a home.

"Ernest Eaton was greatly concerned about the conditions he found and was determined that something should be done. He appealed to several of the great denomination—

al home missionary and educational societies, but received no encouragement. He appealed to the state superintendent of public instruction who stated that he fully understood the need, but the State was doing all it could to maintain the regular system, which was capped by the university.

"At last he appealed to his older brother who had married and built a home. His brother did not care to give up his pleasant position in the college, but after waiting a year the challenge was too great so he sold his home in Des Moines; and he and his wife went to Montana, dedicating their lives to the cause of Christian education in order to save at least a few of these neglected young people.

"At Deer Lodge they rented some old ruins of buildings which years before had been built for a classical college by an ambitious home missionary. The college had failed in 1896 because there seemed to be no need for this school after the state institutions had been established. The roofs were off, windows broken and everything showed neglect. The Eatons themselves replaced broken windows, repaired the roofs, cleaned out the deserted halls and prepared to open a school.

"On July 22, 1904, it was announced thru the newspapers of these mountain states, that a school for the negledted boys and girls of this region would be opened on September 20. On that date students arrived from Wyoming, Canada, Oregon, North Dakota and all parts of Montana and

Idaho. Some rode hundreds of miles across plains, sold their ponies and saddles and traveled hundreds of miles farther to reach the school. The first boy to enroll came 500 miles from southern Wyoming. They gladly accepted the accommodations offered by these ruins in their eagerness for an education which had been denied them. During the first winter every bit of available space was used to care for the school. Lewis Eaton and his wife gave up their apartment to students, and moved to an unfurnished room in the fourth story, where they used cracker boxes for chairs and dressers.

"The school had a terrible struggle for existence. It was never known where funds were coming from to meet the weekly bills. Ernest kept his position as superintendent of the high school and turned all of his salary to the support of the school. The brothers used all of their savings and went deeply into debt. They could not give up, but believed that help would come. Father and Mother Eaton sold their comfortable home in Iowa and came to Montana to help their boys. In several emergencies they came to the rescue and saved the cause. They lived to see the effort an assured success, and deserve to be known as the father and mother of the Polytechnic.

"During the four years' struggle in this frontier institution greater plans were taking shape. The brothers were seeing greater visions and dreaming greater dreams; but there were obstacles in the way of going gerward with

perty where the school was located. The trustees had become ambitious to organize a standard college. If the great plans of the school were to be carried out, preparations must be made so that part of the students could work their way thru the school. After prayerful consideration it was decided to turn the school over to the trustees and seek a permanent location where a great institution could be developed to meet the great need.

"In 1908 the Eatons came to Billings, the center of the great neglected area. They stated their plans and purposes to a number of the leading men of this progressive city, and found a real friend and supporter in Mr. John D. Losekamp, a pioneer merchant who for thirty years had lived in the rough surroundings of the West, and thoroly realized the desperate need of a practical Christian school. He had been deeply concerned about the conditions, but he had not arrived at the complete solution of the problem. All his money was invested in his mercantile business and real estate. In his anxiety to help build the right kind of a school he raised \$15,000 by giving his personal note. Other big-hearted men in Billings and vicinity made similar sacrifices. As a result sufficient money was raised to purchase sixty acres of irrigated land two miles from Billings and to begin erention of a recitation building and four temporary cottages which would accommodate a

hundred young people. "

On August 4, 1908, the new institution came into being thru its incorporation as the Billings Polytechnic Institute under the laws of Montana.

The ideals of the founders of this institution may be stated under four aims, namely:

"1. The institution was to be a broad, practical, Christian school where boys and girls might enter and receive useful training for life. The courses of instruction were to fit the educational demands of the region.

"2. The influence of the school was to be strictly Christian but non-sectarian. While distinctly evangelical, the denominational differences and creeds were to
have no place in the life of the institute.

"3. An opportunity was to be provided thru various school industries for boys and girls without funds to earn their way thru school by remunerative labor, thus giving the poor a chance with those more favored.

"4. The one supreme purpose of the Polytechnic was to be the development of all-round, useful, Christian citizens, trained to take places of leadership in the industrial, social, political and religious life of the region.

"During the winter of 1908-1909, the brothers
spent several weeks in the East, studying schools and colleges and interviewing leading educators. They were desirous of obtaining the best counsel possible before organ-

izing this new educational institution. The schools which interested them most were; Lewis Institute, Chicago; Armour Institute, Chicago; Pratt Institute, Brooklin; the Moody schools at Northfield, Massachusetts; Park College, Missouri; and Tuskegee and Hampton Institutes of the south.

"They consulted such men as Dr. Pritchett of Carnegie Foundation; Fred B. Pratt, Director of the Pratt Institute; George Hodge, Educational secretary of the International Committee of the Y.M.C.A.; and Robert C. Odgen, who had had so much to do with the great industrial schools of the South.

"Mr. Odgen's advice was; "Go to Montana and start the school, even if you have only a tent and no equipment. Do the best you can to take care of the great need in that field and then you will have a story to tell that will bring you friends who will support you."

"On this trip they also met Mr. Willis E. Lougee, at that time treasurer of the Congregational Home Missinnary Society. He took the prospectus and looked it over, remarking; "You have a cause that is worthy of ten men's lives and I am sure you are going to win." They little guessed that by their brief interview that day they should arouse such an interest in Mr. Lougee; that he would some day give up the important work he was doing to cast his lot with the school.

"The Eaton brothers returned to Montana in the spring of 1909 with the determination to open the school

the following fall. The land which had been purchased for the grounds was then planted to sugar beets. In July they staked out the buildings and began active preparations for the opening of the school, which had been announced for October 9. They made known their intentions thru the newspapers of the region and soon commenced to receive applications from students from all over a region larger in area than all New England, New York, Pennsylvania, New Jersey and Virginia combined.

"Rooms were rented in the basement of the library,
Y. M. C. A. and business buildings scattered all over town.
On the date set the Polytechnic Institute was opened under
the most trying circumstances. The first day nearly a hundred young men enrolled, coming from all parts of the great
neglected region of Wyoming, Montana, Idaho and Alberta,
Canada. They were eager for the training offered and were
willing to put up with the inconveniences. On January 29,
1910 they moved to the new buildings, which were then partially finished. Every room was taken the first night and
cots were placed in hallways and in the public offices of
the institution.

"In a few weeks after the school moved to its permanent location six boys met in the office of Lewis T.

Eaton and pledged to work for the religious life of the institution. In three weeks fifty-three students signed a petition asking for the organization of the Polytechnic Church. On March 14 this church was organized by Dr. Hubert

Herring, at that time secretary of the Home Missionary Society of the Congregational Churches of the United States, and Rev. Gregory J. Powell, superintendent of missionary churches in Montana. Dr. Herring at this time gave the right hand of fellowship to over fifty boys and girls of the plains. Since that time the church has taken an active part in the higher life of the institution and four-fifths of all of the students who have registered at the Polytechnic have united with it. Former members of this church are at the present time doing important work in the foreign mission fields and are leaders in church work in various parts of the United States.

"It should be stated that the money subscribed by the people of Billings was depended upon for the payment of bills and the erection of buildings. Up to this time Mr. Losekamp and a few other men had been the only ones to pay their subscriptions. During the summer following the close of the first year, the leading bank in Billings failed and \$2,600,000, deposited in this bank were tied up indefinitely. Following this, other failures occurred and this western city faced a financial panic. Many pledges to the school were never paid and there was a general feeling that the institution could not continue since it was depending upon these unpaid pledges for the erection of its buildings. The only thing that saved the school the second year was the support of Mr. John D. Lose-

kamp, then president of the board of trustees and largest donor to the school. He endorsed personally over seven thousand dollars worth of notes against the school and in this way stopped a series of lawsuits which would have closed the school. He then made a public statement that he would sell his store and all his property and turn the funds into the school before he would see it closed; and that he would personally guarantee that every cent the school owed would be paid. With this assurance the school was able to go on.

"During these two years there were greater and greater demands made upon the school. Word had gone thru all the region that one school was standing with open doors to the boys and girls of the frontier settlements and mining camps, and that there was one place where they had a chance to receive a training. Boys and girls came to the school from Alberta, Idaho, Wyoming, North and South Dakotas and Nevada. They were willing to do anything if they could only stay to secure the training. Because of very meager accommodations and poor equipment, the school was able to care for only a limited number.

"At this stage in the development of the institute, it seemed that the one thing most needed was land,
so that agricultural demonstration could be carried on and
self-help boys could have a chance to work their way. Surrounding the school on three sides lay one hundred acres
of the best farm land in all the country, but this land

was valued at \$250 an acre and it seemed to be out of the question for the school to consider purchase.

"In spite of this seemingly insurmountable obstacle, the Eaton Brothers determined that this land should
belong to the Polytechnic. They secured an interview with
Mr. James J. Hill and placed the conditions of the school
before this great empire builder. He listened to their
story and remarked, "You have organized the right kind of
a school and I am glad to give you \$25,000 with which to
buy the land." Words cannot tell what this meant to the
institution at this time. The endorsement of this practical man of affairs with his word of encouragement and his
financial support, was the turning point in the life of
the institute.

"The third winter of the school was extremely critical. At a time when there seemed to be no hope, \$1,000 being necessary to keep the school, Edward S. Tread, Secretary of the Congregational Educational Society, succeeded in securing a grant of five hundred dollars from this organization, and Mrs. Cyrus Cunningham, an old Baptist saint, went out among her people in Boston and raised \$500.

"As the school increased in age the demands upon it multiplied. Every year saw many more new settlers coming to this great region. Vast areas were being reclaimed and new homes built on the once arid plains.

With the coming of these new settlers the demands for education grew in proportion. Hundreds were seeking a chance

to be trained for life's duties, and how could they be refused?

"In the fall of 1912 Ernest T. Eaton went East to try to find friends to join at this time in the effort.

He spent months cultivating friends for the school and telling of the need in the western states. Mr. Willis E. Lougee finally decided to cast his lot with this great cause.

"In the spring of 1913 a check for \$1,000 was received to be used in the building of a suitable dormitory for girls, who were then living in rough, frame barracks. This gift would seem small indeed beside those received by many eastern schools. The Eaton brothers felt that it was a guarantee that the girls would at last have a suitable home. In the early spring ground was broken for the new dormitory, which was to cost, when finished, \$25,000. The erection of the buildings depended every month upon donations to meet the month's bills. During the summer hundreds of people sent in their mites and the work continued.

"When this building was about half completed the strain of raising money became too great for Ernest T.

Eaton, and he had a severe physical breakdown, being taken to the hospital. It seemed at first that there was no way of going on with the work. It was necessary to have \$7,000 by the end of the month if the building was to be completed.

During the first few days after Ernest's breakdown, 7,000

letters were sent from the school telling eastern friends of the situation. Never was the response more prompt. Within two weeks \$7,000 was sent in and it was realized that there were people scattered over this country ready to uphold the cause in almost any emergency. The last \$5,000 necessary for the completion of this building was given by Mrs. Martha Kimball, of Portsmouth, New Hampshire. As this was the largest gift received, the building was named for her."

This building was dedicated on January 29, 1911, which was also the anniversary of the first moving to the Polytechnic grounds. "Ernest Eaton had at that time sufficiently recovered to be present and take part in the impressive ceremonies. Surely better days were dawning for the Polytechnic."

"It is not necessary to go farther into the years of struggle. It is sufficient to say that it was never known where funds were coming from for the expenses of any month. Building after building has been erected to care for the most urgent needs, but in no case were the funds in sight for the completion of a building when it was started.

"Twenty-five years ago the Eaton brothers dedicated their lives to the cause of Christian education on the great Northern frontier. They had nothing back of them but an idea, determination, and boundless faith in the Infinite.

"From the idea has grown Billings Polytechnic Institute with buildings, lands and equipment valued at nearly \$600,000. It now owns 278 acres of the best irrigated land in Montana, used for campus, orchards, gardens and demonstration farms, and in addition to this, 800 acres of ranch and farm land scattered in several counties. It has eight beautiful stone buildings erected from its own quarries, also a brick building and several frame cottages."

ENVIRONS 1

"YELLOWSTONE COUNTY - Ranking first in the value of crops and livestock produced in 1927, through Billings its county seat and third largest city in the state, Yellowstone County is likewise foremost commercially in eastern Montana. Located centrally near the state's southern border, the county is bisected, its entire length, by the northeasterly flowing Yellowstone River, and has an average width of forty miles south and west from the pine topped Bull Mountains. Seventy-five miles of the fertile Yellowstone Valley irrigated and in a high state of cultivation, extends thru the county, flanked on both sides by productive non-irrigated benchlands. The combination of irrigated and non-irrigated lands affords exceptional opportunities for all types of farming and stockraising, as is conclusively demonstrated by the \$10,000,000 annual income produced by its 2,000 farmers. The agriculture here is highly stabilized, and the irrigated sections represent the greatest advance in diversified farming reached in Montana.

"Crops - Spring and winter wheat, sugar beets, beans and alfalfa hay are the four principal crops, each representing a value of over \$1,000,000 each year, with corn, the other small grains, potatoes and various vegetable crops commercially important. Yellowstone county is

¹ Book of Montana.

the beet and bean center of Montana, these two crops with alfalfa hay forming the basis of irrigated farming: however the production of grain, corn and alfalfa and sweet clover for hay and pasture without irrigation are of large importance. Truck crops produce heavy yields of high quality, and a recent development is the establishment of a cannery for processing tomatoes, sweet corn and pumpkins. Livestock production is an important industry, comprising 40 percent of the county's income in hogs, sheep and wool, beef, dairying and winter feeding of mutton and beef. The latter forms an important adjunct to irrigated farming owing to the availability of sugar-beet pulp and the high quality alfalfa hay. Poultry is rapidly increasing in the county, and honey production here ranks with the leading counties of the state. The fact that this section produces successfully all the products grown in the middle west, in most cases in greater quantity per acre and higher quality, is a revelation to many visitors from other sections.

"Industries: Manufacturing and distributing are important industries in Yellowstone County, represented by over eight establishments. Beet sugar making is the chief industry, the Billings factory of the Great Western Sugar Company being the largest in the world, the 1927 product of which was valued at over \$5,000,000. In addition to the major industry Billings has the usual smaller industries such as ice plants, woodworking establishments

and wholesale bakeries.

Billings is also the distributing center for a trade area containing 87,000 square miles, extending into northern Wyoming.

"Transportation and Highways: Billings is an important junction point in both rail and motor transportation; the hub to a large area. It is the junction of three transcontinental railway lines, the Northern Pacific, Burlington, and Great Northern, as well as the terminal of several branch lines, and has 28 passenger trains daily. Seven of the transcontinental automobile highways pass thru here including the Yellowstone Trail, National Parks Highway, Custer Battlefield Hiway, Glacier to Gulf Hiway, Buffalo Highway, Beartooth and Billings-Cody Way. In addition, the county maintains a good system of roads, which are being given additional improvement, made possible by the present highway laws.

"Billings: Billings has a population of 17,500 and is a thoroly modern city in every way, with the development, appearance and life of a community very much greater in size. It has 26 miles of paved streets, municipal water, sewer, street lighting and garbage disposal systems, cheap electricity and natural gas, a swimming pool, three city parks, five public play grounds, two hospitals, a large public library, and is served by a satisfactory motor bus service. It is a city of homes, with 3,750 dwel-

lings, 50 of which were erected in 1928. It is the home of the Midland Empire Fair, which adjoins the city and is one of the finest exhibitions of the kind in the country, with an attendance of approximately 30,000 people annually.

"Climatological: Yellowstone County has a frost-free period of 133 days, and one of the highest mean annual temperatures in the state according to records covering a large number of years."

ORGANIZATION 1

"The Institute is incorporated under the laws of Montana. It is under the control of a self-perpetuating Board of Trustees. In addition to the managing board there is an Advisory Board made up of men from all sections of the United States. This Advisory Board, or Council, receives reports and bulletins issued by the Institute and its members are invited to visit and inspect the school from time to time and advise with the directors and managing board regarding its best interests. The two directors are elected by the board and have general oversight of the affairs of the corporation and give their entire time and attention to the educational and financial interests of the Institution.

ARTICLES OF INCORPORATION

STATE OF MONTANA) ss County of Yellowstone)

We, the undersigned residents of the City of Billings, County of Yellowstone and State of Montana, being of lawful age and desirous of establishing an institution of learning to be established at or near the City of Billings, Yellowstone County, Montana, do by these presents pursuant to and in conformity with the laws of the State of Montana, associate ourselves together to incorporate said institution of learning and declare:

¹ Billings Polytechnic Institute Bulletin Vol.17 No.8 May 1917.

- 1. The name of the corporation shall be BILLINGS POLYTECHNIC INSTITUTE.
- 2. That the purposes for which it is formed are:
 To establish, maintain and conduct a Polytechnic Institute
 of learning with all the powers and privileges conferred on
 such corporations. The said Institute shall be distinctly
 Christian, in harmony with evangelical churches (but nonsectarian) and shall be open to students of both sexes, and
 shall acquire and hold all the lands useful or necessary
 for the purpose of the Institute.
- 3. That the location of said Institute shall be at Billings, in the County of Yellowstone, State of Mon-tana.
- 4. The number of trustees shall be twelve, and the names and residences of those chosen for the first board of trustees are as follows: John D. Losekamp, Christtian Yegen, I. D. O'Donnell, H. W. Rowley, P. B. Moss, W. B. Gearge, R. E. Shepherd, E. B. Camp, James Chapple, Henry White, A. C. Logan, J. R. Goss, Billings.
- 5. That the names of those who have subscribed money or property to assist in forming said Institute together with the amount of money and description of the property described are as follows:

John D. Losekamp, \$10,000; Yegen Brothers, \$10,000; I. D. O'Donnell, \$5,000; H. W. Rowley, \$5,000; P. B. Moss, \$5,000; W. B. George, \$2,500; R. E. Shepherd, \$500; A. L. Babcock, \$500; J. R. Goss, \$500; Henry White,

\$100; E. B. Camp, \$200; A. C. Logan, \$200; Hart-Albin Co., \$200; James Chapple, \$200; Austin North \$2,500.

These articles were filed according to law with the County Clerk of Yellowstone County on July 29th, 1908, and filed with the Secretary of State of Montana, who in turn issued a certificate of incorporation under the date of August 4th, 1908."

The present organization and faculty is as follows: 2

BOARD OF TRUSTEES

Charles Chapple - - - - - - - President
Chandler Cohagen - - - - Vice President
Ernest T. Eaton - - - - Secretary
P. B. Moss - - - - - - Treasurer
Hon. Scott Leavitt, Judge James R. Goss, H. T.
Hedden, Rev. C. J. Powell, D. D., I. D. O'Donnell, Marion Dietrich, Rev. E. R. Curry, D. D.,
Lewis T. Eaton, Harry C. Carpenter, Rev. R. B.
Walker, D. D.

EXECUTIVE COMMITTEE

James R. Goss

Lewis T. Eaton - - - - - Chairman

Ernest T. Eaton - - - - - Secretary

Chandler Cohagen, Charles Chapple,

MANA GEMENT

Lewis T. Eaton - - - Educational Director

Ernest T. Eaton - - - Financial Director

Arthur O. Kline Registrar and

Assistant Treasurer

Willis E. Lougee - - - Honorary President

New Bedford, Massachusetts

² Billings Polytechnic Institute Bulletin Vo.21 No.10 March 1930.

FACULTY

Lewis T. Eaton, M. S., Educational Director

Highland Park College, Master of Pedagogy. Lenox

College, M. S. County Superintendent, Delaware County, Iowa, 1895-1900. Professor of History and English, Highland Park College, 1900-1902. Dean of

Normal Department and Professor of Psychology and Education, Highland Park College 1902-1904. President

of College of Montana, 1904-1908. Founder of Billings

Polytechnic Institute, 1908. Educational Director

and President of the Faculty, 1908-.

Ernest T. Eaton, M. S., Financial Director.

Lenox College, M. S. State University of Iowa,

Ph. B. Superintendent of Schools, Deer Lodge, Montana,

1902-1908. Principal Powell County High School, 1904
1908. Founder Billings Polytechnic Institute, 1908.

Financial Director and Business Manager 1908-...

Daniel Ward, M. A., Dean of the Polytechnic Institute and Professor of Social Science.

Christian University, B. S., M. A., 1908. Colorado State Teachers College, B. A., 1914, M. A., 1915.

Drake University, Missouri State Teachers College.

University of California. University of Colorado.

Principal Fountain School, Pueblo, Colorado, 18951915. Principal Community High Schools, De Witt
County, Illinois, 1924-1927. Dean of Billings Polytechnic Institute, 1927-...

- Mme. Mary Thayer de Floete, Dean of Women.

 Graduate, The Sorbonne, Paris France. Dean of Women

 1927-...
- Harry E. Biddinger, Principal of Billings Business College,
 Commercial Department of the Polytechnic.

 Rochester College. Vories Business College. Alexander Hamilton Institute. Principal of Billings Business College, 1928-...
- Guy L. Rathbun, M. P. E., Professor of Physical Education and Director of Athletics.

 Association College, Beloit. New York Physical Normal. Indiana University. Coach, Beloit, 1908-1909.

 Professor of Physical Education, Indiana University, 1916-1920. Oregon State College, 1920-1923, Williamette University, 1923-1927, Billings Polytechnic Institute, 1929-...
- Loftus H. Ward, B. S., Director of Conservatory of Music and Professor of Voice and Organ.

Drake University, B. S. Graduate Study under Holmes
Cowper in Voice, Addie van der Tuyl Barnett in Organ,
Arthur Foote in Harmony, Frederick Chapman in Theory
and Choral Management. Soloist and director for Redpath, Midland, Federated, and Community Lyceum and
Chautauqua Managements, 1913-1918. Organizer and
Coach of Concert Companies (among them the Ithacans,
the Meistersingers, the Iroquois Quartet, the Overseas
Quartet and the Ward Ladies) 1919-1923. Director Calvary Choir, Calvary Presbyterian Church, Peoria, Illinois, 1920-1926. Director of Singing, Culver Military
Academy, 1925-1926. Director of the Pilgrim Choral
Club, Billings, 1926-... Director of Polytechnic Conservatory of Music 1926-...

- Carl K. Aldrich, Supervisor of Automotive Egineering.

 Studebaker and Ford Automotive Engineering, 1915-1926.

 Supervisor of Automotive Engineering, Billings Polytechnic Institute, 1926-...
- Arthur R. Knapp, B. S., Supervisor of Electrical Engineering.

Colorado Agricultural College, B. S. 1921. Colorado
School of Mines. University of Toulouse, France.
Colorado Agricultural College. Utah Power and Light
Co., 1922-1928. Supervisor of Electrical Engineering.

Billings Polytechnic Institute, 1928-...

Lincoln J. Aikins, A. B., Professor of English.

Bates College, A. B., 1919. Bates Summer Session,

Hartford Theological Seminary, University of Iowa.

Instructor in English, Berea College, Berea, Kentucky,

1919-1920. Principal of high schools in Maine, 1920
1927. Head of English Department, Billings Polytech
nic Institute, 1928-...

Guy L. Barnes, Ph. B., Professor of Religious Education.
Graduate Billings Polytechnic Institute, 1917. University of Chicago, Ph. B. 1926. Chicago Theological Seminary. Ordained Congregational Minister, 1926.
County Y.M.C.A. Secretary, Colorado, 1918-1919.

Pastor and Head Resident, Firman Church and Settlement House, Chicago, 1920-1924. Pastor Essex Congregation Church, Chicago 1925-1926. Pastor Congregational Church, Molt, Montana, 1927-... Professor of Religious Education, Billings Polytechnic Institute, 1926-...

Fremont Dixon, B. S., Professor of Science.

Kansas State Teachers College, B. S., 1917. University of Oregon, University of California, University of Denver, University of Southern California, Leland Stanford University, University of Colorado. Princi-

pal of high school, Erie, Kansas, 1916-1917. Head of Science Departments Pittsburg, Kansas; Raton, New Mexico; Golden, Colorado, 1919-1920, 1921-1926. Head of Science Department, Billings Polytechnic Institute, 1926-...

Grace Theodora Garrett, B. Mus., Professor of Piano.

Northwestern University, B. Mus. Graduate Study at

Bush conservatory and the Chicago Musical College

under Oldberg, Nixon, Moerschal, Lhevinne, and Grain
ger. Instructor, Grand Praire Seminary, 1917-1918.

Director of Music, Wayland Academy, 1918-1927. Organ
ist, First Congregational Church, Billings, 1927---
Head of Piano Department, Polytechnic Conservatory,

1927-...

Eva Marion McKenzie, M. A., Professor of Foreign Languages.

Colby College, B. A. University of Montana, M. A.

Instructor in Latin and Greek, University of Montana,
1921-1926. Acting Head of the Department of Ancient
Languages, University of Montana, 1926-1928. Head of
Foreign Language Department, Billings Polytechnic
Institute, 1928-...

Florence Mae Shirk, B. A., Professor of Public School Music.

Washburn College, B. A. Graduate Study under Otto

Miessner. Supervisor Public School Music, Alta Vista, Kansas, 1921-1924. Supervisor, Minneapolis, Kansas, 1925-1926. Professor of Public School Music, Billings Polytechnic Institute, 1926-...

Hazel K. Clark, B. S., Instructor in Home Economics and
Manager of Dining Hall.

Oregon State College, B. S. University of California,
University of Washington, University of Colorado.

Teacher in high schools, 1920-1925. Instructor in
Home Economics Billings Polytechnic Institute, 1925...

Bertha L. Croes, B. Mus., Instructor in Piano and Theory.
Yankton College, B. Mus. Assistant in Normal Piano
Department, Yankton College, 1926-1928. Instructor
in Music, Billings Polytechnic Institute, 1928-...

Ruth Hansen, Instructor in Physical Education.

Graduate Billings Polytechnic Institute. State Certificate Montana State Normal College. Graduate Sargent School of Physical Education. Harvard Medical School. Supervisor of Corrective and Remedial Gymnastics, Providence, Rhode Island, Public Schools, 1925—1927. Assistant Director Essex County, Massachusetts. Health Camps, 1925. Instructor in Physical Education, Billings Polytechnic Institute. 1927-...

Raymond F. Lund, B. A., Instructor in Social Science and Agriculture.

Graduate of Billings Polytechnic Institute. Graduate of South Dakota School of Agriculture. Yankton College, B. A. Instructor in Social Science, Billings Polytechnic Institute, 1928-...

Charles E. Martin, B.R.E., Instructor in Industrial Arts.

Worcester Polytechnic Institute. Hartford School of
Religious Education, B.R.E., 1926. Machinist and
Toolmaker, 1922-1924. Director of Religious Education,
1926-1927 Pastor, 1927-1929. Instructor in Industrial Arts, Billings Polytechnic Institute.1929-...

Myrtle Patterson, Instructor in Shorthand.

Graduate of Cheney State Normal, Washington. Teacher in rural schools, Washington. Teacher Billings Public Schools, 1920-1927. Instructor in Shorthand, Billings Polytechnic Institute, 1929-...

Gladys M. Potter, Instructor in Typewriting.

Graduate of Commercial Teachers' Course, Whitewater

State College, Wisconsin. Teacher, Bridger High

School, Montana, 1926-1928. Instructor in Typewriting,

Billings Polytechnic Institute, 1929....

Charles W. Wade, M. Acct., Instructor in Stenotypy, Accounting.

Sparks Business College, Master of Accounts. University of Illinois. Illinois State Teachers College.

La Salle Extension University. Teacher in public schools of Illinois, Montana and Wyoming. Teacher,

Brown's Business Colleges, Decatur and Alton, Illinois. Instructor in Stenotypy and Accounting, Billings Business College, 1929-...

Olga Weydemeyer, B. S., Instructor in Art.

Montana State College, B. S. in Applied Art, 1925.

Teacher rural schools and primary grades, 1920-1921.

Instructor in Art, All Saints School Junior College,

Sioux Falls, South Dakota, 1926-1927. Landscape

painting, Broadmoor Art Academy, Colorado Springs,

summer, 1928. Instructor in Art, Billings Polytechnic Institute, 1927-...

Emma N. Johnson, Librarian and Professor of Continuation Studies.

Simpson College, Indianola Iowa. Highland Park Normal, Des Moines, Iowa. University of Chicago. Teacher, College of Montana, 1904-1908. Librarian, Billings Polytechnic Institute, 1909-...

Arthur O. Kline, M. A., Registrar and Instructor in Mathematics.

Valparaiso University, B. Ph., 1897; B. C. of Accounting 1898; M. A. 1900. Teacher Public Schools, Illinois, 1900-1901. Principal of Business College,
Brazil, Indiana, 1901-1910. Head of Commercial Department, Billings Polytechnic Institute 1910-1921.

Registrar, Billings Polytechnic Institute, 1921-...

Clarence C. Holt, Farm Manager.

Graduate of Billings Polytechnic Institute. Montana State College.

Lena M. Beebe, Secretary to the Directors.

Margaret Holmes, Secretary to the Dean.

FACULTY COMMITTEES

Executive: Mr. Loftus Ward, Mr. Aikins, Mr. Barnes,
Mr. Biddinger, Miss Clark, Mr. Knapp, Mr. Rathbun.

Student Affairs; Mr. Rathbun, Miss Clark, Mr. Lund.

Student Government; Mr. Knapp, Mr. Lund, Mr. Aikins.

Student Relations: Mrs. McKenzie, Mr. Knapp.

Student Social Activities: Miss Hansen, Mrs. McKenzie, Mr. Rathbun, Mr. Loftus Ward.

Vocational Training and Student Industries: Mr. Knapp,
Mr. Barnes, Mr. Biddinger, Miss Clark, Mr. Holt.

Curriculum: The Executive Committee.

Schedule: Mr. Lund, Mr. Knapp, Mr. Martin.

Catalog: Mr. Aikins, Mr. Biddinger, Mr. Loftus Ward.

Publications: Mr. Barnes, Mr. Dixon, Miss Waydemeyer.

Annual: Mr. Aikins, Mr. Barnes, Miss Hansen, Mrs. McKenzie,
Miss Weydemeyer.

Health and Hygiene: Mr. Rathbun, Miss Clark, Mr. Dixon, Miss Hansen.

Commons: Miss Clark, Mr. Holt, Mr. Rathbun.

Buildings: Mr. Martin, Mr. Dixon, Mr. Kline.

Grounds: Mr. Aldrich, Mr. Holt.

Library: Miss Johnson, Mr. Barnes, Mrs. McKenzie.

The Directors and Dean of the Institute are members (ex-officio) of all committees. The Dean of Women is a member (ex-officio) of all committees organized in connection with the activities of the girls.

STUDENT BUSINESS ARRANGEMENTS 1

"The expenses of an education at the Billings
Polytechnic Institute are shared by the institution and
the student. The management is anxious that this matter
be clearly understood.

"The student is asked to pay only about one-half the actual expenses at the school, which are from \$300 to \$1000 for the school year of nine months. It is the aim of the institution to give every boy and girl useful training under Christian supervision. That this training might be within the means of every ambitious boy and girl, the directors, through correspondence and by personal appeal, have sought the assistance of friends of Christian education in making it possible for the young people of the West to attend school.

"For more than twenty years, the directors have dedicated their lives to this service, and as a result a living endowment of more than 1500 has been created, thus making it possible for the school to pay practically one-half the actual cost of the education of its students.

The management desires to offer this training to young people who regard education as an opportunity for self-development, as well as a chance to render valuable service to the community. Restrictions and regulations are few, but students are expected to abide by them, as the simple

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 pp.18-19.

rules which have been listed have been necessary in order that students may attain their ambitions.

"To those who come into the school for a month or two without serious thought of the future and then leave, a rate of \$100 a month will be charged."

EXPENSES 2

Kenney, Kimball, or Tyler Hall. Board, room and tuition for one term of 12 weeks - - - - \$160.00 Rate for one year of 36 weeks payable in advance - - - - - - - - - - - - - - 450.00 Cottage Dormitories. Board, room and tuition for one term of 12 weeks - - - - - - - - 140.00 Rate for one year of 36 weeks, payable in advance - - - - - - - - - - - 400.00

An entrance fee of ten dollars is required of each student but five dollars of this is returned at the close of the school year, less deductions for damage to property.

Charges for room, board, tuition and fees must be paid in advance at the beginning of each quarter.

Students who are working for credit on accounts are required to make first term payments. All earnings are applied on expenses of future terms.

FEES 3

Community Fee

Athletics, including tickets to all home games	\$5.00
Library	3.00
Physical examination and first aid	1.00
Services of school nurse	5.00
The School Paper	1.00
Total	15.00

The community Fees must be paid one-half in cash on entrance; the other one-half at the beginning of the second quarter.

² Ibid.p.19.

³ Ibid.p.19-20.

Laboratory and Shop Fees

Auto-Tractor Shop, per quarter (first two quarters) 3	10.00
Machine Shop, per quarter	
(first two quarters) Chemistry lab., per quarter Home Making lab., per quarter Engineering lab., per quarter General Science, per quarter Agriculture, per quarter Biology, per quarter	10.00 5.00 3.00 3.00 3.00 3.00
<u>Tuition</u> <u>Fees</u>	
Resident Students	
Per month	15.00
	125.00
Day Students	
Day Students	
Any course, each 4 weeks, in advance	18,00
Any course, each 12 weeks, in advance	50 .0 0
Any course, each 24 weeks, in advance Scholarships for complete courses on pay-	90.00
ment basist	
Stenographic or Stenotypy Courses, 40 weeks	7.50.00
limit Bookkeeping and Banking, 40 weeks limit -	150.00 150.00
Secretarial Course, 48 weeks limit	175.00
Complete Business and Stenographic Course	
60 weeks Accounting and Auditing Course, 60 weeks -	200.00
Civil Service, any examination, 12 weeks -	50.00
Business Machines, operation and practice,	
12 weeks	50.00
Graduation Fees	
College, cost of diplomas and rental of cap	
and gown	3. 50
Academy, cost of certificate and rental of cap and gown	2.00

ENROLLMENT 1

Registration for 1929-30

Boys 117 Girls 41 Total 158

Date of Birth	Number Students	Number Church Members Students
1892 1895 1896 1901 1902 1903 1904 1905 1906 1907 1908 1909	1 1 1 2 1 1 7 2 5 17 19 28	Catholics 7 Christian Science 1 Salvation Army 1 Seventh Day Adventist 1 Other Denomina— tions 83 Total 93 Percentage of enrollment 63 State of Number Residence Students
1911 1912 1913 1914 1915 1916	15 20 19 10 5 3	Montana 118 Wyoming 26 Colorado 2 Iowa 4 Illinois 3 California 1 Minnesota 1 Oregon 1 South Dakota 1

¹ Registration data taken from the records in the dean's office of the Institute.

HIGH SCHOOL

Subject	Credits per year	Year to be taken	No. students enrolled	Instructor		
Plane Geometry, Advanced Algebra and Solid Geometry First Year Algebra	15 15	2 1	31 23	Mr. Dixon and Mr. Kline Miss Johnson		
Physics	15	4	9	Mr. Dixon		
General Science	15	ì	26	11 11		
Biology	15	3	20	Miss Hansen		
Latin	15 15	2	11	Mrs. McKenzie		
Latin	15	1	6	Miss Shirk		
Spanish	10		J	MISS DHILE		
English English - Vocational	15 15	4 1	1 9 11	Mr. Aikėns		
English		3	25	11 11		
English	15	1	13	16 11		
English	15	2	23	11 11		
Mechanical Drawing Manual Training	9 6		7 6	Mr. Martin		
Machine Shop Practice2	_		10	11 11		
Feeds and Feeding, Crops and Live Stock Management -			15	Mr. Lund		
and Hit o Bason Harrie company	20		•0	ma - marra		
American History	1 5	3	23	11 · · · · 15		
World History	15	2	21	11 11		
Direct Currents Vocational Electricity	15 1 5		2 6	Mr. Knapp		
Auto Tractor 2-	- 15		30	Mr. Aldrich		
High School Preparatory						
Arithmetic			- 2 - 1 - ·			

COLLEGE GRADE taken No. students Subject Instructor Physical Education 1 9 Public School Admin .- - -6 Mr. Rathbun General Preparation - - -9 1 9 ** ** Pedagogy and Admin. - - -Mr. Dixon Chemistry - Inorganic - - - 15 1 7 Qual. and Quan. - - - - 15 2 9 2 11 English - - - - - - -Mrs. McKenzie English - - - - - -1 27 Mr. Aikins 9 English - - - - - -1 7 English - - - - - -11 1 6 German - - - - -Mrs. McKenzie German - - -2 4 22 2 11 Ethics Mr. Barnes Journalism - - - - -9 5 3 37 ** Religious Education - - -Alternating Currents - -15 2 5 Mr. Knapp 1 Direct Currents - - - -15 4 1 9 15 Engineering Mathematics Mr. Knapp 1 Calculus - - -15 1 9 Psychology 1 15 Dean Ward 6 1 10 ** Sociology -----9 Human Relations - - - -1 12 ŧŧ 14 Economics - - - - - -1 Mr. Martin Manual Training - - - -9 9 Mechanical Drawing - - -Ħ ** 2 Machine Shop - - - - - - 2-10 Mr. L. Ward 18 12 Miss Croes Harmony - - - - - -6 5 17 11 12 Piano - Private - - - -30 Garrett 12 Piano - Private - - - -5 Musical History - - - - -Miss Weydemeyer 5 Art - - - - -Miss Clark Sewing -----

SCHOLARSHIPS 1

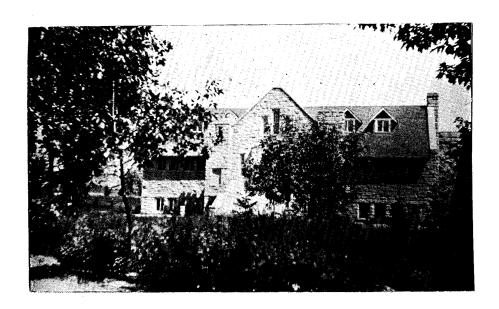
The Ella Lougee Memorial Fund. Twenty-eight thousand dollars has been given to the Institute as a memorial to Mrs. Ella Lougee, who was a great help and inspiration to the school. The income from this fund is given each year in the form of scholarships to worthy young people. The selection is made by honorary President W. E. Lougee, from the students who are recommended by the directors.

#4,000 to the school, the income of which is to be loaned to worthy young men and women who do not use tobacco in any form. The student receiving a loan is to pay it back after leaving school plus a small rate of interest. Thus this fund will increase from year to year.

Other Funds. There are several other funds established for the benefit of worthy students. The school
awards each year a number of scholarships for good scholarship and high endeavor.

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 p.22.

BUILDINGS AND EQUIPMENT



PRESCOTT COMMONS

"In 1915 it became necessary to have a dining room so they started the boys to work on the foundation.

Money came in month by month, to care for the bills, until Mr. Amos Prescott, a New York friend, sent \$5,000 for its completion. This building which cost \$25,000 was constructed from one stone from the Polytechnic quarry." 1

This building serves as a dining hall and an a-musement hall where social functions are held.

The dining room will seat 300 very comfortably with a possibility of 400 on special occasions. It has a high arched ceiling and two fire places, one at either end of the hall.

The kitchen and dining room equipment is suffi-

¹ The Story of the Billings Polytechnic Institute.

BUILDINGS AND EQUIPMENT



PRESCOTT COMMONS

"In 1915 it became necessary to have a dining room so they started the boys to work on the foundation.

Money came in month by month, to care for the bills, until Mr. Amos Prescott, a New York friend, sent \$5,000 for its completion. This building which cost \$25,000 was constructed from one stone from the Polytechnic quarry." 1

This building serves as a dining hall and an a-musement hall where social functions are held.

The dining room will seat 300 very comfortably with a possibility of 400 on special occasions. It has a high arched ceiling and two fire places, one at either end of the hall.

The kitchen and dining room equipment is suffi-

¹ The Story of the Billings Polytechnic Institute.

cient to accommodate about 300 at a meal. Storage space is provided in the basement for fruit and vegetables. The basement also includes a kitchen to be used for canning processes. The farm department uses two rooms in the basement for storage of farm products.

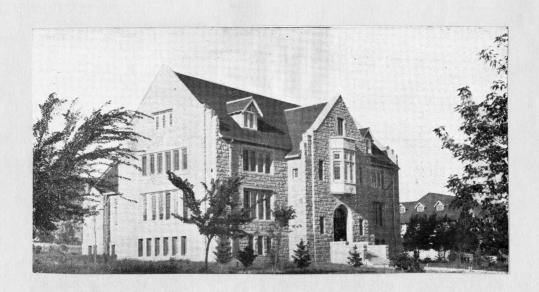


LOSEKAMP MEMORIAL BUILDING

"In 1918, \$35,000 was available from the bequest of Mr. John D. Losekamp for the Chapel and Music Conservatory. The building which was planned, called for the expenditure of \$75,000. With the help of friends of the institution, the building was erected." This building houses the department of music, the library and the auditorium. In the basement are classrooms, library store room, and the heating plant for this building and Prescott Commons. Provision is also made for a room for the students, two in number, who take care of the furnace and the janitor work

² The Story of the Billings Polytechnic Institute.

cient to accommodate about 300 at a meal. Storage space is provided in the basement for fruit and vegetables. The basement also includes a kitchen to be used for canning processes. The farm department uses two rooms in the basement for storage of farm products.



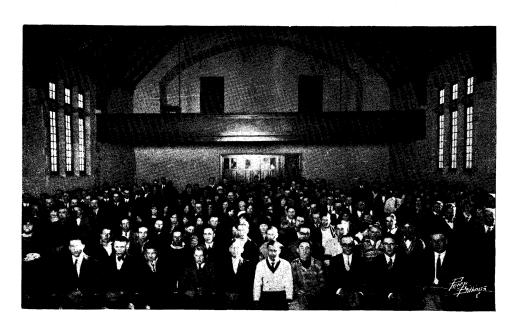
LOSEKAMP MEMORIAL BUILDING

"In 1918, \$35,000 was available from the bequest of Mr. John D. Losekamp for the Chapel and Music Conservatory. The building which was planned, called for the expenditure of \$75,000. With the help of friends of the institution, the building was erected." This building houses the department of music, the library and the auditorium. In the basement are classrooms, library store room, and the heating plant for this building and Prescott Commons. Provision is also made for a room for the students, two in number, who take care of the furnace and the janitor work

² The Story of the Billings Polytechnic Institute.

of the building.

The auditorium is provided with an inclined floor and will seat 210 in the regular seats. The auditorium is primarily for the chapel and other religious exercises but at present all of the larger gatherings, other than strictly social functions, are held here.



THE AUDITORIUM

In the building for the use of the music department are five rooms equiped with pianos and used for piano practice rooms. The music instructors also have their studios in this building. One room on the first floor and a large room in the basement are occupied by the library.

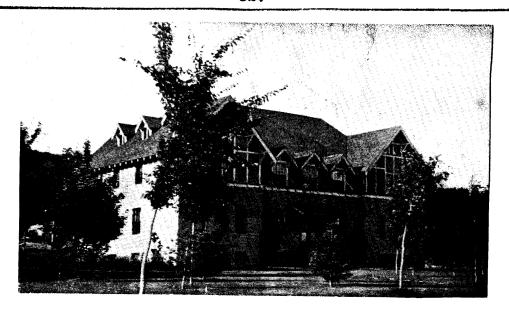
of the building.

The auditorium is provided with an inclined floor and will seat 210 in the regular seats. The auditorium is primarily for the chapel and other religious exercises but at present all of the larger gatherings, other than strictly social functions, are held here.



THE AUDITORIUM

In the building for the use of the music department are five rooms equiped with pianos and used for piano practice rooms. The music instructors also have their studios in this building. One room on the first floor and a large room in the basement are occupied by the library.



KIMBALL HALL

"In the spring of 1913 ground was broken for the girls' dormitory. This building was to cost \$25,000 when finished. The erection of this building depended every month upon donations to meet the month's bills. During the summer hundreds of people sent in their mites and the work continued. The last \$5,000 necessary for the completion of the building was sent in by Mrs. Martha Kimball of Portsmouth, New Hampshire. As this was the largest gift received the building was named for her." 3

This stone building is the home for 50 girls. The basement floor contains the domestic science rooms, while the other floors are given over to living quarters for the girls and the lady teachers.

<u>Domestic science equipment</u> is limited to three sewing machines and a few tables.

³ The Story of the Billings Polytechnic Institute.

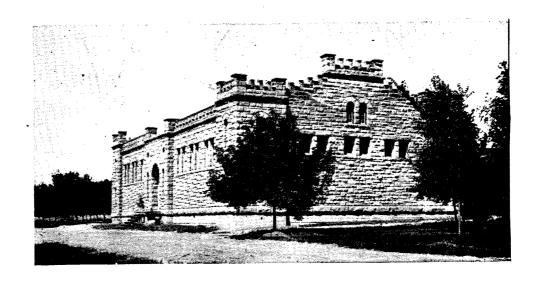


KIMBALL HALL

"In the spring of 1913 ground was broken for the girls' dormitory. This building was to cost \$25,000 when finished. The erection of this building depended every month upon donations to meet the month's bills. During the summer hundreds of people sent in their mites and the work continued. The last \$5,000 necessary for the completion of the building was sent in by Mrs. Martha Kimball of Portsmouth, New Hampshire. As this was the largest gift received the building was named for her." 3

This stone building is the home for 50 girls. The basement floor contains the domestic science rooms, while the other floors are given over to living quarters for the girls and the lady teachers.

Domestic science equipment is limited to three sewing machines and a few tables.



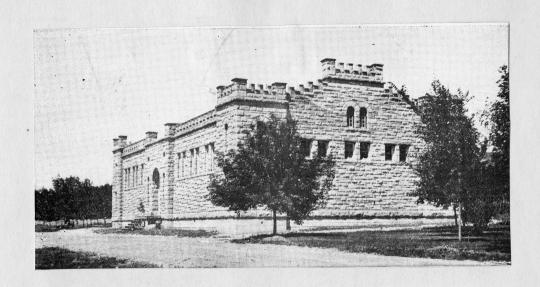
GYMNASIUM

This building was originally a framebuilding.

As finances permitted improvements have been made. The present structure now has three exterior walls of stone, the rear wall is still frame.

Basket-ball equipment, wrestling mats and boxing gloves are provided for gymnasium work.

The building is heated with open gas heaters. Two dressing rooms are provided but without lockers and showers. The basket-ball floor is approximately 80 feet long and 40 feet wide. The interior walls have not been painted so have the natural color of the wood.



GYMNASIUM

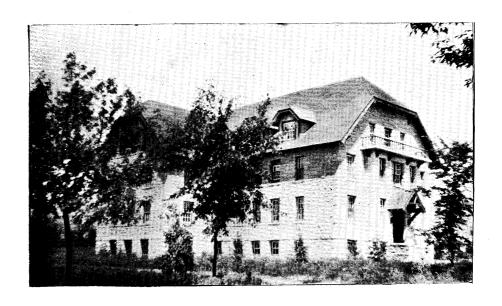
This building was originally a framebuilding.

As finances permitted improvements have been made. The present structure now has three exterior walls of stone, the rear wall is still frame.

Basket-ball equipment, wrestling mats and boxing gloves are provided for gymnasium work.

The building is heated with open gas heaters.

Two dressing rooms are provided but without lockers and showers. The basket-ball floor is approximately 80 feet long and 40 feet wide. The interior walls have not been painted so have the natural color of the wood.



KENNEY HALL

In 1917 the Eatons started to erect a Y.M.C.A. building and dormitory for the boys. "The stone was cut from the rimrocks on the campus. The work went as fast as money was available. In 1918 the corner stone of Kenney Hall was laid and the walls of the first story were built. In 1922 this building was completed. This building not only furnishes accommodations for about 80 boys but it also contains a social room used by the boys."4 The equipment in the basement includes a game room and two bowling alleys. Over 2,000 friends gave money which made this building possible.

Hospital rooms are provided on the first floor and are kept in condition to be used for this purpose at any time. These rooms are provided with cooking facilities.

⁴ The Story of the Billings Polytechnic Institute.



KENNEY HALL

In 1917 the Eatons started to erect a Y.M.C.A. building and dormitory for the boys. "The stone was cut from the rimrocks on the campus. The work went as fast as money was available. In 1918 the corner stone of Kenney Hall was laid and the walls of the first story were built. In 1922 this building was completed. This building not only furnishes accommodations for about 80 boys but it also contains a social room used by the boys." The equipment in the basement includes a game room and two bowling alleys. Over 2,000 friends gave money which made this building possible.

Hospital rooms are provided on the first floor and are kept in condition to be used for this purpose at any time. These rooms are provided with cooking facilities.

⁴ The Story of the Billings Polytechnic Institute.



INDUSTRIAL BUILDING AND HEATING PLANT

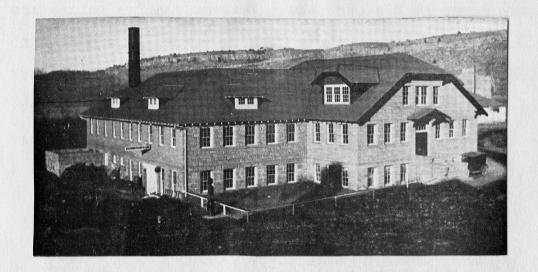
"The industrial building was erected from small gifts, except for the gifts of two friends who gave \$12,000 for its completion." 5

The auto tractor and machine shops are housed in the basement.

The machine shop equipment consists of; one 12" head 5' bed lathe, one drill press, one milling machine, one power emery wheel, and one acetylene welding set including the generator.

The auto tractor shop is provided with tools necessary for regrinding and refacing valves, and tools for
regrinding the cylinders of the popular cars. There is
also a motor-generator charging set and motor driven air

⁵ The Story of the Billings Polytechnic Institute.



INDUSTRIAL BUILDING AND HEATING PLANT

"The industrial building was erected from small gifts, except for the gifts of two friends who gave \$12,000 for its completion." 5

The auto tractor and machine shops are housed in the basement.

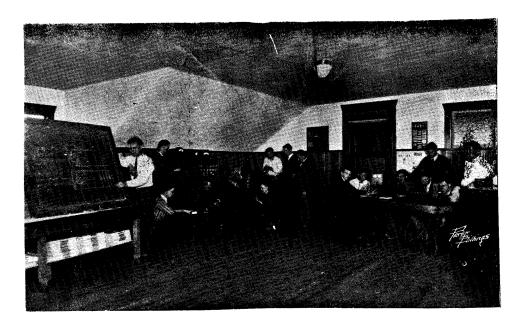
The machine shop equipment consists of; one 12" head 5' bed lathe, one drill press, one milling machine, one power emery wheel, and one acetylene welding set including the generator.

The auto tractor shop is provided with tools necessary for regrinding and refacing valves, and tools for
regrinding the cylinders of the popular cars. There is
also a motor-generator charging set and motor driven air

⁵ The Story of the Billings Polytechnic Institute.

compressor.

The equipment of the wood working shop housed on the ground floor consists of one planer, one buzz saw, one sander and one mortising machine, all of which are driven by one motor thru line shafts. There are hand tools and carpenter benches sufficient to make it possible for ten students to work at varying types of jobs at the same time.



Electrical Laboratory

The electrical laboratory located on the second floor of the industrial building has the following articles of equipment; one five horse power generator set and board with a D. C. voltmeter and ammeter; one bipolar D. C. generator; one 150 volt scale voltmeter; two 10 volt - 10 ampere scale meters; one 1500 watt A. C. wattmeter; one 2.5-5 ampere A. C. ammeter; one 24 ampere scale A. C. ammeter and one student's tangent galvanometer. The neces-

compressor.

The equipment of the wood working shop housed on the ground floor consists of one planer, one buzz saw, one sander and one mortising machine, all of which are driven by one motor thru line shafts. There are hand tools and carpenter benches sufficient to make it possible for ten students to work at varying types of jobs at the same time.



Electrical Laboratory

The electrical laboratory located on the second floor of the industrial building has the following articles of equipment; one five horse power generator set and board with a D. C. voltmeter and ammeter; one bipolar D. C. generator; one 150 volt scale voltmeter; two 10 volt - 10 ampere scale meters; one 1500 watt A. C. wattmeter; one 2.5-5 ampere A. C. ammeter; one 24 ampere scale A. C. ammeter and one student's tangent galvanometer. The neces-

sary tools for doing the usual wiring jobs are included in the shop equipment.

This floor also has a dark room, for blue print work, which is equipped with a Wagenhorst Electric Blue Printer, washing vats and running water.

In addition to the shops and laboratories the building contains four class rooms used by classes in auto tractor, mechanical drawing, college mathematics and electricity.

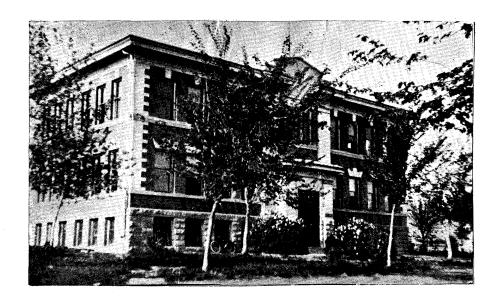
The heating plant, located in the building, furnishes heat for Science Hall, Kenney Hall and A and B dormitories as well as for this building.

The heating equipment consists of two boilers, one of 100 horse power and one of 150 power, one steam driven pump and one motor driven pump to take care of return water. The pump for raising the culinary water to the pressure supply reservoir to the north of the campus is also located here.

SCIENCE HALL

Science Hall was the first permanent structure to be erected. Its construction was dependent upon the small contributor. It stands to-day the only partially brick building on the campus.

The administrative offices of the school are on the first floor in the east end of the building. The center and rear of the first floor is occupied by the



Science Hall

Polytechnic post office. In the west end there are three class rooms which are used by the biology, art and social science classes.

On the second floor are the physics, chemistry and general science laboratories and class rooms. The rooms are combination rooms used for both laboratory and class room work. The south-west room is occupied by the English classes taught by Mr. Aikins.

The equipment in the physics laboratory includes a static machine, Wheatstone bridge, resistance boxes, galvanometers, slide wire bridge, magnets, micrometers and apparatus for simple experiments in photometry. Equipment for simple experiments in heat machines and temerature measurements is included.

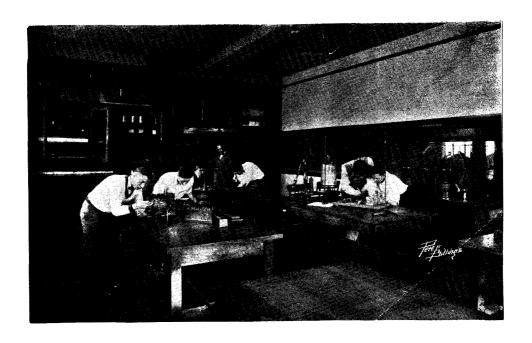


Science Hall

Polytechnic post office. In the west end there are three class rooms which are used by the biology, art and social science classes.

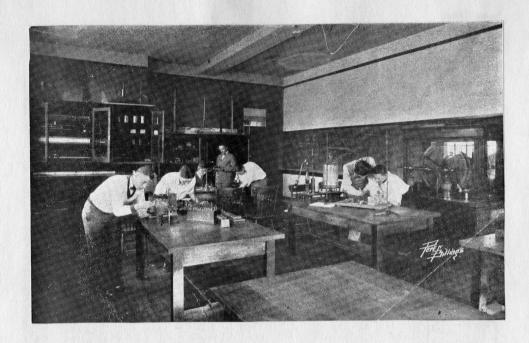
On the second floor are the physics, chemistry and general science laboratories and class rooms. The rooms are combination rooms used for both laboratory and class room work. The south-west room is occupied by the English classes taught by Mr. Aikins.

The equipment in the physics laboratory includes a static machine, Wheatstone bridge, resistance boxes, galvanometers, slide wire bridge, magnets, micrometers and apparatus for simple experiments in photometry. Equipment for simple experiments in heat machines and temerature measurements is included.



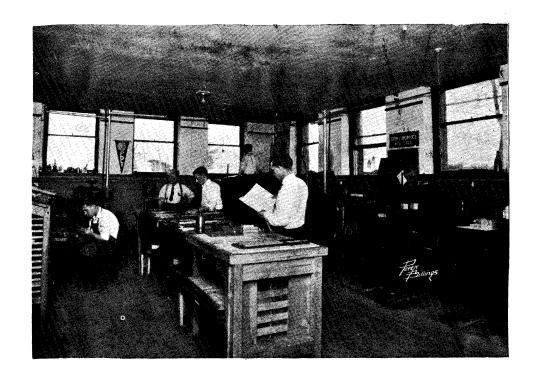
Physics Laboratory

The equipment in the chemistry laboratory consists of a ten student experiment desk with drawers arranged five on a side with a chemical rack between. This desk is provided with individual gas jets for each student and running water at the end of the desk. According to the instructor, there are sufficient chemicals and apparatus in stock to give instruction in inorganic chemistry and qualitative analysis. A large hood is also provided for experimental work with chemicals.



Physics Laboratory

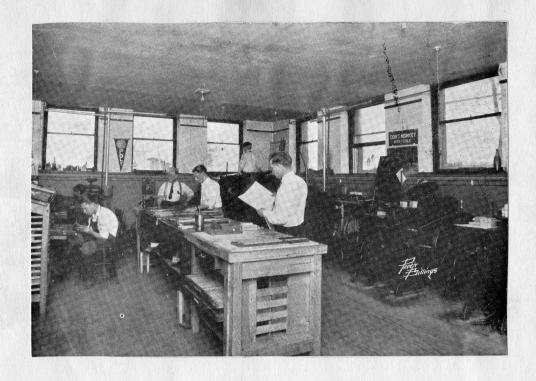
The equipment in the chemistry laboratory consists of a ten student experiment desk with drawers arranged five on a side with a chemical rack between. This desk is provided with individual gas jets for each student and running water at the end of the desk. According to the instructor, there are sufficient chemicals and apparatus in stock to give instruction in inorganic chemistry and qualitative analysis. A large hood is also provided for experimental work with chemicals.



Print Shop

The printing department of the school is located in the basement of Science Hall at the west end.

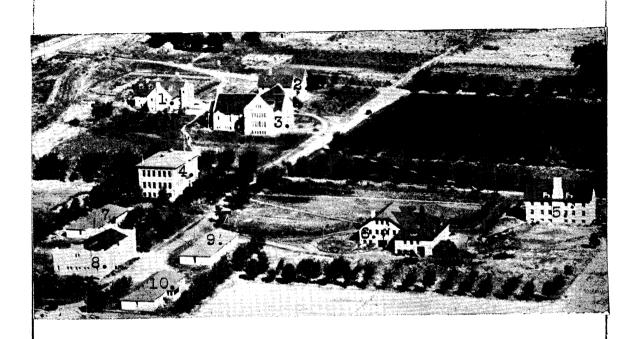
The major equipment includes one linetype
machine, one large press and two small job presses.



Print Shop

The printing department of the school is located in the basement of Science Hall at the west end.

The major equipment includes one linotype
machine, one large press and two small job presses.



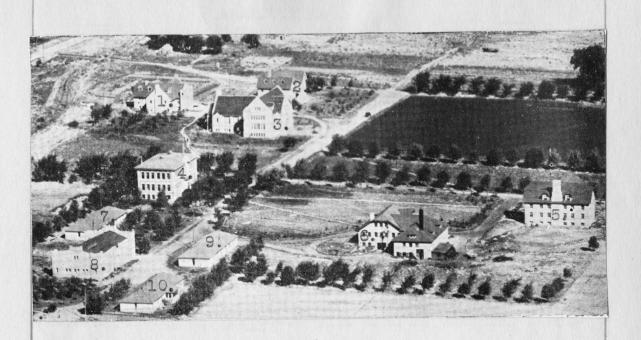
AN AIRPLANE VIEW OF THE CAMPUS

This view is looking east over the campus.

Referring to the buildings by number they are;

- 1. Prescott Commons
- 2. Kimball Hall
- 3. Losekamp Memorial Building
- 4. Science Hall
- 5. Kenney Hall

- 6. Industrial Building and Heating Plant
- 7. A Dormitory
- 8. Gymnasium
- 9. B Dormitory
- 10. C Dormitory (New faculty apartments)
- 11. D Dormitory (Now faculty apartments, not shown in the picture but to the left and opposite No. 10.)



AN AIRPLANE VIEW OF THE CAMPUS

This view is looking east over the campus.

Referring to the buildings by number they are:

- 2. Kimball Hall
- 3. Losekamp Memorial Building
- 4. Science Hall
- 5. Kenney Hall

- 1. Prescott Commons 6. Industrial Building and Heating Plant
 - 7. A Dormitory
 - 8. Gymnasium
 - 9. B Dormitory
 - 10. C Dormitory (New faculty apartments)
 - 11. D Dormitory (Now faculty apartments, not shown in the picture but to the left and opposite No. 10.)

AGRICULTURE

The first few acres of land acquired and that on which the buildings now stand was purchased with a fund made up of miscellaneous subscriptions.

At the time the school was two years old James J. Hill, the Empire Builder, became interested in the institution and the provision of more land for agricultural purposes. His subscription for the purchase of 100 acres of land surrounding the school on three sides at \$250 per acre amounting to \$25,000. This land is used for intensive farming purposes.

The acreage for the various crops in 1929 was divided about as follows; fourteen acres of Marquis wheat, five acres of Victory oats, five acres of Trebi barley, fifteen acres of Sweet corn, two and one half acres of Flint corn, six and one half acres of Minnesota #23 corn, five acres of Yellow Dent corn, five acres of garden vegetables, sixty five acres of alfalfa, and five acres of corn for ensilage.

In addition to the land near the campus, the Polytechnic Institute owns and leases 1,000 acres of grazing land and meadow land located on the Stillwater River, 75 miles from the campus and 16 miles above Absarokee.

That owned was donated outright to the school. About 100 acres of this land produces meadow hay while the rest is

used for grazing purposes.

The hog industry is confined to breeding and raising Poland Chinas. There are at present nine sows, and one boar in the breeding pens and ten hogs in the fattening pen.





DAIRY BARN

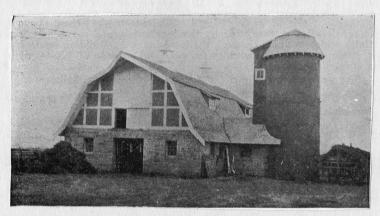
The dairy herd consists of 41 Holstein cows, three of which are registered.

There are 200 White Leghorn hens.

Seventy-four hives of bees comprise the bee industry.

used for grazing purposes.

The hog industry is confined to breeding and raising Poland Chinas. There are at present nine sows, and one boar in the breeding pens and ten hogs in the fattening pen.





DAIRY BARN

The dairy herd consists of 41 Holstein cows, three of which are registered.

There are 200 White Leghorn hens.

Seventy-four hives of bees comprise the bee industry.

SELF-HELP OR INDUSTRIAL PLAN1

"One of the chief aims of the Billings Polytechnic Institute is to give every boy and girl a chance to secure a useful education. The requirement for entrance is an honest desire to train one's Godgiven powers to the best advantage, rather than the desire to acquire the mere ability to pass an examination in some text book in order to reach some artificial standard. The true test of a student's ambition for education is his determination to secure it regardless of all handicaps. Lack of financial means to pay for room, board and tuition is often the chief difficulty to be overcome.

"The Institute offers to share this burden, but it goes still further by providing opportunity for the student to earn a large part of his share of the cost of attending school. That this assistance may be offered, industries are being developed so that no worthy student shall be turned away for lack of funds.

What is required of the Applicant for Self-Help

"First: He should write to the Polytechnic,
stating his condition and ambitions, asking for a place in
the self-help department and giving an idea of the work in
which he is most proficient. In the letter he should give
references as to his inability to attend school without
assistance and also to his worthiness to receive such help.

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 pp.21-22.

When assignment is made, the prospective student enters the Institute.

"Second: Before one is eligible to receive class instruction, he must have made payment of \$165.00. If it is not possible to make such cash payment, the student then puts in full time in some employment, receiving monthly credit until the amount of \$165.00 is completed. The self-help student pays by the term rates and it should be definitely understood that the community fee of \$15.00, at least should be paid on entrance, this being a part of the \$165.00.

"Third: The student then enters classes with full privileges and is given work two, three or more hours per day.

"The compensation depends upon the ability and trustworthiness of the student, and it must be understood that a part of this compensation is in the training received.

"Each month, his earnings will be entered to the credit of his account.

"If through illness a student must leave school, an extension of his time will be made and he may return and use his credit at any time. If he is unable to return to school, a refund of two-thirds of his credit will be made, upon request, at the beginning of the next year.

"No allowance is made for the first two weeks or

the last two weeks of school. If a student enters two weeks late or leaves two weeks early, he must pay for the full time.

"Students who work for financial credit at the school should understand that no cash payment for this work will be made to any one who decides not to use his credit for school expenses."

STUDENT INDUSTRIES

Agriculture; This type of work provides for a large number of students. The dairy industry employs students to milk and care for the cows. One student is furnished employment in the hog industry and still others in the planting and harvesting of crops. At the present time there is a full time supervisor for each of the agricultural industries namely; dairy, hog, preparation of and seeding of soil and harvesting, and the seed grading.

<u>Dining Hall</u>; The dining room and kitchen are supervised by Miss Clark. One full time cook is on duty and takes the responsibility for the preparation of the meals under the supervision of Miss Clark. The balance of the help is entirely students.

<u>Kimball Hall;</u> The janitor work and the general duties about the girls! dormitory provide some work for girls.

Electrical Industries; All of the wiring of new buildings constructed on the campus is done by the electrical students, as well as the electrical maintenance work and the building of pieces of laboratory equipment of the simpler forms.

Building Construction; Student labor is used as far as possible in the construction of new buildings. All

of the buildings except Science Hall have been constructed from the rock taken from the rock quarry on the Polytechnic campus, largely by student labor. Students are not only employed as far as possible during the school year but many of them earn the necessary credit to continue in school by their work on the buildings during the summer months. There are students attending school who have had considerable experience in building trades before coming here who are allowed the usual scale of wages for skilled workmen in their trade. At present there is one dormitory under construction and prospects of other buildings being started during the coming summer.

Plumbing and Heating; The plumbing which includes new work and repairs is supervised by a full time plumber. The rest of the work is taken care of by students. The heating plant furnishes employment to one student attendant during the winter months.

<u>Class rooms</u>; A limited number of the more advanced students are employed as assistants in the class rooms for individual instruction and to check papers.

Janitor Service; The janitor work except in the girls! dormitory and dining room is taken care of by student labor under the supervision of a full time employee.

Apiary and Chickens; One of the older students at present has charge of the bees and the chickens and is responsible directly to Mr. Ernest Eaton.

Mail Bus and Grocery Truck; The mail truck is driven by one student who makes the trip to Billings twice a day for mail and groceries.

Passenger Bus; This bus is also driven by a student and makes the trip to Billings four times each day to take students down and back who go to the business college of the school, which is located in town, and brings students out from town to school here, who live in town.

Post Office; One student is employed in the post office to distribute mail and wait on customers. This student is under the supervision of the postmaster who is also an employee of the school.

Machine Shops; The machine shop provides work for a few students, under the supervision of the machine shop instructor, in adding to the present equipment by building some of the smaller and simpler pieces. The shop also takes care of work of that nature about the campus.

Auto Shop; Routine duties about the shop are taken care of by student labor under the supervision of the instructor.

Print Shop; The school print shop does a very large part of the school printing which includes, the catalog, annual, school paper and publicity bulletins as well as the job printing incident to an institution of this kind.

Maintenance of Buildings and Equipment; Student

	labor	is	used	very	larg	gely	for	the	maintenance	work	on	the
	existi	.ng	build	dings	and	equi	Lpmer	ıt.				
1												
-												
		÷										
												-
1												
						•						
adjetime, angelom a san a												
80 TRR 4 M 1												

RECAPITULATION

 \mathbf{of}

THE STUDENT SELF HELP

for

The Months of Sept., Oct., Nov., and Dec. 1929 1

			•		•		
		No.	No.				
Location	Month	Emp	Hrs.	Total	Rate	Amount	Total
Girls'	Sept.	1	53		.2 5	\$ 13.25	
Dormitory		3	203		.2 5	50.75	
DOIMI OUL	Nov.	2	159.5		.2 5	39.87	
	Dec.	ĩ	53.75		.25	13.44	
	Dec.	_	57.75	527.00			\$ 134.64
	Dec.		01010	021.00		17.00	# 104.04
Plumb-	Sept.	1	5 1		•40	20.40	
ing and	Oct.	1	81.5		• 4 0	32.60	
Heating	Nov.	1	156		•40	62.50	
	Dec.	1	87.5		•40	35.00	
	Dec.	1	300	676.00		150.00	300.00
Publicity	Sept.	1	61.75		•30	18.52	
	Oct.	3	88.25		.25	22.00	
	Nov.	3	125.25	275.25	• 25	31.31	71.83
Agricul-	Sept.	34	1569		.25	382.60	
ture	Oct.	30	20 64		.2 5	516.00	
	Nov.	1	84		•445	21.46	
	Nov.	21	1872		.25	468.00	
	Nov.	2	30 0		.266	80.00	
	Dec.	25	1542.5	7431.50	• 25	385.62	1853.68
Janitor	Sept.	1	5		.2 5	1.25	
Service	Oct.		5 54		.2 5	138.50	
	Nov.	9	482		.25	120.50	
	Dec.	11	<u> 564</u>	1605.00	.25	141.00	401.25
Auto Mech-	Somt	3	109		.2 5	27.25	
anics	Oct.	4	226.5		.25	56.63	
aures		8	403.5		.25	100.86	
j	Nov.	5	230	969.00	•£5 •25	57.50	242.24
	Dec.		200	363.00	• & .	57.50	240 0 E 4
Elect.	Sept.	1	20.25		. 40	8.10	
Eng. and	Sept.	ī	37.00		• 60	22.20	
Col. Math.			91.50		.60	54.90	
	Oct.	2	99.00		•40	39.60	
	Nov.	1	77.00		• 60	46.20	
	Nov.	2	102.00		40	40.80	
	Dec.	1	28.50		• 60	17.10	
	Dec.	3	138.5	593.75	•40	55.40	284.30
mo+s3			orward	12077.50		20.10	\$3287.94
Total	s carl	Ted 1	OTMOTA				Achol eng

		No.	No.				
Location	Month	Emp.	Hrs.	Total	Rate	Amount	Total
Mannal	Com t	E	37		9.5	\$ 9.25	
Manual	Sept.	5 3			• 2 5		
Training	Oct.	2	138.5		• 30 • 2 5	41.50 15.95	
& Mach.			64.0 7.5			1.88	
Shop	Dec.	2 1		319.50	• 2 5 • 3 5		\$ 93.96
			72.5	213.50	•00	25.38	\$ 93.96
Dining	Oct.	18	1278.48		.2 5	319.62	
Hall	Nov.	17	1296		.25	324.00	
	Dec.		1111.6	3686.08	. 25	277.90	921.52
Music	Sept.		30		.25	7.50	
Dept.	Oct.		84		.25	21.00	
	Nov.	<u>_1</u>	6 6 .	180.00	•25	16.50	45 .0 0
	0 - 1	-	14.00		•	7 54	
Art.	Oct.	1	14.25	ge we	• 2 5	3.56	0.07
Dept.	Nov.	<u> </u>	21.5	35.75	.25	5.37	8.93
Building	Oct.	6	13 6.5		•50	68.25	
Const.			222	358.50	•50	111.00	179.25
<u> </u>	200					11100	
Printing	Sept.	1	147.5		.75	110.62	
Dept.	rí	1	29		.40	11.60	
	11	1	13		.25	3.25	
	Oct.	1	132		.75	99.35	
	ff	1	98 .7 5		•40	39.40	
	Nov.	1	99		.75	74.25	
	11	1	3 6		.40	14.40	
	tt	1	63.75		• 4 0	25 .5 0	
	Dec.	1	14.5		•40	5.80	
	11	1	95.5		•40	38.20	
	11	1	94	823.00	• 3 5	32.90	455.27
Library	Sept.		7.0F F0				
	Oct.	3	197.50		.25	49.37	
	Nov.	4	254.75	407.44	.2 5	63.68	
	Dec.	_4	170.75	623.00	.25	42.69	155.74
Post	Nov.	1				18.00	
Office	H	ī				18.00	
	Dec.	ī				18.00	54.00
To	tals			6025.83			1913.67
Brought		·d		12077.50			3287.94
Grand total				18103.33	\		5201.61

¹ Data secured from the reports to the business office of the Institute.

LIBRARY FACILITIES 1

The library is housed in the Losekamp Memorial Building. The reading room and library of reference books, most frequently used, is on the first floor in the south-west corner. The floor space is approximately 1600 square feet. A large room in the basement is used for books not often called for by the students.

The library contains 6,900 volumes divided as follows:

¹ Tabulation furnished by the librarian for the Institute.

THE POLYTECHNIC STATE

The male citizens constitute an independent state with the following constitution as its governing statutes:

CONSTITUTION OF THE POLYTECHNIC STATE¹
September 18, 1928

Article I

EXTENT OF POWER

Section 1. The Polytechnic State, by virtue of authority vested in it by the directors and the board of trustees of the Billings Polytechnic Institute, shall enact, administer, and enforce such laws as seem necessary for the general welfare of its citizenship and the Billings Polytechnic Institute, and which are not contrary to the regulations of the school.

Section 2. The Polytechnic State shall not be responsible for, but shall cooperate with the administration relative to passes for leaving campus, and smoking on the campus.

Article II

RIGHTS AND DUTIES OF CITIZENSHIP

Section 1. All resident male members of the Billings
Polytechnic Institute shall be citizens of the Polytechnic
State unless legally deprived of the rights of citizenship.

Section 2. No citizens shall be deprived of citizenship except by the unanimous decision of the three justices
of the court, and of the educational director of the Billings Polytechnic Institute.

¹ Copy of the Constitution of the Polytechnic State as on record in the dean's office of the Institute.

Section 3. No person legally deprived of his rights of citizenship shall have any right to demand protection of the state.

Section 4. Any person legally deprived of the rights of citizenship may again be taken into citizenship only by such person showing his worthiness and desire to again be taken into citizenship, and by the action of the legislature with the approval of the court.

Section 5. All citizens not under sentence for law breaking shall be entitled to vote upon all questions which are submitted to a vote of the citizens.

Section 6. It shall be the duty of every citizen to uphold and obey the laws of the state, and to report to the proper authorities all law breaking of which he is a witness.

Article III

DISTRIBUTION OF POWERS

Section 1. The powers of this state shall be divided into legislative, executive, and judicial departments, and no person charged with duties in one of these departments shall have any power in either of the others except as permitted in this constitution.

Article IV

LEGISLATIVE DEPARTMENT

Section 1. The legislative powers of state shall be vested in a house of representatives, the members of which

shall be elected from the citizens at a general election.

Section 2. The state shall be divided into two representative districts. The citizens of Kenney Hall shall constitute one representative district. The citizens of A, B, and C dormitories together shall constitute one representative district.

Section 3. Citizens who do not belong to either district may become citizens of either district by filing notice of their choice with the secretary of state.

Section 4. Each district shall be entitled to one representative for every ten citizens.

Section 5. The house shall have power to determine rules for its procedure and rules regulating the conduct of its members while in session, and shall appoint a sergeant-at-arms from the citizens of the state.

Section 6. The house of representatives shall meet in regular session at such times as it may determine, or in special session at the call of the governor. The first session shall be called by the governor or by the school authorities.

Section 7. A bill, in order to become a law, must pass thru the following stages:

- (a) It must be proposed by a member of the house by the presiding officer, or by the governor.
- (b) It must pass the legislature by a majority vote except as hereinafter provided.

Section 8. Should the governor disapprove of any act of the legislature, he shall return it, together with his objections, to the secretary of state. The secretary of state shall return the bill to the legislature for reconsideration at its next session, and if it is passed by a three-fourths majority of the house, it shall become a law.

Section 9. Should the governor neglect, or for any reason fail to sign or veto any act of the legislature within the two days after it is presented to him for approval, it shall become a law without his approval.

Section 10. Before becoming operative, all laws must be approved by the school authorities.

ARTICLE V EXECUTIVE DEPARTMENT

Section 1. The executive department shall consist of a governor, lieutenant governor, secretary of state, prosecuting attorney, state marshal, and district marshals.

Section 2. The executive officers, with the exception of the district marshals shall be appointed by the state marshal with the approval of the governor and the state court.

Section 3. The governor shall be the chief executive officer of the state, and it shall be his duty to see that all laws are faithfully executed.

Section 4. The governor, subject to the approval of the court, shall have power to fill all vacancies by appointment, and those appointed shall hold office until the

next regular election, except as hereinafter provided.

Section 5. The governor shall be chairman of the board of parole or pardon, which shall consist of the governor, the chief justice and the state marshal.

Section 6. The governor shall have power to proclaim holidays during which all laws, judicial decisions, and duties of officers shall be suspended and the government of the state given over to the educational director of the Billings Polytechnic Institute, or some person or organization designated by him.

Section 7. The governor shall have such other powers and duties as shall be provided in this constitution and in the laws of the state.

Section 8. The lieutenant governor shall preside at all meetings of the house of representatives.

Section 9. In case of the resignation, impeachment, death, continued illness, or other disability of the governor, the lieutenant governor shall assume the office of governor.

Section 10. In the case of the disability of the governor and the lieutenant governor the power shall revert to the educational director of the Billings Polytechnic Institute, who may fill the vacancy by appointment.

Section 11. The secretary of state shall keep all records of the state, shall act as clerk of the legislature, and keep a journal of the proceedings of that body,

and shall, in case of the absence of the presiding officer of the house, preside at their meetings until a chairman pro temporaneous may be elected.

Section 12. It shall be the duty of the prosecuting attorney to bring before the court all cases of alleged law breaking filed with him in which the said court would have jurisdiction, and to prepare and conduct on the part of the state until final judgment, all cases of alleged law breaking brought before said court.

Section 13. It shall be the duty of the state marshal to enforce all laws of the Polytechnic State, and to see that the orders of the court are executed.

Section 14. The state marshal shall have general supervision of all district marshals and their duties, and shall have power to call such officers together whenever he deems it necessary to plan for the best enforcement of the law.

Section 15. It shall be the duty of each district marshal to execute the orders of the state marshal, and to report to the proper authorities all cases of alleged law breaking which are with sufficient evidence reported to him.

Section 16. The district marshals shall have power, in case of necessity, to appoint deputies from among the citizens of their districts, and shall have full control over such deputies. Such deputies shall be subject to the same duties as are prescribed for the district marshals in

section 15 of this article. Citizens in this way deputized, shall retain power until it is revoked by the state marshal.

ARTICLE VI

JUDICIAL DEPARTMENT

Section 1. The judicial power of the state shall be vested in a court, which shall consist of a chief justice and two associate justices, one of whom shall be a member of the faculty, two of whom shall be necessary to form a quorum and pronounce a decision.

Section 2. The chief justice shall be elected at a general election. The associate justices shall be appointed by the chief justice with the approval of the governor.

Section 3. The chief justice shall have power to appoint a clerk of the court and to fix his duties.

Section 4. No person shall be eligible to hold the office of chief justice who shall not, at the time of his election, have been a citizen of the state for one year.

Section 5. The court shall have jurisdiction over the trial or impeachment of any executive or legislative officer, shall interpret all laws enacted and determine their consitutionality, and shall try all cases brought before it by the proper authority if within its jurisdiction according to this constitution.

Section 6. The legislature, when necessary, may sit as a court for the trial or impeachment of any judicial officer.

ARTICLE VII

RECALL

Section 1. The citizens of the state shall have a right known as the recall, by which they shall have the power to recall at an election held for that purpose, any executive, legislative, or judicial officer.

Section 2. Recall petitions must be filed with the secretary of state and posted in a publicly frequented place for at least two days before the election. The date, hour, and method of election must be specified. The petition must specify the charges of impeachment.

Section 3. It shall require a vote of a majority of the citizens to recall any state official.

ARTICLE VIII

ELECTIONS

Section 1. A general election for the purpose of electing state officers shall be held within the first two weeks of the second half of the school year. The period between these elections will be considered one term, but all state officials shall continue their duties until their successors are elected and inaugurated, or appointed after said election.

Section 2. All officers elected or appointed shall serve one term except as otherwise provided in this constitution.

Section 3. The educational director of the Billings

Polytechnic Institute shall appoint a committee of three students, with two faculty members who shall act in an advisory capacity, to act as a nominating committee and conduct the election of all executive and judiciary officials.

Section 4. The committee shall make nominations and conduct the election in such a way as it deems best. Notice shall be posted in a publicly frequented place at least twenty-four hours previous to the election, setting forth the hames of the candidates to be voted upon, the time, place, date, and manner of election.

Section 5. The governor shall appoint judges of election and otherwise arrange for the election of the legislative officials within two weeks of his inauguration.

ARTICLE IX

AMENDMENTS

Section 1. Amendments may be made to this constitution by the amendments passing through the following stages:

- (a) They must originate in the house of representatives and pass that body by a three-fourths vote.
- (b) They must be passed by a three-fourths majority of the citizens voting at a special election that
 shall be called by the governor for that purpose.
- (c) They must be posted, in full, in some publicly frequented place within this state for at least two days before the election at which they are to be voted upon.

BILLS

Since the adoption of the constitution bills have been adopted relative to cleanliness and personal appearance, smoking, theft, searching rooms, disposal of rubbish, absence from legislative meetings, destruction of property and handling of fines.

The student self government has little to recommend it as a worthwhile phase of the institution for the following reasons:

- l. The mental growth of the student group is not sufficiently mature to appreciate the standards set up and the importance of the proper discharge of the responsibilities of law enforcement and law abiding.
- 2. The degree to which the citizens are in favor of the laws is comparatively low.
- 3. The speed of trial is slow and consequently the effectiveness of the penalty is discounted.
- 4. The officers have not had any appreciable experience in line with their duties.
- 5. The background of life experience of a large part of the student group has not been in accordance with the laws set up to govern the citizens on this campus.
- 6. There are no special previledges or rewards for those who show a good citizenship record.
- 7. The laws have been largely dictated by representatives of the administration during preceding years

of the school and are now handed down to student groups as they enter each year, a very large percentage of them coming in for the first time.

- 8. A large percentage of the student body is new each year as many students only attend one year.
- 9. The turnover in citizenship membership is very rapid compared to the usual civil state citizenship.
- 10. There is no authority delegated to one or more responsible faculty members.

It is a well known fact that giving a man a title does not predicate that he will be able to discharge the duties of the position for which he bears the title. That is, giving a man the title of superintendent does not make the man a superintendent except in name. In addition to the title he must have those qualities of leadership developed to the degree which will predicate a desirable discharge of the responsibilities of the position.

rew of the students coming to Billings Polytechnic Institute have had the opportunity to develop leader-ship qualities to any extent if they were blessed with these latent qualities at birth. A second factor which enters into this particular situation is that of the type of students who are attracted to the institution. In many cases they are students who for one reason or another have not had the usual educational opportunities of to-day or if they have had them they have not been in a position to

prefit by them. It is a general feeling among the faculty members that the general intelligence level of the student body is lewer than that of most student bodies of a similiar size, which probably means less ability to appreciate the standards set up in their new surroundings. Those who possess normal or better intelligence have in most cases been isolated from most of the phases of life which develop leadership qualities. Some of the phases which might be mentioned are gang life of the boys, organizations of the larger schools such as athletic teams, debating clubs, class organizations, boy scouts and the other usual extra curricular activities.

STUDENT ORGANIZATIONS 1

Literary Societies. Since the early days of the institution, the school has sponsored three literary societies, one for the young ladies - the Alphas, and two for the young men - the Pioneers and Eagles. These organizations give private and public programs. They meet regularly once each week.

"Polytechnic Church. Ever since the organization of the Institute a non-sectarian church has been maintained. The church has charge of the Vesper services Sunday afternoons. This church is a member of the Larger Parish of Congregational Churches in Billings. The Vesper service each Sunday afternoon is in charge of the minister of the First Congregational Church of this parish.

"Lougee League. One of the largest and most active student organizations is the Lougee League, named for Mr. and Mrs. Willis E. Lougee, and aiming to carry out in a practical way the underlying principles exemplified in the lives of these good friends of the Institute. The principles are, "Helpfulness, Friendliness, and Prayerfulness." The league is a member of the Montana Christian Endeavor Union. It meets each Sunday evening for a discussion of some religious topic. The past year the program sent out by the International Christian Endeavor Society has been followed.

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 pp.15-16.

SCHOOL OF VOCATIONS

The school of vocations is made up of the classes in agriculture, auto mechanics, engineering, home economics, machine shop practice, and manual training.

Agriculture; The class in this subject is taught by Mr. Lund. It meets in the basement classroom of Science Hall. There is no equipment other than text books for classroom study. However, frequent trips are made to different parts of the Polytechnic farm as well as to other points of especial interest to agricultural students.

The instruction is conducted largely on the discussion group plan.

Auto mechanics; The classes in auto mechanics meet in the basement of the Industrial Building. One corner is set aside for the classroom. Mr. Aldrich is the instructor and conducts his instruction largely on the lecture and laboratory plan. After a certain amount of material has been covered in the lecture of the students are assigned to laboratory work on a car dealing with the application of material covered in the class.

Electrical Engineering; All classes in electrical subjects meet on the second floor of the Industrial Building. The classes are under the leadership of the writer. The subjects cover direct currents, alternating currents, electrical layout design, vocational electricity and radio.

The classes in direct and alternating currents cover the general theory and laboratory experiments common to these subjects and within the ability of the students. The abilities of the students differ from that of the usual groups taking these subjects in that they do not have as good a foundation in mathematics and physics. These subjects are offered earlier in the school life of the individual than is true in most colleges.

The class in electrical layout design is assigned a problem within the ability of the group. They call for help from their instructor when their resources fail.

Those who are registered for the vocational electricity get experience in wiring for light and power, trouble shooting and motor and transformer rewinding. Much of their work is out on the campus on an actual job of installing new wiring or equipment or making additions to existing installations.

The method of instruction is the contract and individual conference plan for the theory and the usual method for laboratory work. In the plan used for the theory the work for the year is proportioned by weeks for the entire year. If the work is reported ahead of the assigned time extra credit is given and if late, credit is deducted.

Home Economics; The only class in home economics now being conducted is in sewing. This is under the leadership of Miss Clark and meets in the domestic science

rooms in Kimball Hall. The laboratory method is used in the instruction.

Machine Shop and Manual Training; This work is conducted by Mr. Martin on the usual laboratory plan applicable to these subjects.

DIVISIONS OF THE INSTUTUTE

The Institute is now divided into five schools, namely: vocations, academic, fine arts, business, and physical education. The details of the organization are not complete. The major change in the minds of the directors is apparently to place the responsibility for the vocational school on one man, who will do some teaching and supervise the other work. What changes or possible changes are to be made relative to the other schools has not been made public.

ACADEMIC SCHOOL

"The academic school includes the division of the academy and the college. Opportunity is given to students registered in this school to choose electives freely from the other schools of the Institute."

The requirements for admission to the adademy division of the Polytechnic are a satisfactory evidence of good character, a sincere purpose, and the ability to make good. Satisfactory completion of any course schedules of the academy division is recognized by the granting of a certificate of graduation.

The college division, a subdivision of the a-cademic school offers two years of college work. The requirements for admission to this division are the same as for the state schools."

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 p.49.

² Ibid. p.51.

The sub-departments of the academic school are English, foreign languages, mathematics, and science.

Under the department of English are grouped,
English, public speaking, vocational English, religious
education and journalism. These subjects are taught by
Mr. Aikins, Mrs. McKenzie, Mr. Barnes and Miss Weydemeyer.

The foreign language group includes Latin, Spanish and German. Mrs. McKenzie teaches the Latin and German and Miss Shirk teaches the Spanish.

The mathematics include elementary algebra, plane and solid geometry, advanced algebra, trigonometry, analytic geometry and calculus. Mr. Kline, Mr. Dixon and Miss Johnson teach the high school mathematics and the writer is responsible for the mathematics of college grade.

The science group consists of general science, biology, botany, physics and chemistry. These subjects are taught by Mr. Dixon, Mr. Lund and Miss Hansen.

In addition to the above named subjects of the science group are also those of the social science group namely; philosophy, religious education, civics, history, psychology, sociology, logic and ethics. These subjects are taught by Dean Ward, Mr. Barnes and Mr. Lund.

SCHOOL OF FINE ARTS

"The department of fine arts includes the courses offered by the Polytechnic Conservatory of Music as well as those included in the schedule of art and dramatics.

This department is located in the Losekamp Memorial Building. The conservatory of music also maintains a downtown studio in the Empire Building." 1

Instruction and training is given in chorus, glee club, orchestra, individual voice, piano and pipe organ. The instructors in the conservatory of music are Mr. Loftus Ward, Miss Garrett, Miss Shirk and Miss Croes.

The Polytechnic Conservatory has exclusive control, for teaching purposes, of the new Moller organ in the First Congregational Church in Billings. This is a two manual organ with approximately 1000 pipes and a registration of 37 stops besides all necessary control machinery. It is at present the largest organ in eastern Montana.

"Thru the extension department the conservatory contracts with public school boards of the nearby districts to furnish public school music instruction. This instruction is to be outlined and personally supervised by a member of the music school faculty of the Institute.

"The department of art offers training in all of the important phases of art study. In general, applied

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 p.66.

art is emphasized, but any student showing talent for a particular branch of art is given individual encourage—ment according to his interests. The purpose of the courses is to give a thoro grounding in the fundamentals of drawing, printing, design and art appreciation, thru actual experience in handling many different mediums.

Many practical problems are worked out in cooperation with the print shop, and other departments of the school. Programs, place—cards, posters, advertising bulletins, stage equipment, lamp shades and designs for rugs are some of the things which the art department is called upon to make or design for other departments or organizations of the school. "2

The school print-shop provides a laboratory for art students. The art department in cooperation with the printing department, carries out printing projects which include tone and color printing with linoleum blocks, the use of zinc and half tone etchings, designing and printing Christmas cards and calendars, advertising folders and the arrangement of printed pages, and posters, and the make-up of booklets.

Miss Weydemeyer is the instructor in art work.

THE SCHOOL OF BUSINESS

The school of business of the Billings Polytechnic Institute is an entirely separate unit of the institute. The school is housed on the second floor of the Empire Building in Billings. The registration for the business courses is taken care of at the business office of this department. Consequently, the records of the Dean of the institute do not include those of the students registered only for business. Some of the students registered at the Polytechnic proper also take work in the business school.

The work in the school is very largely individual which permits one to progress as fast as his ability and time permit. The size of the classes vary in number from one to 60, and in age of its members from 17 to 45.

The number registered at the time of the survey, the forepart of March, was 126 of which about 40 percent were boys. 1 There is quite a variation in the number enrolled as many register only for one course, which due to the possibility to progress as fast as they are capable, enables them to complete the course in comparatively short time. Many register just for the instruction on one machine.

The school offers one year of work in business and accounting in advance of the regular business college

¹ Data furnished by the principal of the School of Business.

course. The courses are classified as business machine course, accounting and business administration, bookkeeping, complete business course, stenographic course, accounting course and secretarial and civil service courses.

The regular business college diploma is granted to all students completing any of the several courses.

The degree of honor graduate in business is granted by the National Association of Accredited Schools to those who complete the complete business course.

Students who have had three years of high school training with the corresponding credits for this work may offer these credits at the Polytechnic Institute. These credits with one full year's work in the business college will entitle them to a diploma from the academy department of the Polytechnic.

This department of the Institute was moved to Billings with the hopes that more of the local people of Billings would be drawn there to take business courses and to meet the competition of another local business school.

SCHOOL OF PHYSICAL EDUCATION

"The directors of physical education aim to develop organic power which is the basis of vitality, and the prerequisite to physical and mental education; to secure and maintain a harmonious muscular development; to provide an incentive and opportunity for every student to secure physical recreation as a balance to sedentary habits of college life; to provide an outlet for surplus physical energy; to conserve the social and moral value of games and sports; to establish high ideals and efficient administration of athletics; to qualify students for expert service in conducting the kindred activities of physical education.

"Health and hygiene are presented at intervals in ledtures to groups of the student body.

"All entering students are given medical and physical examinations, and the abilities of the students determine the scope of their activities in physical training, and classification for any form of athletic competition. A careful survey of their personal habits and physical condition is made and charted, and their health is carefully watched with periodical examinations. Special corrective work is given the individual with remarkable physical defects. Credit is given for health attainment, and students are expected to correct faulty habits." 1

¹ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 p.75.

The instruction in this school includes general preparatory work, pedagogy and administration, first aid, athletic training, public school physical training, and applied physical training.

RESULTS

This study of an institution which has struggled for existence and is still badly in need of funds to pay operating expenses has been a fruitful one. The study of the history of its growth reveals a constant growth in facilities and the fact that thru some method and many times from some unexpected source money has always come to pay the operating expenses and build new buildings.

The school is located in a growing industrial and agricultural center where the demand for an educational institution is good.

The organization of the school is good, altho, a little weak in that the board of trustees is not sufficiently financially interested to take the responsibility it otherwise would.

tively new with the school. Very few have been with the school more than four years. The rapid turnover in faculty seems to be due to several reasons. One is the irregular system of paying salaries and the assumption in the business office that if an employee needs his money he will call for it: Or in other cases there has been no money to pay salaries for several months at a time which has made it necessary for the employees to carry open accounts with the merchants in Billings longer than was agreeable with

either of the parties concerned and has resulted in a voluntary change on the parts of the employees.

The record of the past two years shows an improvement in the business methods relative to handling accounts and paying employees.

The survey of the enrollment shows a large teaching force as compared to the number of students. The classes in most cases are small and the number of subjects large as compared to schedules of other institutions with a similar enrollment. The opportunity is especially good for those who have fallen behind in their school work for one reason or another and are now anxious to progress as fast as possible and consequently need the help of the instructor in individual conferences.

The aim and effort of the institution is to accept anyone into the school regardless of his or her financial condition so long as that individual has a real conscientious desire to obtain an education and a willingness to work for it.

New buildings and equipment have been added continually since the founding of the school but the demands for industrial instruction have been greater than the growth in buildings and equipment, consequently, those departments are handicapped in their efforts to give the desired instruction. Agricultural opportunities are good but the methods of handling the work are inefficient due

largely to efforts to use student labor as far as is at all possible.

The student self-help or industrial plan is a very commendable one and is functioning very well. The demand for this type of work is usually in excess of the supply of work. The plan of the directors is to provide more industries as fast as the finances will permit.

Library facilities of the school are fair but not in keeping with the demands made by the work which is offered here. Since this survey was made the ground has been broken for a new library building for which the money is available as well as for many new volumes which are to be added.

The student self-government effectiveness depends on the particular group in power. In general, it does not have much to recommend it as a worthwhile phase of the school.

The divisions of the school are such as to provide opportunities for all types of desires for an education and should be conducive to real growth. The present property value of the school is good and the response to solicitation for funds to create an endowment fund is very good. The campaign for these funds amounting to \$1,500,000; was started about two years ago.

SUMMARY

August 4, 1908 under the laws of the state of Montana. The credit for the foundation of the institution goes to two brothers who were born in the state of Maine. These two brothers, Lewis T. and Ernest T. Eaton were born and raised in circumstances which made it necessary for them to work their way thru school.

After graduating from college Ernest T. Eaton came to Montana as superintendent of schools at Deer Lodge. Here he had the opportunity of studying the educational conditions of the region and noted the lack of opportunities afforded the young people. The parents of that time were largely pioneers, or sons and daughters of pioneers who were struggling to get a foothold and were finding that financial means necessary to send their children away to school were not available.

for the neglected young people and supporting the enterprise by free-will contributions from the public. A school
of this type was opened in Deer Lodge in 1904, but due to
unfavorable conditions it only lived four years. After
the plan for opening the school had taken form in the
mind of Ernest Eaton he interested his brother Lewis T.
Eaton, who was then connected with a middle western teach-

er's college.

After giving up the school at Deer Lodge due to lack of facilities for providing self-help for the students and to an unfavorable attitude on the part of the board of directors toward the particular type of school, Billings was chosen as the new site for the second attempt.

Before the second attempt was made to open a school the two brothers spent considerable time in the east interviewing educators and friends.

In the spring of 1909 land had been purchased and in July the buildings had been staked out and active preparations begun for the opening of the school which had been announced for October 9.

The school opened in scattered rooms in Billings.

About 100 young men made up the first enrollment. During the first few weeks of school the Polytechnic Church was organized as the result of a petition signed by 53 students.

The money subscribed by the people of Billings was depended upon to erect buildings and pay the running expenses. During the summer following the close of the first year the leading bank in Billings failed and large sums of money were tied up indefinitely. Much of the money tied up was money which had been pledged but not paid to the Polytechnic Institute. This of course caused hard times for the school.

The history of the school is one of struggle and

in many cases apparent failure but in every case the needed money has been secured in time to avoid having the doors closed.

"Twenty-five years ago the Eaton brothers dedicated their lives to the cause of Christian education on the great Northern frontier. They had nothing to back them but an idea, determination, and boundless faith in the Infinite.

"From the idea has grown Billings Polytechnic Institute with buildings, land and equipment valued at nearly \$600,000. It has 278 acres of the best irrigated land in the state of Montana, used for campus, orchards, gardens, and demonstration farms, and in addition to this 800 acres of ranch and farm land scattered in several counties. It has eight beautiful stone buildings erected from its own quarries, also a brick building and several frame dormitories."

The Billings Polytechnic campus is located in Yellowstone County three miles west of Billings. "The combination of irrigated and non-irrigated lands affords an excellent opportunity for all types of farming and stock raising, as is conclusively demonstrated by the \$10,000,000 annual income produced by its 2,000 farmers." 2

"Billings has a population of 17,500 and is a thoroly modern city in every way, with the development, appearance and life of a community very much greater in

¹ The Story of the Billings Polytechnic Institute.

² Book of Montana.

size. It has 26 miles of paved streets, municipal water, sewer, street lighting and garbage disposal systems, cheap electricity and natural gas, a swimming pool, three city parks, five public play grounds, two hospitals, a large public library, and is served by a motor bus service. It is the distribution center for a large area and consequently enjoys a large wholesale trade.

"Yellowstone County has a frost-free period of 133 days, and one of the highest mean annual temperatures in the state according to records covering a large number of years.

"The Institute is incorporated under the laws of Montana. It is under the control of a self-perpetuating board of trustees. In addition to the managing board there is an advisory board, made up of men from all sections of the United States. This advisory board, or council, receives reports and bulletins issued by the Institute and its members are invited to visit and inspect the school from time to time and advise with the directors and managing board regarding its best interests. The two directors are elected by the board and have general oversight of the affairs of the corporation and give their entire time and attention to the educational and financial interests of the institution." 3

"The expenses of an education at the Billings
Polytechnic Institute are shared by the institution and

the student. The student is asked to pay only about one-half of the actual expenses at the school, which are from \$900 to \$1000 for the school year of nine months. It is the aim of the institution to give every boy and girl use-ful training under Christian supervision. That this training might be within the means of every ambitious boy and girl, the directors, through correspondence and personal appeal, have sought the assistance of friends of Christian education in making it possible for the young people of the West to attend school." 4

The range in age of the students is from 13 to 37 years. Sixty-three percent of the student body were listed as church members at the time of this survey. The larger number of the students come from Montana while Wyoming ranks second and Colorado, Iowa, Illinois, California, Minnesota, Oregon and South Dakota are represented by from one to four each.

For the benefit of these students scholarship funds amounting to between \$30,000 and \$40,000 have been established. In some cases the money is invested and the interest is used to help the student, while in others, funds are drawn on directly.

With the exception of four frame dormitories, the buildings on the campus are built of lasting material. With the exception of the first building to be built, all of the permanent structures are of stone taken from the

⁴ Billings Polytechnic Institute Bulletin Vol.21 No.10 March 1930 pp.18-19.

quarry on the north edge of the campus.

The equipment provided for instructional purposes is rather meager and the instructors are depended upon to arrange their courses of study in keeping with the facilities available.

The industrial or self-help plan of the school states that "One of the aims of the Billings Polytechnic Institute is to give every boy and girl a chance to secure a useful education. The requirements for entrance is an honest desire to train one's God-given powers to the best advantage, rather than the desire to acquire the mere ability to pass an examination in some text book in order to reach some artificial standard. The true test of a student's ambition for education is his determination to secure it regardless of all handicaps. Lack of financial means to pay for room, board and tuition is often the chief difficulty to be removed.

The Institute offers to share this burden but it goes still further by providing opportunity for the student to earn a large part of his share of the cost of attending the school. That this assistance may be offered, industries are being developed so that no worthy student shall be turned away for lack of funds." 5

The self-help opportunities are grouped under the work pertaining to agriculture, dining hall service, janitor service, electrical maintenance and construction, building construction, plumbing and heating, poultry, bees, transportation, pest office clerk and class room assistants.

The survey has shown that for four months ending December 31, 1929, \$5,201.61 was credited to students for self-help work. This represented over 18,000 hours of work at rates ranging from 25 cents to 60 cents per hour.

The number of students registered for various subjects varies from one to 37 with an average of about 12 per subject.

The average number of classes per instructor is three. Many of the instructors have administrative duties and self-help supervisory duties in addition to the regular teaching duties. Much of the work is on the individual conference and contact basis which requires much more of the time of the instructor than the usual class recitation plan does. However, this plan makes it possible for the students who must enter school late in the fall or quit early in the spring to work independently of a class and to progress as fast as their ability and time will permit. In case the student's self-help duties interfere with his regular class schedule it is necessary for him to meet his instructor at some other period.

The value of personal contacts with other students and faculty members is stressed. This is quite an advantage to many, in that many of the students have lived in isolated districts where their associations have been

limited and their opportunities to develop desirable social habits has been meager.

The Institute is divided into five schools, namely:
vocations, academic, fine arts, business and physical education.

A study of the survey reveals the fact that the Institute offers work of a practical nature which is in keeping with the idea of vocational educators and also offers the usual academic training of the standard high school and the first two years of college work.

CONCLUSIONS

The conclusions reached in the mind of the writer are that the school has a real place in this region with the demands for the type of education offered. That the visions of the founders and directors are worthy ones. That 21 years of continued growth is indicative of a continued growth in the future and altho its future, at times, may be clouded due to lack of finances there will surely be money from somewhere, eventually, as there has always been in the past. That the opportunity for a faculty member to grow with the institution is reasonable, although the prospects of receiving a comparatively high salary are not very good. That the opportunities for experimental work in teaching are unusually good. And that the supervision of the faculty is very lax.

BIBLIOGRAPHY

The Story of the Billings Polytechnic Institute
Published by the Billings Polytechnic Institute

Billings Polytechnic Institute Bulletins

Volume 5, No. 8, May 1916

Volume 17, No. 8, May 1917

Volume 9, No. 4, July 1919

Volume 19, No. 12, Sept. 1928

Volume 20, No. 9, June 1929

Velume 21, No. 10, March 1930.

Billings Polytechnic Institute Annuals

1927, 1928, 1929.

Book of Montana

Published 1929 by the State of Montana.

STATE AGRICULT'L COLLEGE FORT COLLINS, COLO.