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Vol. 9 No. 103

January 1928

MINNESOTA CHATS



For a Better
Minnesota

Foreword

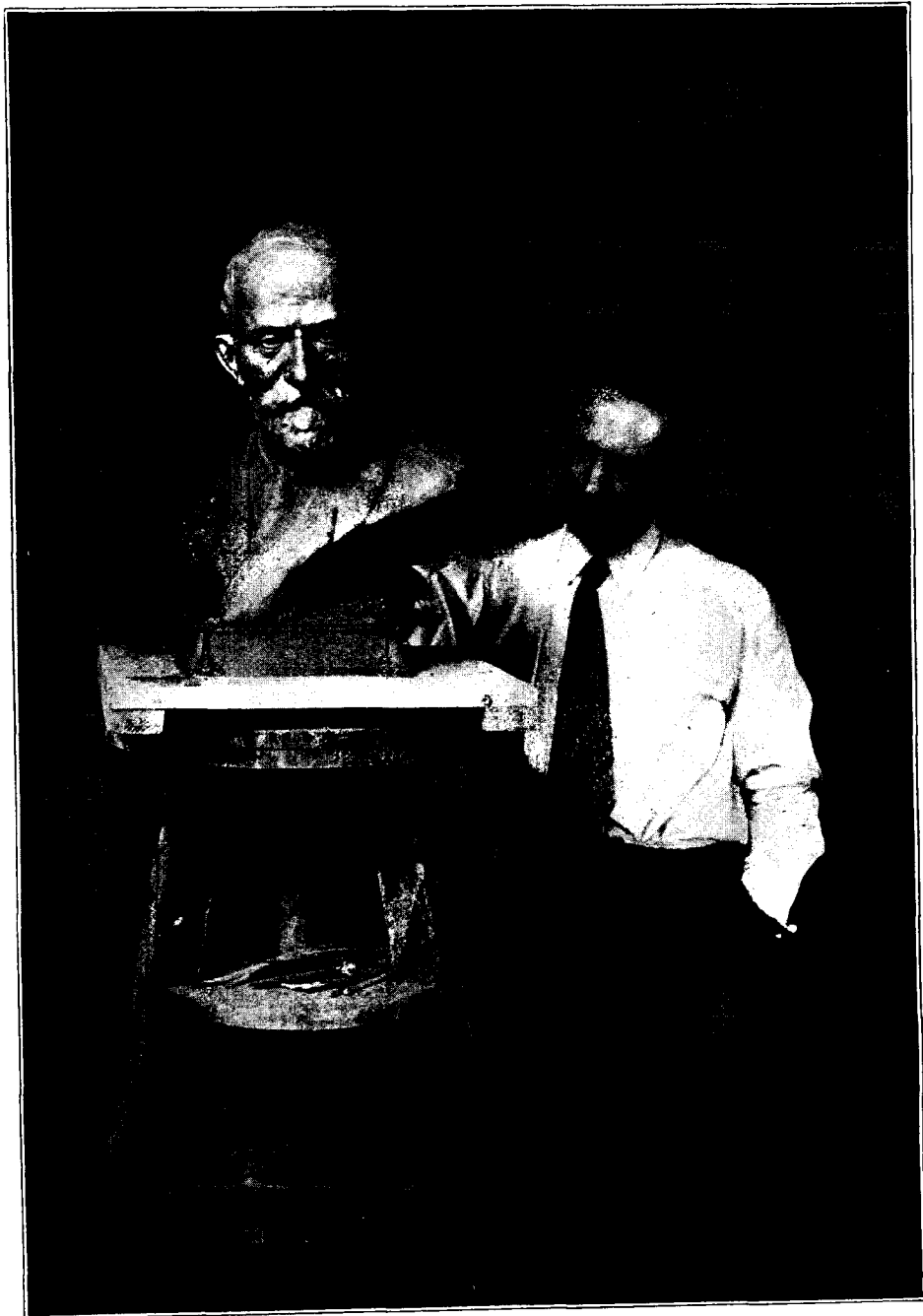
“MINNESOTA CHATS” presents in its current issue a description of the additions that will be built to the University Hospitals during the coming year, by which it will establish a service for ailing and crippled children, will suitably house its growing Outpatient Department, and will provide adequate examination quarters and hospital space for its Students’ Health Service.

SUPERINTENDENT PAUL H. FESLER, of the University Hospitals, put his finger on an interesting fact recently when he said that the University of Minnesota serves through its hospitals, some five thousand persons a year whom the University probably could serve in no other way.

FOR the most part these are men, women, and children, stricken with illness, who obtain careful and highly scientific treatment in the hospitals. Few of them are of an age or condition to take advantage of University instruction, and they comprise, literally, a group to whom the institution would be of small direct significance were it not for the hospitals.

THE William Henry Eustis Children’s Hospital is the first materialization of Mr. Eustis’s splendid dream of service to those who are handicapped. The Outpatient Department provides at small cost more than 75,000 medical and dental services yearly, and the Students’ Health Service performs the all-important functions of caring for the health of the University’s 12,000 students and giving painstaking medical, dental, and surgical care to those who fall ill. The hospital extension project is one of the most important in which the University has recently engaged.

MINNESOTA CHATS
Vol. 9, No. 103
published by the
UNIVERSITY OF MINNESOTA



Dr. William Watts Folwell at 95

Professor S. Chatwood Burton is shown with the bust of Minnesota's venerable first president, whose ninety-fifth birthday will fall on Valentine's Day

University Hospital Adds Three Important Units

Eustis Children's Hospital, Outpatient Department, and Students' Health Service Will Be Housed in a New Wing Now to be Built

DESPITE the many obstacles encountered by the University of Minnesota in its plan to offer a site on the University Campus for the erection of a general hospital by the City of Minneapolis, and the final rejection of that plan, a project has now matured by which the University will add three major hospital units from its own funds and will increase by nearly one-half the number of beds in the University Hospitals now available for service to the public.

Bids are about to be asked on the erection of the William Henry Eustis Children's Hospital, an Outpatient unit, and a building to house the University Students' Health Service. The three units will be linked together in construction and will connect with the main hospital structure, running at right angles to it at its western end as the Todd Memorial and George Chase Christian Memorial Cancer hospitals do at its eastern end.

The three new parts will add 148 beds to the hospital facilities and will bring the total to 448. They will cost in the neighborhood of \$900,000, including equipment, of which sum the \$250,000 required for the Eustis unit will be provided from accumulated income from gifts made to the University by William Henry Eustis.

Of chief importance to the state in these new developments are the facts that they will pro-

vide wholly adequate consultation and hospital facilities to the Students' Health Service, a thoroughly modern and satisfactory headquarters for the large outpatient service and dispensary conducted by the Medical School, and will establish as a reality the Children's Hospital to which Mr. Eustis has made such liberal contributions. The plans call for use in these buildings of between \$500,000 and \$600,000 allocated to the Medical School in the final disposition of funds for the Comprehensive Building Program.

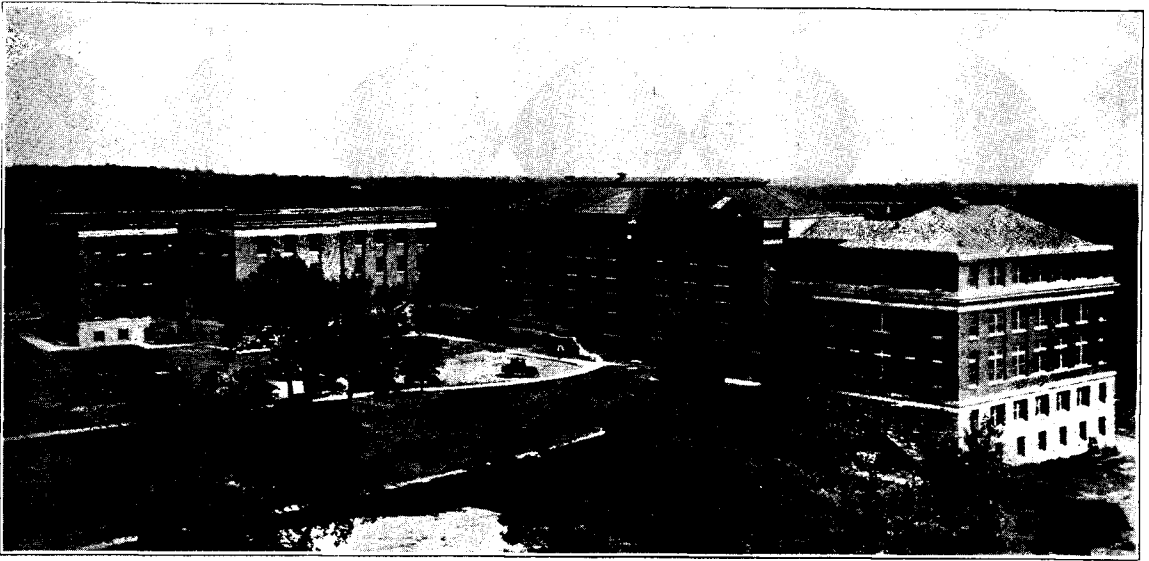
The need of the Students' Health Service for a new home may be seen from the following statistics of services rendered to students by it during the past year, as shown in the report of its director, Dr. H. S. Diehl: entrance physical examinations 4,673; periodic health examinations 1,371; dental services 10,552; dispensary visits 50,470;

house calls 407; hospital cases 985, involving 4,447 total days' care. This service, which has grown each year since it was established as a war measure in 1917, has been housed in the basement of Pillsbury Hall and has long since outgrown the space that could be allotted to it there. Addition of nutrition and mental hygiene services during the past year has made the need for larger quarters still more acute.

The Outpatient Department, likewise, has completely outgrown its present quarters in the



Paul H. Fesler
Superintendent of the University Hospitals



The Present University of Minnesota Hospitals

basement of Millard Hall. Furthermore, the space in Millard Hall is needed by the expanding staff of the Medical School for office and laboratory space. During the past year the dispensary treated 53,947 persons in its day clinic, of whom 14,819 were first entries; 6,920 patients in its night clinic, 248 of them first entries, and averaged service to 178.72 persons each day and 69.89 each night. Drug prescriptions were put up to the number of more than 21,500 and there were 2,440 dental cases.

It is assumed that construction of the William Henry Eustis Children's Hospital on the Main Campus will be followed in a year or so by the erection of the Convalescent Home which Mr. Eustis designated as one of the objects of his original gift. This home will be one to which children can be transferred after they have received as much care as the hospital can give. There they will be given an opportunity to regain health and strength before returning to their homes. This building will stand on West River drive, in the tract given by Mr. Eustis for that purpose, and adjoining the tract, also given by him, on which the City of Minneapolis has built the Michael Dowling School for Crippled Children.

Extension of the University Hospitals by the new three-purpose wing will also involve rearranging the service building at the west end

of the main hospital. A central University laundry will be installed there, to care for all laundering, not only from the hospitals, but from co-operative cottages, dormitories, and cafeterias. A kitchen to serve both the old and new parts of the hospital will be installed on the next floor up, together with a modernly equipped dish-washing "laboratory" and offices for student dietitians. A dining room for nurses and the house staff is also included in the plans. The two top floors will be devoted to hospital beds.

Mr. Eustis's Dream Materializes

THE first section of the new structure, extending at right angles to the main hospital building, will be the William Henry Eustis Children's Hospital. Here at last Mr. Eustis's dream of a hospital especially intended to serve crippled children will come true. But he has seen, also, the administrative desirability of imposing as few restrictions as necessary on the use of the hospital. For this reason its services will not be for crippled children alone, and it will admit children whose troubles are other than orthopedic.

The ground floor will be devoted to the uses of the department of pathology, and part of its space will be given over to a lecture amphitheater with a seating capacity of about 150.

This room will rise through and occupy part of the space on the second floor. The second floor will be used chiefly for the children outpatients who call for treatments rather than enter the hospital. It will be equipped with a waiting room and with cubicles where mothers can undress their babies and prepare them for examination. A diet demonstration room is to be fitted up, where mothers can be instructed in the proper feeding of infants and children. Offices of department heads will be on this floor, and the remainder of it will be devoted to locker rooms.

An assembly room and space for a school for those crippled children whose doctors find it necessary to keep them in the hospital for some time will occupy part of the third floor space. Here also will be a physical therapy department, with exercise apparatus, a pool, and a gymnasium.

Glass partitioned wards of four beds each will be installed in the part of this floor that is to be devoted to actual hospital purposes. The glass partitions will serve the purposes of cutting off sounds between the different sections and also of enabling the nurse, if but one is on duty, to see every baby on the floor. Connected with each floor on which there are hospital beds will be a solarium walled with a special glass that admits the ultra-violet light,

which is so important in its health-giving properties but is cut off from interiors when ordinary window glass is used. On this floor and the two above it corridors will be so arranged that doctors and nurses passing from the service building to the Outpatient and Health Service buildings beyond it will not have to go through the parts occupied by the youngsters. The fourth floor will be made into wards and an operating room for orthopedic cases, while the fifth will be turned into small wards especially designed for the care of babies. Here will be milk laboratories, rooms where students can observe children under treatment without entering the rooms where they are, special bathing arrangements for crippled children, and a dining room in connection with the diet kitchen. A special isolation department for children suffering from contagious diseases will be installed here. There will be sixty beds.

The roof house will be used as a playground for the small inmates of this hospital, and there will be a glassed-in room into which beds may be wheeled and their small occupants given an opportunity to enjoy the sunlight.

Plans for this unit and for the Outpatient and Health Service departments have been drawn under the general oversight of Paul H. Fesler, who came to Minnesota last year from Oklahoma to be superintendent of University

Architect's Drawing of the Three-Unit Addition



Hospitals, a position in which he succeeded the late Dr. L. B. Baldwin. He has spent much of the year in careful study of the best way to arrange and equip the new hospital divisions. As an example of the need for expanded hospital facilities for children he cited recently the fact that eighteen cases of hare-lip and cleft palate in children were then waiting for admission to the University Hospital but could not gain admission because the beds were full.

The Outpatient and Dispensary Section

The Outpatient unit will be one of the most important, providing, as it will, quarters in which to meet and care for the large number of persons who make use of this service each year. Last year more than 60,000 visits by outpatients were recorded on the department's books, and the number grows steadily.

A central pharmacy on the ground floor of this part of the hospital and on the main floor an admission department for the entire group of University Hospitals are included in the plans.

The medical department of the dispensary, occupying much of the first floor, will be provided with special examining rooms for gastrointestinal diseases, and for heart cases. There will be an orthodiascope, a special machine that makes a tracing to show the position and size of the heart, and also a fluoroscope, which enables the attending physician to look at the stomach and other internal organs. This floor will also have waiting rooms and rooms in which private consultations may be had with patients, or social workers may conduct interviews with persons seeking treatment.

This unit will be the headquarters for the social workers of the University Hospital, a staff of six young women who do follow-up work after patients have left the hospital, make home calls when these are necessary, investigate applicants for admission when it seems desirable, and perform similar services that facilitate the work of hospital administration and operation.

A Department for Women

THE long-felt need of a special department for women in the University Hospitals will be met, at least in part, by the establish-

ment of a women's section in this building. Special space will be set aside for work in obstetrics and gynecology. The outpatient cancer division, hitherto conducted in the George Chase Christian Memorial Cancer Hospital, will be transferred to the Outpatient building. On the top floor will be two delivery rooms, with rooms adjoining for the use of patients and physicians.

In parts of the upper two floors not otherwise used there will be 78 beds in two- and four-bed wards and some specially arranged private rooms for the use of pay patients. Besides items already mentioned the top floor will provide space for a children's unit in which non-orthopedic cases will be treated, a nursery, and special isolation rooms for children. The roof house will be used as a lounge, library, and recreation place for the staff of internes.

The Students' Health Service

An idea of the functions performed by the Students' Health Service at Minnesota may be gained from the following extract from the 1927 report of Dr. H. S. Diehl, its director, to President L. D. Coffman.

"To every student who enters the University, the Health Service gives a complete, thorough physical examination. Subsequent examinations are required of medical students, members of the Reserve Officers Training Corps, and candidates for athletic teams. The medical and dental staffs, in co-operation with the departments of physical education for men and women, perform these examinations. Upon completion of the examinations each student is advised of any physical defects which were discovered and later in the year those students who were found to have the more serious defects are re-examined to determine whether the defects have been corrected.

"During the past year a beginning was made on periodic health examinations. These examinations were thoroughly and carefully done, an average of an hour's appointment with a physician being allowed for each examination, in addition to preliminary tests, measurements, laboratory work and history taking. These examinations were offered to all students in the Medical School, College of Dentistry, and

Law School, and to seniors in other departments of the University. From these groups 1,371 were given examinations. Probably their greatest value lies in the individual and personal advice given to each student in regard to his habits, physical, mental, and emotional. With more adequate quarters it will be possible to extend this valuable service to a still larger proportion of the student body."

It is to provide adequate quarters for this important branch of student welfare work that the Health Service Hospital is being built. The top two floors will be hospital floors, with an adequate number of beds to care for students who must be hospitalized and an arrangement under which these beds may be devoted to general hospital purposes in those periods of the year when relatively few students are on the campus.

The main floor, which will be above the ground floor, will be divided into a large and attractive waiting room with offices for the student outpatient department, and about ten offices for general medical services. Space will be provided also for the new mental hygiene and diet services which were begun this year. Here will be the central record system, a suite of offices for nose and throat work, and the offices of the administrative and business heads of the Students' Health Service.

About a dozen offices for the conduct of the periodic health examinations will be situated on the ground floor together with physiotherapy units, including ultra-violet light and X-ray

equipment. Space will be allotted to the dental department for its laboratories and practicing division, with eight dental chairs.

Operation of the service will continue on the same plan as in the past, with most contacts made with students who call for examination, treatment, or to see one of the physicians in order to get a class excuse on account of illness. But in addition to this the Health Service sends staff physicians to call on students who are ill in their rooms, if the students request it, and cases of some severity are cared for in the Health Service Hospital. The present hospital, in the basement of Pillsbury Hall, has been inadequate for several years.

Minnesota's Students' Health Service has been widely recognized as one of the best in the United States. Its director, Dr. Diehl, was re-elected at Christmas time to a second term as president of the American Student Health Association.

The cost of the new hospital units will be divided approximately as follows: Children's unit, \$225,000 with \$25,000 for equipment; Outpatient unit, \$380,000 with \$40,000 for equipment; Health Service, \$200,000, with some new equipment to be purchased from funds accumulated in Health Service fees; Service unit reconstruction, \$40,000, with some additional expenditure for equipment.

Superintendent Fesler expects that construction will start about April 1 and will be completed in a year.

Agriculture--A Business or a Mode of Life?

A Paper Delivered Before the Annual Meeting of the American Association of Land Grant Colleges

By Professor Andrew Boss

Vice-Director of the Agricultural Experiment Station

THE agricultural industry can never become static. Change rather than stability will always mark its history. Because of its newness and its greatness the agriculture of America changes more rapidly than the agriculture of longer established nations. America leads the world in the production of agricultural products per capita and yet, in the period of depression just passing, grave doubt has been cast upon the efficiency of the American farmer and the economy of American agricultural production.

It may be well at this time to give consideration to the present status of the agricultural industry and to consider the trends in agricultural production and the reactions in social demands. Some believe that farming is becoming decadent in America, that it has passed through its most profitable stage and is now headed toward the peasant type. It has been suggested that our farmers are inefficient; that they do not possess the habits of thrift and industry nor the skill of European farmers and that they lack knowledge of the principles of good farm management. Some urge that farming be organized into business units rather than as family homes. These are grave problems that demand attention. It is our duty as public servants and as scientists to anticipate errors in practice and to point out improved methods of organization and production for the good of our farmers on the ground that what is good for them is good for society as a whole.

I have been asked to discuss farming as a mode of life compared with farming as a business. In opening the subject it seems to me necessary to repeat some facts and statements which are familiar to most of you. I have thought best to present first the background of farming as a mode of life because it explains and perhaps justifies some of the attitudes of our farmers toward the more businesslike procedure.

America is a nation of large land resources. It has always been, and is yet, a national policy to encourage land settlement. In the early life of the nation this was a necessity for the purpose of creating material wealth and security. In later years it has been justified by the desire to develop the potential natural resources and to gain a place in world commerce. Even yet, if we are to judge from acts of Congress and executive rulings, it is regarded as advisable to open up new reclamation and irrigation projects and stimulate land settlement.

There have been at least two good reasons for favorable reactions to this policy. The first is that up to the present time land of good quality has been abundant and easily obtained. The pre-emption system of the early days, followed by the Homestead Act of 1862, made it possible for settlers to secure tracts of 160 acres or less at low cost and on easy payment plans. The Tree Claim Act in some of the prairie states, the Grazing Act, and other special enactments were also effective in stimulating people to settle upon and till the land. In the second place, self-sufficiency was the keynote of early American agriculture. Each farm family hewed and sawed the timber needed for buildings, made its own furniture, cured its own meat, made its own butter and cheese, spun and wove its own linen and wool, and cobbled its own shoes. There were consequently few factories offering employment and no industries of consequence competing with agriculture for the labor and management of the people. Prior to the Civil War there was little to disturb the spirit of self-sufficiency held alike by citizens and government. Upon the close of the Civil War, in the absence of industries to give employment, and with great bodies of fertile land untouched, the Federal Government was well content to encourage returned soldiers to homestead tracts of land and to engage in farming

where they could at least produce their own subsistence. There are a few in the audience who will remember that at that time "Uncle Sam was rich enough to give us all a farm." The national objective was a self-sufficient agriculture with the majority of the people living upon the land. These family farms were designed to support the farm families. Surplus products were sold for what they would bring on local markets. The family size farm has been held up as an ideal in the education of the American citizens and has become an American tradition. Thus has farming developed as a mode of life rather than as a business.

The Fruit of the Policy

Agriculture has just been passing through a period of distress so great as to provoke wide debate and become a matter of controversy between the industrial and agricultural classes. The national Congress has been drawn into the controversy and it may even yet become an issue in the next election.

During this period these "self-sufficient, family unit" farmers have been severely criticized as shortsighted, inefficient, and lacking in good business management. There is evidence that in some cases the criticism has been warranted. May I venture the opinion, however, that in these respects farmers are neither worse nor better than those engaged in other vocations. It is true that some farmers have failed. So also have some storekeepers, many bankers, and businessmen engaged in other lines. Why center criticism upon the farmer?

Farmers exert themselves as much as is necessary to secure the material and mental satisfactions they desire. They react strongly to price stimulation when money values are high. When their desires are satisfied or money demands become less active, they relax in their efforts to produce. In these respects they are no different from others in the social fabric.

Farms Produce a Surplus

In following farming as a mode of life American farmers have amply demonstrated their ability to produce more than the rest of society is willing to pay a profit bearing price for. One demonstration of this fact was given

in the '70's when the full effect of the homesteaded farms was felt upon the national and world markets, which were at that time badly demoralized. At various times prior to 1914 there was immediate response in production to expressions of demand for farm products in the form of favorable prices which well illustrated the reserve or latent power to produce which lies in these family farm units. It was during the war period, 1914-18, however, that the most illuminating demonstration was given of the power of this national reserve.

Responding to the urge of patriotism in providing food supplies to the allied armies and to the stimulation of favorable prices, the farmers of this country produced such an abundance of agricultural products as to swamp the markets of the world. So productive have the farmers been that it has been regarded necessary by the Federal Government to advise restriction of production and abandonment of further land development, at least temporarily. It is possible that our farmers have produced too abundantly rather than wisely. So productive have they been en masse, with farming conducted as a mode of life and with all the attending errors and inefficiencies, that the farmers have placed themselves at a temporary disadvantage in purchasing power by the very abundance of their production.

Up to the present decade at least the family size farm with a self-sufficient program has been a highly satisfactory and desirable unit. The lack of industrial employment for the masses, the ease with which land could be acquired by homestead or purchase and the high quality of the land available for settlement have greatly stimulated the desires of people to establish homes upon the land. The contact thus maintained with nature, the hope of increased land values, the satisfaction found in owning one's home and of running one's own business, added to the privileges and advantages of a life in the open country, have encouraged many to remain on farms even though returns for operating them have been small.

From these same farms have come many of our best citizens. In saying this I realize that in the early life of the nation there was no other place from which they could come. Be that

as it may, the cities have been rejuvenated by new blood from the farms and the countryside. Men who grew up in the environment of farm homes have become the leaders in much of our business, professional, and political life. At the same time the farmers of America have been and are living on a higher financial and social plane than the farmers of most other nations. What, if anything, is wrong with the system? Is it possible that Uncle Sam has been wrong all these years? What is the dynamic force that seems to call for a new order of things in the agricultural industry? In my opinion it is commerce. America has developed into a great commercial power and in so doing her agriculture has become commercialized. The transformation greatly affects the farm life.

National Economy Has Changed

Farm families no longer spin and weave nor make their own clothes. Not many of them make butter or cure meat. Few of them make cheese. Many of them buy their fruit and some, their vegetables. Farm families sell the major part of the products grown upon their farms and buy in return many of the necessities for the family. Production for sale and exchange rather than for home consumption now motivates the farm family. Money, the universal medium of exchange, has therefore become a much more important factor than formerly in the life of the farmer and in the farm economy.

At the same time that money is demanded as a medium of exchange between agriculture and other industries, farmers are finding that they also need more of this commodity to satisfy their family needs. Standards of living are high in America. This statement applies to all classes of people, farmers included. These standards are an outgrowth of educational processes on the one hand and an abundance of material resources on the other. Education of the agricultural classes has advanced with the rest and in the advancement new wants have been created and new desires have arisen. Since money getting is usually associated with business and on the assumption, I suppose, that all business is successful, there have been many suggestions that farming be put on a business

basis. Those making the suggestions have seldom described how this is to be done. It is somewhat difficult to determine just what is involved in transforming farming as a mode of life into a more businesslike procedure. As I see it, there must be readjustments in several directions. I shall discuss what seem to me to be the most important ones.

Many farm businesses should be refinanced. No business enterprise can be successful that is not soundly financed. With the emphasis in the past on ownership of the farm, many farmers have worked into the handicap of poorly distributed capital. Payment contracts have demanded all available earnings, thus leaving the operator short of operating capital. Activity of operation and frequent turnover are essential to success in making large business earnings. They are just as important in making income on a farm business. Farm investment should be so distributed as to provide adequate capital for operating. One wishing to operate a farm on limited capital will do better to use the available capital for operating purposes and let someone else furnish the land. In other words, one should operate on a leased farm.

Any farm business that is found not to be on a sound financial basis should be refinanced where possible through new loans and adjustment of interest rates which will reduce the actual expense for owning and operating. This should be the first step in applying business principles to farming.

The family farm that served well in the early days of American agriculture is no longer a satisfactory economic unit. The plant is not now large enough nor has it earning power enough to give the farm family adequate returns for their employment and money enough to satisfy their social desires. Aggressive, foresighted farmers are seeking to combine sufficient land, capital, and equipment into the farm business to make it a suitable unit for certain specified types of production.

On small farms the expense for buildings and equipment and work stock is spread over a few acres, thus making the overhead too large. Industry is making heavy demands on labor that would otherwise be used in agricultural production and implements are replacing man labor.

Large power units and large machines are rapidly finding places on the best organized farms. To permit the utilization of such machinery to advantage and to increase the earnings from the business it is necessary to increase the farm acreage and intensify the operations. It is only by doing a large scale business that the use of large power units and large implements can be made profitable.

The real objective in setting up any farm business is to bring into the most effective combination the elements of production available for the situation.

Should Specialize Farm Units

Specialization in the production of a few well-adapted products rather than wide general diversification is becoming the rule on successful farms. The application of science and technical skill to agricultural production favors specialization in a few, rather than in many, products. Farmers cannot profitably utilize expensive equipment for small areas or limited production of any one crop. To do the work by hand limits the amount that can be produced and increases the cost. Those who specialize in the few products for which their region is best adapted economically and naturally will secure the largest returns. Small areas and great diversity may be desirable in limited localities where the production of home products is essential to a good food supply for the farm family. But successful commercial production demands specialization and concentration.

Studies of previous price fluctuations and trends as well as of yields and quality of product are now possible and should be used. Such studies may indicate the wisdom of making temporary adjustments or shifts in crop or livestock production which will insure larger returns or reduce the expense for operating, either of which will result in larger net income.

Businesslike farming calls for close attention to economic production. Low initial costs are a large factor in profit making. Low costs as a rule follow well-ordered, quantity production. That the rule applies in farming can easily be demonstrated. In Iowa a case has been cited where corn was produced with $6\frac{1}{2}$ hours of man labor per acre whereas the average time requirement on farms of the average

size was 18 to 19 hours per acre.¹ In a group of farms in Minnesota it was found that on those producing 5,000 pounds or less of pork the cost index was 123. On farms producing 25,000 pounds and over annually the cost index was 70, or 43 per cent less. On a large farm in Montana I am told that the cost of producing a bushel of wheat this year was reduced to 47 cents. In lowering costs, specialized production has an advantage over generalized production.

Mechanical equipment and machinery can sometimes, but not always, be used in lowering production costs. The adaptability of available machinery to the kind and quantity of work to be done will bear careful consideration. If a reasonable probability can be shown that the use of such machine will reduce the cost of production below the cost without it, that the quality of the product may be thus improved, or that the use of the implement will release labor that can be more profitably used on some other enterprise, the purchase may be accepted as a safe business venture. The present day engineering phases of farm management promise great opportunities for profit making operations but they also hold great possibilities for unproductive investments. Careful calculation and cold business judgment must guide the investor in his choice.

High Yields Cut Unit Costs

High yields of either crops or livestock products are effective in reducing the cost per unit made. Intelligent action in securing high yields is another large factor in earning returns from farming. It is not an expensive matter to arrange systematic cropping schemes, to grow and use green manure crops, to apply barnyard manures, or to provide surface drainage. To do so may greatly increase crop yields. It will also lessen the difficulty of controlling weeds and the risk of crop loss. All of these items influence greatly the cost of production.

Constant employment of capital and labor is essential in making profits. One of the difficult problems in organizing farming as a business is that of providing employment for available labor, at all seasons of the year. Attention to the proper combination of crops and livestock for the use of labor will reduce the

¹ Davidson at Land Grant College meeting, 1926.

expense for labor. The inclusion of enterprises which will provide employment on profit earning enterprises during ordinarily slack seasons also will add to the earnings from the farm. Farmers who have been following the mode-of-life type of farming have been little concerned about idle labor during the so-called slack times. Those who wish to farm in a businesslike way must give attention to this important item in making large returns from the business.

Farmers Must "Keep Posted"

Farmers need no longer be ignorant of current events. The radio brings to their ears daily, or oftener, market reports, weather reports, production outlook, price discussions, and other similar information. They can have sent to their doors without cost, printed reports of prospective production, both foreign and domestic, of intentions to plant and to breed, of market outlooks, and of price forecasts. It is possible that these reports are not always as accurate as their makers would like to have them. Possibly they are not so well summarized as business reviews in some other lines. Nevertheless, they are useful in helping the farmers to study their business and to plan their production to meet the market needs and to market at fortuitous times. These are all good business practices. Farmers must make use of them if they are to survive in the business world.

It is in such ways as these that business principles can be applied to farming. Their application need not detract from, but rather will add to, the advantages of farming as a mode of life. Large farm units and greater efficiency in operation will require fewer farm families engaged in agricultural production. The reward, however, will be greater for those who persist.

Some of you may have been disappointed in this analysis of the case. You may have pictured, as others have, the business of farming organized on the corporation plan with greatly enlarged holdings, highly capitalized and operated through skilled, hired management. Such a scheme precludes a place for the family unit or family participation in the business in the sense of home making. Sentiment is eliminated and the plant operated on a cold-

blooded business basis. It is possible to conceive of farmers organized in such ways. In fact, such farms have existed in the past and do exist now. A few instances may be called to mind. The bonanza wheat farms of Minnesota, the Dakotas, Montana, and the Palouse and Big Bend areas are examples of one type of big business farming. Other examples may be found where corporate dairy and livestock farms have been organized and where milk or meat products are produced and handled in a wholesale way. In highly developed agricultural areas groups of farms have been capitalized and organized under skilled management and operated under highly competent hired supervision. It is known that certain of these groups are at present making satisfactory returns on the investment.

Such schemes for farming may have a place in our agricultural production. They do not appeal to me, however, as related to a permanent agriculture. The bonanza wheat farms first referred to, with few exceptions, have all passed out of existence. They are being converted into small farms occupied by farm families. Those holding such farms under the ownership plan are anxious to convert them as soon as possible into family size units. These are examples of mining rather than of farming, and in my opinion most of them will sooner or later be reduced to a condition where they no longer yield "pay dirt." The second type of farm mentioned may serve well for certain special situations, but they are not likely to appear in large numbers because of the large capital requirements and the difficulty of making capital earn sufficient returns to attract it. The third group is more likely to succeed than the others because it is built upon the scheme of a farm family on each unit of the business enterprise and sharing in the responsibility for management. There is a chance for these to succeed.

Farming Not a "Big Business"

Farms of the type referred to hold but a small place in the agriculture of America. They may increase somewhat in number but I do not believe that enough such farms will be organized to dominate the industry. Some fundamental difficulties which are sure to be encountered in big business farming may be

named. (1) Farming is an out-of-door industry. It is subject to violent weather disturbances which make it next to impossible to lay out and follow a fixed labor schedule. Reversing the program shifts labor to other jobs. Lack of short-time, inside, profit-paying jobs for employees in inclement weather is sure to eat seriously into the returns. (2) Hired labor that has no personal share or interest in the proceeds from the farm must be closely supervised. This is difficult because on very large farms the labor employed must be spread over larger areas than can well be kept under the eye of the owner or supervisor. Hired supervisors and foremen do not often succeed in getting the work done economically. It is a well-known fact that few of the highly capitalized farms owned by wealthy businessmen and supervised by high salaried overseers are self-supporting. Yet they are supposed to be governed by the best of business judgment and talent. (3) The most fundamental reason why corporate farming cannot succeed, however, is this: All farm products have their origin and being in some form of organic life. Domestic plants and animals thrive best under the care of one who has a personal interest in them. This personal interest is difficult to hire or buy. Pay checks from a corporation do not stimulate it. It is best developed in those persons who expect to gain personal satisfaction and their financial reward as well in the well-doing of their charges.

I believe there is a sound philosophy in the view expressed recently by Dr. L. H. Bailey in one of our agricultural periodicals. He says: "We are too ready to measure all the elements of the rural situation in terms of our present day standard. Farming is as old as the hills. We are trying to solve it by twentieth century criteria. No wonder we fail. From the dawn of history men have been farmers of one kind

or another. Through all the mists of the centuries and through all their wanderings over the earth they have taken to a piece of land and they have lived upon it. Like the birds and the animals, in a way, they have become a part of the environment and they are adapted to a natural situation. That situation is not easily changed." Others may not agree with this view. To me it is impressive. I have in my veins the blood of my forebears who were attracted to America by the desire to own a piece of land. That desire is strong in me and may bias my views, but I am firm in the conviction that a permanently satisfactory agriculture must be built upon the family unit. May I read to you in closing a little poem by Dr. Bailey which to my mind typifies the spirit of the folk who will eventually be found in possession of the farms of America.

Blow ye winds and lay on ye storms
 And come ye pests in rabble swarms
 And fall ye blights in legion forms—
 I am here: I surrender not
 Nor yield my place one piece or jot—
 For these are my lands
 And these are my hands
 And I am bone of the folk that resistlessly
 stands.

The blood of old plowmen runs hard in my arm
 Of axemen and yeomen and battlemen all
 Who fought and who flinched not by marish or
 wall
 Who met the bold day and chased ev'ry alarm;
 My father-kind sleep, but I hear the old call
 And fight the hot battle by forge and by farm—
 For these are my lands
 And these are my hands
 And I am bone of the folk that resistlessly
 stands.

The Major Premise

AS I look about me and consider this program, I am conscious of the fact of diversity of individual interests, tastes, talents, and training. Sometimes it seems as though specialization has gone so far that there is no unity of purpose remaining. Each must speak the jargon of his own technical field, and we do not meet on the broad plain of common relationships at all.

Yet there is one field, however little regarded, in which all of us have, or should have, a common interest, as we certainly have a common obligation—the field of public affairs, where each must bear the responsibility of citizenship, and discharge that responsibility either constructively, or as a negative force.

We are all citizens in a democratic republic, whose political structure is an experiment still in the making, an experiment whose fullest success is hindered by want of adequate leadership. Your own individual citizenship is to have great influence. If you are slothful, neglectful, or unintelligent in your contact with the problems of politics, you connive at the destruction of the state. If you feel that the duty of citizenship is comprehended in the obligation to defend the state by arms in time of war, you will make an effective contribution toward bringing on the state of things which produce war. However the appeal may be most effectively made to you, whether through your intelligence, through your ethical standards, or through your pocketbooks, let me warn you that if you would insure your income and your life, if you would assure your happiness and comfort, you will give intelligent and courageous attention to the problems which confront us.

We are living in a shaken and disillusioned world. I wish I had the power to carry your minds back to those glowing days of moral and political enthusiasm, when men spoke with conviction of a war to end war, of a world safe for democracy, of the right of peoples to choose their own way of life through self-determina-

tion, of a world organized for peace and justice, for freedom and the right. Those were great and thrilling phrases, in great and thrilling days. But now they lie in ashes. Every great nation has heard its leaders declare that the war did not pay, that its costs exceeded its gains, that its tragedies blasted the hopes of happiness it roused, that its accompanying disorder opened the avenues to moral disintegration.

Foreign Minister Briand has said, "In modern war there is no victor. Defeat reaches out its heavy hand to the uttermost corners of the earth, and lays its burdens upon victor and vanquished alike." And Winston Spencer Churchill wrote, "Victory was to be bought so dear as to be almost indistinguishable from defeat. It was not to give security even to the victors."

In that jaded and disillusioned atmosphere, we have wandered without a policy. This absence of policy is wonderfully summed up by a national official, who remarked that the American policy should be one of isolation. The late war, he said, brought us no fruits, and we should therefore return to the policy we had pursued theretofore. He went on to say that if again a crisis should arise in Europe, and the world should be aflame, of course the United States would join again in the struggle. The difficulty with that statement as an exposition of policy is that it argues in a circle. We will abstain from effective influence upon policy until the moment of crisis and disaster. Then we will again pursue a course of action which is described as having been futile. Where is light and leading in such a proposal? It lacks any great unifying principle to give it either coherence or direction.

A Great Hypothesis Is Needed

If we are to make an effective impact upon problems of citizenship, there must be some great hypothesis upon which we can build. There must be a major premise as the foundation for our reasoning. I want to suggest to

you that this should be our major premise—that the modern world as we have inherited it, and as it is now being shaped, and as you have been trained to live in it, is founded upon the assumption of peace, and that unless that assumption can be supported, the civilization founded upon it, the work you are prepared to do, the lives you plan to live, must be profoundly altered, and may even be destroyed.

The world through most of its history has based its life upon the assumption of war. The very structure of its daily life revealed the fact. Men carried arms as a matter of habit. Its social organization was a defensive structure and social customs looked to protection against encompassing enemies. Its political structure was based upon the idea that war was inevitable, and often war was regarded as the principal duty of the state. The houses men built, the cities in which they lived, even whole countries, sometimes, were walled, and watchmen kept ceaseless vigil against the foe. Their industries, their commerce, their agriculture all reflected the overwhelming fact that life and war were inseparable.

The structure of society demonstrated the presumption of war. Our remote ancestors were organized by tribe or clan. Such were the primitive evidences that man must look to kith and kin for protection. The feudal system with its hierarchy of allegiances was designed for the protection of the individual and for effective aggressive action against the foe. The free man was the fighting man. Bearing arms was the test and badge of freedom. The fabric of its society was complicated, but it was crude. Knots marred its beauty, but added to its toughness. It was organized on the assumption of war, and was calculated to withstand the stresses and strains of conflict.

Take note of the changes in social structure. In the modern world, the fabric of society has been woven anew. Since the "emancipation" of woman in the last quarter century, the individual is the single strand. So the knots have disappeared, and there is a new fineness in the social fabric. Hierarchies and special privileges have slowly disappeared and the result is a new evenness of democratic texture. But as the tribal and feudal knots have gone, as society's

threads have been spun finer and finer, tighter and tighter, its fabric has become more fragile. This process, which adds to the beauty and charm of social life, can have no basis save the assumption that society need no longer be patterned in the expectation that it must stand the stress of war.

World Assumptions Based on Peace

As with society, so with domestic politics. The major premise has been altered. As the genius of Sparta was martial, so the spirit of America is civil. As the medieval world based even its domestic politics upon war, the modern world bases its assumptions upon peace. Read the Declaration of Independence for its bold defense of the civil ideal. George III was denounced because he "affected to render the military independent of and superior to the civil power." Look to the Virginia Bill of Rights and the first amendments of the Federal Constitution for classic emphasis upon the intention to found in this hemisphere a civil, not a military, state. Read the debates of the Convention of 1787—discussions as to separation of powers, and checks and balances—to see the settled and studied purpose to build a political structure with peace as its philosophy. Our experience has demonstrated again and again that war destroys the essential balance of the constitution. It gives the executive more than its share of power. War puts stresses upon the bill of rights which defeat its essential purpose.

The genius of democracy itself is peace. Democracy represents the ideal of individual and social self-control; it is based upon the readiness to command one's own fortunes and destinies. Its obedience is to the voice of common counsel. War requires obedience to external command, obedience without question or criticism, discipline without inquiry or reason, decision without deliberation. Democracy represents internal authority, war, external authority. For this reason, war is always a setback to democracy, it is a breeder of dictatorships, of chauvinists, of intolerance—to all of which the democratic ideal is antithetical. Our political structure, therefore, is based upon the assumption of peace, and the failure to support

that assumption imperils the very essence of our political idea.

Industry has been reorganized upon a vulnerable basis. In the old order, industry was scattered among homes. Its machinery and tools were, for the most part homemade. They were difficult for an enemy to find and destroy, and if destroyed, could be repaired or remade again in the home. Manufacture, under that system, was a slow process, and the product was often crude. But it was a tough industrial structure, and could stand war.

The industrial revolution changed all that. Machines have been concentrated in factories, easily destroyed. They are operated with power, of which the dynamiting of a dam or a railroad may readily deprive them. The machines themselves have been made complicated, and further refined, until they have become more sensitive and delicate than the human fingers, more rapid and complicated than the operative's thought itself. But every refinement has made for vulnerability. The instruments upon which we have become dependent are delicate in the extreme. Some require months and years to build, but their destruction is simple and instantaneous.

Does not the grouping of manufacturing in vulnerable positions, does not the use of marvellously organized but delicate machinery demonstrate that the structure of modern industry rests upon peace and order as its major premise? Aggregations of capital are so great that idleness of the plant produces great financial strain, often disaster, not only to the company, but to the employees and their creditors as well. The industrial revolution represents a transition from the assumption of war to the expectation and necessity of security.

The changes in our home life represent a like change of fundamental presumptions. We have built no Chinese wall to separate us from Canada or Mexico. Our cities are not walled against invaders. Our homes are not fortresses or castles, or even the blockhouses of our pioneer forefathers. We depend for our water upon distant sources of supply, reminiscent of the aqueducts which the Romans built in centers where peace was thought to be entirely assured. There is not even a hint of exaggeration in the

assertion that in the planning and construction of the modern city, the homes and offices which compose it, absolutely no thought is given to its defensibility. It is easy of attack through the air, and strategically located damage with modern weapons may be entirely disastrous. There is no rational basis upon which we can continue to construct ever larger and larger centers of destructible wealth, upon ever more and more vulnerable lines, save upon the assumption that war with its growing inclusiveness and its enlarging destructiveness cannot come near them.

World Trade Presupposes Peace

In older days, commerce did not exist upon the modern basis. Goods were locally produced and consumed. There were trade routes in the medieval world, but chiefly for luxuries. The necessities of life were close contained, so that in time of war subsistence could be maintained. We went through that era in American life. The frontiersman fed himself, clothed himself, was little dependent upon others. The trapper, the hunter, the fur-trader found a difficult, but simple, outlet. So grew a theory of self-sufficiency, of general competence, of individual omniscience, which took possession of our politics when Andrew Jackson came to the White House. When the sections began to produce surpluses, Henry Clay and others sponsored the idea of an American system, with sections virtually complementary and interdependent. The bitterness of spirit toward Europe, the fear of European abuse of American commerce because Europe was warlike (it had been in all the childhood of the United States) were reflected in an emphasis upon a domestic organization of commerce, upon self-dependence rather than ties with Europe, upon drawing South America into our sphere of interest and influence for trade as well as politics, upon setting up this hemisphere apart from Europe, upon a new presumption of peace. From a sectional to a national market was but a step.

Now the market is a world market, and we bring the food we eat thousands of miles. We levy tribute on three continents for an ordinary day's food. The adjustment is so fine, transport is so prompt, the organization is so ef-

fective that we seem further from want than ever before. For individual omniscience, we have substituted democratic interdependence. The principle of the division of labor has been applied in so great a variety of ways as to make interdependence the most conspicuous fact of modern life. But the assumption upon which this organization of commerce and industry is founded is not only local peace, but world-wide peace. While there is social, industrial, and political peace, starvation is further away from the individual than ever before in history. But if war comes, even the nation with greatest resources feels the effect of sugar rationing, "gas-less Sundays," and many other hints of the dire distress brought upon people less fortunately located, or longer involved in the strife. The terrible dislocation of prices which has altered our whole standard of values further illustrates the point.

The lines of communication which are the arteries of industry and commerce, while vital, are easily cut. They may appropriately be compared to the spider's web in intricacy and delicacy. The submarine, itself a feeble instrument and a vulnerable one, gave Britain, in the course of the World War, adequate reason to understand how tenuous are the strands which bind her to food supply and the raw materials for her factories.

Finance has gone through the same transition. Credit has become international. Public and private organizations in Europe owe over fifteen billions to public and private agencies in the United States. Nearly two billion dollars were loaned abroad last year. Some of these credits have more than a half century to run. The listing of foreign securities on the New York Stock Exchange involves cutting new channels for the exchange of credit and capital. The recent action of the Federal Reserve Board with reference to international trade acceptances opens the way for yet greater acceleration in the volume of international obligations. These things facilitate commerce and industry; they advance prosperity, but always upon the assumption of peace, always in the expectation that the bases of the credits shall survive and remain solvent. The sensitiveness of the foreign exchange market to rumors of misunderstanding

or war demonstrates the importance of peace as the guaranty of stability in the tremendous financial structure. To send your capital abroad expecting it to be destroyed would be a folly. The only theory which can explain the process is one which makes peace, and the security incident to peace, its major premise.

This unity of interest, this interplay of harmonious forces, and this new sensitiveness, of which I have been speaking, are reflected in the field of communication. When life was local, news was local. We sometimes get our reasoning backward and think that modern invention created the market for news. The integrated world created the market, which modern invention has furnished the means of supplying. The use of news naturally increased the demand, and stimulated new sources of supply. The fact that the Battle of New Orleans was fought two weeks after peace was agreed upon is evidence enough of the need for news in the old world with its faulty methods of communication. But today local intelligence has become general intelligence. If an ex-judge in Denver coins a phrase and a school girl in Kansas City seizes upon it, the consequences become the gossip of a nation avid for news. In that sort of world the individual may readily become a cinder in the public eye, causing irritation entirely out of proportion to his size or value, befogging the world's vision and leading it, through momentary blindness, to accident and disaster. The chauvinism of a nation's leader, the tactlessness of a diplomatic officer, unwisdom on the part of a man in power, may become the source of irritation and strife. On the other hand, a great leader may have the whole world for his forum, and the force of his ideas may be felt around the globe.

I have been emphasizing the tendency for national boundaries to disappear in the economic organization of the modern world, the growth of interdependence of man upon man, group upon group, region upon region, and the increase in integration and delicacy of adjustment. That process goes forward today at an ever accelerating rate, making interdependence ever more complete, integration ever more delicate, and the whole, therefore, ever more easily

thrown out of order if subjected to the stress of war.

The World Needs Trained Citizens

The modern world awaits the impact of your trained citizenship. You cannot escape by saying, "There are so many, and I am but one." So sympathetically organized is life, and so powerful are the instruments given into our hands, that the effective force of the individual is infinitely greater than ever before. We are the inheritors of this new world, created in the last two centuries, and built for us in this nation in the last century and a half. It carries with it the tremendous privileges of education, the wonderful opportunities for an agreeable and an effective economic and social life; but it lays upon us new individual responsibilities so to order our lives, so to shape our ideals, so to master our impulses as to maintain its fabric in peace.

Where, now, shall the trained citizen make his best contribution? The great task is to reshape our international politics to harmonize with the interdependence, the world community of interest, the economic unity of mankind which has developed in the last two centuries. We have built a world upon one premise, and we govern it upon a contradictory premise. We cannot continue to organize the whole of life outside politics upon an international and interdependent basis, and insist in our politics upon perfect independence. Either we set our economics and politics into harmony, else we set up a disastrous dualism.

We may illustrate that point by comparison with the life of the individual. One of the greatest sources of moral authority in the world today is the desire for a personality at peace with itself. The stupid and inert person faces no urgent problem of self-control. Emotions do not surge within him. Thoughts do not crowd his mind. There are no forces contending for mastery, because there is no force at all. His case was aptly described by Browning, who spoke of, "finished and finite clods, untroubled by a spark." It is as we begin to refine life, and to take notice of its moral, intellectual, social, esthetic, and economic implications, as we begin to enjoy its richness and wonder, that we become conscious of conflict,

and the problem of resolving conflicts—that we may live at peace within a developed personality. To see life as a whole becomes, that is to say, more and more of a task and an achievement as we make it finer and more sensitive.

No one has expressed the idea with more pith and force than Plato who said, "The righteous man does not permit the several elements within him to meddle with one another, but he sets in order his own inner life, and is his own master, and *at peace with himself.*" The emphasis is a sound one. Life must be envisaged as one problem, the problem of putting together our several elements so that personality is integral. We must not have one mood and temper for gainful hours, and become Dr. Jekyll in the evening by the fireside; one social and ethical outlook in contact with employees and competitors, with another set of standards in the home. Such dualism destroys the integral life. The man is at war with himself. Though he have all technical skill, it may be rendered useless if in political, social, or religious ways, he is poorly adjusted. The extreme manifestation of the conflict of forces within a poorly integrated personality is suicide, which may fairly be described as war within oneself to the death.

It is so with nations. A slow moving world, a world without rapidity of motion or thought, where science is sleeping, where trade stands in stagnant pools, and life is local, does not face the problem of integrating politics into a great common enterprise.

As life is developed and refined, as its adjustments are made more delicate, the problems of preserving peace become at once more difficult and more pressing. It is a fair comparison to call international war a species of race suicide. As with the individual, so with the group, it represents essential failure to integrate life, to view it as one problem. The disaster it produces is the most conspicuous fact of our generation, for we have had the greatest objective example in all human history. It has shaken the foundations of a religion based upon a proclamation of peace on earth, good will toward men. It has set back economic and scientific advance by untold years. It has in-

creased the sum of human suffering and woe by an incalculable amount. And when it is all done, the victors proclaim that they lost along with the vanquished!

It is futile to believe that we can pile up armaments to protect the tissue fabric of modern life. To organize for peace and prepare for war merely emphasizes the disharmony of aim; it accentuates the struggle for control between contradictory forces. The post-war memoirs which have deluged us all agree upon this point; that preparedness became in itself a source of war, that armaments were a menace to peace. The outlawry of war does not achieve the end. There is no hope in putting forces in motion which lead inevitably to strife, and then setting up paper barriers. Nor does pacifism show us the way out.

Must Harmonize Life Elements

The key to peace must be found in the reorganization of political life in harmony with the social and economic and scientific structure of the modern world—in harmony with the major premise of society's life. The tragic fact is that economics and science have far outrun politics. The changes science has wrought are no less than revolutionary. When men left the earth and took to the air, the act was revolutionary. But it was hailed with delight. When the ocean was conquered by flight the world rejoiced. The more radical the experiment, the more revolutionary the proposal, the more the world applauds. Change, experiment, progress—these are the watchwords of science and of its applications to business. But they remain anathema in politics. Men in laboratories have tested our preconceptions and notions, and have ruthlessly thrown them overboard. They have not only reshaped the physical world, they have profoundly altered the nature and content of our thinking. But the scientific method of tested thought has not been adequately applied to the structure and problems of international life.

Science has made its advances because of research—research which everywhere took advantage of what had been done anywhere else, research which at some stages often seemed to have no practical bearing, but which, with the progress of other workers, came to have more

of meaning than the discoverers could have imagined. The field of international politics needs now the rigid and unbending application of scientific method, even if it remodels or destroys some of our old thought patterns. A great Teacher of ancient times suggested that experience should be the acid test—"By their fruits ye shall know them." The fruits of our present international polity are death and disaster. We need to seek for the remedies with the ruthlessness of science.

It is worthy of emphasis that our forefathers had the courage to undertake experiments in the field of political organization, which were denounced at the time as radical and dangerous. The greatest gift to the science of peace is the American union. Frederick J. Turner has said, "The American peace has been achieved by restraining sectional selfishness and assertiveness and by coming to agreements rather than to reciprocal denunciations or to blows. . . Statesmanship in this nation consists not only in representing the special interests of the leader's own section, but in finding a formula that will bring the different regions together in a common policy." It is true that for a time sectionalism overcame the sense of unity. We went through a period of maladjustment in the integration of our nation's personality, when one section concentrated its attention and built its social and economic structure upon an institution already out of date. Thereby was set up a destructive dualism within the Union which all but destroyed it. But what southern leader today would wish that the South had won in the Civil War? The losses to both North and South would have been infinitely less without war, the readjustment politically and socially would have been vastly easier if war could have been avoided. That revealing experience has given to American statesmanship the essential restraint in the development of policies which it lacked before.

That seems to be the key—the giving up of the raw assertion of freedom in order to achieve its reality. The man in the jungle is free to do as he will, but he can do little beside battle for his food and shelter. It is when he comes out of that shadowy freedom and enters society, with its rules and restrictions upon individual

action, that he wins the opportunity for peaceful and protected intercourse with his fellows, for a decent living and good food, for a home, for learning, for the enjoyment of art and music, and thus, by the sacrifice of his individual whims, he gains the reality of freedom.

So it is with states. What shall it profit a nation to have all sovereignty, when its people dwell in the valley of the shadow of death, whose borders are harassed, whose economic life is upset, whose currency is debased, whose morals are shocked by the hideous crisis of war? The price of peace has always been the sacrifice of portions of sovereignty. No one should have learned that lesson better than these forty-eight states, who yielded up a portion of their sovereign rights in the interests of a union of peace and honor. Midwestern states are having a dispute over lake levels. We have given up the high privilege of going to war upon Illinois; we have given up the sovereign right of devastation and death, and by peaceful adjudication before nine elderly gentlemen at insignificant cost we are to determine the issue. Which of these methods has the substance of freedom, and which the empty husk? We have invested some of our sovereign capital in the common stock of the Union, and the dividends are freedom from war, emancipation from fear, the enjoyment of justice and order and prosperity. Shall we hold back from paying that price for peace on earth? Are the trappings and the suits of sovereignty more precious than the lives of our children? Are the forms and ceremonies of supremacy more to be desired than economic and political and esthetic and spiritual advance?

There is an essential incongruity in displaying one temper and structure of politics which make for peace between forty-eight sovereign,

and independent, yet integrated states, and a wholly different temper and political system in dealing with nations divided from us by an imaginary line, or by the oceans which we traverse with ever greater and greater facility.

Need Closer Co-operation

The nations of the earth have dimly recognized the need for closer co-operation. The modern system of diplomacy represents, in a rudimentary way, a recognition of the realities of interdependence. That system has grown through the years, but it has grown too slowly, and must be fundamentally revised as thought, and experiment, and experience show us the way. The American tradition of arbitration, established in the days of our weakness, was a recognition of the fact that war does not solve problems and does not pay. American origination and support of the idea of a World Court, before the other nations were ready to support it belongs in the same category.

I plead not for any specific remedy. I offer no panacea. My plea is that as you go out to take your places as citizens in this great republic, you shall preserve in your political attitudes that spirit of scientific inquiry, that eagerness for improvement, that readiness to make experiment, that facility in accepting demonstration which marks the life of modern science, and which makes modern industry so amazingly progressive. We must recognize the implications of our age, and arguing from the major premise that an interdependent and sympathetically organized world is founded upon the assumption of peace, go forward to the normal and logical conclusion that our nation's life and policies are to be built upon that major assumption.

NOTICE

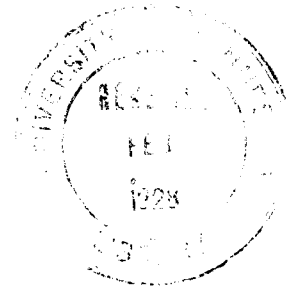
Address communications to T. E. Steward, editor,
216 Administration Building
University of Minnesota,
Minneapolis, Minn.

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Vol. 9 No. 104

February 1928

MINNESOTA CHATS



For a Better
Minnesota



Published Monthly by the University of Minnesota, Minneapolis. Entered as second-class matter at the Minneapolis, Minn., post office. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

FOREWORD

THE college man gets more education, and a better education in his four years than the non-college man will get in ten. The reason is plain enough. The college reduces the gaining of knowledge to a system—provided of course that it is a good college with a wise man at its head, and an intelligent faculty. It lays down courses of reading, and insists that they be followed.

It makes a man work on a subject till he really learns something about it. Its advantage lies in just that. With the aid of the hundreds of thousands of volumes covering the sum of human knowledge any one will get an education—if he knows how. The college teaches him how. Not only does it teach him how, but at stated periods he is made to report on what he has learned, and if he is not doing well he is made to learn it over.

THE majority of young people will do better in a college, if they go to the right one. For there they will learn system. They will find courses laid out for them instead of being obliged to lay out their own courses. They will be given first aid to the improvement of their minds—and there are few people who do not need that sort of assistance.

It is easy to say that Thomas A. Edison never went to college, that Shelley hated the one he attended and was thrown out of it, that many great men have got their own educations. So have a great many crossed the ocean in sailing ships, but it is quicker and safer to cross it in a steamship.

YOUNG women and young men will do well to go to college if they can. If they can't, their knowledge of what they have missed may make them work hard enough to make up the difference. But only those who want to be taught should go. To go to a college merely to say you have been there, or write a few letters after your name on graduation, is futile.

It is the people who go with this motive that give so many others the idea that college education is not necessary. But such people would have been failures anyway.

(An Editorial from the *Minneapolis Star*)

MINNESOTA CHATS

Vol. 9, No. 104

published by the

UNIVERSITY OF MINNESOTA



A Glimpse of Ancient Greece
Seen by peeking around a corner at Minnesota

The Reduction of High Summer Infant Mortality

A Study of Past Conditions in the United States and of the Recent Swift Improvement in Child Health

By Dr. Frederic W. Schlutz

Professor of Pediatrics, University of Minnesota

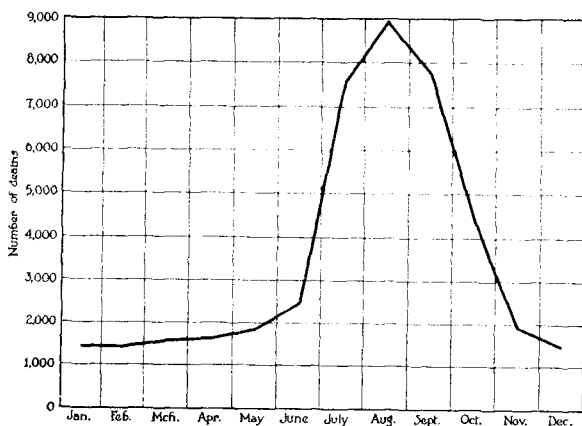
This paper was read by Dr. Schlutz at the Recent Pan-American Child Hygiene Conference at Havana, to which he was one of three official delegates from the United States, appointed by the Hon. Frank B. Kellogg, Secretary of State.

HIGH summer death rate among infants under two years was until a few years ago a general experience in practically every part of the United States where atmospheric and climatic conditions favored a hot season of the year.

Aside from other factors and causes, gastro-intestinal diseases, accompanied by diarrhea, were the preponderant causes of the great increase in the death rate during the hot summer months and in number and proportion overshadowed all other causes.

An excellent report by Dr. Rucker¹ of the United States Public Health Service, covering the known birth-registration area of the United States in 1912, illustrates this (Figure I).

Figure I

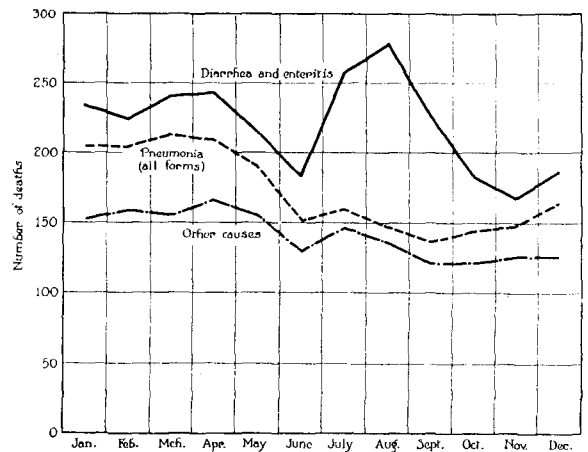


Deaths from intestinal diseases—of children under two years of age—in the registration area of the United States in 1912.

Over fifty per cent of deaths from this cause in children, under two years, occurred during July, August, and September. The vital sta-

tistics reports of four large representative American cities, New York, Chicago, Detroit, and Minneapolis, strikingly show the same situation (Figure II).

Figure II



Infant deaths in Detroit in the years 1916, 1917, and 1921, showing all forms of pneumonia, diarrhea, and enteritis, and other causes.

In every one of them, until within a period of the last ten or fifteen years, over fifty per cent of the total mortality for infants under two years occurred during the hot summer months and was due largely to gastro-intestinal diseases, with diarrheal features. There has been a tremendous change in this situation during the past fifteen years, showing not only a great decline of general infant mortality, but particularly of mortality due to these principal causes.

In spite of a steady rise in infant population in these cities, there has been a continuous decline in infant mortality and in deaths due to

gastro-intestinal disease. Figures III and IV graphically illustrate this condition for New York City.

Figure V illustrates it, in a given period, for the city of Chicago.

These two cities are the largest centers of population in the United States and present every phase of conditions that ordinarily and formerly has made for a high infant death rate. In spite of this fact we have the truly remarkable showing represented herewith.

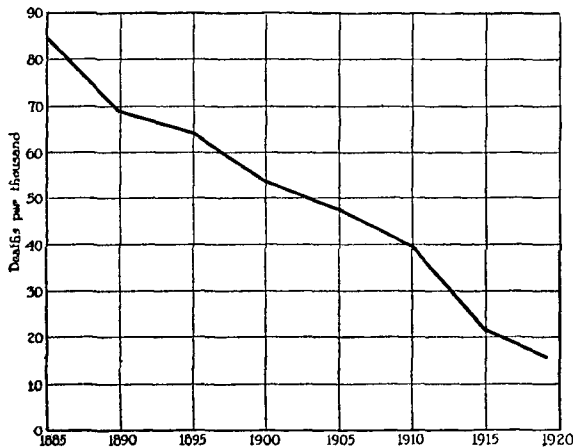
sand in 1915, and only 5.6 per cent of a total death rate of 56.3 per thousand in 1926.

Before going into explanatory and more detailed account of the causes which have brought about this remarkable and favorable showing, permit me to review briefly some of the causes which are known factors in high infant death rate during the summer months.

Heat, Ignorance, Carelessness

Heat and the atmospheric conditions associated with it are factors which unfavorably

Figure III

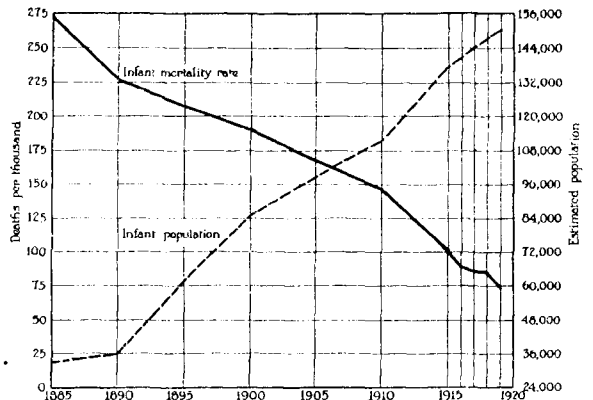


Decline in the infant mortality rate due to diarrheal diseases in New York City.

In Detroit, in 1915, deaths from gastro-intestinal diseases were 23.6 per cent of a total death rate of 103.3 per thousand. In 1926 this had dropped to 14.8 per cent of a total death rate of 85.4 per thousand.

In Minneapolis, a city which, by favorable location and early wise municipal planning, is singularly free from every influence that operates for high infant mortality in the other three cities named, the deaths from gastro-intestinal diseases were 13.2 per cent of a total death rate of 71.1 per thou-

Figure IV

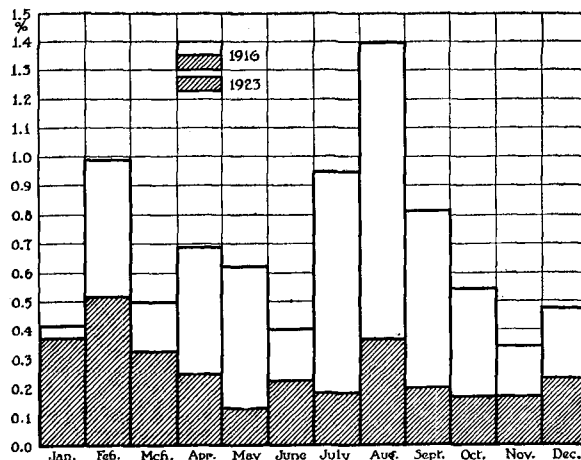


Estimated population under one year of age and infant mortality rate based on the estimated population in New York City during the period 1885 to 1919.

affect the infant and his entire environment; and undoubtedly influence infant mortality. These factors, combined, during the hot summer time, with ignorance and carelessness regarding the production and conservation of food and food substitutes, for the infant artificially fed, are large contributing factors in the causation of the dangerous diarrheal state. Improper sanitation, always difficult during hot weather, in crowded, congested urban areas, adds its quota of unfavorable influences.

Figure V

The infant mortality rates of Chicago in 1916 and 1923.



summer time, with ignorance and carelessness regarding the production and conservation of food and food substitutes, for the infant artificially fed, are large contributing factors in the causation of the dangerous diarrheal state. Improper sanitation, always difficult during hot weather, in crowded, congested urban areas, adds its quota of unfavorable influences.

Ignorance and in-

difference, upon the part of public health administrators, to the promulgation and proper enforcement of ordinances and laws regulating effective sanitation, and particularly the proper handling and control of infant food supplies, have served as additional promotive causes.

The failure upon the part of the public to secure, and upon the part of authorities and experts to convey to it, the required information concerning feeding of infants and children is a further responsible factor.

Breast-Feeding Is Important

We also have had to contend with non-appreciation by the layman, and in the past by the physician also, of the enormous importance of breast-feeding and the far reaching influence of its proper establishment and maintenance upon infant mortality and upon the prevention of gastro-intestinal diseases.

The complete want, in earlier times, of properly prepared and circularized educational material for the use of the public both at large and in the home, left it without preventive knowledge.

The almost complete absence or non-availability of those relief and instructional agencies such as a visiting nurse or social organizations, which now are potent health-directing forces, strikes one as contributive, in absentia, to the prevailing mischiefs of that day.

Until rather recently, the inadequate pediatric training of the general medical practitioner, both as to the care of the sick and the protection of the well child, must be accounted a large and decisive factor in the production of infant mortality.

The light baggage of pediatric knowledge with which the graduate left the medical school quickly proved inadequate in the face of a difficult feeding problem or a severe gastro-intestinal disturbance. Only too frequently the spectacle ended tragically in the complete discomfiture of the helpless practitioner and the loss of his little patient.

This situation, in no small measure, was responsible for the rising of the great wave of proprietary infant foods, generally harmful and always inadequate, in spite of the preposterous claims of their manufacturers and promoters,

which at one time, and even today, floods both our own and other countries.

Finally we should mention the complete indifference until quite recent years, of federal, state, and municipal governments in the possibilities of child saving and child betterment.

Doubtless there are other contributing causes to high infant mortality, during the summer months, but those we have mentioned are among the principal agents of influence.

Recent Progress Has Been Rapid

The changed conditions which have wrought so complete a change, within comparatively few years, and have converted a high infant death rate to a comparatively low one, a principal cause of infant destruction during the summer months, to one of relative infrequency, have had an interesting, progressive development.

This revolution, not always an orderly one, and necessarily more or less adapted to local conditions, has nevertheless reached a practically uniform result.

Improved sanitation and the conservation of infant's food materials, and notably of its milk supply were the first focal points of attention upon the part alike of pediatric and sanitary officer. The improvement which followed was both definite and striking. The decline of the infant mortality rate from diarrheal diseases was synchronous with the purification of the milk supply and its required pasteurization.

The milk station for the distribution of pure milk sometimes preceded and was sometimes associated with the development of the infant welfare clinic, recognized today, in the complete evolution of the entire prenatal and postnatal program, as the most potent single factor in infant and child welfare and in the reduction of high infant mortality.

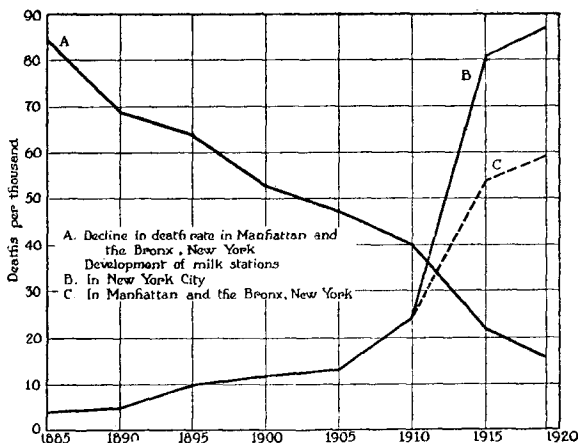
No group of death causes is influenced so vitally by infant welfare work as that induced by diarrheal diseases. This is strikingly illustrated in Figure VI.

In the largest and most crowded section of New York City, where the infant death rate from diarrheal disease was always enormously high, the extensive development of infant welfare stations succeeded in a comparatively short time in reducing the death rate from gastro-

intestinal disorders, in that section some 3.8 points lower than it was in the rest of the city.

Almost unanimously with the organization of the infant welfare clinic, and as a part of its effective mechanism, the home visiting nurse came into the field, followed in time by the social service worker and the organization supporting her. All this introduced not only the proper relief agency for practical service, but introduced a great instructional and educational factor into the home. The mother was taught the proper care and feeding of the infant at first hand.

Figure VI



The relation of infant health stations to the decline in the death rate from diarrheal diseases.

The enthusiastic medical pioneer in infant welfare work recognized early the vast importance of breast-feeding and its tremendous influence upon the infant death rate and especially upon the control and prevention of gastrointestinal diseases accompanied by diarrhea.

How successfully breast-feeding can be urged upon a community is instanced by results reported from St. Louis and from Minneapolis where over 90 per cent of the infants under three months of age were breast-fed, where formerly this was the case in less than 40 per cent.

Government Interest Increases

The awakened and active interest of the government health officials, alike federal, state, and municipal in all child welfare problems has been no small factor in the reduction of this high summer death rate. The enactment of wise, sanitary, and protective laws, and particularly laws governing complete birth registration and

promoting general and comprehensive education of the public in things pertaining to the welfare of the infant and the conservation of its life, are among the beneficial results of this new interest of governing authorities. Infant welfare work has become a national responsibility and is now viewed only in that light by the government of the United States.

The improvement in the education of the medical practitioner, particularly in pediatrics, has also been of far-reaching consequence in the reduction of infant mortality. No good medical school in the United States today is without a major department of pediatrics fully equipped with excellent facilities for the teaching of the subject in every one of its phases. It is needless to point out the significance of such improved instruction.

It strikes at the very root of one of the most potent causes of infant mortality—both in the summer death rate and that of any other period.

The schools of public health and hygiene now organized in some of our leading universities afford excellent possibilities of teaching preventive pediatrics and of training specialists in this field of public health work.

Leadership From the Universities

The leadership that comes from men trained in these fine institutions finds, almost at once, its expression in the growing excellence of the organizations with which they become associated.

Finally may we mention the influence and the work of our great philanthropic foundations, such as the Rockefeller Foundation, Commonwealth Fund, and the Duke Foundation

The benefactions of these great organizations are both national and international in their scope. They touch practically every field of service contributing to the betterment of mankind. Child welfare work and the reduction of the high summer infant death rate have in many ways and at different periods been their great concern.

Directly or indirectly, it has been shown, that their work and influence have contributed in no small measure toward the great reduction that has been brought about in infant mortality in these United States.

Progress in this reduction of the high infant

mortality and particularly of the high summer death rate has been rapid. What it has accomplished is graphically suggested in the results shown for the four large cities specifically mentioned.

That it is quite general for the entire birth registration area of the United States is indicated in the report by Woodbury² of the Public Health Service which shows that the decrease in the mortality rates in urban areas, that is in cities of 10,000 population and over, was relatively greater than the decrease in rural districts. This change in ratio holds particularly for gastro-intestinal diseases as causes of death.

In 1915, the rate for the cities was slightly over five points, or nearly 24.3 per cent higher than the rate in the rural areas, but in 1921 the urban rate was nearly one point or 5.8 per cent lower than the rural rate. A remarkable showing when one considers the greater disad-

vantage and handicaps conditioning infant care in urban centers as compared with rural districts.

The measures we have outlined as potent factors in the reduction of the high summer infant mortality in the United States, are measures, available and readily applicable in at least some degree in any community where high summer infant death rate prevails.

Intelligent organization and co-operation between government forces, private agencies, and individual initiative, supported by philanthropic aid wherever obtainable, will accomplish anywhere what has today been so splendidly accomplished in the United States of America.

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Joel Lunell And The Lunell Herbarium

By Dr. J. Arthur Harris

Head of the Department of Botany, University of Minnesota

INDIVIDUALS who do things which are worth while because they are of the nature of pioneer undertakings often remain in obscurity. They are, in their own lifetimes, prophets without honor in their own country. After their death, the work which they accomplished under great difficulties is too often forgotten by those who enjoy greater facilities.

It should be one of the functions of institutions to provide means whereby the effectiveness of such individuals may be continued after their personal efforts have ceased, and to see to it that the work which they have set-a-going is not interred with their bones. Thus, institutions would safeguard the future against the dissipation and loss of the efforts of individuals and make the accomplishments of those who have passed, foundations for the greater accomplishments of those who work in the present.

In the field of biological science the University of Minnesota occupies a rare strategic position. Situated in a state which has a geographic location and a range of latitude and longitude to afford a wide variety of those climatic factors which are known to influence the characteristics of fauna and flora, which has been further modified and highly diversified over much of the area by several different glaciations that have affected both topography and soils, and which, moreover, embraces within its boundaries the headwaters of three of our greatest river systems along which plant and animal organisms may have migrated in times past, it provides an ideal opportunity for the investigation of

many problems of the relations of plants and animals to their environment. These are not merely of the greatest scientific interest but of enormous economic importance as well.



Dr. Joel Lunell

If this very great opportunity of the University of Minnesota is to bear fruit in that kind of public service which we call scientific research, it is necessary to accumulate at the University all of the materials possible which will throw light on the problem of the natural resources of the state. Since these cannot be adequately interpreted without reference to surrounding regions, it is essential to make the foundations for such research far wider than the limits of the state itself.

The purchase of the Lunell Herbarium for the Department of Botany by the Board of Regents in June, 1927, represents more than the mere acquisition of 15,000 to 20,000 fine specimens. It marks a step forward in a department policy of developing the investigation of the flora of the Northwest. The herbarium of the department is already rich in such materials. The addition of the Lunell collection will be of great value in completing our sources of exact information concerning the flora of the prairie regions. Dr. Lunell worked primarily in North Dakota, but many of his specimens have critical value in their bearing on the problem of the flora of Minnesota.

The man who is untrained in the discrimination of the fine differences which are found between species of plants cannot fully realize the importance of having preserved in our universities for future reference actual specimens from

as many localities as possible. This is important not merely for the classification of plants, but for the purpose of affording exact information concerning their distribution.

Since the Lunell Herbarium is an important acquisition of the Department of Botany of the University of Minnesota, it is worth while to glance for a moment at the life of the man who brought it together.

The Story of Dr. Lunell

Joel Lunell was born on March 30, 1851, in Kalmerslott, an ancient castle overlooking the Baltic Sea on the coast of Sweden. He emigrated to the United States in October, 1887, bringing with him the responsibility of a family of a wife and three children.

After a year devoted to the practice of medicine in association with Dr. Fleisburg in St. Paul, he felt the irresistible call of the frontier and he took up his medical practice at Willow City, North Dakota, in 1889. This was at a time when cities were but names which expressed the hopefulness and ambition of those who were living in dugouts, sod houses, or board and tar-paper shelters. He lived at Willow City for about five years before removing to Leeds, North Dakota, where he remained until his death on March 27, 1920.

The conditions of those days on the plains have become familiar to the general public through the books of Hamlin Garland, through Martha Ostenso's "Wild Geese," through Rolvaag's "Giants in the Earth," and through the writings of others who have not claimed the attention of so many readers. The story of the aspirations and labors of some of those who kept the faith of scientific studies during these years that tested strength and courage is yet to be written.

From the first moment of his arrival on the plains, Lunell began to collect and study the plants of the region. As a student in Sweden, his leisure time had been devoted to the collection of plants, all of which he had left behind when he came to the United States.

Besides being a practicing physician, Lunell was a citizen of his community. To his medical work was added, at one time or other, his services as postmaster, coroner, alderman, and

mayor. Demands upon the one doctor available to a widely scattered frontier population often crowded out eating and sleeping, but the large tin vasculum of the botanist invariably accompanied the small black bag of the doctor, and if the long outgoing journeys to visit those in distress permitted of no delay, the returning trips always afforded opportunities for noting and collecting plants of particular interest.

It is a great misfortune that there were not more such men to study and preserve for future reference, actual specimens of a flora which has now largely disappeared through the ravages of fire and the inroads of agriculture.

While Dr. Lunell is known widely to students of the flora of the west through his collections, and his systematic botanical notes and papers, perhaps few are aware that he was a man of highly varied interests.

He is said to have pursued his earlier education with unusual distinction. His studies in medicine completed at the University of Upsala were followed by graduate work at the Carolyn Institute at the University of Stockholm. Whatever may have been his formal academic record, his later life bears ample witness to the breadth and thoroughness of his training.

A Man of Varied Accomplishments

During the six years of his studies at Upsala he spent his vacations as tutor in Latin and music. However, this may be, I could not but feel deeply impressed when, some years after his death, I went to his modest home to examine his collections and found that his volumes of classical music, well worn by use at his own piano, were about as numerous as the bound botanical works of his small library. He not only read Latin, Greek, and Hebrew, but was familiar with several modern languages. This proficiency he turned to good account by making available to those whose reading was limited to the Swedish language various works which appeared originally in English, French, German, and Russian. Among these volumes were Mark Twain's "The Prince and the Pauper," "Huckleberry Finn," "Tom Sawyer," and "Innocents Abroad." Brillet-Savarin's "Physiologie de

(Continued on page 16)



Winter Sunrise on the Campus

“Advanced Drill” Has Interesting Aspects

Leadership, Self-Control, and Manliness Are Pointed Out As Among the Benefits Derived From College Military Training

TWO hundred and eighty-two young men at the University of Minnesota are spending five hours a week as members of the advanced R.O.T.C. in an effort to fit themselves to be reserve officers of the United States Army who could be called to service in the event of war. Of these, 35 men are in the medical corps, 42 in the dental corps, 116 in the infantry, 57 in the coast artillery, and 32 in the signal corps.

All of these men have chosen voluntarily to continue the military work they began as freshmen and sophomores with a view to carrying their training to a point where it would be of distinct and immediate use to their country if war were to break out. but they have also been motivated by an appreciation of the benefits they derived from the basic work of the first two years—training in leadership, self-control, obedience, and orderly organization.

These men are not admitted to the advanced work of the Reserve Officers Training Corps on mere application. For one thing, the total number of them is restricted by the United States Government. Many more would enter the advanced courses if the War Department could afford it. Again, the men in the advanced courses are carefully selected among all applicants on general fitness and the manner in which they did the work of the basic years, freshman and sophomore.

Why these men choose to continue their mili-

tary drill following the two years in which it is compulsory on all the able-bodied male students in the University presents a subject for some interesting speculation. Statistics would

seem to show that it is not because they are “military minded,” although it is reasonable to suppose that they have become moderately interested in matters military. But when one sets the figure 35 off against the 619 medical students at Minnesota, the figure 42 against 269 dental students, or 116 against something like 3,000 men in the colleges from which this group is drawn, Science, Literature, and the Arts, and Agriculture, Forestry, and Home Economics, for example, it soon becomes apparent that there is no militaristic stampede. Which is to say that in the event of war many times the number now



Major Bernard Lentz

taking advanced drill would seek commissions in the various military service branches. The men in the advanced R.O.T.C. aren't the ones who are eager to go to war; rather, they appear to be the ones with sufficient foresight to know that it is well to get the preparation that will enable them to be of greatest service.

“Believe me,” wrote a recent graduate to the Minnesota commandant, Major Bernard Lentz, “I'll never regret taking that R.O.T.C. course, and I will probably not forget how much I disliked it when I first started it. It has already meant more to me than a number of other courses that I took when I was at Min-

nesota. I think my brother Charles, who is a sophomore now, is planning to take the advanced course next year, and you might see that he doesn't go astray and forget to do so."

"This country is coming more and more to seek leadership in all walks of life among its college graduates," says Major Lentz, whose title, "professor of military science and tactics," was first held in 1870 by General R. W. Johnson and has been continually in existence at Minnesota since that time. "The need for college leadership and the terms of the National Defense Act being granted, the colleges should do their share in developing military leadership as well as direction and command in other fields. The fact that France, Japan, and Russia have recently adopted the American reserve officer system in their institutions of higher education shows that the theory and practice is winning broad approval. And it must not be forgotten that the nation is saved vast quantities of money by training these young men who are already in college, instead of having to set up additional military academies to train men for war and nothing else."

In times of peace, like the present, West Point, together with other regular army sources of officer material, provides all the commissioned personnel needed by the United States Army. The young men who complete the advanced work satisfactorily receive commissions in the United States Army Reserve Corps if they are 21 years old, otherwise, certificates entitling them to a reserve commission upon reaching their majority.

An important exception to the rule that these graduates mostly remain reserve officers and no more is offered in the Medical School, where from two to six men each year are awarded military internships. These are internships in United States military hospitals, and during the year of military internship the fortunate recipient receives the pay of a first lieutenant in the army, amounting, with commutations, to about \$3,000. Each year there is an eager scramble to get these prizes. All medical students must serve an internship of one year, most of them under far less attractive circumstances than the army offers.

Each of the five advanced units devotes itself to those phases of military work that harmonize

with the other work of the college from which it is drawn. The men in the signal corps unit are all students of electrical engineering. The coast artillery corps unit is recruited among the students of the College of Engineering and Architecture and the School of Chemistry. Naturally, the medical and dental units are organized in those colleges, and the infantry unit is drawn from the juniors and seniors in other departments of the University.

While the medical unit devotes some of its hours of military instruction to studies of the evacuation of wounded, field hospital work, sanitation and the like, and signal corps men study code practice, the field radio and field telephone, there are other elements in the advanced military courses that are common to all units. It is in these, according to Major Lentz, that much of the principal benefit of the R.O.T.C. work may be found. These are the courses in military organization and in command and leadership, which all units must take. Incidentally, only the reserve officers with the three combat units, which are the infantry, coast artillery, and signal corps, have to spend any time "with troops," the troops in this case being their fellow students of the freshman and sophomore years in the basic military course. Of the 150 hours a year devoted to military activities by the advanced men, sixty are with troops on the drill ground or in maneuvers, and the remaining ninety are spent in the classrooms.

It is by its instruction in organization and in command and leadership, says Major Lentz, that this training makes its strongest contribution to education and American principles of life. And he believes that the work in these branches alone would justify the military instruction, even if it were not necessary to have a nation prepared for defense in times of danger.

Land Grant College Resolution

On this point Major Lentz calls attention to a resolution adopted in 1926 by the Association of Land Grant Colleges, in session at Washington, D.C., which said in part: "On the basis of our experience with many thousands of students we declare that it is not true that the R.O.T.C. in our colleges breeds militarism or anything like it. It is ridiculous to assert, as some have done, that America is being Prussian-

ized. No facts in support of such charges have been cited, nor could they be collected on any campus in America. Such assertions show small faith in the good sense of American youth, or in the fundamental, peace-loving tradition of the American people.

"On the other hand, we can testify, likewise on the basis of experience with our students, that military education as now conducted is a valuable element in collegiate education, especially in training for leadership. It is not mere instruction in close order drill and in formations for purposes of parade, as is sometimes ignorantly imagined. These college youths are in training as officers, not as enlisted men, and from the first lesson they are led toward powers of command. There are all too few opportunities in ordinary academic life to discipline youth in actual practice of leadership, and the R.O.T.C. provides an opportunity we will not willingly cancel.

"Because of its great value as an educational feature, because of our conviction that it is our duty to do our part to keep our country safe, because we do not wish to be responsible for possible calling of untrained citizens to military duty with the awful wastage of human life inevitably consequent therefrom, we reaffirm our position in support of the National Defense Act, the maintenance of R.O.T.C. units on a required basis, and appropriations adequate for their maintenance at the utmost efficiency, and we request the executive committee of this association to call to the attention of Congress our firm stand on this subject."

Minor advantages attached to enrolment in the advanced R.O.T.C. include payment of 30 cents a day by the War Department for this service and the issuance of uniforms. For many an

earnest student, the trim blue uniform of the advanced reserve officer trainee, with its Sam Brown belt and cap, means a saving in clothing costs that represents much of the difference between being able to go to college or not.

Attendance at a six-week camp during one of the two years in which they belong to the advanced R.O.T.C. is another privilege to which these students look forward with eagerness. All expenses are paid and they receive five cents



The University Battalion on Parade

a mile as a traveling allowance, which easily covers the price of berth and meals as well as ticket. Going to these camps also gives the students a chance to see a new part of the country if the camp happens to be at a distant point in his corps area from the city where his university is situated.

At camp and during the 60 hours spent with "troops" on the campus these budding officers receive a training and experience in handling men which is believed by their commandant to be one of the most valuable contributions the military courses make to the building of men capable in leadership. The advanced students also receive instruction in such subjects as military history, military law, tactics, map reading, and topography.

School and Society, a magazine nationally known in its field, the news and opinion of persons in higher education, recently published an article by Harry T. Mathews of the Reserve Officers Training Camp at the University of Washington, who said: "The department of military science and tactics in a university is a testing laboratory in which the male product from all other departments is tried out to see how much character, discipline and ability to co-ordinate have been developed. In this depart-

ment, better than in any other, the student has an opportunity to grade automatically himself and to see himself as others see him.

"Some have asserted and many suppose that all that is taught a student in the military department is the latest and most scientific method of taking the life of one's fellow man. Others believe that the time spent in this department is time wasted. These ideas are erroneous. We are endeavoring to build character by teaching habits of obedience, order, cleanliness, promptness, co-ordination of effort, physical fitness, honesty, and ability to play the game according to the rules."

The existence of the advanced and basic R.O.T.C. courses at state universities by no means makes them into military schools, but in view of the opportunities offered to students who are interested in military training and capable of taking advantage of it, one is surprised to see statements such as one which recently appeared in a Minnesota newspaper, which said: "The ideals of manhood taught in the fine military schools of our country, and the exact discipline and government there cannot be excelled, and it is unfortunate that some of it cannot be carried into our universities and colleges." The opportunity is there for those who want it.

The views of a former dean of the Department of Agriculture, University of Minnesota, on military training in colleges may be interesting, inasmuch as this man, Dr. Albert F. Woods, is now president of the University of Maryland. A year ago Senator James W. Wadsworth, of New York, mailed out the results of a questionnaire sent by the United States Senate Committee on Military Affairs to the heads of many land grant colleges, which is to say, the big group of "Agricultural and Mechanical" institutions, some of which, as in Minnesota, have been combined as an integral part in a comprehensive state university. It asked about military training and the influence of the Army officers on the student bodies.

President Wood's reply follows: "I can say without qualification that it has been a decided success from the very beginning. It is considered by all as a distinct asset to the institution in developing the students, not only to meet a sudden call for assistance in case of need, as

during the World War, but intellectually, morally, and physically. The discipline as carried out at the university is a distinct help to the students in all these directions.

"The military work does contribute an important and unique content to the education of the student. It develops probably more successfully than any other educational procedure the idea of teamwork and of looking ahead. The application of the sciences to such problems is also brought out.

"In our case the influence of the Army officers upon the students has been salutary. The War Department has taken great pains to assign excellent men to us for the purposes of the work. The good results of the plan are absolutely dependent on the presence of Army officers. The work can not be carried out successfully without their aid.

"The military formations, the standards, the courtesies, and the discipline certainly elevate the morale and strengthen the loyalty of the student body. In these state universities, especially, is it important to keep the mind of the student continually focussed upon the idea that he is training to serve the State and Nation, and he must take not only a state but a national viewpoint of his responsibility. I hope, therefore, that nothing will be done in any way to weaken the valuable work that is being done in the universities and land grant colleges in this respect."

Replies in the same general tenor were received from the heads of most of the large institutions in the country where military training is conducted, among them Princeton, Michigan, Harvard, Minnesota, California, Stanford, Georgia Tech, Ames, Chicago, Purdue, Florida, North Dakota, Ohio State, Iowa, Syracuse, Oregon, and many others.

Like Maryland, Minnesota has been fortunate in the War Department's assignment of Army officers to direct the Reserve Officers Training Corps, which is now being commanded for the second time by Major Bernard Lentz. Major Lentz, as a first lieutenant, was in command of the Minnesota battalion from 1914 to 1916. He returned to Minnesota in the summer of 1923 and has been professor of military science and tactics since that time. His success at Minnesota is attested by the fact

that his assignment has been extended for two years beyond the ordinary duration of such an appointment under Army regulations. Accordingly, Major Lentz's service at Minnesota will last through this year and next.

Among the interesting items in his military record have been the origination of the cadence system of close order drill, a method of training raw recruits which was widely adopted during the World War. He also organized and directed the "Panorama of Victory" parade in New York City following the armistice. He is a graduate of West Point and of various war colleges, including the staff school at Fort Leavenworth, Kansas. During the war period he was a member of the General Staff.

Serving with Major Lentz are Colonel Kent Nelson, in command of the medical unit; Major Ray Hill, infantry; Major Frederic H. Bockoven, in command of the dental unit; Captain Frederick S. Mathews, infantry; Captain Don F. Pratt, adjutant; Captain Porter P. Wiggins, infantry; Captain Arthur R. Walk, infantry; Captain Wilton B. Persons in command of the signal corps unit; Captain Nyal C. Adams, in command of the coast artillery corps unit; Captain William F. Rehm, infantry; Captain Julian Gist, infantry; and Lieutenant John F. Cassidy, coast artillery corps.

Before being allowed to apply for enrolment in the advanced R.O.T.C. units the men at the University of Minnesota must have gone through the two basic years, which are required of all able-bodied male students except those who have had equivalent training at another college or in the National Guard or those who have transferred with advanced standing from institutions where no military service is required.

Basic drill is compulsory at Minnesota, having been established in accordance with the terms of the Morrill Act of 1862. A passage in this act provides:

"That there be granted to the several states for the purpose hereinafter mentioned, an amount of public land equal to 30,000 acres for each senator and representative in Congress to which the states are entitled; that the proceeds derived from the sale of these lands shall be invested in stocks and bonds, the income from which shall be appropriated to the endowment of at least one college in the state,

where the leading object shall be without excluding scientific and classical studies, and including military tactics, to teach such branches of learning as are related to agriculture and mechanic arts."

It is from this phraseology that the phrase "Agricultural and Mechanical" came to be applied to state colleges based on land grants, such as are now represented in the American Association of Land Grant Colleges. In some states the land grant college is an institution by itself, as at Iowa, where Iowa State College, is distinct from the University, or in Michigan, where there are the University of Michigan and Michigan Agricultural College. In Minnesota far-sighted pioneers in education combined the land grant college of agriculture and the mechanic arts with the institution devoted to instruction in the arts and sciences and the "theory of instruction," to make one inclusive university.

The basic drill course amounts to three hours of drill a week for two years. The squads are commanded by student officers from the advanced R.O.T.C. under the direction of the selected officers of the United States Army who have been assigned to each university.

This year at Minnesota there are 1,564 men in the infantry, 448 in the coast artillery, and 185 in the signal corps branches of the basic R.O.T.C. battalion.

That college military training, together with the high intellectual average maintained generally by persons attending college, is of use in time of war and is used, is shown by the fact that 53 of 280 Minnesota students who entered the Army in the Spanish-American War were commissioned, while of 3,527 students and graduates who served in the World War, 1,415 were given commissions as officers.

Minnesota maintains, apart from the Military Department, an orthopedic gymnasium, conducted by Emil Iverson, the hockey and cross country coach, where men who are physically unfit to take part in military drill are given scientifically conceived exercises. There is no doubt of the actual benefit received by hundreds of these men. They are assigned to the class by the Students' Health Service. The other group, relatively small, whose members are relieved from drill is made up of men who are "on the squad" in some intercollegiate

sport. They need not necessarily be members of the first team, but must be men with definite possibilities of making the team. But even these must complete one year of drill before they may take advantage of this opportunity to substitute intercollegiate athletics for R.O.T.C. assignment. And if they become lax in attendance on the athletic field their excuses from drill are annulled.

The Reserve Officers Training Corps is also responsible in large measure for the fine military band that represents the University of Minnesota, although some of the bandsmen are not members of the R.O.T.C. The concert band of 110 pieces is made up of 70 members of the R.O.T.C. band and about 40 additional men who receive band scholarships to help them pay for the relatively expensive uniforms. Band practice takes place three times a week, so that members of the reserve corps band are in practically the same situation as are the members of any other unit.

Through the excellent rifle teams that have been developed in the past five or six years Minnesota has advanced to first place in college rifle competitions in this country, has won a score or more of trophies, and has sent men to shoot on some of the most important rifle teams in America. Other adjuncts of the R.O.T.C. are the Military Ball, one of the yearly social events on the campus, and the organization of student officers which goes by the name "Scabbard and Blade." Each year in May or early June the Minnesota Reserve Officers Training Corps undergoes a formal inspection by officers of the General Staff, who make the rounds of all institutions offering military training and conduct inspection of the work.

This year an unusual feature of the student military life was the appearance on the campus of Major General C. P. Summerall, chief of staff, who addressed a student convocation on February 23.

(Continued from page 9)

Gat," Tschernyshevsky's "Tchito Pjeleli?," works by Marryat, pamphlets by Bebel, and various technical works.

This is not the proper place to review Dr. Lunell's purely botanical work. It is sufficient to relate that working without facilities, without immediate scientific associates, and during only such time as could be snatched from fatiguing duties, he built up a large herbarium and made his own modest but meritorious contribution to the literature of pure science.

Since Dr. Lunell's death, his herbarium has been little used by botanists. It is unfortunate

that there is not now more local interest in collections of the plants and animals of the various regions of the United States, but until such local interest exists, it is desirable that collections of this kind, made by men fired with enthusiasm for scientific work under difficult conditions, be ultimately assembled in centers where they may be available to students.

It is a source of satisfaction to the members of the Department of Botany that the Lunell collections are now to be incorporated with the already extensive herbarium of the department, where they will be of material value in work on the flora of the Northwest.

NOTICE

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Vol. 9 No. 105

March 1928

MINNESOTA CHATS



For a Better
Minnesota

Published Monthly by the University of Minnesota, Minneapolis. Entered as second-class matter at the Minneapolis, Minn., post office. Acceptance for mailing at special rate of postage provided for in section 1103, Act of Oct. 3, 1917, authorized May 26, 1923.

FOREWORD

ARE too many seeking admission to higher schools, colleges, and universities? The committee feels that the issue presented by this question cannot be satisfactorily met by arbitrary systems of selection and elimination. Institutions and systems themselves as well as people must be tested. Until this is done we do not know what the possibilities are. In the meantime it is more constructive to give the benefit of the doubt to human beings rather than to systems which are likely to be overly traditionalized. In the final analysis this is the problem of making scientific adjustment to all types of people. In all probability the higher educational institutions will have to continue to make broader adaptations to individual differences among ever increasing numbers. Our American schools should not revert to a caste system philosophy. Caste systems have had ample time in which to prove their superiority, but what have they to show for themselves? Our school system is young, but it is based on the most persistent ideals we know of, the ideals of democracy.

The elementary school has been well established on this ideal. But let us not forget that this was not accomplished without a bitter battle. The same forces in the main which now are so alarmed over the growth of our higher schools fought the establishment of the free tax supported elementary school. It has always been so. Our profession should lead the battle for ever better educational opportunities for all the people.

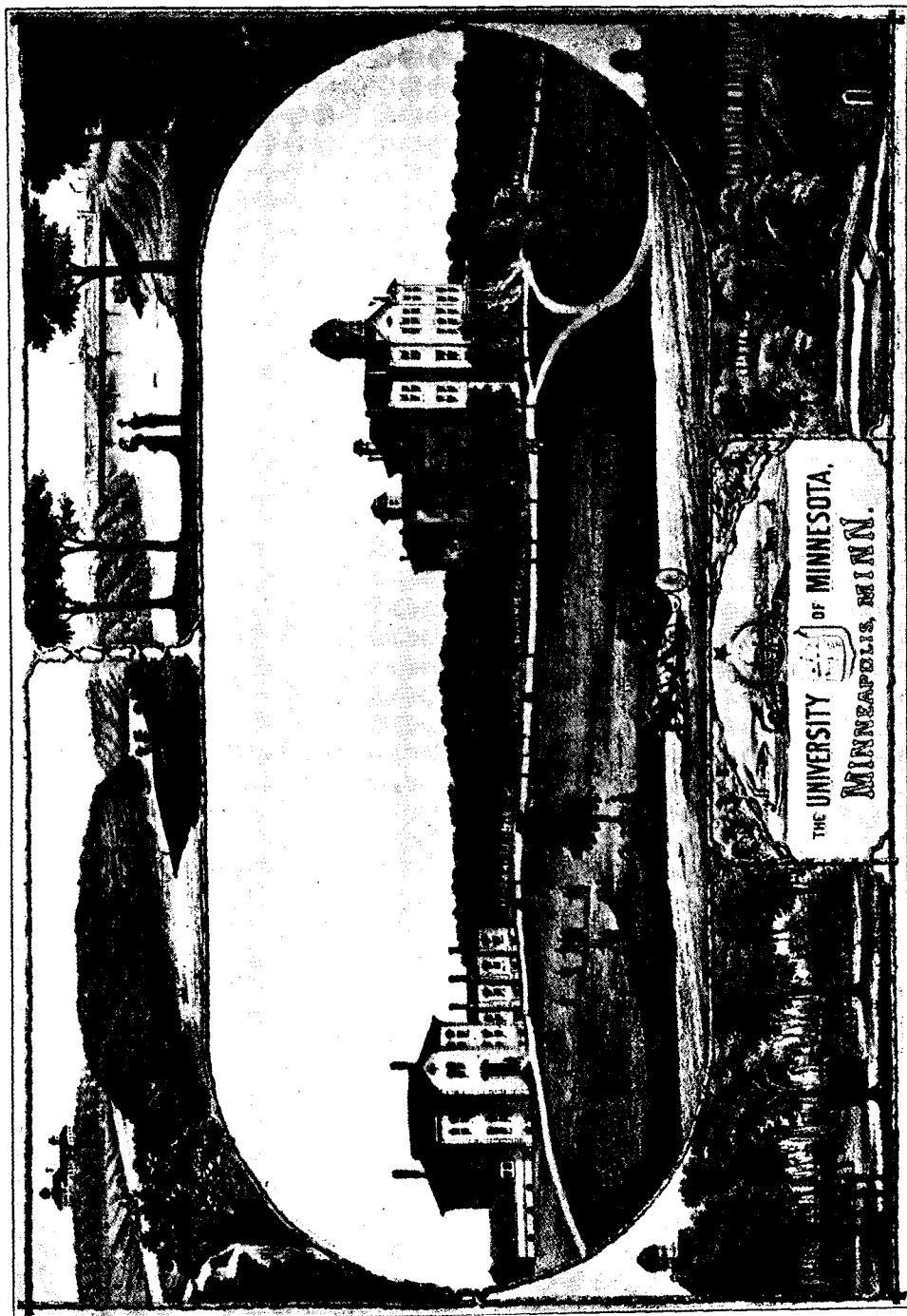
*Resolution adopted at the recent Boston meeting of the department of superintendence,
National Education Association*

MINNESOTA CHATS

Vol. 9, No. 105

published by the

UNIVERSITY OF MINNESOTA



The Original Minnesota Campus
Left, Agriculture and Mechanic Arts building; right, the Old Main

The State University--Its Relation to Public Education

By President L. D. Coffman
Of the University of Minnesota

THE state universities of America are an expression of the spirit of the pioneers who settled west of the Appalachian Mountains. True, they had their origin in democratic Virginia, but their expansion and development came with the growth of the Central West. Since then they have spread to the South and across the Rocky Mountains to the Pacific Coast.

The state universities represent the culmination of democracy's effort to advance itself by education. They have thrived and flourished where democracy has thrived and flourished. Wholly unsympathetic with every attempt to transplant an alien university system to American soil, the great body of citizens in the Mississippi Valley, and later to the South and West, sought the establishment of institutions of higher learning, open to all, sensitive to public need, supported largely by taxes levied upon all, and designed and administered to promote the public welfare.

The state universities and the public schools evolved out of the same set of conditions. The arguments for the establishment of the universities were essentially the same as those for the establishment of the public schools, only raised to a higher power. The public schools were intended to be free schools; the state universities were intended to be as nearly free as possible. The doors of the public schools were to be wide open; likewise the state universities were expected to admit those who had completed the work of the next lower unit of the public schools. The public schools were maintained to provide for each individual that training by which he could profit most; the state universities offered additional training for those who were capable of pursuing their studies into still higher realms. Both the public schools and the state universities were founded on the assumption that society's welfare is best promoted by providing as nearly free and equal educational opportunities and privileges as possible. In-

deed from early colonial times this conception has been assumed to be one of the surest guarantees of civil liberty.

Now Come Criticisms

But of late, a tide of criticism of the public schools in general and of state universities in particular has begun to flow. Today it is a report of one of the great corporations that arraigns the cost of the state universities in most vigorous language and declares that they have become the victims of mediocrity. Tomorrow it is a report from one of the great foundations declaring that the students should pay the cost of their instruction. The next day it is an address from one of the distinguished citizens of America in which the same declarations are made. Then follows another report, brilliantly written, comparing the best of European secondary schools with American secondary schools of lower grades, discrediting the work of the American schools. Then comes a report from the manufacturers' association calling for new limits on child labor legislation and the extension of the privileges of work for children. Then follows a report of the United States Chamber of Commerce presenting figures showing that education is costing too much.

One cannot view an army of samples of this nature without stopping to think. If these criticisms and others like them mean anything, they mean that we need to clarify and to re-define our philosophy of life and of education, for it is obvious, even to the casual observer or student, that a wide difference of opinion exists between the dominant philosophies with regard to education.

Provide Freedom of Opportunity

The state universities and the public schools from the beginning have been maintained to provide freedom of opportunity. One of their fundamental doctrines has been equal opportunity for all to reach their highest attainments. They have stood vigorously against class educa-

tion. They have provided educational facilities for all alike, the rich and the poor, the boy and the girl, the Gentile and the Jew, the Fundamentalist and the Modernist, the Conformist and the Non-Conformist, the Religionist and the Atheist.

Free of denominational control, the state universities are nevertheless Christian in spirit, Christian in ideals, and Christian in fellowship. They are open alike to those of social station and to those without. Long ago they learned that genius and talent do not belong to any class based upon wealth or social position. The only differences they recognize are differences due to ability and to a desire to achieve.

They recognize that not all can achieve alike or move forward at equal rates of speed. They know that some must fall by the way and that some attempt that which they are not qualified to pursue. But they are not willing to condemn those of less talent merely because they have less talent. They propose for them just what they propose for the more talented; that is that each shall be permitted to progress as rapidly as his abilities will permit to the approximate limits of his attainment. The student of few talents shall not be denied his opportunity while the student of many talents is given his.

The state universities and the public schools have persistently maintained that they are training the common people for the common weal. They have believed in the unlimited potentialities of the individual. In maintaining this as an ideal they have merely been expressing the spirit and philosophy of the free people who support them.

Let the state universities set themselves up as class institutions and the support which they

have hitherto received will quickly vanish and other institutions will arise out of the soil which gave them birth to take their places.

All other criticisms notwithstanding, if the American people have any great passion, it is a passion for education. They may not all be imbued with a flair for learning, they may not all be endowed with a "divine afflatus" for truth, but of this one thing we may be certain, no matter how vigorous the criticism of college and university education may be, the people of this country, those who vote and pay the taxes and support its institutions, will not permit their children to be deprived of their inherent privilege to attend college. They will establish new ones if they have to, even though the taxes must be increased to support them.

It is claimed that the average ability of the student bodies in these days is lower than it was fifteen years ago. This may be true; it probably is, but based upon a priori evidence, is difficult to establish. The standards of admission to college and the standards of college work certainly are higher today than ever before in all of the history of American education. This is as true of the state universities as it is of the privately endowed universities. If one listens to much of the current criticism he despairs of the college student, but he takes heart when he observes on commencement day that thousands of those who were supposed to be mentally incompetent have completed to the satisfaction of the faculty all of the requirements for their degrees. And it should be remembered that those requirements for the most part are determined by those of alleged superior intelligence of a generation ago.

We hear much about mass educa-

The Regents at Crookston



The Board is shown during its recent winter tour of schools of agriculture and experiment stations. Front row—Dr. Mayo, Mr. Williams, President Snyder, President Coffman, Mr. Lewison, Mr. Middlebrook; back row—Mr. Sundberg, Mr. Wilson, Dean Coffey, Professor Boss, Mr. McConnell, Mr. Hildebrandt.

tion, and the absence of the personal touch between university teacher and student. All of the teachers of a generation or so ago did not hold personal communion with their students either; a few of them did; most of them did not. A student then often got very little intelligent advice concerning himself; today he gets advice scientifically determined concerning his health, mental makeup, emotional maladjustments, and vocational potentialities.

We probably forget that there were not very many dynamic personalities on the teaching force in earlier days. There were a few, praise be, and most of us acknowledge their strength of character and personal influence. One of the educational myths is that all of the teachers were of this type. Far from it. We should remind ourselves that there are dynamic personalities who are forceful teachers on the teaching staff today and that twenty years hence, they, too, will be remembered with affection by their students.

Not all state university teachers are of the type which Mr. R. L. Duffus, a writer for the Sunday supplement, *New York Times*, January 8, describes, "For himself (that is, the teacher in the state university) he needs the arts of the orator quite as much as those of the scholar. He must be ready with stories, with amusing illustrations. He must possess the ability to dramatize his subject, so that the dozing student in the last row will every now and then wake up and grasp a fact or principle." Without claiming that teachers should be entertainers, perhaps a little of the power of lucid presentation may be good for a teacher wherever he is. Experience has clearly demonstrated that men who place themselves rather than the materials of their subjects in the forefront, are condemned by faculty and students alike.

A Great Democratic Experiment

In moments of great exultation Americans in general are disposed to praise their schools and the profession of teaching. They view with pride the public schools and the state universities as the agencies of the greatest experiment democracy has ever undertaken. It is the experiment of providing or of attempting to provide, largely by taxation, for the education of the children of all men and of offering to them,

as nearly free as possible, equal educational privileges from the kindergarten to the university. The burden which the present generation has to bear in maintaining this experiment is incomparably lighter than that which our sacrificial forefathers bore to establish this great system of popular education.

Certainly it is true that the torch of American civilization has been passed from generation to generation, not by tradition, but through the processes of an expanding education. Shall some generation in the comparatively near future witness the dimming of that torch because it provides the maximum opportunity for the children of the favored and denies the maximum opportunity for the children of the less favored?

AMERICANS have long maintained that equality of opportunity is essential to the development, the safety, and the perpetuity of democratic institutions. And by equality of opportunity none but the most uninformed have ever thought that it meant equality of ability. Equality of opportunity has been relied on to produce a worthy democratic citizenship.

Education has been supported as a social investment. It has been assumed that society's contribution to the education of its children is returned manyfold in service, progress, and wealth. And the facts, I believe, fully justify that theory. One only needs to point to the states that have neglected education as contrasted with the states that provide generously for education, to find evidence in support of this assumption.

If one will take the five states that have provided most liberally for education, and compare them with the five states that have provided most parsimoniously for education, he will find that the average earnings of the families in the former are almost twice those of the latter, that the amount per individual in the savings banks is nearly ten times greater per individual in the former than in the latter, that the number of books in the libraries and the number of magazines and newspapers subscribed to is vastly greater in the former, and that the living conditions by and large are much superior in the former.

One of the things we are sometimes prone to forget is that we pay for the things we don't

have as truly as we pay for the things we do have, but we pay in a different kind of coin. One has only to sweep his eye over the world to find abundant support for this statement. The nations that have been unwilling to spend on education are the victims of ignorance, superstition, destitution, and of all the wretchedness that comes in their train.

America has achieved her station, not by a withholding but by a generous spending. And she has done it by refusing to close the gates of educational opportunity. Generous donors and generous states have kept them open. Shall she now turn her back on the past and, heedless of its lessons, initiate a new philosophy, one which provides the best of higher education for the privileged few who possess the money to pay for it? Or shall she continue to hold steadfastly to the theory that democracy in the final analysis is a process of continuous education and that this nation can keep her place at the forefront among the nations of the world by providing more, not less, generously for the education of all?

If society is growing more complex, as most of us believe, its problems more numerous, more intricate, and more difficult of solution, then more, not less, education will be required for their solution. How tenaciously did our forefathers hold to the doctrine that the progressive advancement of democratic institutions depended upon an educated citizenry! An able attorney said to me recently, "Mr. Coffman, civilization has been ruined by education. Do you suppose you can make people competent to vote on public questions by giving them an education?" My only answer was, "I know of no other way."

Shall America Be Weak-Hearted?

And if the education of a generation is to become increasingly more selective, as some advocate, so that only the gifted possess knowledge concerning the complex problems of modern life, which we are constantly called upon to consider and, we have thought, to assist in solving, if college education is to be only for the select, then it becomes alien to the spirit which gave birth to public education and to the state universities.

If pursued to its logical conclusion, this doc-

trine means that free government, based upon universal citizenship, cannot endure. We are not ready to admit, without adequate trial, that the great American experiment has failed. We are not yet ready to create by deliberate act an uneducated and uninformed proletariat.

We know that there are many who maintain that too many are in school and that too many are being graduated from college. There does not appear to be any trustworthy information showing that the professions, in general, are overcrowded. And we do not seem to have too many persons with a knowledge of government and of the other institutions of men. Where trained intelligence exists there we seem to have the best citizenship. And is not citizenship a function which all classes of people are expected to exercise? Shall we deny those who are to traverse the humbler walks of life the outlook of the trained mind? If we attempt to do it we shall probably find ourselves reckoning without our host, for as Lincoln said, "God must have loved the common people. He made so many of them," and they still rule in the land.

The state universities and the public schools have had still another common interest, an interest to which reference has already been made but which is deserving of further consideration. This interest may be best described by reference to an address which I heard a gentleman deliver recently before a distinguished midwestern club. He said, "College education, and perhaps secondary education, to some degree at least, should be based upon wealth. Those who are able to pay for it should be privileged to get it; those who cannot pay for it, should be denied it." Here we have a doctrine, stripped of all veneer, that education in its upper reaches should minister only to an aristocracy of wealth.

All Students Pay Part of Cost

It is a fact that there are almost no free universities any more in this country. The fees charged students by state universities have been increasing but they are not so large, nor have they increased so rapidly, as fees charged by private universities. If they must now be increased so that the students pay the full cost or approximately the tuition cost of higher edu-

cation, then one of the original primary purposes of the state universities will have been defeated.

The gentleman to whom I referred a few moments ago, declared that all education is simply a matter of charity and that the costs of education should be compared with the money given to charity. Viewed in this way it is clear that education is absorbing an unreasonable proportion of the nation's wealth. He stated also that the disintegrating effects of such charitable giving become even more pronounced in the case of students in colleges and universities and especially if the students are being trained for the more lucrative professions. He demanded that this pauperization should cease because of its deleterious social consequences.

It requires a type of reasoning which I am as yet unable to comprehend to understand how those who have themselves been the beneficiaries of this social charity and who because of it have achieved wealth and recognition in their communities, should now suddenly discover its harmful effects and seek to deny the children of others and even their own sometimes, the advantages which they themselves enjoyed.

Suppose it should happen that the great privately endowed universities should become even more select and that men of means and the great foundations should continue to endow them with increasing millions and the state universities at the same time were unable to make corresponding progress. Then, indeed, we should have what some claim we already have, provincial education in the private institutions

and a cheap variety of education for the less favored thousands in the state institutions.

Far be it from me to look with envy upon large gifts to private universities. I am especially happy to see them prosper, but I hold at the same time that the state universities, if the common weal is to be served, should prosper in corresponding degree. Education should be looked upon as national, not as a local enterprise; as a common, not as a class undertaking.

Many Centers of Learning Needed

The country as a whole will flourish best if there are many rather than a few centers where distinguished men of art, of literature, and of science are perpetuating their own kind.

THE last proposition to which I wish to call attention is likewise one to which reference has already been made. Stated more directly, however, the state universities and the public schools are unwilling to accept the doctrine of a self-appointed aristocracy of brains as their sole or primary function. They fully

understand that there is a somewhat popular impression that wherever "mass" education exists, a term which I deplore, for I believe there is no such thing as mass education, but wherever it is said to exist, they say, there is no training for leadership, although training for leadership is, in the opinion of many, the only justification for higher institutions of learning. Leadership, it should be remembered, is a relative term. Probably no one is a leader in everything; he leads in some respects and follows in others. Intelligent followership may be quite as important in a democracy as intelligent leadership.

The Auditorium Site



A winter view of the pharmacy garden

There are those who maintain that the efficiency and value of the higher institutions of learning are determined by the selective and eliminating processes: the fewer they admit and the more they eliminate the better they are. Some on the other hand measure their progress by the numbers of students they attract. Neither of these measures is adequate and neither can be applied without reservation to state institutions. A state institution will eliminate those who cannot do its work, but it will not refuse to give the individual who can do its work a chance to spend more than four years in accomplishing a given task if there seems to be good reason for it. It is unwilling to accept slowness as a sure sign of incompetency.

And admitting large numbers of students does not mean that the state universities are not training for leadership. If they are not already doing so, they should be offering every opportunity for the talented and the gifted and they should be encouraging them in every possible way. In discoursing upon this matter former Dean Eugene Davenport of the University of Illinois said a few years ago, "We hear too much about educating for leadership. What the world wants is not leaders, of whom we have a surfeit, but rather information and trained habits of thinking that it may select its leaders wisely. This all means the closest possible working relations between the institutions and the citizenship of the state, between those who, feeling the pressure of unsolved problems, realize the need of better information for those whose business it is to supply the need. A university so guided will remain close to the people and close to its problems. A university that so functions will not come very far from fulfilling its highest usefulness."

Two documents dealing pointedly with this general problem have recently appeared. One of them is the January issue of Ginn and Company's leaflet on *What the Colleges Are Doing*, and the other is the annual report of President Butler of Columbia University. The Ginn leaflet is a series of extracts from articles or bulletins, which reveal a common theme; they favor rigid selection of students.

Is This Social Justice?

Among other things these authors have set up a new conception of social justice. They

argue that fewer students should be admitted and more should be eliminated, because the mediocre students are trespassing upon the time and rights of a high-minded faculty who are giving generously, and with high altruistic motives, of their energy and ability for the advancement of society; because the mediocre students are depriving the brilliant students of that opportunity which they covet of maximum achievement, and because the mediocre students are defrauding their parents, friends, and society in general out of the greater returns and rewards which would accrue if society invested only in the gifted.

The statement is made that "the stampede into college life today is in a great measure blind, ill-considered, and without high motive," that the college market is saturated with mediocrity, that the keynote of the college world is the tragedy of the unfit, that the colleges are engaged in a wildcat exploitation of youth, that education for democracy should cease, and that education for aristocracy should take its place.

One of the articles in particular seems to hold the colleges responsible for the ills and sins of society. "For not a third of all that graduate see in their own intellectual growth sufficient compensation for the labors of a college career. Most, on the contrary, feel that they have sacrificed time and energy, and for the loss thus sustained they mean to recover from society. Is the legal profession being prostituted by the practitioner who brings with him into practice the ethics of the bootlegger and the heart of the pawnbroker? Then the remedy is not in stricter requirements for admission to the bar. The evil originates at the threshold of the law school or earlier, and there it is to be combatted or abandoned."

Why Are Schools Responsible?

I have long known that the schools of this country had their weaknesses but never before did I assume that they should be held primarily responsible for the sins of men. I knew that they had been forced to assume many burdens which did not belong to them, but not until I read these articles did I understand that the colleges of this country, because they have not been exclusive, are responsible for bootlegging lawyers and medical fishmongers. Were this true I

should say that it was high time that Jehovah direct His destructive thunderbolts at these dens of iniquity.

The common theme running through the series of articles is education for the elect. And to this doctrine we agree that those who cannot profit by college training should not be permitted to attempt it or to remain at college. And those who can profit by it but will not, likewise should not be permitted to remain at college. Colleges should not be regarded as playhouses, eleemosynary institutions or rest stations. At the same time there are those of us who remember with gratitude that talent and genius were not the sole requisites for admission to college in our day.

The authors of these articles say they are thinking in terms of social justice. I maintain that their doctrine is the doctrine of individualism concealed under the cloak of social justice. The conception of social justice advanced by these writers is new in the field of education. While it has been advanced here and there by writers, it never before could be dignified as a movement. The focus of our attention, educationally speaking, years ago was upon the individual; more recently it has been upon those things which minister to the common welfare. The scene in education has been shifting from man to his activities; from individualism to the common good; from personality to commonality; from what is best for the individual to what is best for the community. And the common good has not been conceived as depending upon the training of the gifted alone, but upon the training of all who are competent to profit by training.

IN his annual report, President Butler distinguishes between universities that reside in the sphere of liberty and universities that reside in the sphere of government. He defines the institutions of liberty as those supported by benefactions while the institutions of government are those supported by taxes. "Free men," he says, "have themselves erected government and have given to it for domain and occupation a very small part of all that constitutes their activity, physical, intellectual, social, moral, economic, reserving the vast and unlimited remainder for themselves as the sphere of liberty." And again he says, "The vast advantage which

a university erected in the sphere of liberty has over a university erected in the sphere of government is in its freedom from bureaucratic control, from partisan political pressure and from those urgings which are the unhappy result of compromise between clashing convictions and conflicting public policies. A university in the sphere of liberty is master of its own destiny and is responsible only to its own ideals and to that larger public which has brought into existence both the sphere of liberty and that of government."

The obvious inference from this is that state universities are greatly limited as to domain and occupation, that is as to the scope of their usefulness, while the endowed universities are practically unlimited in scope. If it be true that the social justifications lying back of these two types of universities, possess these sanctions, then it is clear that these two types of universities do not operate and are not expected to operate in the same field. Furthermore, it is clear that we are dealing with differences in kind as well as with differences in degree when we think of the service these two types of universities render. It may be that society must rely even more heavily in the future than in the past for its leadership upon the dwellers in the sphere of liberty, while institutions which it itself provides shall be for the training of citizens for the more modest and humbler walks of life. I suspect that if public universities can continue to develop citizens and, if I may dare to say it, "true leaders," as they have in the past and in increasing numbers, no imaginary line will ever be drawn between a school in the sphere of liberty and a school in the sphere of government.

Is Freedom Ever Complete?

A second inference to be drawn from Dr. Butler's statement is that endowed universities sustain no interference with their freedom while state universities do. There is abundant evidence, I believe, in support of the opinion that endowed universities, generally speaking, are influenced, controlled, and frequently governed quite as directly, oftentimes more obviously, by the donors of their funds than state universities are by the taxpaying public. The funda-

mental question of public concern is not that of control versus freedom; for all institutions are controlled. The question is whether the control always seeks to advance public interests.

This distinction of President Butler's raises again, and from a new quarter, the question of the purpose and place of the two types of higher education in a democracy. No matter from what source universities receive their support, they should, in my opinion, seek an atmosphere of freedom in which to do their work and they should view with disfavor any movement or attempt, whether it be directed at state or endowed institutions, to curtail their freedom. The subservience of one institution must eventually menace the life of the other. A state university must, if it is to be worthy of the name university, be as truly a republic of minds where truth is fearlessly sought and taught, as is an endowed university. We cannot have two classes of true universities in America, one serving in the empyrean fields of liberty and the other with its hands and feet of clay serving in the field of government. Each must serve in both fields, if both liberty and government are to survive.

Symbol of Popular Struggle

And now in conclusion let me say that both the public schools and the state universities rep-

resent the struggles of a free people to establish a system of popular education. The relationship between popular education on the one hand and democratic society on the other, is one which the American people still feel with responding devotion. The freer the political institutions of men, the more widely scattered are the schools for everybody; the more restricted the political institutions of men, the less widely scattered are the schools for everybody. The chief means of control in a democracy is some form of popular education. It is no mere accident of time and place that Americans have fostered public education for all.

None recognized the truth of this more than Thomas Jefferson, who declared that a free government cannot endure without public education. He gave a mighty impetus to its cause. From then until now the public schools and the state universities have advanced, sometimes with uncertain and halting steps, but the movement in general has always been forward. Could our forefathers have looked into the future, they would have known that this great experiment in democracy was secure, for its foundations are rooted in the idealism of the people and in provisions which they consider wise for meeting the necessities of their social and political structure.

Northrop Memorial Auditorium Becomes a Reality

The University of Minnesota's Dream of an Impressive Hall Where All May Meet Under Noble Influences Finally Reaches the Point of Realization

THE University of Minnesota is to have its auditorium at last.

And the late President Northrop, remembered with love by the thousands who graduated between 1885 and 1911, will have his memorial.

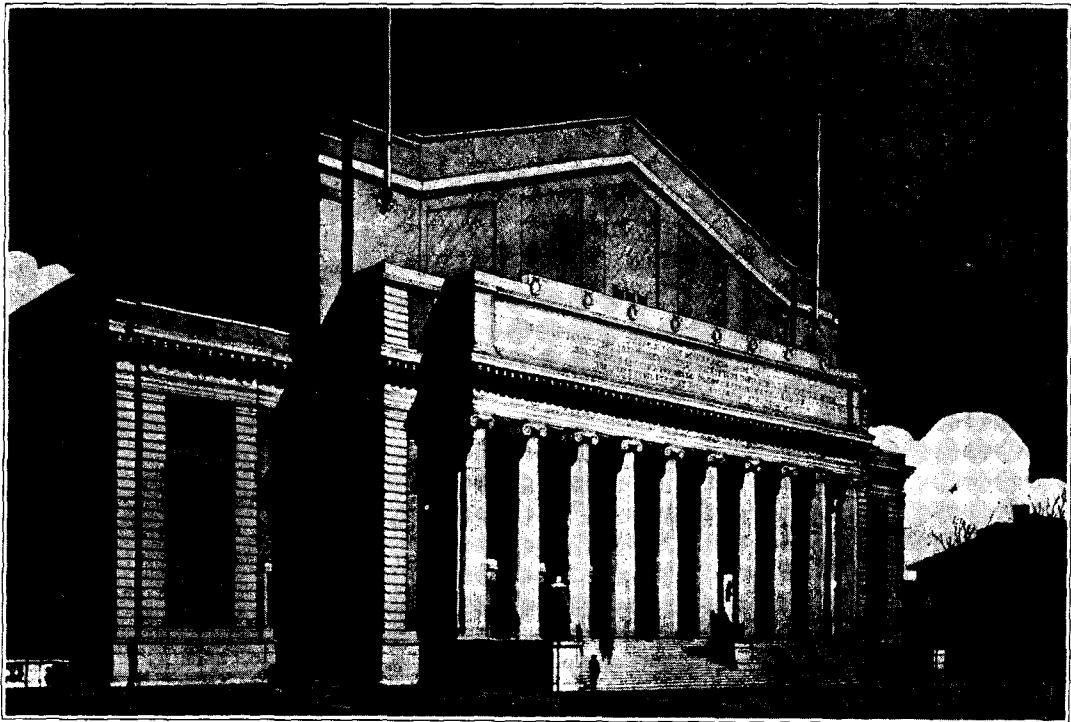
Final plans, completed by the state architect, C. H. Johnston, with the assistance of Professor F. M. Mann, consulting architect for the University and head of the School of Architecture, have been approved.

The Cyrus Northrop Memorial Auditorium will be the crowning structure of the fast-developing University Mall, and will focus and dominate the group of new buildings that has shifted the center of today's university of 12,000 students away from the famous "Campus Knoll," where the activities of yester-

day's University of Minnesota, 5,000 strong, were centered.

More than \$250,000 in pledges remaining from the Stadium-Auditorium campaign of 1922 is still unpaid, and every effort is being made to bring about the settlement of these outstanding obligations while the work of building is under way. Construction of the auditorium is due to begin almost at once.

Northrop Memorial Auditorium will be an imposing building, standing where the old Minnesota pharmaceutical garden has attracted the attention of campus wanderers for many years and facing south, down the open space of grass and trees that stretches from that spot to Washington avenue. One standing in front of the new building will look down this mall.



The Approved Drawing of Northrop Memorial Auditorium

past the colonnades of the Library and School of Chemistry on the right, and of the Administration and Physics buildings on the left, and will be able to see almost to the Mississippi river.

The auditorium will be built of brick and stone. Ten massive limestone columns, forty feet in height, will stretch across the face of the building in an impressive portico. These pillars will be of the same height as those in front of the other buildings on the mall, but the auditorium itself will rise high above them, reaching a point 119 feet from the earth at the peak of the roof gable. Brickwork above the colonnade will be panelled artistically. A series of low steps, sweeping across the entire stretch of the portico will complete the effect at the base of the structure and provide easy access and egress to the large audiences that are certain to gather for auditorium events.

The portico and sections of the entrance immediately related to it will run for 118 feet, taking up about one half of the extent of the whole building across the front. Plans call for a structure 218 feet wide at the front and 230 feet deep. At either side of the row of columns the building will continue for about 50 feet.

Once inside the artistic bronze doors that will be installed behind the pillars one will come to what will be the most artistic, and perhaps the most impressive feature of the building, according to Professor Mann. This will be the memorial vestibule, rising 40 feet from floor to ceiling, 108 feet long and 28 feet wide. It will be walled with travertine stone from Minnesota quarries. The vestibule will provide, on the inside front wall of the auditorium, a series of nine memorial panels. On these, as time passes, memorials and symbolic sculpture representing great events in the history of the University can be placed, and it is the hope of the architects, expressed by Professor Mann, that this may be done.

At either end of the great vestibule a stone staircase will wind artistically upwards to the balcony level, and on that level, on the side of the auditorium proper, a promenade will be built under the balcony, with graceful openings through which persons walking there may look out on the memorial panels or down on the crowds of people passing in or out.

Two important problems concerning the front of the auditorium remain to be decided. One is the matter of an inscription. Above the colonnade a broad space will be set aside on which an inscription dedicating and characterizing the building is to be carved. Inscriptions are a delicate matter, and President Coffman, on the advice of the administrative committee of the university senate, has appointed a special committee of "best brains" which is expected to evolve a suitable statement. Extreme care will be taken with this wording, for it is felt that the inscription should reveal the very heart of the university's purpose and philosophy, inasmuch as it will stand for all to read, at the very well-spring of the institution, over a period that probably will stretch into centuries.

The other problem is that of a specific memorial to the late Dr. Northrop. An unnamed friend of the late president of Minnesota has offered to erect a suitable personal memorial to Dr. Northrop, and its nature and location are now to be decided. One proposal is that a statue of him be erected in front of the auditorium. Professor Mann believes that for the sake of the entire artistic effect and fittingness of the completed structure, the personal memorial to Dr. Northrop should be placed inside the great vestibule. His suggestion is that the central three of the nine memorial panels on the south side of the vestibule be set aside as the vantage point on which the Northrop Memorial could be worked out most artistically. It could be inspected at greater leisure by persons inside the building, and would also focus attention of those looking down from the balcony level promenade through interstices in the vestibule's north wall.

The Main Auditorium

The auditorium proper will have a seating capacity of 5,000, of whom half will be on the first floor and half in a large balcony. It has been the aim of the architect, Mr. Johnston, to "make every seat as good as the next," and the design of the auditorium has been carried out with this as the keynote. Presumably it will be used as a "one price hall," with the difference between seats at the front and those further back determined by one's good fortune in getting to the box office early or late. The

hall will be 143 feet wide, 82 feet high, and will stretch for 154 feet from the stage to the rear of the gallery.

In determining to install only 5,000 seats the architect and Professor Mann took into consideration the necessity that all seats be comfortable and provide ample room for the occupant.

"You may safely predict that there will be no crowding" it was explained. "Every person admitted to a function in the auditorium is going to find comfort there, and elbow room, too."

What is called "circulation" in building parlance, relating to the question of ease in getting in and out, has been given careful study by the planners, with the result that exits and entrances are to be placed so that crowds can be let out in the briefest possible time. Not only will there be ample exits in front on the ground floor, but at each extremity of the balcony there will be a direct exit to outdoors, in no way connected with exits from the main floor, and directly beneath these will be direct outside exits from the main floor for the use of persons seated toward the front who do not care to go out through the principal doors.

Acoustics Tested by Picture

Acoustics have also received careful attention. Determination of the manner in which sound waves will behave when released from a human larynx or the sounding board of a musical instrument has come to be a science in recent years, and the most scientific methods have been applied to the auditorium problem. The illustration partly shows how this is done. This is a picture of a piece of metal, cut out in the shape of the room under study, and highly polished. Light waves are then played

upon it from the point and direction that sound waves are to come when the actual building is in use. The manner in which these light waves disperse, scoot about, and reflect, is accurately shown by the simple act of taking a picture of the metal with the light playing on it. Reference to the illustration reveals this.

One can see that an abundance of direct sound with little conflict from side-wall reflection reaches practically all points in the auditorium. The exceptions are the two rear corners, represented in the picture as covered by a thick series of reflected diagonal lines. To eliminate them and make it possible to hear equally well at practically all points in the interior, special plaster will be used on the walls to deaden sound reflections.



A picture of the Auditorium Acoustics

The proscenium arch, framing the stage, will be 72 feet wide, and will be impressively decorated.

Must Leave Off Stage House

Here, however, the auditorium will end, for the University has too little money on hand to be able to complete the building according to the original plan. It will be necessary to leave off the entire stage house, stage, and dressing rooms, without which the building can never reach its full utility. This will not be a permanent omission, naturally, but nothing can be done about it just now unless the pledges come in more rapidly. A temporary stage will be constructed under the proscenium arch and will be provided with special exits and entrances.

Source of the Funds

From all sources, money available for the auditorium amounts now to \$750,000. This comes partly from collected pledges, partly from

a sum turned over to the auditorium in the distribution of the last funds available under the comprehensive building program, and partly from a loan to that fund, voted by the Board of Regents, until an equivalent amount shall have come in on existing pledges.

The building as planned in its entirety would cost \$1,000,000, but the stage section, which has been eliminated, will reduce the cost by one-fourth. Unfortunately this elimination will also reduce the utility of the structure by at least that much. Productions requiring the dressing rooms and a full stage will be out of the question.

The auditorium can be used, however, for addresses, performances by soloists, and occasions on which it is desirable to bring together a large part of the student population of the University. When the stage house is finally built the auditorium will be able to accommodate any imaginable presentation of drama, opera, or ballet.

One part of the stage equipment which will be put into the original structure is the large switchboard to govern lighting. It has been found that this must be constructed in the place where it is to remain. It will be built at the rear of the building and covered with a temporary house that can be removed when the opportunity to build the stage house comes.

The great hall in which performances and gatherings can be held will not provide the only facilities included in the Memorial Auditorium by any means. Inside the front gable will be a long room that will be set aside for permanent and temporary art exhibitions. At various places about the building will be 13 large rooms that can be used for meetings, exhibitions, committee gatherings, and the like.

Most notable among the special rooms will be two in the basement, each 34 by 60 feet, one of which will be equipped to perform a service that cannot now be obtained at any other place in the Twin Cities. This is the broadcasting of musical events by large organizations in a place specially prepared for that purpose. Such organizations as a band or large chorus can present programs there for radio transmission in the assurance that all conditions are right.

The second room will be especially for the

accommodation of the meetings of learned societies and scientific groups. It will add to the popularity of the Minnesota campus as a meeting place for scientific conventions and will also be a great convenience to scholarly societies which have branches at Minnesota, as practically all of them have. Adjoining this room will be others that can be used for committee sessions in connection with these meetings.

The special broadcasting room will also serve as a practice room for the University Band, and will be equipped with special sound-proof walls, band practice being something that is more appreciated by members of the band than by those who listen involuntarily. In this room the band can conduct rehearsals without disturbing persons who may be occupied in other parts of the auditorium.

Will Create a Spirit

Minnesota is building an auditorium because the heads of the institution are convinced that a meeting place capable of bringing together a large part of the student body is absolutely necessary to the development of the unity and common point of view that play so large a part in the development of spirit.

And college spirit is a far more important thing than most people realize. College spirit is only in small part a matter of pep-fests, rah-rahs and tin lizzies marked "Stop me if you've heard this one." It is rather a quality that is like true patriotism in one's attitude to his country or true piety in relation to his church. It is a state of mind that involves love and respect and enables one to see in his college the symbols of human aspiration, of noble endeavors for achievement and progress, of ten thousand young people joined in activities whose main purpose is that they shall become something better tomorrow than they are today and that, being better, they shall be a force for the upbuilding of the society in which they dwell.

One who leaves the University of Minnesota with the memory of solemn moments in a beautiful hall, where the great organ peals out its notes, and campus leaders, from faculty or student body, express their ideals of education and human progress, cannot but take with him influences that affect his life; influences that might have been brought into his life in no other way.

Teaching Students "How to Study" Not a Bad Idea

Experimental Course for University of Minnesota Freshmen Has Been Found to Produce Some Remarkable Results

IN the educational world, the University of Minnesota has attracted attention for several years past by its successful innovations looking to an increase in the student's efficiency in college and a more effective direction of his efforts. Minnesota is determined to do its share in caring for the student's health, giving him vocational guidance, counselling him in his class-work, and trying to find for him the subjects best suited to his capabilities.

In other words, without challenging the oft-repeated assertion that students lose "something" at a university because it is large, Minnesota has set about establishing definite enterprises that are certain to be helpful to students—services a student is not likely to get at an institution of any size, large or small, unless an agency is purposely created to provide them.

The most recent of these enterprises is the "How to Study" course. Dean Johnston, of the College of Science, Literature, and the Arts, last fall assigned Professor Charles Bird of the Department of Psychology to the task of conducting a trial series of lectures and demonstrations, covering five weeks, with the purpose of showing 25 students how they could make better use of their time "for study."

That one of these students, during his first week, found that he spent 19 hours "tuning in" his radio, against 12 hours in study, illustrates the type of problem the course was intended to meet, as well as one of the more aggravated incidents that it revealed.

It was the original intention of the course to offer aid to those students in particular who received low marks in their college ability tests and, therefore, seemed to be in need of all possible assistance in developing a study technique to offset other handicaps. But when the rattle of computing machines had died away at the end of the first five weeks, and the results of the course became known, it was found that those who had profited most by learning how to study were those whose tests had indicated

the higher ability. In fact, the students of relatively low ability and poor high school performance did not "choose to take the course," and, because it was optional, the more enterprising and alert were the ones to profit most.

Far from defeating the purpose for which the course was established, this situation revealed the very interesting fact that these students, from the abler two-thirds of their group, still had a great deal to learn about how to study, and were able to derive great benefit from lectures on that subject.

How the Study Course "Took"

Some of the more interesting results showed such things as the following:

During the first week of the course, members of the special class spent twenty hours a week on their studies outside of classrooms, and during the last two weeks had increased this to thirty-two hours. According to the instructor's report, the first figure, twenty hours, is not exactly bad as an average for the freshman class as a whole.

Reading tests conducted in connection with the course revealed that twenty-five per cent of the students who needed to learn more about how to study could read no better than grade school children, and were severely handicapped in an effort to get knowledge from books because they lacked command of the most elementary tool of learning—reading ability.

Some of the students who were "grade school readers" when the class began progressed rapidly, and read as well as the average high school senior by the end of the five weeks' period.

Students who made the most rapid progress in the "How to Study" course were found, in many instances, to be those who confessed that they had "gotten by" in high school without exerting themselves. They had not been working to anything like the full extent of their abilities, and had finally reached the point where they seemed to need help.

In a comparison maintained between the

members of the "How to Study" group and a perfectly matched group of freshmen outside the course—students of the same age, sex, and ability, coming from the same high schools—it was found that those who studied "studying" did far better in their classes than did the "control group." Members of the study class gained an average of 1.4 honor points per credit hour while those of almost exactly the same ability and background who did not take the course gained only .756 honor points per credit hour.

In other words, members of the class averaged about half way between "C" and "B," while the others fell somewhat below a "C" average. And the "C" average is important, because most of the university professional schools that students enter as juniors require that an average of "C" be maintained in the first two years as a prerequisite for admission.

Only One Real "Flunk"

Only one of the twenty-five students failed a credit subject, making a total of five credit hours of failure. In the comparable or "control" group, seven students failed different courses, making a total of forty-one credit hours of failure. Of the twenty-five students, five were taking subfreshman English, a subject which carries no credit. Four failed this subject. Of three students in the "control" group who were taking subfreshman English, all failed.

One of the most striking statements in Professor Bird's report is this: "Apparently those students who had rated in the lowest third of the class in the college ability test, excepting those who had also been low in high school scholarship, were trained in the 'How to Study' course to do work in the first quarter of the

freshman year which was above the average grade of all freshmen."

It was found, also, that students from the upper third of the class, based on college ability tests, who were in the class, earned three times as many honor points (grades of "C" and better) as did the students from the lowest third of the class as shown by ability tests. In the control group students from the upper third earned twice as many honor points as those from the lowest third of the class.

"The students who benefit most from the course," writes Professor Bird, "are not those who are poorest in high school scholarship, but those who did good work in high school. Actually, the course appears to help the students from the middle third more than it does others. Those from the middle third obtained an average of 'C plus,' while those from the middle third in the comparable group averaged 'D.'

"Should these results be confirmed with other classes, we may conclude not only that the type of training offered in the 'How to Study' course is advantageous to very good students, but that it is almost a necessity for the majority of students who did only average work in high school."

So successful did the university administration consider the first five-week course in "How to Study" that it was repeated at once, for another five weeks and with other students. It is now in its third term.

Many possibilities have been opened up by this interesting experiment. It may be found advisable to give such a course for all students coming from those groups that need it most. That is one of the many things the University of Minnesota is attempting to decide in its efforts to see that its students have every chance to succeed.

NOTICE

Address communications to T. E. Steward, editor,
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Minneapolis, Minn.

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and credit line to MINNESOTA CHATS is suggested.*

MINNESOTA CHATS



For a Better
Minnesota

FOREWORD

FOR the past three years the University of Minnesota has been producing for free distribution a magazine devoted to educational matters, particularly the affairs of the University, on the assumption that there was a genuine public interest in the welfare and accomplishments of the institution.

MINNESOTA CHATS has reported to the Minnesota public many of the addresses of the administrative officers of the University, addresses by faculty members, the results of interesting researches, ventures looking to the promotion of student welfare and the like, and has run a long series of feature articles intended to inform the reading public on interesting university activities and personalities.

MANY friendly comments have been received from readers, and a number of other educational institutions, among them two in the Western Conference, have asked for full details on the method of preparation and the policies of the magazine, with a view to establishing a similar publication in their own states.

It is felt, however, that it would be the part of wisdom to conduct a check on the actual interest in such a publication as MINNESOTA CHATS, with a view to learning just how widespread an interest it creates, in a word, to learn whether those who receive it actually read it and wish to continue receiving it.

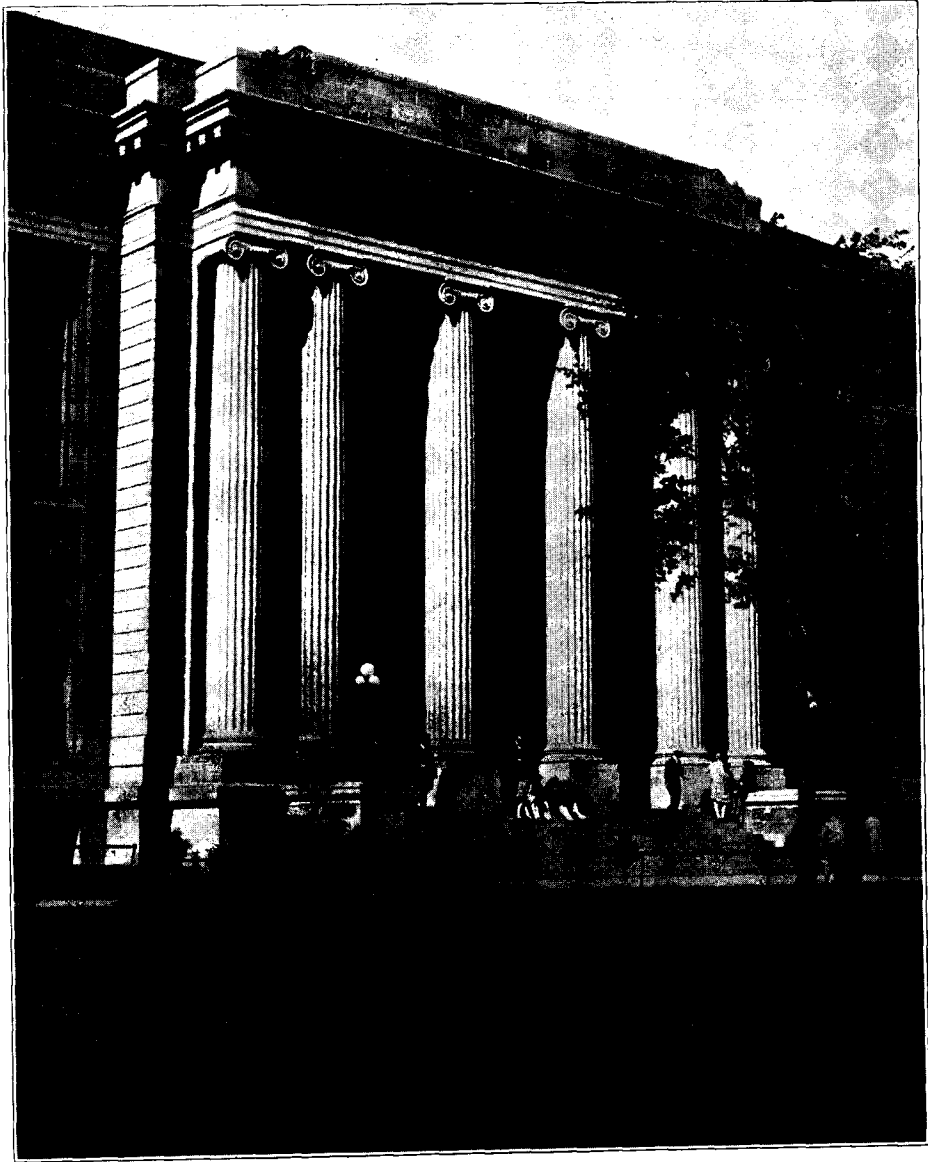
YOUR PART IN THIS CHECK-UP WILL BE MERELY TO FIND THE POST CARD ENCLOSED IN THE PRESENT ISSUE AND MAIL IT IN IF YOU WISH TO CONTINUE RECEIVING MINNESOTA CHATS.

MINNESOTA CHATS

Vol. 9, No. 106

published by the

UNIVERSITY OF MINNESOTA



Spring Comes to the Library
(Some students linger to see the phenomenon)

Liberalism Today

By Dr. F. J. Kelly

*Dean of Administration, University of Minnesota
(President-elect, University of Idaho)*

THERE are many definitions of liberalism. The one which seems to contain the essence of them all may be stated thus. "Liberalism is the state of mind which ensues when people think for themselves." When a man does his own thinking, he is liberated from traditional controls, from custom made explanations, from superstition, from ignorance and from fear. Of course liberalism can be only relative, since information can be only partial, and since instinctive reactions persist in the face of knowledge. However, liberalism tends to enthrone the intellect as the controlling factor in life, and the nearer we approach complete liberalism the more our fate is placed in the hands of our intelligence.

It is fair to assume that no matter what other function we ascribe to general education, in elementary school, high school and the college, the central and dominant purpose is liberal. We expect youth to learn to think, and we establish liberal educational institutions to help in the process. Just how effective we are in high school and in college in inducing this hoped for capacity to think, it is not my purpose to discuss. There are those, even on college faculties, who claim to be in despair in their search for a youth who can think. Then there are others who retort that students are too shrewd and discriminating to waste their time thinking about the things we ask them to think about in some of our college courses. But be that as it may, there are unmistakable evidences outside the college that the yeast of liberalism is working, and it seems worth while to examine some of its manifestations. We need to know whether the phases of liberalism now in evidence are the result of a symmetrically developed intelligence, or of a warped intelligence. In fact, only as we observe the workings of this expanding liberalism which results from it can we check the values of liberal education.

Lest this discussion seem to be directed only to graduates of liberal arts colleges, let me explain that my conception of an engineering school or a medical school is that these schools are essentially liberal. No college can make an engineer. It can hope to make a man with command of the tools by which he may make of himself an engineer. Whether he does make of himself an engineer or not will depend chiefly upon whether he has a liberalized mind with which to do it. No one more than a member of the learned professions needs to have the power and the will to be a student all his life. The professions need liberal minds, and the technical aspects will take care of themselves. Therefore what is said about liberalism is applicable to all who hold themselves educated.

As an indication of how rapidly times are changing in respect to liberal education, we need only to remind ourselves that in one short generation of thirty-five years, the proportion of the population of the United States who graduate from the high school has multiplied more than sixfold. The proportion who graduate from college has multiplied more than threefold. Such unprecedented growth of this liberalizing influence would lead us to expect a nation growing mighty in intellectual stature, a nation exhibiting effective intellectual control of human life. As compared with thirty years ago, we should expect higher respect for law, less crime, a better stabilized home, a more equitable distribution of the comforts of life, an increase in discoveries and inventions, a stronger church, youth more judicious and self-restrained, guided in their conduct by considerations of public welfare. These are the evidences which we should expect to result from dethroning ignorance, superstition and fear, and crowning intelligence in their place.

Happily, many of these evidences are easy to discern. Men and women who have learned

to challenge tradition, to declare in favor of the thing nobody has yet been able to do, have stepped forth and led us in the great advances we have made as a people. Intellectual freedom is the only atmosphere in which social progress is possible. The barbarian, bound by the *mores* of his tribe, worshipping generation after generation the gods of the wind and the rain and the sun, continues to live in squalor, and to regard the scourges of devastating epidemics as manifestations of the wrath of the gods. Given the spark of intellectual freedom, kindling a fire in the mind of a Pasteur, and epidemics slip into the category of that rapidly increasing list of things of which enlightened man becomes ashamed, rather than afraid. Intellectual freedom fires a Watts, as he sees the jumping tea kettle lid, and the thundering transcontinental trains supplant the prairie schooner. Baffled by what was underneath the skin, Roentgen harnessed a new ray by means of which we can now at least "see through one another."

So the list might be endlessly extended. Mendel gave us the basic law of heredity so we may cooperate in evolving better living creatures. Jesus of Nazareth, the greatest exponent of intellectual freedom, a rebel in the church, a fighter for change in social relationships, a thorn in the flesh of entrenched privilege, led the revolt in the interest of common human rights. In short, progress, whether in science, in

government, in religion, or in whatever other field, has ever waited upon the courageous souls who have worshipped at the shrine of intellectual freedom.

Whatever may be said, therefore, in calling attention to blights on our body politic, I would

not be understood to discount the paramount importance of intellectual freedom. Thinking is the most precious of all our powers. Using a bit of a paraphrase, 'Tis better to have thought and lost, than never to have thought at all. Any activity as precarious as thinking, if indulged in by any considerable number of people, especially young people, is bound to lead to a good many mishaps. We don't try to make baseball pitchers, however, by keeping boys off the mound until they can throw every ball over the base. Just so, we don't make thinkers by limiting the exercise to those who already can think straight,—assuming that they can sometimes.

Practice in thinking is just as essential as is practice in ball throwing. Crooked thoughts are likewise as inevitable as crooked throws. They are the price of learning the game of thinking. You will understand, therefore, that I am not among those chanting the chorus over this lost generation of youth. Youth is not lost. We are merely having trouble keeping within sight as youth goes rushing ahead.

After such a defense of the foundations of our

Dr. F. J. Kelly, dean of administration and director of the summer session at the University of Minnesota since July, 1923, has been elected president of the University of Idaho and is now completing the last year of his services at Minnesota.

Dean Kelly has established an enviable reputation for himself both before and during his term of service here. He came to Minnesota from the University of Kansas where he had filled a position as dean of administration, to which he had been appointed from the faculty of education. Between his terms of service at Kansas and Minnesota, Dean Kelly conducted a survey of the American college of liberal arts, both the independent arts colleges and those making up a part of a university organization, under the auspices of the Commonwealth Fund. Results of this study were published by The Macmillan Company under the title, "The American Arts College," the first book on that subject to be based on painstaking research.

At Minnesota Dean Kelly has conducted a large number of careful researches into the internal organization of the institution, such as determinations of the cost of education, of the teaching load upon instructors, of the classification of university non-teaching employees, of the use of university rooms for instruction and research and the possibility of extending that use, as well as studies into other administrative problems. At the same time he has directed the university convocations, arranged and conducted the growing summer sessions, and has responded to many demands from outside for speeches, papers, and studies.

MINNESOTA CHATS appends, in a footnote, a list of Dr. Kelly's publications during the five years he has served the University of Minnesota.

social progress, I may now be permitted to point out certain blights which threaten its permanence.

The first blight to which I wish to refer is self-complacency. It was reported a few days ago that an influential citizen of Chicago died and passed to the great beyond. In recognition of his importance, he was given a guide to show him about the place. After an hour's sauntering around he still appeared more or less bored and finally stopped the guide and said: "So this is heaven. Well. I've heard heaven cracked up now for a good many years, but I don't see where this is much different from Chicago." "Heaven, man!" said the guide. "Heaven! This isn't heaven!"

This gentleman's state of mind typifies the first blight which I wish to point out. Supposing to be heaven what is really Chicago. Self-complacency, an unquestioning attitude, an inability to establish a sound scale of values and put first things first, this tendency to assume that what is, is right, and the consequent sluggishness of reforms, is an evidence of how anaemic our liberalism is. We still elect state superintendents of public instruction and many other technical officers by popular vote, even though every one admits that the only reason is that we hark back to the outworn notion of democracy that all the people should exercise an equal voice in all affairs of government. The short ballot is acknowledged to be the best means of registering the real will of the people in government, but progress in its adoption is painfully slow.

Not many years ago I lived in a community where two struggling churches, a Congregational and a Methodist, had their meager edifices just across the street from each other. Both

were spending all their vitality on merely keeping alive. After much discussion the two congregations agreed to unite in the support of only one church. I was one of a committee appointed to present the matter to our Methodist bishop and request him not to appoint a pastor for our church, but rather to let us join with the Congregationalists for the year and then, when a change of pastor would later be made, the new appointee might be a Methodist. Well do I remember with what self-complacency the bishop made answer to our petition: "No, brethren. Let's stick by the good old ship, Methodism!" So it is. In thousands of communities the church, the most potent influence in human control all down through the centuries, is waning in power because it cannot make the adjustment which its friends and supporters realize it must make.



Dean F. J. Kelly

But why go to the fields of politics and religion? Education, the public schools of which our universities are a part, seems not overly hospitable to liberalism. A half century ago the conception prevailed that education consisted of quantities of stuff stored away in memory. In consequence, schools consisted of alternate exercises of learning and reciting, with marks of 70, 75 or 80, to indicate the percentage the student did of all he might have done.

Now, while the conception of education has changed to that of the process of developing all the powers of the student; and while it is generally acknowledged that our system of marks and other educational bookkeeping from the primary grades through the graduate school tends to hamper that development; tends to fix the learner's attention upon meeting requirements, upon getting by; and tends to thwart the very purpose of liberal education, namely, stimulat-

ing intellectual independence: in spite of all these acknowledged evils of our system of school and college marks, less than a half dozen colleges in the country have yet dared to discard the relic of a repudiated conception of education. Almost nowhere are college students met with a challenge to educate themselves. Even in the colleges, the supposed strongholds of liberalism, we are still telling students today what they must do for tomorrow, and then we spend our time in checking up on how well they did what they were told. Students cultivate the fine art of "getting by" so cleverly set forth in one of the verses of Jacques LaClercq's recent booklet of student poems. Says he:

"When Death has loosed the last ties that
confine us;
When, the doom read, slowly we steal
away;
You'll linger on with studied naïveté
To whisper in God's ear: "Give me a
B Minus —!"

Yes, whether in politics, religion, education, economics, science, or any other field, the first need of liberalism is to be able to look at any situation squarely, not content to call it right on the mere basis of its being the prevailing practice, no matter how hoary with tradition; nor yet willing to call it wrong. Tradition is neither sacred nor profane. The mental habit of challenging tradition is a foremost quality of liberalism.

The Intellectual Food Supply

A people whose diet contains too little iodine will have a tendency to develop goiter. Our lady friends of the perfect thirty-two type have found that much candy defeats their ambition to be weighed in the balance and found wanting. These days are the heyday of the dietitian. We are pretty much what we feed upon.

Intellectual freedom as a habit of mind can have no practical significance apart from the materials with which we think. Therefore, the supply of the materials for thinking is all important, and the third social blight to which I wish to call attention is the present contamination of that intellectual food supply.

The cost of the manufacture of the average number of the *Saturday Evening Post* for which

you pay five cents, is nineteen cents. Nor does The Curtis Publishing Company lose fourteen cents on each number. The enormous increase in the company's wealth bears ample testimony to that. The advertisers pay upwards of eighteen million dollars a year for their space in this one great national weekly. Incidentally, that would support a dozen average universities. The sums spent for advertising in other magazines and in the metropolitan newspapers must be enormous sums indeed.

But what has that to do with liberalism? Merely this: newspapers and magazines furnish our chief food for thought. Along with sermons, lectures and the movies, they determine not only what we think about, but also what we think about it. By and large, the one who holds the purse strings determines the policies. By and large, our liberalism is pretty well confined in its diet to what the nation's advertisers wish to feed it. Without in the least disparaging their high motives or their worthy citizenship, it may be assumed that the nation's advertisers represent the nation's business men in their financial rather than in their social aspirations. Without minimizing the contribution to the nation's prosperity which has been and is still being made by "big business," we cannot close our eyes to the fact that each decade sees a greater and greater proportion of our country's wealth concentrated in the hands of fewer and fewer of our country's citizens. It is not ungenerous to assume that if our grist of thought pabulum is ground through the mill of big business too exclusively, we shall be warped in our thinking. We may exhibit liberalism, that is, we may boast of our intellectual freedom, we may stand staunchly for our convictions, but our views may be formed from partial information or from prejudiced reasoning and so may not be in the interest of the public good after all. I mean only to warn you, young men and women, that you cannot think independent of your intellectual food supply, and that that food supply is dominated largely today by a small minority of our people. Probably that explains why distinguished guests from other lands when visiting America get the impression of a rather crass materialism.

To be on your guard against this ill-balanced

intellectual diet is to be wisely cautious, but to go to the pains to supply the missing ingredients is to show initiative. If one fourth of the hours spent on newspapers were spent on careful accounts compiled by accurate students of the events, we should be a much better informed people. The other three fourths could then be free for perusal of the serious treatises on issues that confront mankind, but which treatises now go largely unread, even by the rapidly mounting number of college graduates who should be leading the nation's thinking.

Under the spell of the daily newspaper craze we allow ourselves to feel quite ashamed if it is discovered that we do not know how many gallons of gasoline Lindbergh used in his ocean hop, or how many home runs Babe Ruth swatted last season. We ought to feel ashamed, instead, not to know how the families of the coal miners are faring, who have been so long on strike, or what the infant mortality rate in our county or town or nation is in comparison with that in neighboring counties, towns or nations, and why the difference. As a nation we are enslaved to inconsequential daily newspaper gossip, and so have no time for the materials needed for liberal thinking. I would like to be a charter member of a club whose oath of membership should be that every time a friend asked a question such as "Do you think Dempsey will fight again?", the member should reply with something like this, "After careful consideration I have come to the conclusion that he will not. Now let me ask you one. Do you think a horned toad can climb a telephone pole?" Such a club might help to reveal to us the gross adulteration of our present day intellectual food.

Narrowness of Our Social Consciousness

One other blind spot in our liberalism must be discussed briefly, and I shall close. Perfect liberalism must be as wide as the human race. It can make no distinctions between classes, races or nations. Human welfare must be supreme over personal or national welfare. There exist on the earth today peoples of every level of civilization from those who are dominated by the selfish impulses of tribal leaders to those who are of genuinely international mind. In

America, there are individuals on all these same levels of civilization. Many who would resent the imputation that they are illiberal, nevertheless conduct themselves essentially on the basis of their own personal desires. How widespread this is may be brought out by the popularity of such stories as the following: "Said Mr. Bing, 'Did you hear about Jones?' 'No,' said Mr. Ding. 'What about him?' 'Why,' said Mr. Bing, 'he caught a burglar singing in his cellar.'"

Violation of law on the score that one does not believe in the law, is a reversion to the lowest type of social control. The prevalence of such violation today, and among the supposedly most liberal minded classes, proves how near the surface are the roots of our liberalism. Crime of whatever sort is merely the expression of one's own uncurbed desires carried out at the expense of the social group. If to check the crime wave we must resort to more drastic laws and severer penalties, we need no other proof of the partial failure of liberal education. A famous preacher who was later made a bishop, once said, "Any man who behaves himself because he's afraid he'll go to hell, ought to go to hell." I say, any man who behaves himself because he's afraid he'll go to jail, ought to go to jail. Certainly no man who can claim even the rudiments of a liberal mind needs such fear to effect his self control.

But the problem goes much deeper. While we will not defend personal selfishness, we still have little compunction about group selfishness. What I can get for my ward at the expense of the city; what I can get for my legislative district at the expense of the state; what I can get for my state at the expense of the nation; what I can get for my nation at the expense of other nations or of humanity at large; all these are regarded still as marks of statesmanship.

The concept of the Liberal of Galilee is far beyond the liberalism of most of us today. Brotherly love embracing all mankind is the severest test we have to meet today. What of China? Forced by embarrassing circumstances, the United States will, it is hoped, put human rights above commercial rights. Even so, it is nothing to make our national breast swell with pride, for we might have done it without wait-

ing for the embarrassing circumstances to force us to it.

What of Mexico? What of the League of Nations? And the World Court? I hope that time will prove that our national policies have exemplified the spirit, "Humanity first and America second." But I must wait to see.

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Business Students "See Action" For Three Months

Minnesota Seniors Leave School for a Quarter to Work in Accounting and Merchandising Concerns—Special Courses Grow

THIRTY seniors in the School of Business Administration at the University of Minnesota have spent three months of the past winter in actual business positions, earning the usual salary of a man of their age and ability, and coming into contact with the real thing—the everyday give and take and the normal thorny problems of business life.

Dean Russell A. Stevenson of the School of Business Administration believes that young people should learn business by taking part in business. He doesn't mean by this that they should step right into a job instead of going to college, for the college is necessary to give them the fundamental theory. It places in their hands the tools with which they can operate when they are placed in a business situation. But he does believe that the conditions under which they begin to practice should be real. "You can't learn much about business by make-believe," he says.

In line with this theory Dean Stevenson set about establishing contacts with business firms almost as soon as he was settled in his new office a year ago last fall. Some men left the University for a "quarter" of outside work last year. This year there have been thirty of them. Next year there will be still more.

Most of the men who spent the winter quarter in business instead of classroom, and got college credit for doing the work, were students of accounting, although some of them were in mercantile establishments. Some worked in Chicago; some in Duluth. Others took positions in St. Paul and Minneapolis. One man was sent away down to Mobile, Ala., by the Chicago firm of accountants for which he was working. Incidentally, he got unusually valuable experience, for the Mobile concern was a subsidiary company and he saw the intricacies of the accounting procedure whereby a parent concern maintains control of a subsidiary.

"In most of the professional schools there are

adequate laboratories on the University campus," Dean Stevenson said in discussing the system of "externships" which he has established. "The engineer has his shops; the medical student, his hospital; the dent, his clinic; and the student of agriculture has a whole farm, with flocks and herds, where he may see theory put into practice and help in exemplifying it. But it is impossible to create a similar laboratory of business on a university campus. I understand that one richly endowed School of Business Administration in the East has actually erected a factory, which it is leasing to a large textile manufacturing company. It will be used as the business laboratory for its students. They will go through the processes of buying raw materials, manufacturing, advertising and marketing the product. But I believe, personally, that it will still smack of make-believe; and here at Minnesota we have no opportunity to do anything so elaborate, in any event.

"When we release our men for three months of outside work, all conditions are made identical with those of actual business. That is to say, the man must apply for his position, must work hard so that he is worth his salary, and must run the risk of discharge if he proves unsatisfactory. Then, upon his return, he must write a report for his professors, on the basis of which we are able to give him college credit for the time he has spent outside."

Minnesota has risen to an advanced position among professional schools training for accountancy, and the success of its men in the part-time temporary positions has had a good deal to do with this according to Dean Stevenson. They start by taking two years of pre-business work in the College of Science, Literature, and the Arts, and then enter the School of Business Administration at the beginning of the junior year, provided they have maintained the required average of "C." During the junior year and the first quarter of the senior year they

get the fundamental accounting principles and enough classroom practice to make them worth their salary when they step out into a part-time job. This brings them to January in their senior year, a month in which accounting concerns are carrying their peak load. Most fiscal years in business end on December 31, and there are reports and audits of every kind to make, covering the operations of the year just ended. Consequently there is plenty of work in accountancy offices and the Minnesota men can get positions more easily than at any other time.

The students who go out get the rating of a "junior" in an accounting office and are paid the salary that goes with such a rating. Besides auditing books they are set at the tasks of preparing income tax reports, tax appeal cases, financial statements to be used in new financing operations and other duties having to do with the preparation of accurate statistical statements. Upon returning to the University at the opening of the spring quarter, each student hands in a detailed report of the work.

Another group of seniors in business have formed temporary connections with large retailing merchandising companies in the Twin Cities and are studying the department store business on the same basis as the accountants. These men complete their junior year in the course in market administration, and then enter a department store for a three months' course of training. Each starts in the receiving room and after working there for a while advances to the stock room. He next puts in a period on the floor as a salesman, and finally works for a while in the offices.

"In each of these situations the man must work for the usual pay a regular employee would receive and must deliver value received to his employer, just as if he were regularly employed," Dean Stevenson explains. "During three months' time he is able to get a glimpse of the principal operations in a large mercantile establishment. He is in an actual, not make-believe, situation and is earning his way 'on his own.'"

The system under which the students work in mercantile concerns is slightly different from that used for the accountants, in that these stores have the use of a student at all times. As soon

as one man leaves the store after a training period, another enters it. Not the least advantage of this method comes from the fact that the store management has a chance to observe the work of four seniors from the School of Business Administration and select one or more of the four men, those best suited to its needs, as permanent employees.

How such a plan may go wrong because the men supplied by the University are "too good" is exemplified by a recent happening. The school had an arrangement with a trust company whereby a position in the concern was held open and filled by students, one after another, on this laboratory basis. At length a man came along who was too good to miss. The trust company decided to hold the position open no longer. They filled it permanently with the student who had done such satisfactory work as an "extern," and now there isn't any rotating position in that particular trust company.

Students employed in mercantile companies are required to write a formal report on the business when they return to the University. This paper is supposed to include such suggestions for improvements as may have occurred to the student during his term of service. Dean Stevenson says that some of these suggestions have been of real value and have been adopted.

The Northwestern Bell Telephone Company has offered to create an opening in its organization to be filled by one student after another, but at present the school cannot take advantage of this opportunity, as it does not provide sufficiently thorough basic work in the field of public utilities. This is a subject which Dean Stevenson intends to develop, however, and the telephone opportunity will be utilized eventually.

The School of Business Administration is gradually developing a series of specialized courses offering intensive training in some one field while at the same time they maintain the continuity of the central business subjects that are important to students in all business fields. One of these new courses, that in advertising, has been elected by eight students this year. The course in real estate, new this year, has four students enrolled. The specialized course

in statistics boasts an increase of 100 per cent in enrollment over a year ago. One student elected statistics last year; now there are two. Another specialized field is covered by the combined course in agriculture and business, in which there are four students. This combination of work looks to preparation for employment in businesses operating in the field of agriculture, such as co-operative marketing concerns, creameries, farm financing companies, grain elevators, stores in small communities, and the like.

A better picture of the place of the college man in northwestern business than anyone has had hitherto is to be provided by the occupational survey now being carried on by the School of Business Administration to find out

what opportunities exist in this part of the country for the college trained man in the business field. The administrative staffs are being analyzed in a number of different businesses. Accounting, the mercantile business, the milling business and wholesaling have already been covered. The survey will be continued until it includes manufacturing, public utilities and finance in addition to those already covered. When this survey has been completed Dean Stevenson will know about how much demand northwestern business will make upon an institution that specializes in giving young men the type of training that will enable them to develop into business executives. It is the first study of its kind that has been made in this section of the United States.

Periodical Literature and the University Library

Increases of 200 to 600 Per Cent in Subscriptions by Educational Institutions Since 1910 Are by No Means Unusual

By Frank K. Walter

Librarian, University of Minnesota

“THE times are changing and we are changing with them,” runs the familiar Latin adage. Much of our political, social and educational unrest is due to a failure to see the changes of the present, or seeing them, to understand them.

It is not change in any one direction, but in all directions which must be faced. Old expenditures fail to meet new needs. The average two-car or three-car family could not buy even its annual supply of oil, much less its cars or gasoline, with its former total annual expenditure for railway, street car and cab fare. There is no doubt that the kitchen and parlor stoves cost far less than any kind of modern house heater. Florida grape fruit, Texas celery and California oranges are far more expensive than the home-made preserves, canned fruit and dried apples which mother used to make.

One-room district school houses are far more economical in tax outlay than modern school buildings with their elaborate activities and expensive equipment. A supply of hickory switches cut from the surrounding thicket was so cheap as not to be compared with the cost of a single piece of gymnasium apparatus. The old-fashioned college with a limited curriculum, text-book assignments for class work and simple, if any, scientific facilities, got long wear from limited supplies. Its library was small and seldom used. The thoroughness of its methods was unfortunately seldom supplemented by opportunities to test the validity of these methods in independent work.

Two outstanding features of the growth of colleges and universities in the last fifty or seventy-five years have been the growth in their laboratories and their libraries. Of the former there is no present occasion to speak.

The growth of the college and university

library is due to many causes. Only a few can be mentioned here. It always was a theoretical necessity. Most school boys of earlier generations are familiar with the fact that both Harvard and Yale were started by donations of books. First the library, second the faculty. In the early publications of the University of Minnesota the library was almost always mentioned. In its early days, the college library was primarily for the faculty. When elective courses and professional schools began to appear the library began to increase in variety and in its use by students. Each new subject in the curriculum demanded some literature relating to it in the college library. The newer the subject the more the need of books and magazines devoted to it. The professor of Latin could be fairly sure whether his class scanned *Arma virumque cano, Troiae qui primus ab oris* correctly, but the professor of chemistry was not always sure that the latest book at his disposal gave the latest chemical application of the theories he taught, and the professor of law always had to be on the alert for new test cases as well as for older ones he might have overlooked.

The rapid progress of scientific research and of the application of scientific method invaded all fields. The hunt for new material and for unused and forgotten documents in which the historian and the professor of literature joined, rivalled in intensity the ardor of the bacteriologist who, to quote the philistine relative of one of them, “spends his whole life chasing invisible bugs around a glass slide.”

Meetings of scientific and “learned” societies multiplied. Paper followed paper in such rapid succession that the book could not keep up the pace. Magazines were established to furnish intellectual spillways for the rising flood of information, if not always of tested knowledge.

The university library had to follow the general trend. The book still had to be bought as before. It still represented in many cases a more carefully thought out and a better seasoned product than the case history or the partial or episodic treatment of the magazine article, but along with the increase in books came an even greater increase in magazines.

The demand for these was even more insistent than that for books. This demand has rapidly increased within the past ten years. The changing times have changing viewpoints. New theories are, at least, for the time, displacing old ones. The almost incredible increase in research in all lines is making it unsafe to depend on any old knowledge in any field of science or industry. Even the archaeologists are digging up ancient remains which support or supplant or supplement the authorities our fathers and their fathers thought beyond destructive criticism.

The Growth of Periodicals

More people than ever before are reading and using books. Many more are reading and depending on magazines and other periodicals. The leading authority for America, *Ayer's American Newspaper Annual*, in its 1928 edition lists 22,128 periodicals regularly published at least once every four months in the United States and Canada. During the past year, 1,227 new ones were started and 1,299 suspended or consolidated with others. The high-water mark was in 1917 when 24,868 were published. Most of the apparent loss has been due to the discontinuance or consolidation of rural weeklies. There are 11,930 of these still running despite a loss of 2,771 since 1917. In nearly every other line there has been an increase. Besides the weekly newspapers and the 2,388 dailies there are 3,987 monthlies, 1,957 weeklies which are not newspapers, 468 quarterlies and 453 magazines published semi-monthly or fortnightly.

These deal with every conceivable subject. Here are a few headings selected at random from the subject list of the *Annual*: Ku Klux Klan; Anti-Ku Klux Klan; prohibition; brewing, distilling and anti-prohibition; bee-keeping; dogs; cats; laundry; wrestling; junk and poetry. In foreign countries the situation is much the same.

Every organized group has its news organ or its journal of discussion.

The commander whose artillery is obsolete or who learns of the enemy's plan after the battle is not usually decorated for his victories. The scientist who shapes his laboratory practice or theories on industrial methods of even five years ago is not a safe authority. The university which uses out-of-date appliances or depends on stale information serves well neither its students nor the state which educates them so that it may later benefit from their training.

Must Buy Useful Magazines

Consequently, as useful periodicals increase, the number which the university library must supply for its constituents must also increase. In 1907, the general library of the University of Minnesota was receiving 321 periodicals; in 1925 (the latest date for which there are comparative statistics) it had subscriptions for 1,715, a gain of 434.3 per cent, and it received a total of more than 3,300. These numbers are small in comparison with those of some other state universities with which we like to compare ourselves. In the same period (1907-25) Michigan's periodicals (subscriptions and gifts) increased from 1,259 to 3,361; Illinois' from 1,224 to 9,943; Stanford's (subscriptions) from 749 to 1,255. California in 1925 regularly received 11,179 and Yale 11,548 periodicals.

Knowledge is international and a university must receive periodicals in the language of virtually every civilized country. Our holdings of German, French and Italian periodicals are large. The increasing value of our biological, chemical, literary and medical facilities for research is largely due to them. We have one of the three or four best working collections of Scandinavian periodicals in the country and it is our intention to increase this collection as rapidly as our resources permit.

Unfortunately the changing times have brought changing costs. In a study made of the cost of 633 periodicals (American, English and Continental) taken by Cornell University it was found that the 1925 cost was 181.9 per cent of the 1910 cost. At Minnesota this means that a fourfold demand must be met with a

dollar which is worth in terms of subscription cost not quite 55 cents as compared with its 1910 value.

Despite the rising costs, there are several considerations on the other side. It has already been stated that the periodical is the only means of measurably keeping up with either theory or practice in any line of commerce, industry or professional practice. It is no less important in keeping pace with literary and social tendencies. Though the partial treatment of the periodical is often of less definitive value than the more carefully prepared book, its infinite variety makes it even more valuable as a cross section of its times. The university library is the intellectual arsenal of its faculty and students. The periodical files under present conditions are the foundation of the university library. As the state university becomes more and more a center for the students and the research workers of the state the more valuable these files become to the state as a whole.

Universities Help Each Other

Through a system of inter-library loans, between themselves university libraries are supplementing their own resources by borrowing for special purposes the periodical material in other libraries. In this way each institution's resources are supplemented and useless duplication is often avoided. This service is extended to other colleges, to scholars, to state officials and to leading professional men throughout the state. Our files of seventeenth, eighteenth and early nineteenth century periodicals (as well as recent files) are in steady, though sometimes limited demand.

Through some rather fortunate circumstances our periodical holdings, both of back and current volumes have increased rather rapidly the past few years. Nearly 4,500 volumes of them were acquired by purchase in the college year 1926-27 and probably 3,000 more volumes of current periodicals were bound and added to the library.

A *Union List of Serials*, published for a

group of co-operating libraries by Halsey W. Wilson (Minnesota Arts Ex. '93) has just been received. This lists the important periodical sets in the leading libraries of the United States and Canada. About 75,000 periodical titles are included. A rather cursory glance strengthens the impression gained by several years of examining booksellers' catalogs for important sets we lack. This is that the University of Minnesota, though still far behind many of the older private and state universities, has gone a long way in providing reasonable supplies of important periodical sets and that it already ranks well in this respect.

Gifts Help to Fill Gaps

A few valuable gifts of sets or separate volumes have been received. From an economic standpoint sets of current periodicals are a present embarrassment. We must have them to meet the demands of our university public, but they cost heavily for subscription, care and binding. As a future asset, they are an exceedingly good investment. Many of the best, from a reference and research standpoint, are published in small editions which soon become scarce and expensive. In a very large proportion of cases, it would be impossible to duplicate at anywhere near their original cost to us, many of our most useful periodical sets. In many cases they could not be procured at all.

The recent revival of interest in providing some kind of educational facilities for those who are past conventional student ages and for the alumni of our colleges as well as the unschooled, indicates that, in the near future, the university and its faculty may have a closer contact with the education of the entire state than they now usually have. In the preparation of treatises or reading courses or extension work, in helping individual students or research workers in important investigations and in many other ways, the university library and its periodicals should play an important part in this movement for wider and better education.

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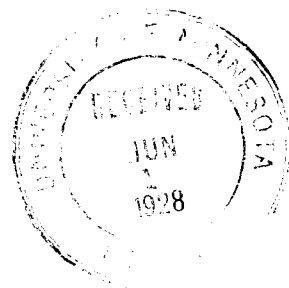
Address communications to T. E. Steward, editor,
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Vol. 9 No. 107

May 1928

MINNESOTA CHATS



For a Better
Minnesota

FOREWORD

IN its current issue, MINNESOTA CHATS gives a detailed outline of the work now being conducted by the Department of Journalism at the University of Minnesota. During the past year 180 different students have been taking one or more courses in Journalism, and the total enrolment, counting all courses, has been approximately 400. The résumé given herewith shows just what work the department is offering and what requirements a student must meet to enter the courses.

Minnesota was honored this spring by its selection as the place of the American Alumni Council's annual meeting. Alumni representatives from every part of the United States, and some from Canada, gathered on the campus May 3, 4, and 5 to discuss general problems, alumni magazine and contact problems, and the workings of the various alumni funds.

IN this issue, MINNESOTA CHATS reprints President L. D. Coffman's address to the Alumni Council, in which he points out many ways in which alumni could help, and even suggests one or two things alumni have been doing, not necessarily at Minnesota, that were not so helpful.

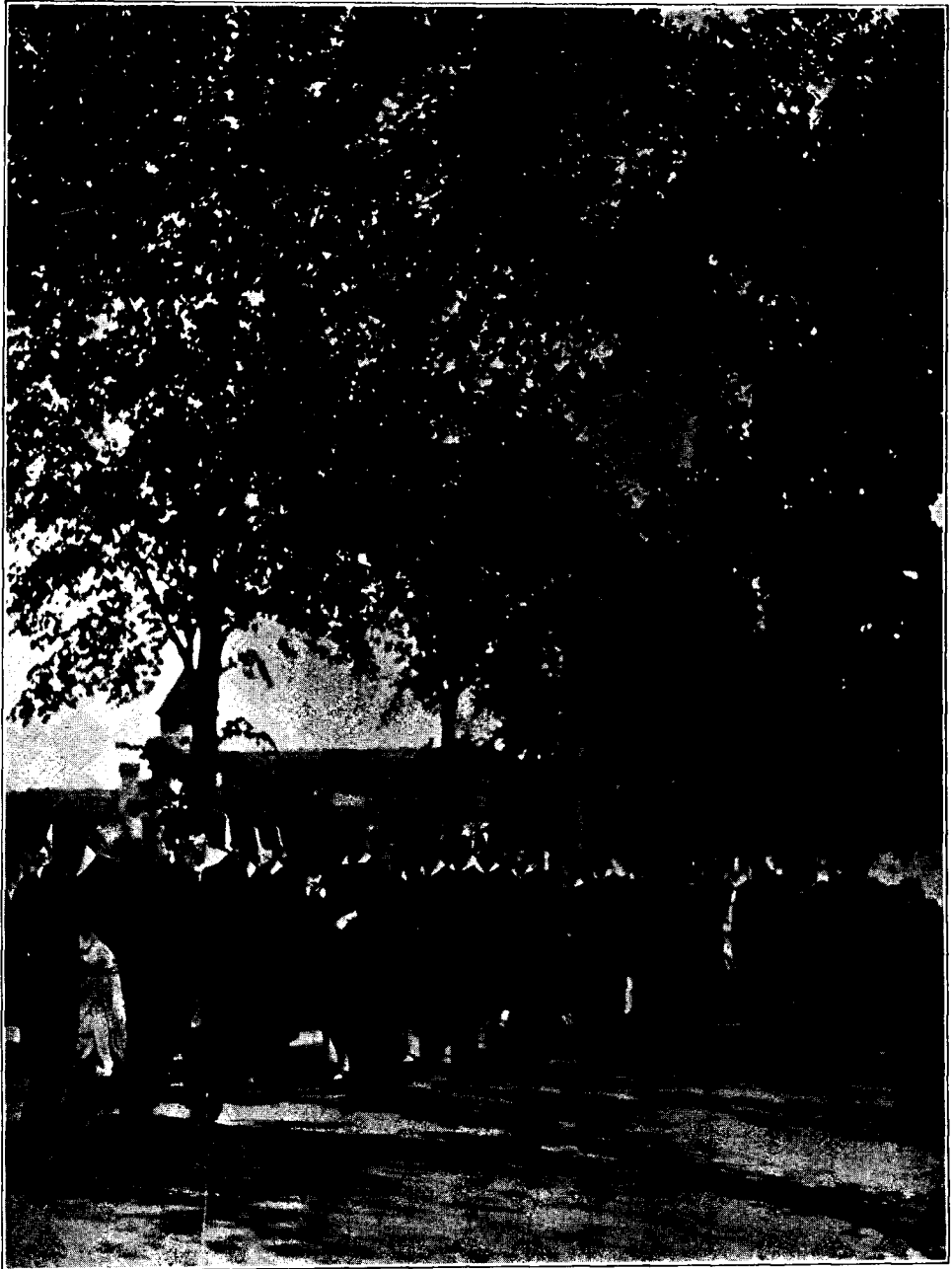
How an unexpected circumstance may lead a research worker into interesting and valuable investigations is shown in the article on Dr. Harder's researches into rust corrosion and the permanency of steel magnets after heat treatment.

MINNESOTA CHATS

Vol. 9, No. 107

published by the

UNIVERSITY OF MINNESOTA



Their Last Ten Minutes as Co-Eds

The Alumni--Problem or Prop?*

Graduates of American Colleges and Universities Could Take a Splendid Place in the Program of Education

By Dr. L. D. Coffman

President of the University of Minnesota

ALUMNI associations have concerned themselves pretty largely with annual pilgrimages to the university at commencement time, with the holding of anniversary class meetings, the promotion of athletics, the perpetuation of dramatic episodes incident to college life, and with appeals for money. With notable exceptions they have given little attention as an organized body to the real functions and purposes of the institutions they represent. There have been occasions when their zeal has been carried to such length as to interfere with the successful administration of their Alma Maters. Sometimes they have made demands upon the administration which were subversive of the best interests of the institution. When they have concerned themselves with educational questions and policies they have not infrequently shown that they are not familiar with the progress that has been made in educational matters in the last decade or so.

Alumni meetings in the nature of periodic pep fests for the raising of money are not altogether bad things. Very much larger sums of money are needed for the progressive development of higher educational institutions today than were needed a few years ago. With reference to this matter of support, I realize that there appears to be an almost concerted attack upon public education in general and upon higher education in particular in the interest of economy. It is claimed that education costs too much and that too many are going to college. The alleged growing cost of education is, relatively speaking, fictitious. Of course, the expense is greater in the aggregate than it used to be. There is no evidence that it has grown greater in proportion to the number educated and the increase in the cost of other things.

The same statement applies with reference

to the number of students in college. There does not seem to be any evidence to show that society has deteriorated or is in the process of deterioration because of the number in college. Nor has society as yet made up its mind to substitute class rule for democratic ideals, although there is considerable pressure for it to do so.

There are praiseworthy instances where alumni groups have risen in the face of an emergency or crisis and have saved their institutions from extinction or loss of prestige. There are other instances where alumni in large numbers have entered upon the policy of annual giving for the purpose of promoting the progressive development of the colleges from which they were graduated.

The attitude of alumni toward higher institutions of learning seems to differ greatly, depending upon whether they were graduated by private institutions or by tax-supported institutions. I think it must be admitted that those graduated by the great privately endowed universities have a different sense of loyalty and of obligation toward their universities from that possessed by the graduates of tax-supported institutions. For some reason or other, whether it be due to the selection of the students or the atmosphere of the institutions, or to some other more subtle cause, such for example, as the psychological attitude of the public towards the two types of institutions, the graduates of the tax-supported universities have not been imbued with the spirit of constant, loyal, and intelligent support that the graduates of the great privately endowed institutions seem to be imbued with.

How this spirit is to be generated, if at all, represents one of the unsolved problems. I do not mean to imply by these statements that the graduates of state universities are entirely wanting in these respects. Such a statement would

* An address delivered May 3, 1928, before the American Alumni Council, meeting at the University of Minnesota.

be far from the truth. But it is clear to me that the graduates of state universities, even more than graduates of other higher institutions of learning, are greatly in need of developing a more abiding devotion to their universities. All college graduates need to bear in mind that the generations following in their wake will need advantages even superior to those they themselves enjoyed, and that these improved facilities and advantages will result partly from the manner in which they conduct themselves towards society in general, and towards education in particular, after graduation.

THE whole system of higher education seems at the present time to be in a state of flux. It deserves special consideration and attention. That special consideration and attention is something to which the layman, particularly the alumnus, might well give some of his time. An alumnus who thinks only of the welfare of the particular college that may or may not have been fortunate enough to graduate him, has caught little of the real meaning of higher education. An alumnus who contributes only to that institution by his utterances and by opening his purse, who thinks that in building up *his* school it is quite right for him to speak disparagingly of other schools, has been provincialized by college education. If the alumni of the great privately endowed institutions should maintain that university instruction on a high level and important research work should be carried on only in such institutions, and if they stood in the way of increased appropriations for state universities that desire to provide university work of a corresponding character, such alumni have missed the meaning of a liberal education. Men who reside in a given state, who make their wealth in that state, and who make liberal grants and bequests to higher educational institutions in other states, are wanting in that larger view of higher education if they fail to make corresponding contributions to the institutions within the state whose soil and whose people and whose resources in general have made their wealth possible.

We would not have any one disinterested in the institution that he attended; on the contrary we would look with pleasure and approval upon such manifestations of interest and loyalty

as he might exhibit toward the institution of his undergraduate or graduate days. At the same time our conception of him, as a broad-minded man truly interested in public welfare, would be greatly enhanced if he gave with corresponding generosity to the institutions within the state in which he resides.

We expect a college graduate to continue to be loyal to the institution that poured out its soul to him in such generous measure. We expect him, however, at the same time to recognize that the wealth, the comfort, the happiness, the institutional development, and the industrial efficiency of the nation depends upon maintaining many centers in which men of letters and of science are perpetuating their own kind. Some of these centers will be found within the state in which he resides.

I do not presume that the large privately endowed institutions are abundantly supplied with funds even though their campaigns for endowments and for other funds have been generally successful. The state universities likewise must depend upon gifts if they are to be equally distinguished. The struggle, too, of the small private colleges merits special sympathy and consideration. These institutions are in hard lines. Many of them are suffering from loss of attendance and annual deficits. They are wondering what the future has in store for them. No one, of course, can lift the veil of the future and tell with an absolute degree of certainty just what is ahead. There are those who maintain that many of these institutions must go out of existence during the next two decades. It also seems likely that some of them should deliberately go upon a junior college basis. Very few of them, if any, certainly can survive and maintain the level to which they aspire without greatly increased resources.

President Cowling of Carleton College recently estimated that a private college of a thousand students, after charging the students \$250 a year tuition, requires a private endowment of at least twelve million dollars. This is not too much. No one, so far as I know, who is familiar with the history of American education or who takes a large overview of American society would suggest that the small private college is without its distinctive func-

tion. It has its place and it is deserving of encouragement and support. That support should come not merely from its own alumni but from all worthy citizens who are in any sense interested in providing college education for the youth of the land.

But the purpose of this discussion is not to stress alumni financial support. I have a much keener interest in another type of service which they can render.

One of the encouraging things about college alumni is that they are becoming increasingly group-conscious and that consciousness is a consciousness of kind rather than a consciousness which clusters about a given institution. There is not enough of this as yet, to be sure, but there are signs that it is developing. A consciousness is emerging that a program to be worthy of alumni support must be a program for which all college graduates can work. The development of this consciousness of kind is of lasting importance and would be greatly stimulated if the objectives for which the alumni should strive were more clearly defined. It is my purpose to suggest some of these broad objectives.

The need of money, of course, is concrete and easily understood; the promotion of athletics is equally concrete and easily understood. It is not difficult to interest alumni in building a stadium, but it is difficult to interest them in erecting a science building. It is not difficult to interest alumni in the salary of the football coach, but it is difficult to interest alumni in securing sufficient funds to pay distinguished professors the salaries they should receive. Whoever heard of a meeting of college alumni to improve the library facilities? Whoever heard of a conference of alumni on the research problems of a university? Whoever heard of a meeting of alumni that confined its discussions largely to the promotion of the moral and ethical and spiritual welfare of the student body? Whoever heard of a meeting of alumni whose primary purpose was that of improving scholarship within the institution? And yet these are the things that constitute the sole excuse for a college or a university. Do you suppose it is possible to develop a consciousness of kind with reference to these fundamental matters?

It is not enough to stop with these things. We are entering upon a new era. We are facing new problems of enormous significance. Universities everywhere are encountering new types of situations to which the alumni, so it seems to me, need to devote themselves, with increasing vigor. In thinking over the things of a fundamental character which the alumni should do, it seems to me that one of the most important is that of insuring that intellectual freedom of the colleges and universities which is necessary for real college and university work.

How many alumni clearly understand that the freedom of our higher institutions of learning is in danger? New forms of control are being devised to take from these institutions the one thing upon which their life and spirit depend, that is, the right to seek the truth and to teach the truth wherever it may lead. These new types of control are expressing themselves in many guises.

Control is sometimes sought by a group that desires to use the university for sectarian purposes to prevent the teaching of this or that. There are abundant instances, too, where business groups have attempted to prevent the teaching in a perfectly fair-minded way, of some social theory or doctrine that is essential to a complete understanding of certain situations of vital human interest. Not infrequently those who seek to limit the freedom of these higher institutions of learning are themselves alumni. Sometimes they desire for their own institutions that which they are unwilling to grant to others. The alumni of American colleges and universities should clearly understand that an attack upon these citadels of freedom is an attack upon the very foundations of democracy.

IT seems to me also that the alumni of our colleges and universities should give some attention to the allocation of work and of responsibility among our various higher institutions of learning. It is a fact that the universities practically all aspire to do the same thing. It is equally true that it is not necessary for them all to do the same thing. If they would agree to do in common those things which they need to do for the promotion of the common welfare and then in addition would agree that certain institutions should attempt to do cer-

tain things on a distinguished basis, while other institutions did other things on an equally distinguished basis, the tenure of the staff would be more secure, better salaries could be paid, and both science and art would be promoted to a higher degree than is possible at present. Many, if not all institutions would be in a fair way of becoming distinguished.

While there is ample money in this country for all higher institutions of learning to be supported on a far more liberal basis than they now are, obviously there is not enough money for them all to go on expanding indefinitely. Here is a problem to which the alumni associations might give profitable consideration.

Still another thing to which the alumni associations might devote more attention is the movement for continuing education, otherwise known as adult education. This movement is world-wide. Just now we are interested in it particularly as it applies to America. It is not confined to colleges and universities. We find that there are more adults engaged in educational work in institutions not associated with colleges or universities than there are carrying on work within the colleges and universities.

We wonder sometimes why so many hundreds of thousands of citizens of this country are engaged in continuing their education. Certainly many factors must contribute to it. One is the desire to keep the road to promotion open. Another perhaps is the desire simply to learn more about more things, to become broader minded and more liberally educated generally. I suspect that there are some forces responsible for this that we are not fully conscious of, whose meaning we do not fully comprehend or understand. I am frank to say that I do not know just what these forces are, but I do have an opinion as to one of them.

The college graduate of a comparatively few years ago was trained for one of the professions. Now we find that thousands upon thousands of college graduates are going out with the expectation of entering business or industry in some form. They do not find that it is possible for them to set up their own independent business. They find, on the other hand, that it is necessary for them to secure employment in one of the great corporations, mercantile or

manufacturing establishments, where they are expected to spend long years as apprentices at very modest salaries. Thousands upon thousands of the youths of today are entering upon these long-term industrial apprenticeships. The inevitable outcome of this process is the development of a clerical mind and a docility of spirit so far as industry is concerned. When men cannot build a business for themselves but must on the contrary be salaried employees during most of their lives, the meaning is clear: we are in the process of developing a new social order.

The changes I have described do not apply to business alone. They have invaded all of the professional fields. There are more doctors working on a salary today than ever before; great corporations of lawyers have been created, employing many young lawyers; large-scale farming with many tenants is being introduced; everywhere we look we find this process going on. The manhood and womanhood of the nation by the tens and hundreds of thousands, caught in this network of industry, are seeking an antidote through the processes of education; they are looking for emancipation; they want to keep the road to promotion open; they are more or less unconsciously trying to find something that will furnish them with pleasant if not useful employment during their leisure time; they want help. I should think that colleges and universities through their alumni associations could assist in providing this help. The University of Michigan has already attempted to do this and is to be commended, in my opinion, for the step it has taken, insofar as that step is intended to provide actual help for the various groups of college people in the field.

Alumni associations should not confine themselves to alumni alone. Why shouldn't they aid the child guidance clinics in providing education for parents, for prospective mothers, mothers of young infants? Why shouldn't they help spread knowledge of health in order that human life may be lengthened and efficiency increased? Why shouldn't they help with the spread of information that will aid in developing interest in fine music, in art, and in other things that contribute to the better life and

spirit of their communities? Why shouldn't they help in every way which will promote human betterment, extend human knowledge, increase human happiness?

Alumni associations should be worthy of the worthiest ideals of the institutions they represent; they should stand for catholicity of spirit and of mind; they should be cosmopolitan in attitude; they should be essentially educational in character; they should uphold the hands of those who are fighting the battle to preserve the freedom of the institutions that graduated them; they should insist upon a still higher and better type of education within these institutions.

Alumni associations of this country may become great agencies for the development of de-

mocracy. Let them show to the world that the great experiment of American education has succeeded and that the institutions which our sacrificial forefathers established are being strengthened and expanded under their fostering care. Let them say to the college authorities: "We are here to help, never to hinder; always to support, never to limit." Let them say: "We hereby dedicate our learning, our trained minds, and the ideals which our beneficent institutions sought to inculcate, to the making of better colleges and universities, to the building of finer manhood and womanhood, and to the liberalizing of the minds of men for the sympathetic consideration of the problems of all mankind."



A Southern Minnesota Hillside

Tests Will Determine How Well Metals Last

Dr Harder's Experiments Covering Ten-Year Periods Will Reveal Corrosion Resistance and Magnetic Permanence

ONE of the interesting things about scientific research is that the most ordinary situations may unexpectedly pose a problem that will lead up to fascinating and valuable investigations.

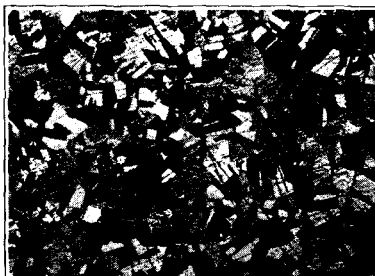
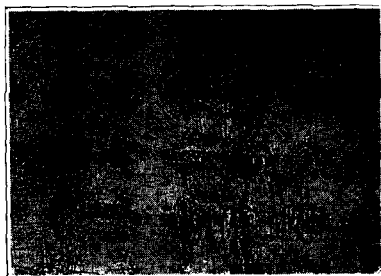
Take as an example the investigations in corrosion of sheet metal that are now being

made by Professor Oscar E. Harder, head of the department of metallurgy in the University of Minnesota School of Mines and Metallurgy.

One might expect such a study to start

from questions asked by manufacturers of boats, motor cars, or metallic roofings. And, no doubt, firms engaged in those lines will be intensely interested in his results. But the investigation began when Dr. Harder decided he must have more information to answer accurately questions asked him by students in a short course for funeral directors. Curiosity over the wearing properties of sheet-metal caskets, buried in the earth, gave first impetus to these particular investigations.

Consequently the roof of the main Mines building fairly bristles today with several thousand small metallic strips, four inches long and flaring at the ends like flattened dumb-bells, which stand upright on the boards to which they are attached. They have been stamped out in the necessary shape for taking tests of their tensile strength, to see how much they have been weakened by weathering. These



Above: Dr. Harder and his specimens; below, left, ingot iron; right, bronze, photographed through a microscope.

specimens have only been there since last fall, but they are sentenced to a ten-year stretch, and throughout that time they will stand there, in extreme cold and heat, subjected to frost, burning sun, rapid changes in temperature and all the gradations of dryness and humidity. From time to

time, tests of their strength and deterioration will be made. At first tests are being made every three months. Later they will be made once a year, and during the last half

of the experimental period, once in two years.

These are but half of the materials of the experiment. In a series of wooden boxes, filled with composite soil from various places in the Twin Cities, including several cemeteries and the campus of the University, hundreds of other slender strips of sheet metal have been buried. By these Dr. Harder will determine the resistance of various pure metals and trade-marked alloy metals to corrosion when used underground. Incidentally he is testing the durability of the boxes also, some being of white pine, some redwood, and some cypress.

Although the experiment began with an interest in caskets and burial vaults it really has a bearing on the use of at least 1,000,000 tons of alloy steels used annually in the form of sheet metals, and a further large amount of sheet metal made from copper with other alloys. Dr. Harder estimates that half the

annual production of 2,000,000 tons of alloy steels is utilized in the form of sheets and rods.

These are the materials that form the rain spouts on homes and public buildings; the metals from which the most durable roofing is made, from which drain pipes, culverts, eaves troughs, ornamental barn cupolas, sheet metal tanks and troughs in livestock barns, and no end of other highly necessary pieces of equipment are manufactured.

The list of different metals which are being tested in this experiment includes: Armco Ingot Iron, Copper Bearing Steel, Keystone Copper Steel, Metallic Zinc, Toncan Metal, Copper, Bronze, Everdur, Carbon Steel, Ingot Iron Zinc Coated, Copper Bearing Steel (cadmium plated), Keystone Copper Steel (furniture finish), etc.

Breaking specimens in the tensile strength tests machine Dr. Harder has found that in the first six months of their exposure to corrosion by soil or atmosphere, various metals have lost from 0 to 4 per cent of their original strength. Quite a good many have not yet begun to deteriorate after having been subjected to one or another of the elements for half a year. It is far too early for him to state any general conclusions, but he is at least of the opinion that loss of strength is less than one would expect from the appearance of some of the specimens. Nothing very serious has happened as yet.

The Minnesota corrosion experiment is not the first of its kind that has been conducted. At the same time, most of the work done hitherto has been carried on by interested parties, who wished to find results favorable to some particular kind of material. It is also true, Dr. Harder says, that some materials are being put to uses for which they are not best fitted. An impartial investigation, such as is being conducted by the department of metallurgy, will place the exact facts before the public. Then if, say, a casket is sold with a fifty-year guarantee, it will be possible for the purchaser to know how nearly correct such a guarantee is. In almost all cases, the casket, once buried, is out of sight permanently, and one must take its wearing qualities on faith. It differs in this from the eaves trough, rain spout, or roof, in which any flaw soon becomes only too evident.

A second experiment which Dr. Harder and Professor R. L. Dowdell are conducting is a study of the heat treatment and magnetic properties of a large variety of permanent magnet steels. Its first purpose is to determine the methods of heat treating steel which will give it the qualities necessary for use in "permanent" magnets. In the second place, it is a study of the permanence of such magnets—the length of time they will retain their magnetic properties.

The importance of the knowledge to be derived from such a test lies in the need for having uniform magnetic power over a series of years in any instrument of which a magnet forms part. Most of such instruments are electrical measuring devices. Variation in the strength of the magnet would mean that measurements made this year and measurements made next year would not be comparable. In scientific measuring this would be unendurable, and in commercial measurements it would be extremely annoying, too. So the tests are looking to the development of magnet steels on which one may absolutely depend.

Ordinary steel, by the way, cannot be used for permanent magnets. For such a use, steel must be heat treated. Explaining why this is so would involve a tremendously complicated discussion of physics and chemistry. That it is true is the principal fact in the manufacture of a permanent magnet. The treated steel is then exposed to an electrical current in just the right manner and becomes a magnet.

This experiment consists merely in hanging up a large number of specially treated and magnetized steel rods so that they are suspended from a ceiling by slender wires. They are thus exposed to the demagnetizing forces of the earth's magnetic currents. The experiment was begun in 1920 by Professors Harder and Dowdell, and a technical paper giving the results of their study into methods of heat treatment has already been published.

Findings with regard to the retention or loss of magnetic properties will not be published until the ten-year period has expired. Nor will the experiment be carried beyond ten years, for it has been found that any important losses of magnetic properties take place within that period. Subsequent changes would be unimportant.

A Picture of Journalism at Minnesota

Prospective Students Desiring a Detailed Description of the Work Offered Will Find It Appended to This Article

INSTRUCTION in journalism at the University of Minnesota, begun in 1914, is fourteen years old, but the existence of a full-fledged Department of Journalism, offering a major sequence in that subject for graduation is but two years old, having been created in the summer of 1926, with the appointment of E. Marion Johnson as professor and chairman.

Clayton Neary, this year a senior student in journalism, has written a brief history of journalism at Minnesota, outlining its beginning at University Farm under Professor W. P. Kirkwood; its expansion under Professor Kirkwood and his successive aids, L. G. Hood, Phil C. Bing, and Norman J. Radder, and its transference to the main campus, first under the direction of Mr. Radder and then of R. R. Barlow, who was the principal instructor in journalism until the spring of 1926.

In the summer of 1924 the original bequest of \$338,000 from the estate of W. J. Murphy, late publisher of THE MINNEAPOLIS TRIBUNE, was made available in cash to the University of Minnesota, and it was at that time that the future of the Department of Journalism at Minnesota became assured. The accumulated fund now amounts to more than \$400,000.

When Mr. Barlow left Minnesota after the college year 1926-27, Professor Johnson took charge of the work with the assistance of T. E.

Steward, assistant professor; and Clarence E. Cason, instructor. At the beginning of the present year Mr. Cason was made an assistant professor and Bruce J. McCoy, formerly publisher of a country paper in Wisconsin, was added to the staff to direct the important course in Community Journalism. This is the personnel of the staff in journalism at present.

Meanwhile enrolment has increased rapidly, from about 125 registrations in all classes in 1926 to more than 300 in 1928; many students have elected journalism as their major sequence for graduation, and a total of 180 individuals are now taking from one to four courses each during the present year; and a number of special journalism sequences

have been introduced to provide special training to students who have in view some definite field of journalistic work. Among these are the Journalism-Business course; Journalism-Agriculture course; a special sequence for students aiming at specialized journalistic work for women, and others that are shown in the tabulated offerings that appear later in this article.

This summer, for the first time in the University's history, journalism will be offered as a subject in the Summer Session. Courses entitled "The American Newspaper"; "Special Feature Articles"; "Supervision of School Pub-



Practicing at the Copy Desk
(Professor Johnson in Charge.)

lications"; and "Teachers' Course in Journalism" will be offered by Professors Johnson and Cason.

The new Department of Journalism at Minnesota is endeavoring to make itself as truly useful to the publishers of Minnesota as it can. By participation in editors' conferences and association meetings, in the annual Editors' Short Course conducted by W. P. Kirkwood for the Agricultural Extension Division, and most of all by devoting itself to the task of giving adequate training to the young men and women who are to be Minnesota's newspaper workers and proprietors of the future, the Journalism Department is taking its place in the picture of Minnesota publishing.

The editors of the state are doing their part also. Not only have they given their time freely to come to the University as speakers or counsellors on special occasions, but a number of them, both last year and this, turned over their entire plants to students in Community Journalism and gave them the opportunity of publishing an actual issue of a real weekly newspaper, an experience that is invaluable to any student.

To Have New Quarters

In line with the policy of expansion and improvement, Dean J. B. Johnston of the College of Science, Literature, and the Arts, of which journalism is a part, has authorized the department to move into larger and more adequate quarters a year hence. When the Students' Health Service occupies its new wing of the University Hospital, the Department of Journalism will be given almost the entire ground floor of Pillsbury Hall. It also has been decided that at least one, and possibly two, new men will be added to the teaching personnel next year, although details may not be made public at this time.

Recognition of the improved work in journalism at Minnesota has come during the past year through its admission to membership in the American Association of Schools and Departments of Journalism, an organization which accepts only departments and schools that have met its standards for giving instruction on a professional basis. These standards have had wide publicity, but are sufficiently

important to be reprinted here. They are:

1. That instruction in preparation for journalism shall be organized as a separate academic unit.

2. That the successful completion of four years' work in a college or university, consisting of not less than 120 semester hours or their equivalent, be required for a Bachelor's degree in the department, course, or school of journalism.

3. That the form of the Bachelor's degree granted shall indicate that the students upon whom it is conferred have successfully completed the requirements for a degree in journalism.

4. That the four years' course required for the Bachelor's degree in journalism shall normally include history, economics, government and politics, sociology, literature, natural science, and psychology or philosophy. A reading knowledge of at least one modern foreign language is desirable.

5. That the courses offered in journalism shall afford instruction and practice in reporting, copy reading, editorial writing, and the writing of special articles; and instruction in the history of journalism, the principles, or ethics, of journalism (with particular reference to the duties and responsibilities of the journalist to society), and the law of the press.

6. That in courses in journalism requiring writing and copy reading, the students shall have the advantage of constant individual criticism of their work by competent instructors, not by students or other assistants; and that as far as possible, students shall be given the benefit to be derived from seeing their work in print.

7. That in courses in newspaper reporting students shall be required to cover regular news assignments, and that they shall have the benefit of constant criticism by competent instructors, not students or assistants, on the manner in which they handle such assignments.

8. That students shall not receive academic credit for practical journalistic work unless such work is done under the immediate supervision of an instructor in journalism as a part of a regular college course in journalism.

9. That the number of instructors in journalism shall be sufficient to insure careful

attention to the individual needs of the students in the instructor's courses, and that the amount of class and laboratory work required of each instructor shall not exceed that of instructors in similar departments, such as that of English composition.

10. That instructors in journalism shall be encouraged to carry on research work and to contribute to the literature of the subject.

11. That a collection of the standard books on various phases of journalism shall be available to students and that students be required to familiarize themselves with these books. Sufficient laboratory equipment shall also be available for use in connection with instruction in the technique of journalism.

12. That the standards of admission to, and graduation from, the department, course, or school of journalism shall be sufficiently high to prevent students lacking in knowledge,

ability, or proficiency from obtaining a degree in journalism.

During his two years at Minnesota Professor Johnson has continued to direct the annual journalism study and sight-seeing tours of Europe which he began while a teacher at Wisconsin. These have been successful from the first. The tour he will conduct during the present summer offers the unusual advantage of a chance to attend the International Press Exhibition that is being conducted in the historic German city of Cologne. Last year his students attended the Press Congress at Geneva, capital city of the League of Nations.

Professor Johnson has prepared a detailed statement of the reasons for teaching journalism at Minnesota, the courses Minnesota offers, and the various services the department is trying to render to students, publishers, and the public. And it is to his statement that most of the remainder of this article will be devoted.

GENERAL INFORMATION

Aims of the Department

THE tendency to regard the press as a semi-public utility, and the increasing effort on the part of newspaper editors to build staffs which will aid them to improve the editorial and news efficiency of their newspapers, which will contribute toward the development of sound public thought, make journalism a profession which offers today a greater challenge than ever before to well-trained men and women. Training for journalism is as essential today as for any other profession.

The journalist is in reality an educator serving the entire nation. He therefore needs a broad knowledge of the fundamental forces which daily influence the life and progress of the nation, in order that he may correctly and clearly present to his readers the information they need to carry on their part in a democracy. The gathering and presenting of the vital news of the day is the greatest of the services rendered by the newspaper. As life becomes more complex, the more competent must be the training of the journalist.

Work in journalism at the University of Minnesota, begun in 1914, underwent a reor-

ganization in the fall of 1926 when a full-fledged department was created under Professor E. Marion Johnson. Journalism, in keeping with all the other professions, is becoming highly specialized. The department is now organized to give students a sound basic course and at the same time to encourage and contribute to the development of individual abilities and to assist in specialization for definite types of work. Training for those who desire to go into the business side of journalism, which has been almost entirely neglected in the past, is provided for by two carefully planned programs.

The expanded program of the University of Minnesota Department of Journalism was made possible largely by the benefactions of the late William J. Murphy, publisher of THE MINNEAPOLIS TRIBUNE. The settlement of his estate in 1924 gave the Department of Journalism an endowment of \$350,000. With this assured and permanent income, the Department of Journalism is enabled to carry on its program with confidence.

The Department of Journalism believes that the only method by which students can be com-

petently trained for journalistic work is through the use of the laboratory method in the teaching of all courses dealing with journalistic technique and methods. Reporting classes write news stories for print. Copyreading classes use live news copy, press association reports, and material from syndicate services. All courses are taught by instructors who have had extensive newspaper or magazine experience in the special subjects which they are teaching.

Some of the conditions that make practical training for journalism at the University of Minnesota singularly promising are the following:

ADVANTAGES OF LOCATION.—With the University located in the heart of

a great news territory, and with the Department of Journalism receiving the active co-operation of the Minneapolis and St. Paul newspapers and periodical publications, the opportunities for effective instruction in journalism are unsurpassed. The Twin Cities with a population of 750,000 provide an ideal training laboratory for metropolitan newspaper work. The cities are surrounded by a prosperous and progressive farm territory which is served by outstanding weekly newspapers and small city dailies. Every type of journalistic production is available for study, analysis, and practice work.

The state capitol in St. Paul, the city, state, and federal courts, press association offices, and other institutions and agencies provide the opportunity for students to receive practical training for every type of journalistic work.

PRACTICAL WORK.—The co-operation of the Twin City newspapers makes it possible to augment classroom writing with work on the newspapers. A large number of outstanding trade, technical, and professional journals pro-

vide opportunities for practical training in magazine editing and publishing. Special arrangements are made each year for all of the students in the community newspaper course to edit several of the weekly newspapers of the state.

STUDENT AND DEPARTMENTAL PUBLICATIONS.—A number of publications, edited and

managed by the students of the University, offer valuable experience in all phases of newspaper and magazine work. These publications are THE MINNESOTA DAILY, the university newspaper, published five times each week throughout the academic year; THE GOPHER, the university yearbook published by the senior class; THE



Early Spring on the Mall

TECHNO-LOG, issued monthly during the university year by students enrolled in technological schools; THE GOPHER COUNTRYMAN, a monthly magazine published by students on the farm campus; THE SKI-UMAH, college literary and humorous magazine; THE MINNESOTA QUARTERLY, campus literary magazine published under the auspices of the English department; THE GOPHER BUSINESS NEWS, a magazine devoted to commercial interests published by students in the School of Business Administration, and THE MENTOR, published by College of Education students.

Other magazines devoted to specialized fields are: THE SCHOLASTIC EDITOR, a nationally circulated magazine dealing with the publishing and editing of all forms of school publications, edited by the faculty of the Department of Journalism; MINNESOTA LAW REVIEW, a legal magazine published by the faculty and students of the Law School; THE MINNESOTA ALUMNI WEEKLY, published in the interests of the alumni of the University; and MINNESOTA CHATS, a monthly in which are outlined the

achievements and problems of the University. These publications offer opportunities for extensive training in writing, editorial direction, circulation work, and advertising.

EQUIPMENT.—A news room equipped with typewriters, a copy desk, reference books, and other standard newspaper office equipment is maintained as a journalism workshop. This equipment provides a laboratory in which classroom instruction can be put into practice. The work of the students is done under the supervision of members of the faculty in much the same way as work will be done by the students later under editors of newspapers or magazines. This laboratory method is as essential in instruction in journalism as it is in teaching science. It contributes to making the work efficient, interesting, and valuable. A journalism reading room contains current files of the leading newspapers of the state and country and the leading journalistic periodicals. During the summer of 1929 the department will move into enlarged quarters. A complete laboratory for instruction in the mechanics of newspaper and magazine make-up will then be installed.

LIBRARY FACILITIES.—The general library of the University contains about a half million volumes exclusive of pamphlets and documents. The section on journalism is unusually complete, and the collection of historically significant newspapers and magazines is one of the best in the United States. The library is housed in a beautiful new building making it one of the finest university libraries in the United States.

Editorial Association Contacts

Each spring the Agricultural Extension Division acts as host to the editors of the state, conducting an Editors' Short Course. The programs for these sessions deal with very practical problems and are made up largely of addresses by progressive editors and outstanding authorities on community journalism and the business of printing. These meetings provide programs of inspiration and value to students of journalism. They are arranged by W. P. Kirkwood, professor of agricultural journalism.

Minneapolis and St. Paul serve as meeting places for many of the state associations of edi-

tors and publishers. These conferences usually are open to students, giving them an opportunity to gain insight into the problems of journalism and to come into contact with established and successful editors and publishers.

Professional Journalistic Organizations

Five professional journalistic organizations are maintained by the students in journalism:

THE PRESS CLUB.—An organization sponsored by all students enrolled in the Department of Journalism to further the professional and social life of men and women interested in newspaper and magazine work. The club during the year brings a number of outstanding journalists and publicists to the campus to address the members. These special lectures constitute a valuable supplement to the classroom and laboratory work in journalism.

SIGMA DELTA CHI.—A chapter of this national, professional journalistic fraternity is maintained by the junior and senior men in the department.

PI DELTA EPSILON.—A chapter of this honorary journalism fraternity is maintained.

THETA SIGMA PHI.—A national, professional journalistic sorority to which junior and senior women are eligible.

BESS WILSON CLUB.—An organization of women in journalism, named in honor of a regent of the University of Minnesota and prominent newspaper woman.

Typewriting and Shorthand

Proficiency on the typewriter is essential to a journalist. Although the ability to type-write is not a formal entrance requirement to the Department of Journalism, students are urged to learn to use a typewriter before entering the department. Work written in longhand will be accepted only until November 1 of each year from students in the beginning courses after which all work must be typewritten. Although typewriters are provided in the journalism workshop, it is recommended that every student have his own machine for use in his room. Whenever possible students are advised to learn shorthand either before or after they enter the department. Such training may be

had in the School of Business Administration for a small laboratory fee.

Scholarships, Loans, Prizes

Information regarding university scholarships, prizes, and loans may be obtained from the University of Minnesota bulletin of general information.

Extension and Correspondence

Many subjects in journalism are offered either in night classes in the Twin Cities, or by correspondence, to students living anywhere that the mails reach.

Inquiries and Information

For further information regarding general regulations of the University or of the College of Science, Literature, and the Arts, write to the registrar for the bulletin of general information and the bulletin of the College of Science, Literature, and the Arts. All requests for information regarding entrance requirements should be addressed also to the registrar.

For further particulars regarding any phases of the work of the Department of Journalism

not explained herein, address the Chairman, Department of Journalism, University of Minnesota, Minneapolis, Minnesota.

ADMISSION.—Candidates for admission to courses in the Department of Journalism must be regularly matriculated students in the College of Science, Literature, and the Arts of the University.

Those who have completed at other institutions of approved standing work which is equivalent to that specified by the University of Minnesota are considered eligible for entrance with advanced standing. Graduates of other standard colleges and universities who have completed all the required studies for a degree in journalism, except the professional courses in the Department of Journalism, may usually be admitted to the senior class, and may as a rule obtain a degree in journalism in one year.

For further information in regard to accredited preparatory schools and the details governing admission to the University, the university bulletin of general information should be consulted.

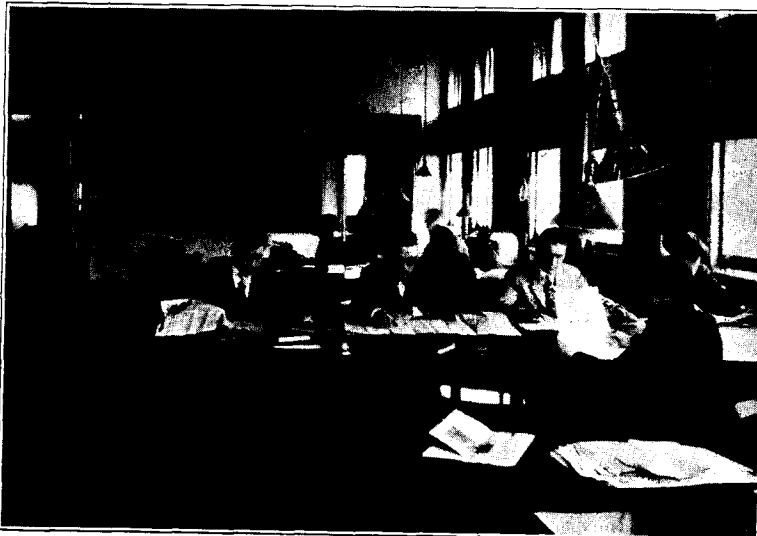
GENERAL REQUIREMENTS

REQUIREMENTS FOR GRADUATION AND DEGREES.—For admission to the Senior College, or professional courses in the Department of Journalism the student must have completed the specific requirements of the Junior College, as stated in the bulletin of the College of Science, Literature, and the Arts (Part II) and must also have completed the basic courses in journalism (Journalism 14-15).

Upon admission to the Senior College a student intending to specialize in journalism must select one

of the several major sequences offered by the Department of Journalism. Following the designated schedule, the student must obtain from 27 to 36 credits in courses offered by the Department of Journalism.

A View of the Journalism Laboratory



Before graduation the student must earn 180 credits and 180 honor points, or a smaller number of credits determined as follows: for every five honor points in excess of one honor point per credit, the number 180 is diminished by one.

Requirements for the Bache-

lor's degree in journalism correspond to those for a degree with a major sequence in any department of the College of Science, Literature, and the Arts. Further particulars of these requirements are supplied in bulletins of the college.

In addition to undergraduate courses, the Department of Journalism offers to graduate students the opportunity to pursue advanced studies in journalism leading to a master of arts degree, and to engage in research problems connected with publication.

SCHOLASTIC REQUIREMENTS.—The Department of Journalism insists that its students acquire a background of general scholarship as well as professional knowledge and technical skill, for it believes that culture in the liberal arts and understanding of the principles of the social and natural sciences must form the basis of a useful career as a journalist. Students of journalism are required to take all but about one fourth of their work in fundamental courses offered by the divisions of English, languages, the

social and natural sciences, the arts, and history. The Department of Journalism undertakes to correlate for its students the work chosen in other departments in such a way as to make it all of the greatest possible good to the profession of journalism to the end that the profession may serve the public welfare.

Students whose scholarship in the fundamental academic subjects is deficient or inferior are discouraged from entering the Department of Journalism. Students who show no particular aptitude for work in journalism are not encouraged to continue, or to anticipate entrance into the profession. The Department of Journalism desires to concentrate its efforts upon those students who in character and endowment give promise of future contribution to the dignity of the profession and the good of the public. The department issues a Certificate of Recommendation to all students completing a major who have maintained a scholastic average of one and one half honor points in their courses in journalism.

MAJOR SEQUENCES

THE several sequences in journalism are arranged to provide an organized and purposeful course of instruction for every phase of newspaper or magazine work. The character of the training provided by each of the sequences is indicated in the introductory statements preceding each. Adaption of the curriculum to the needs of the individual student is the purpose in view. To make this aim effective each student is assigned to a departmental adviser who is primarily interested in the special phase of journalism in which the student expects to do his work. The professional and technical courses are taught largely by the laboratory method. These courses equip the student with a knowledge of the important details of journalistic writing and editing, newspaper and magazine organization and management, and an appreciation of the professional ideals. Courses are elected in other departments which provide students with instruction in the fields of knowledge which are fundamental among human activities—government, politics, economics, business, science, literature, history,

psychology, and sociology. The acquiring of knowledge in these special fields constitutes the greater part of the course in journalism. Several of the journalism courses are designed to correlate and synthesize the information acquired in the electives.

Pre-Journalism Courses

The following program for students expecting to major in journalism has been prepared to aid in the election of courses in the freshman and sophomore years. These courses constitute the prerequisites for required courses in the senior college.

FRESHMAN YEAR

Eng. A-B-C. Freshman English. (15 credits.)
Lib. Meth. 1. Use of Books and Libraries. (2 credits.)
Soc. 1. Introduction to Sociology. (5 credits.)

SOPHOMORE YEAR

Jour. 13. Introduction to Reporting. (3 credits.)
Jour. 14-15. Newspaper Reporting and Correspondence. (6 credits.)
Jour. 17. Newspaper Reference Methods. (2 credits.)
Eng. Comp. 11-12. Description and Narration or 18-19. Types of Writing. (6 credits.)
Econ. 6-7. Principles of Economics. (10 credits.)

RECOMMENDED ELECTIVES

To complete the junior college requirements elections from the following courses are recommended. Election of courses marked with an asterisk (*) is especially recommended:

- Eng. 8. Shakespeare. (4 credits.)
 Eng. 44-45. American Literature. (6 credits.)
 Geog. 1. Introduction to Human Geography. (5 credits.)
 Hist. 1-2-3. Modern World. (15 credits.)
 *Hist. 7-8. American History. (10 credits.)
 Hist. 9. Recent American History. (5 credits.)
 *Modern Language. (A reading knowledge of a modern language is becoming increasingly essential to journalists.)
 *Pol. Sci. 1-2. American National and State Government. (10 credits.)
 Pol. Sci. 3. Comparative European Government. (5 credits.)
 *Psy. 1-2. General Psychology (6 credits) and 4-5 or 7, Introductory Laboratory Psychology. (4 credits.) Courses 4-7 or 7 need not be taken if one of the laboratory sciences is elected.
 Laboratory Science. (Bot., Geol., Chem., Physics or Zool. (10 credits.)

Basic Major Sequence

Below are listed the courses that constitute the basic sequence for a major in journalism. Certain additions are indicated for those who wish to prepare for special fields of journalism.

JUNIOR YEAR

- Jour. 51-52. Copyreading and Newspaper Make-Up (6 credits.)
 Jour. 53. Mechanics of Journalism. (1 credit.)
 Jour. 73. Special Feature Articles. (3 credits.)
 Jour. 75. Law of the Press. (3 credits.)
 One of the following courses: Pol. Sci. 25 or 123 or Hist. 104 or 108. (3 to 5 credits.)

SENIOR YEAR

- Jour. 104. Editorial Writing. (3 credits.)
 Jour. 110. History of Journalism. (3 credits.)
 Jour. 111. Foreign News Sources. (3 credits.)
 Jour. 112. Current Problems of Journalism. (3 credits.)
 Jour. 190-191 or 191-192. Senior Topics Course. (6 credits.)
 Pol. Sci. 187. Problems of Democracy. (3 credits.)

NOTE.—Where courses in the School of Business Administration are enumerated in any sequence, they are offered for credit only to students majoring either in journalism or business administration subjects.

Women's Departments

Newspapers and magazines are giving more and more attention to various forms of social service. These service departments are largely under the direction of

women. This program is designed to train women students majoring in journalism for departmental editorships and special types of work.

In addition to the required courses previously listed these courses should be taken: Jour. 65, 74, 80; Psy. 56; and Bus. Adm. 88. Elective courses which will aid students to prepare for specialized work will be arranged in conference with the major adviser.

Minor requirements.—For women taking specialized or professional courses such as home economics, preventive medicine and public health, social and civic work, etc., the following minor work is recommended: Jour. 13, 41, 65, 69, 70, 71.

Journalism-Advertising

Advertising is continually offering greater opportunities to those qualified for the work. Since advertising is so closely associated with journalistic enterprises, thorough training in both subjects is desirable for persons entering many forms of publication or advertising work.

In addition to the list of required courses, the following subjects should be elected: Jour. 74 and 77; Hist. 169; Psy. 56; Econ. 14 and Econ. 85; Bus. Adm. 88, 194-195-196. Students primarily interested in advertising should consult the bulletin of the School of Business Administration.

Community Journalism

The opportunities for advancement and the acquiring of ownership offered by country weekly newspapers and small city dailies makes community journalism a field of exceptional opportunity. The course in community journalism includes comprehensive analyses of the community editor's special problems, circulation and advertising methods, and plant management.

The following courses in addition to those previously listed provide the essential preparation for work in community journalism: Jour. 60-61-62, 90; Econ. 88, 108; Psy. 56; Soc. 110, 112.

Journalism for Teachers

With approximately 10,000 high schools and junior colleges issuing one or more forms of scholastic publications and with a large number of these schools offering courses in journalistic composition, the demand for teachers qualified to give this instruction and to supervise the student publications is correspondingly great. The Department of Journalism offers both a teaching major and minor. An English minor is recommended for students majoring in journalism. For a detailed statement of the requirements to be satisfied by students in education see the College of Education bulletin. College of Education students majoring in journalism may omit Journalism 75-104 from the list of required courses. Journalism 120 and 121 are required courses.

Minor requirements.—Courses 13, 14-15, 69, T82, 83.

Technical and Trade Journalism

This course is intended for students in professional schools, such as Engineering, Forestry, and Business, who

wish to acquire a knowledge of journalism either with the object of writing on subjects relating to their special field or for the purpose of editing technical or trade journals.

Such students will be regularly enrolled in their professional colleges and will elect courses in the department of journalism. It is recommended that these elections be made in the following order:

JUNIOR YEAR

- Jour. 13. Introduction to Reporting.
 Jour. 14-15. Newspaper Reporting and Correspondence.
 Jour. 17. Newspaper Reference Methods.
 Jour. 41. Editing and Make-Up.
 Jour. 69. The Writing of Special Articles.

SENIOR YEAR

- Jour. 57. Magazine Typography.
 Jour. 70-71. Trade and Technical Journals.
 Jour. 75. Law of the Press.
 Jour. 104. Editorial Writing.

Pre-Agricultural Course

This course is intended for those who wish to prepare for some branch of journalism which relates to agriculture; such as staff positions on agricultural magazines, writing on farm problems, editing of bulletins for state and federal departments of agriculture and experimental stations, editing of special farm pages or departments for newspapers, and editing of publications for farm organization. The first two years are prescribed and include introductory courses in agriculture, journalism, and economics. During the freshman and sophomore years, students will register in the College of Agriculture, Forestry, and Home Economics, and during the junior and senior years, will become registrants in both the College of Agriculture, Forestry, and Home Economics and the College of Science, Literature, and the Arts.

FRESHMAN YEAR

The freshman year consists of the regular freshman courses outlined on pages 15-17 of the College of Agriculture bulletin, except that English Survey A-B-C should be substituted for Rhetoric 1-2-3.

SOPHOMORE YEAR

- Agr. Econ. 1f-2w. Principles of Economics I-II, 8.
 Agr. Econ. 6s. Economic History of Agriculture, 5.
 Agr. Econ. 8s. Rural Economics, 3.
 Zool. 14-15-16. General Zoology, 9.
 Jour. 13. Introduction to Reporting, 3.
 Jour. 14-15. Newspaper Reporting and Correspondence, 6.
 Psy. 1f-6w. General Psychology for Business Students, 6.
 Eng. Comp. 11-12. Description and Narration, 6.

JUNIOR YEAR

- Jour. 51-52. Newspaper Copyreading and Make-Up, 6.
 Jour. 57. Magazine Typography, 2.
 Jour. 69. The Writing of Special Articles, 3.

- Agr. Econ. 90f. Agricultural Statistics, 3.
 Agr. Econ. 110-111. Economics of Agricultural Production, 6.
 Agr. Econ. 140s. Principles of Marketing Organizations.
 Soc. 1. Introduction to Sociology, 5.
 Soc. 14. Rural Sociology, 3.

SENIOR YEAR

- Agr. Jour. 10f-11w-12s. Agricultural Journalism, 9.
 Jour. 75s. Law of the Press, 3.
 Jour. 104. Editorial Writing, 3.
 Jour. 191w-192s. Topics Course, 6.
 Agr. Econ. 130f. Prices of Farm Products, 3.
 Agr. Econ. 135s. Methods of Forecasting Prices, 3.
 Econ. 149f. Business Cycles, 3.
 Psy. 56w. Psychology of Advertising, 3.

RECOMMENDED ELECTIVES

- Agr. Econ. 25. Principles of Accounting, 3.
 Agr. Econ. 126. Economics of Consumption, 3.
 Agr. Econ. 145-146. Marketing Management, 6.
 Agr. Econ. 170. Land Economics.
 Agr. Ed. 11. Principles of Vocational Education, 3.
 Agr. Ed. 75. Visual Presentation, 3.
 Eng. 44-45. American Literature, 6.
 Forestry 1. General Forestry, 3.
 Geog. 51. Human Geography, 5.
 Jour. 60-61. Community Journalism, 6.
 Jour. 70w-71s. Trade and Technical Journals, 6.
 Pol. Sci. 1. American Government, 5.
 Pol. Sci. 2. State Government, 5.
 Soc. 110. Community Organization, 3.
 Soc. 112. The Rural Social Survey, 3.

Minor in Journalism

For students in the various divisions of the College of Agriculture, Forestry, and Home Economics wishing a short course in journalistic writing, elections from the following program are recommended:

- Eng. Comp. 11-12. Description and Narration, 6.
 Jour. 13f. Introduction to Reporting, 3.
 Jour. 41w. Copyreading and Make-Up, 3.
 Jour. 69s. Writing of Special Articles, 3.
 Jour. 70w-71s. Trade and Technical Journals, 6.

For Majors in Home Economics

- Jour. 65f. Women's Departments.

A Survey Course in Journalism

The Department of Journalism feels that there is just as real a need for more knowledge on the part of the average person about the present-day newspaper as there is for the studying of the works of the journalist of the past whose writings make up a considerable part of courses devoted to a study of the English classics.

The universality of the present-day newspaper makes it an institution of interest to every person. To satisfy a general desire for more information about the rise, the organization, methods, and services of the newspaper a special survey course, *The American Newspaper*, is offered. This course is given the spring and fall quarters.

NOTICE

Address communications to T. E. Steward, editor,
216 Administration Building
University of Minnesota,
Minneapolis, Minn.

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Vol. 9 No. 108

June 1928

MINNESOTA CHATS



For a Better
Minnesota

FOREWORD

THE University of Minnesota is making every preparation to provide a hearty, but chiefly a useful, greeting to the freshmen when they arrive on the campus next fall. Freshman Week has proved to be a great success during the past two years, and the administration is planning to make it even more effective this time.

A student fresh from high school, used to the home environment and the careful supervision of the secondary school, needs a helping hand from the moment he steps upon the campus of a college or university. In fact, more than at any other time, he needs it AT the moment he steps on the campus, so that he may begin his college life with the right ideas and an impetus in the right direction. These, and a real understanding of higher education, are the things which Freshman Week is designed to give.

THE Mayo Foundation, given to the University of Minnesota by Drs. William J. and Charles H. Mayo, has been one of the finest contributions to the advancement of medical science ever made in the United States. Something of its workings and accomplishments is told in an article in this issue by the editor of MINNESOTA CHATS. Dr. W. J. Mayo is a member of the Board of Regents.

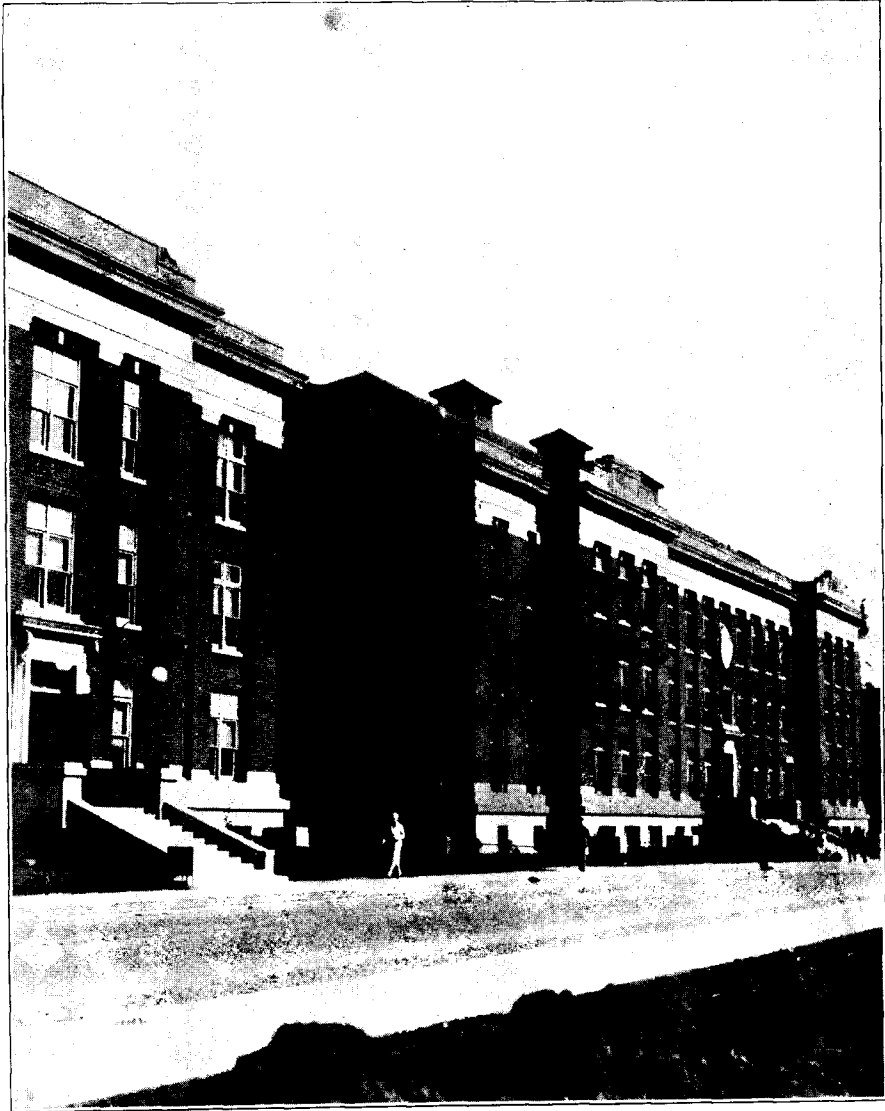
In this issue will be found, also, a number of editorial comments anent the University of Minnesota and education in general that have appeared during the past year in the state and city press of Minnesota. They will all be found worth the reader's time.

MINNESOTA CHATS

Vol. 9, No. 108

published by the

UNIVERSITY OF MINNESOTA



Part of the Engineering Group

The University's Mayo Foundation Research Center

Graduate Medical Students From All Parts of the World Assemble at Rochester for Periods of Training Ranging From One to Five Years

AN opportunity for research and graduate study in basic medical sciences and in the clinical branches of medicine which is sought in formal applications by 30 per cent of the graduates of Class A medical schools in the United States may be said to be sufficiently characterized by that fact alone.

Add to this that something like 70,000 patients a year are available for observation and study as part of that opportunity, that more than 650,000 cross-indexed records of earlier cases are filed as research material, and that hospital facilities of 1600 beds are manned by a professional staff of 440, of whom 134 are permanent staff members. One now begins to get a picture of the Mayo Foundation for Graduate Medical Study and Research, which has been included as a unit in the Graduate School of the University of Minnesota since 1915.

Still by way of introduction, consider one more fact, that as far as actual clinical and professional duties are concerned, 70 men could do the work for which 290 are now supported on fellowships at Rochester, Minnesota, by the Mayo Foundation, and the opportunity for study and research stands out in bold relief. Simple division shows that these men have three-quarters of their time to devote to their own investigations, to improvement in their chosen fields, and to scientific advancement. The comparison of 70 and 290 is quoted from Dr. L. B. Wilson, director of the foundation.

With so large a number of fellows engaged in research and advanced study one might jump to the conclusion that a great many degrees were granted, and that men marked with the stamp of high original accomplishment were turned out somewhat in proportion to the background against which they work. This would be untrue. Many who come for study are not seeking degrees. Furthermore, statistics of the foundation show that in the thirteen years of its life 282 men and women have been recom-

mended for advanced degrees, but only 39, or an average of three a year, have been found to fill the requirements for the degree, doctor of philosophy. On practically all of the others the master's degree has been bestowed. This degree, Doctor Wilson explains, means that a man has been found competent to do capable, independent scientific work, without supervision. Exceptional talents and unusual ability to advance knowledge by research methods are implied in the doctor of philosophy degree, and the statistics show, as one would assume, that while there are always some exceptional men and women to be discovered, there are relatively few.

The results of the fellowships are foreseen in advance when applicants are interviewed and examined. For instance, Dr. Wilson cites that of 128 applicants for Mayo Foundation fellowships interviewed last month, seven seemed to have real talent in research.

Purposes of the Foundation

A brief bulletin describes Mayo Foundation fellowships as "definitely intended to provide opportunities in several years of graduate work for well-prepared, serious-minded students to fit themselves in the science, as well as in the art of some special field of either the basic or clinical medical sciences."

"Fellows are expected to regard their residence as an opportunity to find out things for themselves," this bulletin says, "and not a period in which they will be instructed by undergraduate methods. Fellows who do not evince strong personal initiative will not be recommended for annual reappointment. In the arrangement of schedules the best opportunities will be given to fellows exhibiting the greatest earnestness and ability. To this end all fellows' work is carefully estimated quarterly in University grades by members of the faculty with whom the work is done."

Apart from reasons which hold good for any

type of advanced education, the Mayo Foundation was established with two principal objectives in view, first, the training of medical specialists by an orderly, scientific procedure, and second, though most important, the training of men to carry on the torch of medical progress as teachers in medical schools. Its affiliation with the University of Minnesota began in 1915, and some years later the original endowment, having grown to \$2,000,000, was turned over to the University of Minnesota in accordance with the original agreement.

A University Unit

The teaching and research at Rochester supplement, but it goes without saying that they do not supplant, the graduate work in medicine which is also carried on at the Medical School of the University of Minnesota in Minneapolis, many of whose students have no connection with the foundation. At the same time, students enrolled in either group have the advantage of frequent interchange of lecturers, men from the foundation coming to Minneapolis, and others from the Minneapolis campus lecturing before groups in Rochester.

World-wide recognition of the graduate study facilities provided by the Mayo Foundation is found in the enrollment figures, which showed, in May, that 51 North American universities and 14 universities in foreign countries were represented in the student body. And in addition to these university men on regular fellowships, there are always some representatives of two other classes of students: one, men sent to the foundation by the United States Army or Navy to improve their teaching background and brighten their familiarity with current medical progress, and the other, men sent to the foundation by foreign governments.

Some are fellows of the Rockefeller Foundation who have been designated to spend part of their period of study and research at Rochester. A number are supported by fellowships from foreign universities, some by foreign governments, and some are foreign students who have won Mayo Foundation fellowships. The overwhelming majority of the foundation fellows are, however, students from the United States. Dr. Wilson carefully explains that Canadian students are not listed as "foreign,"

and that applicants from the Canadian medical schools are on exactly the same basis as young men and women from this country. Inasmuch as there are no students at present from Mexico, the 51 universities in "North America" that are represented are in the United States and Canada.

Utilization of "by-products" is one of the basic principles on which modern civilization has been built and the opportunities for teaching and research under the foundation come as a by-product of the vast hospital center known as the Mayo Clinic. Sick persons and the processes of treating and healing them are the principal materials of training in both the science and the practical art of health service, and these the clinic abundantly provides. It should be pointed out, also, that while the clinic doctors necessarily regard treatment and healing as of first importance, the "by-products"—research and teaching—are the first concern of those working in the foundation. Many of the research professors have no clinical duties in the treatment of patients, though most of the fellows devote part of their time to clinical functions. Yet so closely inter-related are the two great fields that differentiation is next to impossible.

Work in the Research Institute

To see research going ahead quite independent of patients one must go to what is called "The Institute," a group of buildings perched on one of the rounded green hills that are numerous in the pleasant, rolling countryside near Rochester. Here all interest is in science, there are no patients, and no human material is used, the research workers themselves excepted. Animals are employed in some of the experiments.

One enters the lounge of the main building and is welcomed by a smiling young doctor, who lays down a very serious-looking periodical devoted to some of the more advanced and, to the layman, quite abstruse, phases of physiology. He is wearing the protective, white-linen gown that is the symbol of the laboratory worker. Patiently hearing the visitor's explanation that he would like to write about the research work done under the Mayo Foundation, that he knows very little about it, but would be delighted if the doctor

would take a typical research problem and follow it far enough so that some understanding of it might be given to the public, this young doctor sits down on the table, crosses his knees, and says,

"Well, let's take ulcer of the stomach or duodenum as an example. That's something that is common enough to be interesting. It's also an ailment about which there is a great deal to be learned. It offers a splendid opportunity for research, whether one's purpose is scientific or practical."

One carefully avoids saying "Shoot, doc." Instead one says, "That's fine. Tell something about ulcer, and please, please, use words I can understand."

Introductorily the doctor explains that all sciences with a bearing on such a problem are brought into play at the Institute. If sound, light, or heat are involved, physics comes in; chemistry tells the composition of substances and the changes that take place in tissues as a disease progresses or as healing gains the upper hand. Frequently the bacteriologist has a contribution to make; the physiologist always has. Some factors in disease are purely mechanical, he explains.

"In ulcer" says the doctor, "we know the things to do, as dictated by present medical knowledge, but how can we be sure of the cause, so that we may carry defense to the point of original attack?"

"You probably can guess the scientist's first step. It is to know all he can about the normal organ, so that he may know how it should act, and how far in illness, it is departing from the norm.

Study of Ulcer in a Dog

"Next, the scientist would like to study an ulcer about which he knows as much as pos-

sible. We find that we can produce an ulcer in the stomach of a dog which, from an experimental standpoint, is very similar to those found in human patients. Various factors are encountered in the artificial creation of ulcer. There are chemical factors involved in the contents of the stomach; trauma, or injuries, come in, caused in dogs chiefly by swallowing bits of bone. The stomach, in functioning, contracts violently, and these contractions sometimes force a hair or fragment of bone against a tender spot on the stomach wall so that it remains there and becomes the irritant that keeps an ulcer from healing.

"Again, the explanation for the continuance of an ulcer may be weakness in natural healing power. Certain places in the stomach heal less readily after injury than do others. Ulcer is more commonly found in these slow

healing spots. Perhaps we come around to the conclusion that ulcer of the stomach is nothing so very peculiar, or mysterious, but is difficult because of obstacles in the way of its cure."

Ulcer, the doctor explains, is one of the ailments in which the bacteriologist is making a big contribution. Certain bacteria originating in the teeth or tonsils have a way of finding their way to the stomach and lodging in certain rather well-defined areas. If a dog's teeth are infected, his ulcer is probably in one of these known places which the bacteria seek. As long as the bacteria are present, that region will be irritated, or inflamed, consequently more subject to injury and resultant ulcer.

Chemistry comes in once more as science learns the neutralizing factors that offset too much acidity in the stomach, and becomes able to determine the presence or absence in the body of these neutralizing agencies. Their absence would be the equivalent of increased acidity,



Campus Visitors on Mother's Day

it is explained. The laboratory makes a further contribution after hundreds of specimens have been examined under the microscope and the scientist becomes able to tell, by looking at the tissue, whether the ulcer from which it has been taken in the course of an operation, is getting worse or is healing.

Notable Foundation Researchers

In the main office of the foundation a shelf stretching beyond the dimensions of the famous "five feet" is filled solidly with bound papers in which are printed the lectures and results of research. They make an imposing array and are known throughout the world of medical science.

Some of the better known researches under the foundation are those of Dr. E. C. Kendall who discovered the active principle of the thyroid and who works chiefly on the chemistry of the thyroid, and those of Dr. E. C. Rosenow, who studies the elective localization of bacteria, like those from the dog's teeth, which caused an ulcer in its stomach. He has published between 50 and 100 papers on that general subject. Dr. F. C. Mann and associates study the functions of the liver and gall bladder. They have found that the liver, in some way, furnishes sugar which the body must have. The liver was removed from a dog. As long as he was given sugar by injection, he lived. When he no longer got sugar artificially, he died, the sugar in his system having gradually disappeared. Perhaps as many as thirty research fellows under the foundation have worked with Dr. Mann on these problems, and an impressive series of papers, giving the results, has been published.

The researches of Dr. Charles Sheard have to do with the physics of light and the effects of rays on growth. With his various students he conducts a great number of varying experiments. The roentgen ray and cancerous growths immediately come to mind in connection with such studies. Their value to practicing surgeons and diagnosticians can hardly be over-estimated.

Sometimes a student branches off into fields that seem to have relatively little bearing on anything practical in life. Take the work of Dr. Corbeille, a woman. She has been work-

ing with Dr. Sheard. Leaving her first field, she decided to study bio-physics, which is to say, physics in relation to living substance. For a long time she has been investigating the effects of harmony versus the effects of noise on living creatures. Presently she is to publish her findings, and much is expected of them. Will they show that the endless racket and disturbance of modern life are causing degeneration of the human nervous system? Quite a practical consideration, that, by comparison with the impression one might get from hearing that she was working on bio-physics in a remote laboratory.

In the surgical colony some of the most valuable research has been done by Drs. W. C. McCarty and A. C. Broders, who are working toward the earlier diagnosis of cancer. By studying minute sections of the growths called cancer they have become able to understand the stage of the disease from the appearance of the section. They can tell, from looking at this minutely thin slice of cancer whether the disease is progressing or receding. They almost can tell how long the patient will live if a section of the cancer looks like this; how much longer, or less, he has to live if it looks like that.

Dr. W. M. Boothby and his assistants are studying in the field of basal metabolism, which is to say, the rate of destruction of the body tissues normally or under the influence of disease. Destruction of the body differs tremendously in rate in different diseases. Some burn fiercely; some destroy less actively. Among other practical results, Dr. Boothby's work has given medical scientists an entirely new conception of the nature of exophthalmic goitre, according to the statement of Dr. L. B. Wilson, director of the Mayo Foundation.

These are some of the outstanding pieces of scientific work being conducted, the men named being chiefs of several divisions. Actual count of the schedule published in THE CLINIC BULLETIN shows that in the quarter that began April 2, 1928, 140 scientists, including those mentioned, were devoting their time to laboratory services.

Cost Is Far Above Income

Naturally, all of this work can not be supported even by the income of the \$2,000,000

endowment of the Mayo Foundation, and A. J. Lobb of the administrative staff estimates that something like four times the income of the foundation is spent each year to conduct the researches, lectures, and teaching that come under the foundation. All income from the foundation is spent, however, on researches not directly related to clinical medicine.

Why all this expenditure, and labor, and concern with the laboratory side of medicine? Even to ask seems ridiculous, yet the answer, however obvious, should be stated. Passing over its tremendous immediate value to those engaged in the practice of diagnosis, medicine, and surgery nearby and in distant fields, passing over the fact that unless science progresses, it stagnates, and even passing over the fact that there are men at work here who would be doing what they are if they had to surmount as many obstacles as they now have helps and encouragements, one comes to the major purpose. Teachers must be trained in the various fields of medicine, for the splendid and increasing medical knowledge which mankind has attained is not for the present generation only, but for all time. If the men with this knowledge practiced only, and gave no attention to the training of others, that those of tomorrow might have the same, and no doubt better, facilities for healing than we have, the gain would be temporary. All the laborious progress of medical science would be lost.

Big Majority Become Leaders

The Mayo Foundation and the University of Minnesota are proud when they say that 70 per cent of the men who have left after various periods of training are devoting part or all of their time to teaching in medical schools. Five are actually the heads of medical schools, among 63 in this country.

Take as an example the statement in the last annual report of President L. D. Coffman of the University of Minnesota relative to fellows majoring in internal medicine and related branches, under the Mayo Foundation since its establishment. Under the subhead "teaching positions" it states:

"Five of the 109 (who have left after more than one year of residence) are in whole time and 50 in part time teaching positions. Of

these 55, two are professors; six are associate professors; 14 are assistant professors; 32 are instructors; and one is a lecturer. The largest number of these (35) are, of course, in the University of Minnesota; two are in the University of Pennsylvania, and one each in 17 other American medical schools. One is teaching in a foreign school. The teachers have come almost entirely from those who have been in the Mayo Foundation longest, the average period in the foundation of those who are now teaching being more than 37 months."

The same results with regard to teaching are found in "pre-clinical fields," and in "surgery and surgical specialties." These are the two other main divisions.

As has been pointed out, not all of those who come to the University of Minnesota for work under the Mayo Foundation seek degrees, a circumstance which makes the proportion of those who teach still more impressive. The Universities of Copenhagen and Stockholm keep a man at Rochester practically all of the time. The same thing is done by the Italian government, and there usually is a fellow working in the foundation representing the Japanese and Spanish governments. Most of the other foreign students are from Great Britain and her dominions or possessions, such as Australia, New Zealand, or South Africa. The appointee of a foreign university or government, or one from the Rockefeller Foundation will be accepted for any period of six months or more.

To protect men from foreign universities who leave their posts at home vacant while doing advanced work in Minnesota, the foundation has made it a rule to accept fellows from those institutions only if the administrators guarantee them eligibility for appointment on their return, with provision for such advancement as they would have received had they remained.

Draw on World for Lectures

In addition to the actual researches conducted by men holding fellowships, they have the advantages throughout the year of a notable series of lectures by authorities on various branches of medical and related science. The annual report for 1926-27 lists among the lecturers Professors Roberto Alessandri of the

University of Rome; G. H. Coons, Michigan State College; C. H. Cowles, University of Chicago; Henri Fredericq, University of Liège; Oscar Gans, University of Heidelberg (five lectures); Sir Henry Gauvain, Crippled Children's Hospital, Alton, England; W. Sampson Handley, Middlesex Hospital, London; William M. James, Panama; S. Judin, University of Moscow; Allen K. Krause, Kenneth Dows Tuberculosis Research Laboratories, Baltimore; L. O. Kunkel of the Boyce Thompson Institute for Plant Research, Yonkers, N. Y.; Professor A. Kuntz, St. Louis University; Professor A. A. Maximow, University of Chicago; Professor Frederich Muller, Ludwig Maximilian University, Munich (four lectures); H. Winnett Orr, Omaha; W. J. Osterhout, Rockefeller Institute for Medical Research; H. J. Prentiss, University of Iowa; Edward Rist, Paris; Professor R. E. Scammon, University of Minnesota department of anatomy; Professor E. C. Stakman, department of plant pathology and botany, University of Minnesota; Henry Sewall, Denver, Col.; D. D. Van Slyke, Rockefeller Institute for Medical Research; H. H. Whetzel, New York State College of Agriculture (Cornell); David Wilkie, University of Edinburgh; Archibald Young, University of Scotland.

The subjects discussed by these lecturers are as diverse and interesting as the names of the men themselves.

Of the annual series of lectures five or six are considered sufficiently important to be included among those given under the Mayo Foundation at a group of middle western universities, including Minnesota, Wisconsin, Iowa, Nebraska, Washington University (St. Louis), and the Des Moines Academy of Medicine. In this connection the announcement has just been made that for the next five years these lectures will deal with medical history, forming a great symposium on the history of medicine, for which experts in special fields and epochs will be brought to Rochester from all parts of the world. Three big names have already been arranged for next year, Colonel Fielding H. Garrison, U. S. A., probably the greatest living authority on medical history; Professor William H. Welch, head of the School of Medical History at the Johns Hopkins Uni-

versity, and Sir Arthur Keith of the Royal College of Surgeons, London. Other speakers for the first year of the five-year symposium will soon be selected. Results of this series of lectures, totalling from 25 to 30 papers, will be published by the foundation as a comprehensive history of medicine.

Northwestern University, the University of Chicago and the University of California have recently asked to be included in the itinerary of the Mayo Foundation lecturers.

All of these lectures are merely the cannon crackers of the year. There are hundreds of other lectures by members of the staff. Four nights a week from October 1 to June 1 are devoted to lectures in which the results of research, the accounts of actual cases, and the progress of medical science are discussed. Three of the week's four lectures are usually by members of the foundation and a fourth by some eminent speaker from outside. Members of the University of Minnesota faculty on the Minneapolis campus are frequent contributors.

Graduate fellowships in medicine are needed in far greater numbers in American medical schools, according to Dr. Wilson. Chicago is building a system of graduate fellowships. Northwestern and Tulane Universities, the Pennsylvania Graduate School of Medicine and the University of Minnesota, through the Mayo Foundation, have them. As chairman of the committee on graduate medical research of the American Medical Association, he is doing all he can to encourage the extension of such a policy.

Can Take Few Applicants

The demand for fellowships is shown by the fact that only 94 were accepted for Mayo Foundation fellowships out of 1200 applicants last year. Nearly all of the men accepted come from the upper third of their classes and from the Class A medical schools.

Up to July 1, 1927 there had been 734 fellows working under the Mayo Foundation, divided among the following fields of study: chemistry, 12; anatomy, 1; bacteriology, 17; pathology, 29; roentgenology, 14; internal medicine, 161; neurology, 11; syphilo-dermatology, 21; pediatrics, 23; general surgery, 343; oto-laryngology and rhinology, 34; ophthal-

mology, 21; urology, 28; orthopedics, 16; obstetrics, 3; total, 734. These men had come from the following medical schools: University of Minnesota, 90; Pennsylvania, 69; Chicago, 54; Michigan, 35; Johns Hopkins, 31; Northwestern, 26; University of Toronto, 24; Harvard, 20; Virginia, 20; Iowa, 19; Washington University, St. Louis, 10; other American schools, 254; foreign schools, 50. Thirty-two others were graduates of colleges but not of medical schools. These men had graduated from medical school at an average age of 25.8; had entered the foundation at 28.6 and had enjoyed an average of 2.8 years of graduate training before entering the foundation.

Prior to June 9, 1915, when the Mayo Foundation became a part of the University of Minnesota, another group of 60 men who were not afterwards registered as fellows in the Mayo Foundation had begun graduate medical training in the Mayo Clinic.

This picture of the Mayo Foundation is

sketchy, but no brief article could reveal in full the complicated activity of the fellows, whose work is now distinct, and again merged in the myriad services of the Mayo Clinic with its many hospitals and 1600 beds. Everyone seems to be doing something for the foundation, and many in the foundation are helping those in the clinical branches. That men appointed for one year often remain three, four, or five years, if their superiors find them worthy, while many who remain as fellows for as much as five years find permanent usefulness in Rochester, is not to be wondered at. Rochester is a little world in itself and, wonder of wonders, it is a made-to-order world of like-minded persons, all working at tasks that interest them more than any other that could be devised. It is no Utopia, but one who described it would come dangerously near to using some of the words that a definition of Utopia would require, at least if the Utopian were a man of medical science.

Week of September 24th Dedicated to Freshmen

University's Third "Freshman Week" Is Planned in Advance, and All Will Be in Readiness to Welcome Them in the Fall

A faculty committee headed by Professor Oscar C. Burkhard and a committee of co-operating students under the chairmanship of W. Allen Mortenson are making all necessary arrangements to conduct Freshman Week at the University of Minnesota next fall, from September 24 to 29.

Half a dozen different things will be done by the general faculty committee to smooth the path of the entering student, acquaint him with his tasks and with the nature of university life, and orient him in the new community he is entering.

First among these will be the distribution of a freshman booklet, containing statements by the dean of each college in the University. Each will tell what the opportunities are in his field, and what factors a student should give careful consideration to before he elects to enter. These booklets will be mailed to students when they first write in, expressing their intention to register at Minnesota in the fall.

The main operations of the entering student will be gotten out of the way early in Freshman Week. These will include his registration for actual classes, his physical examination, and his psychological or college ability test. Each student will receive a printed schedule, designating him as a member of a certain group, which group will take part in the various affairs of the week at stated times. At a certain time the student will attend a lecture on "The Significance of the University," delivered by a dean or prominent faculty member. Other lectures will be given on "How To Study" and on "The Significance and Use of the Library."

In addition to the general lectures and to the information contained in the freshman handbook, a series of vocational lectures will be conducted, in which the opportunities in various professions and vocations will be set forth. Such fields as mining, engineering, chemistry, agriculture, forestry, business, dentistry, pharmacy, medicine, and law will be carefully

covered. The lecturers will touch on the qualities a man should have to enter one of these occupations, on the advantages and standards of the calling, on the nature of the preparation and the likelihood of adequate return, in personal satisfaction, social status, and money.

As has been done in past years, groups of freshmen will be taken on tours of the campus, through the Chemistry building, the Library, the University Greenhouses, the Museum of Natural History, and the like. It is intended that the new students shall have a kaleidoscopic but thorough view of the entire institution by the time October 1 arrives and they are required to settle down to actual studying.

Meanwhile the student committees will be active. Each evening they will conduct some sort of a meeting which will be entertaining and at the same time will introduce the newcomer to some aspect of college life. Possibly he or she will learn the college yell or the football songs. Possibly the Women's Self-Government Association will hold a special meeting for the girls, or the men will be entertained at a boxing match between student athletes. The students also will maintain booths at a dozen or more places about the campus at which new students may obtain whatever information they need. Students will conduct the tour groups to points of interest and will be on hand at railway stations to meet such newcomers as do not know their way around.

The results of past freshman weeks at Minnesota and other universities have more than borne out the good things theoretically predicted for such efforts, according to Dean J. B. Johnston of the College of Science, Literature, and the Arts. Members of the faculty committee, besides Professor Burkhard, the chairman, are Dean Johnston, Dean E. M. Freeman, Dean M. E. Haggerty, F. K. Walter, librarian, R. M. West, registrar, Dean E. E. Nicholson, and Professor R. C. Lansing.

What the Minnesota Press Has To Say

In the following pages MINNESOTA CHATS reprints a number of the editorial comments that have appeared during the past year in Minnesota newspapers touching on problems of the University of Minnesota and of higher education in general. They are offered without comment as the expression of opinions representing a considerable part of the state's population.

Education by Budgeteers

The cause of educational freedom has a sincere exponent in Lotus Delta Coffman, President of the University of Minnesota, who has been giving excellent service lately in a specialized sense. Because of the issue of financial control between the "Big Three" and the Board of Regents, Dr. Coffman has been called upon to clarify the distinctions between educational and financial policies as they are variously interpreted. It is in defense of the Regents' superior judgment, against the hard and fast rule of budgeteers, that he has been trying to show the people of Minnesota that their educational progress, so far as it is fostered by their State University, depends upon the untrammelled application of educational principles over and above rote accountancy.

Perhaps the best exposition by Dr. Coffman of education's paramount claim through the separate and co-ordinate Board of Regents is contained in his address at the University of Michigan Clubs Triennial, in Chicago, in connection with the Triennial theme, "The Interrelation of the State, the University and Its Alumni." Dr. Coffman dealt particularly with fiscal control of State Universities. After illustrating his points with a statement of the friendly litigation between the "Big Three" and the Regents here in Minnesota, he warned educators that "a fixed budget is the worst enemy of economy," when educational freedom is concerned. He insisted that rigidity of financial control meant peril to the University, and he appealed to graduates of State Universities to come to the defense of *Alma Mater* against budgeteers' encroachment. Thus he said:

No university can be a republic of scholars, so long as it lives under the threat of business; when the methods of the manufacturing establishment, of the chain store, and of the contractor are introduced, and learning and research fall victims to pro-

scription, to labor union salary scales, to time schedules and clock hours, to the purchase of equipment by bids long after the need for it has passed—all these in the name of efficiency and economy—then our Universities have ceased to be seats of learning; they have become factories engaged in quantity production.

It is in that phrase, "quantity production," that Dr. Coffman points the peril of inflexible control most forcibly. For Minnesota has become especially conversant with the problem of quantity enrollment, since the great increase in demand for collegiate training. The seasoned judgments of the Regents are absolutely essential to any degree of success in dealing with the quantity problem at the University of Minnesota. So, in the large, are they of surpassing importance to the State, as it strives for the best in higher education.

—*Minneapolis Journal*

Timely Counsel For Students

President Coffman of the University of Minnesota uttered some excellent thoughts in his annual address to the freshman class this year. They were admonitions and advice which should sink deep into the minds of the students of that institution whether those young people be freshmen or seniors. These thoughts are also good to be pondered over by young men and young ladies who are not in high places of learning. Too often boys and girls get the idea that they know more about life than father and mother and even the other friends in the home town. Too often when young people come near to the age of their majority they believe it no longer necessary to heed the advice of parents or to consider their wishes. It is deplorable, also, that these young people are often advised to disobey and neglect the parents by those outside the home circle. President Coffman's warning is against letting education create pride and instructs the student, the same

as does the Good Book to honor father and mother. He said: "God forbid that your experiences here may make you ashamed of your parents, even if they be poor or untutored. You have come here to get an education. If you get that you will grow in ways of tolerance and affection. The picture of the father who has just bid farewell to his son who is leaving to enter the University comes to my mind time and again. He typifies thousands of parents. Day after day throughout this year there will come from homes such as his, solicitude for the welfare of son or daughter and evidence of faith in education. With this realization in mind, I am overwhelmed with a sense of obligation that the University shall do its part in full. Its faculty shall expect the best efforts from the students, and shall meet the students' difficulties with sympathetic understanding. There shall be maintained on the campus and in the students' homes conditions as wholesome as it is humanly possible to make them. This we pledge you. In turn, you freshmen surely stand ready to pledge your best selves to the University. It is fitting, indeed, that at this time all of us, faculty and students, old and new alike, take the vow of fellowship and learning and dedicate ourselves to a year of mutual regards and intellectual effort, never forgetting the glow in the father's eye and the smile on his face as he bade his son farewell."

—Mapleton Enterprise

No Strings

When the late Chauncey M. Depew left a million dollars to Yale he set a good example to other givers—in two ways. In the first place he gave a large amount. In the second place he handed out the gift without any strings tied to it. Mr. Depew rightly assumed that the president and trustees of that great educational institution know better than anybody else how to use a million dollars for the good of the university. He didn't try to tell them what to buy or what to build. There is so much vanity in most of us that we seek to rule—even after we are dead.

—Grove Patterson in "The Star"

University Day

Hibbing and the range which appreciate the importance of the state university will take a

prominent part in University appreciation day.

Many thousands of people from every section of the state are expected to gather on the University of Minnesota campus to help celebrate and to observe the day as set by Governor Christianson in a recent proclamation.

—Hibbing Tribune

An Eternal Triangle

There was an interesting announcement from President Coffman of the state university recently to the effect that unless the members of certain fraternities which were called by name, showed an improvement in their studies and brought their marks up to a certain point these fraternities would be suspended from the university. Lack of familiarity with fraternities, their methods of operation, their purpose and their connection with institutions of learning makes it impossible for us to grasp the consequence of this threatened suspension. However when the head of the university goes to the length of insisting on a scholastic improvement in order to continue the present status, the consequence must be serious.

The president's announcement even to the uninitiated has an encouraging sign. On occasions past the uninitiated would be in doubt whether the university and various other colleges and local schools for that matter, were being conducted for the purpose of making fraternities possible, or whether the real reason was gathering in enough material for a good foot ball team.

Now it seems the problem has another angle—education. It becomes an eternal triangle.

—Appleton Press

Pay-As-They-Go Students

The good old-fashioned practice among young Americans of working their way thru college is apparently as much in vogue as ever. Dean Nicholson of the University of Minnesota is authority for the statement that some 1800 students at that institution will work their way in whole or part during the college year about to open. An equal number were provided with jobs last year. A similar situation, though on a lesser scale, could be shown at the smaller colleges in the state.

The character of the work these students do

emphasizes further their zeal to get a higher education. They are not easy jobs they accept. Wielding shovels underground, scrubbing floors, washing dishes, and other menial tasks are included among those taken by the students to enable them to complete their college work.

This information contradicts to some extent the prevalent notion that the present day college and university is made up largely of carousing, pleasure seeking students bent on having four years of good time before settling down to the job of earning a living.

—*St. Paul Daily News*

The Tuition Question

The board of regents of the University are to be commended for raising tuitions in certain departments, the law, medical and graduate departments. The big school is growing so large that it is fast becoming a burden on the taxpayers and it is no more than fair that those who send their children there should pay a substantial portion of the cost of maintaining the school. The state furnishes the buildings and equipment, and can afford to stand a part of the cost of operating the school, but as long as it is not only impossible for all children to attend but it would be impossible for the state to take care of all if they should attend, those who do attend should pay a good share of the operating cost.

—*Springfield Advance-Press*

Board of Regents Versus "Big Three"

The Dads who were foregathered on the university campus and in the stadium Saturday will do well to acquaint themselves with the issue that has arisen between the board of regents and the "Big Three" regarding control of expenditures of the University of Minnesota. Doubtless many of them already have done so, but there may be others who have not looked critically into the merits of the controversy.

These fathers of stu-

dents who help to make up the university population for 1927-28 had a good chance to see to what the university has grown and to get some tangible idea of the size of the investment that has been made by the state and by friends of the institution in their private capacity. They may or may not have been surprised at the number and character of visible evidences of individual benefactions of which the university has been the recipient. They may or may not be surprised at the additions in equipment still to be made through gifts and endowments.

The University of Minnesota is one of the outstanding institutions of its kind in the United States. To date the financial administration has been in the hands of a nonpartisan board of regents representing all parts of the state—all of the members being unpaid for their service save three ex-officio members whose participation in the board's proceedings is only a part of their public duties. What expenditures shall be made, and how they shall be made, is determined by the board of regents, subject to the amount of legislative appropriations and the terms under which appropriations are made. Under this system the university has waxed strong and great, and under it the educational policies have been determined.

Because the university is what it is, and probably because its administration has been what it has been, generous private donors have shared their fortunes or made bequests in their wills to advance still further the usefulness of this great institution. Whether we would have had

as many or as great benefactions if there had been a prospect of a change in the existing system of administration, only the benefactors themselves could say. It is perfectly obvious, however, that various university activities have been privately financed because those who provided the funds were satisfied with regency control.



Watching the Cap and Gown Parade

The university has operated through the years with a minimum of hindering political influence. To expose it unnecessarily to that danger does not seem to be the course of prudence. Minnesotans have real pride in the capstone of their public educational system, and with substantial reason. The traditions of the university are praiseworthy. The aim of the regents has been to keep the functioning of the institution on a high level, to be always on advanced educational ground, and to do what the board can to make equipment and instructional personnel square with the needs of the time. The policy of discretion is to go on trusting the board's judgment and purpose.

—*Minneapolis Tribune*

The University's Defense

The University of Minnesota has taken legal action to end invasion by the State Commission of Administration and Finance of what it contends are its constitutional rights.

The immediate point of conflict is the payment of a \$50 University pension expense item, allowed by the Board of Regents and disapproved by the Commission of Administration and Finance, the so-called Big Three.

Behind the question as to whether this small sum shall or shall not be paid there range issues of the highest public significance. One of them is so important that it dwarfs even such a question as the validity of the Reorganization Act of 1925. That question is the University's independence from political control.

The Reorganization act empowered the Commission of Administration and Finance to supervise and control the expenditures of the various agencies of the government and the institutions under their control. The University contends that Big Three and not the Legislature is making appropriations under the act; that the vesting of arbitrary discretion of such a nature in public officials makes the statute void; that in any event the Legislature did not intend the act to apply to the University and that the principle of University immunity from political control is at stake.

Public interest will center in the final contention. The Constitution of the State provided that "all the rights, immunities, franchises and endowments heretofore granted or

conferred (on the University) are hereby perpetuated unto the said University; and all lands which may be granted hereafter by Congress, or other donations for the said university purposes, shall vest in the institution referred to in this section."

Thus the State University is a constitutional corporation, vested with title to lands, donations and funds. It is "under the management, jurisdiction and control of a Board of Regents," a board immune from political pressure. Thus the Board of Regents has a stability not given to the Commission of Administration and Finance, whose members are removable by the Governor at any time without cause.

Discussion of the legal aspects of the controversy may properly wait while the issues are being considered by the court. Back of the questions of law, however, there is a question of expediency. The experience of Minnesota and of Michigan, whose plan of operation was adopted by this state, has attested to the wisdom of protecting a university from complete political control. Opening the way to make control of the University the football of politics might be legal and still be decidedly unfortunate.

—*St. Paul Dispatch*

Building Project at University

Minnesota University is now in fourth place among American institutions of higher learning. Many new buildings will be built there this year. The department of physics took new quarters in the new \$450,000 physics building recently completed before the holidays. The new \$250,000 law school structure will be ready by February 15. The Cyrus Northrop Memorial auditorium will be started by February 1, at which time excavation, also, will start for the erection of a three-unit addition to the University of Minnesota hospital, which will include the Eustis hospital for crippled children, a new student health service and a dispensary, all costing around \$890,000. This hospital unit for diseased and crippled children was made possible by a trust fund created by William Henry Eustis, philanthropist, and former mayor of Minneapolis. This fine building project is needed at the University of Minnesota to keep pace with the steady increase of

enrollment, and this triple project providing for crippled children, out-patients and students, as a part of the University of Minnesota medical center, will make its medical department one of the finest in the United States. Citizens of Minnesota may be justly proud of its big university.

—*St. Cloud Times*

Sports Self-Supporting

The university of Minnesota receives approximately \$113,000 as its share of the receipts of the Minnesota-Michigan game at Ann Arbor this year. The total receipts of the football season are expected to reach \$300,000. In addition to this basketball is expected to "pay its own way" this year but a portion of the receipts from football must be devoted to financing other sports of the university, in which there is less public interest. The remainder of the income for the year will go toward paying for the new \$600,000 field house, now in the process of construction.

Athletics, football in particular, are no longer simply an adjunct to the university. They are an institution in themselves, capable of self support, of meeting all expenses, providing the necessary structures for staging the events and showing a handsome profit at the end of the year besides. That so profitable a source of entertainment should be operated solely for the benefit of the sport itself is a tribute to the American spirit of sportsmanship and the public should be vigilant to keep it free from commercialism.

—*Mankato Free Press*

University Athletic Policy

Those who find fault with the University of Minnesota because it does not go out into the highways and byways to seek athletic material, forget the true purpose of the institution. They think the University exists primarily for athletics, while its first duty to the people of the state and its students is true scholarship. The University wants to know first that its students are there for this purpose, and if they are athletic all well and good. A school which seeks its athletes in preparatory schools is in great danger of becoming athletic topheavy. This drafting of high school football players into a higher school was the gen-

eral practice a quarter century ago, but the best schools nowadays frown upon the practice and we think the intercollegiate athletic rules forbid it. The University with its twelve thousand students should have ample material for all forms of athletics. We are overdoing this athletic business anyhow and there is serious danger of scholarship becoming the second fiddler in our higher institutions.

—*Tracy Herald*

Missing Something

For a time there was worry over the growing number of suicides among college students. Not everybody worried about it, of course, but there were some that did. A few thought that it would perhaps be a good thing if the fad would grow more popular. Opinion was divided. Now collegiate criminals are seeking the limelight. Some time ago a college student in Wisconsin murdered his sweetheart. Before that were Leopold and Loeb in search of a thrill. Then the Texas coed that is still side-stepping jails. And the girl student in South Dakota that specialized in bank robberies. The Iowa college moonshiners. Finally the University of Minnesota students that get a thrill out of stealing money from people. It is true that college boys and men make up a very small percentage of our criminal population. Then the criminal world must be missing something. All criminals should have a college diploma so that they may properly enjoy a prosy murder or a dull bank holdup. Without education the ultimate thrills and undoubtedly much of the pleasure giving technique is missing.

—*Lake Wilson Pilot*

Dr. George G. Eitel

The sudden death of Dr. George G. Eitel comes as a severe shock to thousands of residents of the Northwest.

For the name of Eitel had become something of an institution not only in Minneapolis and in Minnesota but in neighboring commonwealths, as well.

Dr. Eitel was endowed with great skill and he was the possessor of a great heart. Whenever it was physically or financially possible, no deserving case was ever turned away from his door unassisted.

His early days were ones of struggle. He

earned the money necessary to obtain his medical education by selling books and working on a farm. He knew the bitter disappointments in store for aspiring youths who were without the funds needed to obtain professional training.

With his memories of the difficulties he himself had encountered, unobscured by his success of later years, he provided a life insurance fund of \$80,000 for the purpose of assisting deserving students at the University of Minnesota medical school.

This act was typical of the many that characterized Dr. Eitel's entire career. Like the Great Physician, "he went about doing good."

—*Minneapolis Star*

University Field House

Two notable structures at the University of Minnesota have been completed without tax funds—the stadium and the university field house.

The stadium will seat some 55,000 people and it has been full several times. The university field house will seat so many thousands that we do not dare to tell you how many for fear you will think we are fibbing. Anyhow, it will seat, under one roof, more people than could be accommodated in most football stadiums a few years ago.

The stadium was built by money contributed by students and alumni of the university. The new field house, which will be dedicated Saturday evening, February 4, will be paid for entirely out of athletic receipts during the next ten years, a considerable fund having already been provided for this purpose from athletics.

The new field house is one of the finest buildings of its kind in the United States, as well as one of the largest. It provides facilities for indoor football, baseball, tennis, and all phases of track athletics and intramural games.

The new field house is one of Minnesota's notable buildings. It will be dedicated February 4 with brief ceremonies and with a basketball game between Ohio State and Minnesota.

—*Hibbing Tribune*

Those Mounting Tuition Fees

An organization which makes a business of raising funds for educational institutions finds that college tuition fees are gradually increasing

in this country. A rather comprehensive survey shows that the average tuition charges in 30 schools has advanced from \$131 in 1907 to \$333 at the present time. This increase, of course, must be considered in relation to the decreased purchasing power of the dollar, but even when this is done, there is evidence enough to show that the tuition curve is definitely upward.

The growing tendency to charge the student for the cost of his education seems by every test a healthy one. During the past decade college after college has been faced with a financial crisis. Operation costs have soared, attendance has swollen to embarrassing proportions and endowments which once loomed large on the educational horizon have seemed to shrink pitifully. The institution of higher education, like any business concern which faces mounting production costs, has had to face economic realities. It has, as a general rule, been forced to choose between selling an inferior product at the same price, or selling a quality product on an increased scale. Fortunately the college has insisted on maintaining or bettering its standards of education, and has subscribed to the very sensible notion that what is worth having is worth giving full value for.

Not a few conscientious persons oppose increased tuition fees as undemocratic. They fear that many needy and deserving students will be debarred from college by a fee which approximates the actual cost of educating the individual. This objection, however, is not well grounded. The system of student loan funds and scholarships is now so well developed that the tuition fee is seldom an insurmountable problem to the worthy student of limited means. The honest student, after all, would much prefer to buy a good education than to receive an inferior one gratis. He would rather mortgage his future earnings, if necessary, and be well educated, than to attend a school whose finances compel mediocrity. The colleges, after all, have little place for those who are not willing to make economic sacrifice for the rewards of learning. They must first be efficient and after that, perhaps, charitable. The practice of giving something for nothing, while ad-

mirable in theory, is not ideally suited to this period of crucial economic problems.

—*Minneapolis Tribune*

Minnesota's Grand Old Man

To few is it granted to exceed man's allotted time of four score years; to a still smaller number to reach ninety; and to so few that their number is negligible is it permitted to reach one hundred.

Minnesota has an honored citizen who is well on his way to the century mark. On St. Valentine's Day this man celebrated his ninety-fifth birthday, hale, hearty, doing a full day's work and with every human indication that he will round out a century.

William Watts Folwell, president emeritus of the Minnesota State University, is that man, known far and wide as Minnesota's Grand Old Man; and many of us are now calling him Minnesota's Grand Young Man.

At the age of 36 this man came to Minnesota at the call of the Board of Regents and assumed the presidency of the institution. Two fifths of the proposed University building had assumed form, and for some years this structure stood vacant on the campus, the nightly resting place for cows, turkeys, chickens and pigs. Then the Regents decided to start the school, cleaned up the building and summoned Folwell, a brilliant young graduate of Hobart College who had made his mark as an engineer in the Civil War.

In September, 1869, Folwell took charge, and remained at the helm until along in the early eighties when he was succeeded by Cyrus Northrop, Folwell retaining the Social Science chair, which he had ably filled while president. He also was librarian and for 24 years devoted himself to this double duty. Then he retired, to devote his entire time to his literary work. How well this has been and now is being performed is known to all men.

Dr. Folwell has seen the school rise from a struggling concern with two hundred students to its present proud eminence. The first class—of two young men—graduated in 1873; the Class of 1927 numbered over 1200. In his span of life Dr. Folwell has seen the development of the railroad, the telegraph, the telephone, the phonograph, the automobile, the

airplane, the radio, and the thousands of electrical inventions and appliances that do the world's work and solve the problem of living.

But it is as a man and an educator that Dr. Folwell reaches the summit of his greatness. A courteous gentleman, a successful executive, a ripe scholar with a diversity of talents, a wise guide, a faithful friend—these be some of his many characteristics that endear him to the thousands of the men and women—especially those of the early days—who at one time and another have come in contact with him. And now that the shadows are lengthening for him and life's span is drawing to a close, these men and women cherish him in their heart of hearts and deem it a great privilege to meet him, grasp his hand and receive the same cheery and friendly greeting as of yore.

William Watts Folwell is the finest and the best valentine ever given to Minnesota. "Late to Heaven may he return."

—*Worthington Globe*

An Expected Decision

The decision of Judge Hanft of Ramsey county district court that the act creating the bureau of Administration and Finance, generally known as "the big three," is null and void, as it relates to the university of Minnesota and constitutional officials.

The reason why the university is thus singled out is because it is a constitutional body, created by the territorial and state institutions, and for this reason is not subject to control by a creation of the legislature, and appointees of the governor. The case will probably go to the supreme court for final decision, but the opinion of able attorneys is that the district court will be sustained.

Aside from the court decision, the proposition is rather ridiculous. The governor appoints the regents of the university, and he himself is a member ex-officio. Then by authority of the legislature he names three men to keep check on himself and the regents, and to say what they can and cannot expend. This creates divided and often conflicting authority. Judge Hanft expresses the situation in saying that no "czar" was ever given so drastic authority.

The university will continue, as it has been,

dependent upon the legislature for its appropriations, and to the chief executive for the regents who will be entrusted with its management. If the governor used good judgment in selecting regents—and all governors have selected able and faithful men and women—that should be quite sufficient state control.

—*St. Cloud Journal-Press*

Working Your Way

Some of our state "U" professors think that many students suffer from trying to work their way through college; but it is safe to assume that their mental loss is far less than that of the students whose highest ambition is to attain prominence in athletic sports. Besides this, the students who work their way through college, even though their class work may not be the best, acquire business habits as well as initiative, courage, and self reliance far beyond the average. Such students will never become loafers, wastrels, or molly coddles; and the professors should take this into consideration.

—*Onamia Teamwork*

More Pay for Professors

The inadequate pay of college professors compared to that in various other walks of life, has long been a subject for discussion in the United States. Boys have been advised to go in for bricklaying, or for coaching in the colleges rather than to aspire to a chair of higher learning.

Heartening news, however, now comes from Columbia university, which would indicate that college faculty members are to some extent, at least, coming into their own. Columbia has always been reputed liberal toward its faculty. It is a rich university.

Now comes the announcement that Columbia has declared a general increase in the salaries of its teaching and administrative staff, effective July 1.

The present minimum of \$6,000 for full professors will be raised to \$7,500, while those of exceptional service or distinction, may attain to \$9,000, \$10,000, or \$12,000. The compensation of associate professors will range from \$5,000 to \$6,000, and of assistant professors from \$3,600 to \$5,000. The new minimum for instructors is \$2,400, an increase of \$400 per annum.

Nicholas Murray Butler, president of Columbia, expresses the hope that the example set at Columbia will be followed "at other institutions to the well-deserved advantage and comfort of the great body of American scholars engaged in university teaching and research."

As a rule college professors have been underpaid in this country. In many colleges this was due to lack of means. Most colleges are making an earnest effort to right this injustice as their finances become more adequate.

It is desirable to keep a high type of man on our college faculties, and in order to do this they must be amply paid. Columbia has set a good example.

—*Duluth News-Tribune*

The Story of Joel Lunell

MINNESOTA CHATS, published by the University of Minnesota for March, contains the story of Joel Lunell, a country doctor of Leeds, N. D. Born and educated in Sweden he came to the North Dakota frontier in 1889, where after thirty years of active life he passed away at Leeds. Besides practicing the art of healing he was called upon to act as a leader in all community activities, serving as postmaster, coroner, alderman, and mayor. Dr. Lunell had a hobby. Perhaps no one appreciated the value of it at that time. Probably not himself. It was the collection and preservation of specimens of all the plants which grew upon the virgin prairies. His little tin box as a botanist invariably accompanied his doctor's kit on his trips into the country.

Seven years after his death a valuable collection of upward twenty thousand fine specimens of the plants of the prairie such as existed before the ravages of the plow and civilization destroyed the original native state, were discovered and purchased for the herbarium of the botany department of the Minnesota University, where it is found to be of the greatest value in completing the sources of exact information regarding the flora of the prairies. Besides being able to read several modern languages, Dr. Lunell was able to read Latin, Greek, and Hebrew and had a wonderful library in his frontier home. It's a story which appeals to those who still retain a

memory of conditions as they existed here in the pioneer days, and for such it is not hard to visualize this busy country doctor who through all his strenuous duties preserved his idealism and devotion to a hobby which proves of some value after he has left the scenes of this life. He was a worthy alumnus of the University which gave Linnaeus, the king of flowers, to the world.

—Willmar Tribune

Schooling Isn't a Handicap

As a nation, America is fond of paradoxes and one of the most common in recent currency is that the man who spends more time in preparing for life and attends college is at a disadvantage with the man who cuts his schooling short and starts his career at an earlier age.

This theory has gained credence by citing the exceptional cases of university graduates who are found in the ranks of dish-washers and ditch-diggers, and it is the more readily believed by the "self-made" type of citizen who was unable to procure such an education in early life.

Although doubtlessly true in the minority of cases, this belief is effectually branded as false by the recent survey conducted by the American Telephone and Telegraph company, the results of which are reported by the company's president, Walter S. Gifford, in the current number of HARPER'S MAGAZINE.

The university man, and particularly the man who attained good marks during his schooling, has just twice the chance of breaking a way into the five figure salary class than the one who barely skinned through on passing marks, according to this survey. "High marks in college and good salaries with the Bell company have a direct relation to each other," Mr. Gifford writes.

The ne'er-do-well at school who later becomes a captain of industry is probably more or less of a romantic fiction. Surely it is reasonable to believe that the hard-working student is forming habits that will stand him in good stead in the outside world, while the play-boy is building up a handicap which may work against him later on.

—Minneapolis Star

Honors For Scholars

Seven Minnesota educators, five of whom are professors of the Minnesota university, have

been granted fellowships in the Guggenheim Memorial Foundation, in recognition of their diligence in the field of art and science, and they will carry on their research and creative work abroad during the coming year. It is a fine tribute to these able and hardworking educators, and a fine compliment to Minnesota's university.

—St. Cloud Journal-Press

Up Here in the Corn Belt

The College of Agriculture finds that Minnesota's corn acreage has doubled in the last fifteen years, while wheat acreage has declined sixty per cent. And five-sixths of the corn raised stays right on the farm, or at least right in the county, for stock feed.

This shift from wheat to corn, with the corn marketed in the form of hogs, milk, butter fat, and beef cattle, indicates that the farmers making the shift have found the hog, dairy, and beef business more profitable than single crop wheat production. Otherwise, the change would not have been made.

Perhaps they would find it more profitable still to follow the College's advice and seed more and more alfalfa, a crop that has a feeding value equivalent to bran, yields heavily, and at the same time, takes nitrogen out of the air and stores it in the soil, rehabilitating exhausted land for the growing of wheat and corn.

—Minneapolis Journal

Dormitory Values for Students

Somebody once said that all that was needed for a college was a log with a student seated on one end and President Hopkins, then a well-known educator, upon the other.

Then a few years ago, Stephen Leacock, of the Department of Economics at McGill University in Canada, insisted that, in establishing a college, the first need was for a dormitory with a clubroom, next for a good library, third for teachers—and then, if there was any money left over, it should be spent for building and equipping laboratories and classrooms. Leacock later achieved a reputation as a humorist, and it was considered in some quarters that his statement regarding dormitories as a first need was humorous. Others have strongly supported it.

President Jessup of Iowa, who is an alumnus

of Michigan, now advances statistics to support the Leacock dormitory theory. He has found that students housed in dormitories have higher academic averages than those who "live around" all over the lot.

The University of Michigan must hold the same view, for it is on the point of expending about two million dollars in building dormitories.

There can be little doubt of the large values of good dormitories to a university or college. In the first place, they offer greater seclusion and quiet to the student, if he really wishes to study. In the second place, dormitory life has a charm about it that a boarding house cannot offer. With what affection an alumnus returns to "the old room" where he spent four happy years, all old graduates know well. And then there is the fostering of the college spirit, which is worth much to a university in the spirit of the alumnus body. A university can have no greater asset than an enthusiastic and loyal army of alumni. They often come up to the help of the college "against the mighty," and their assistance is valuable.

There is little excuse for not building dormitories, for they finance themselves from the rental returns.

It may be wrong to say, "Give us dormitories, or we perish," for we shall not perish; but we may quite properly say, "Give us dormitories, and we shall do much better as a college and live much happier and more comfortable lives."

—*Minneapolis Journal*

Short Courses

The University of Minnesota will offer a short course for merchants the coming summer. The ADVANCE-PRESS hopes that many of our local merchants will attend. Problems of im-

portance will be discussed and those who attend cannot help but bring back with them some practical ideas which will make them better able to hold their own in the business world. The dates have not been fixed. The ADVANCE-PRESS will announce the dates later. Pack up your troubles in the old kit bag and take them to the short course. It will be a good way of spending a part of your vacation. The editors have a short course every year at the Agricultural school and it is always a pleasant and profitable affair. We can heartily recommend these short courses.

—*Springfield Advance-Press*

Aviation

The group of professional protesters is out with criticism because a school in aeronautics has been established at the University of Minnesota. Would they then have their biggest institution of education remain one step back in the march of progress? Arthur Brisbane says:

"Aviation is a reality, says General Atterbury, and railroads should know it. He is said to plan for the Pennsylvania a part-railroad, part flying machine service from the Atlantic to the Pacific. The traveler would spend daylight in the flying machine, night hours on the train, cross the continent in 48 hours, avoiding mountain flying. This rumor is not guaranteed."

Whether the rumor is guaranteed or not its background is sufficiently assured so that the administration of the University is justified in its effort to give the students a chance to learn this new science.

—*Redwood Falls Gazette*

NOTICE

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