

6u Eben

UNIVERSITY OF ILLINOIS BULLETIN

ISSUED WEEKLY

Vol. XXVII

February 11, 1930

No. 24

[Entered as second-class matter December 11, 1912, at the post office at Urbana, Illinois, under the Act of August 24, 1912. Acceptance for mailing at the special rate of postage provided for in section 1103, Act of October 3, 1917, authorized July 31, 1918.]

er a
ensa-

able
tage.
long
ally.
The
neither.
an-
Or
farce
at the
ing
es

**Whole World
Eyes Services
of Illinois U.**

**Bennett Finds University
Citizenship "Lab."**

By James O'Donnell Bennett.

THE University of Illinois is a vast laboratory of science and citizenship built by and for the people of Illinois. It is primarily that, and lastly more than ever a source of inspiration.

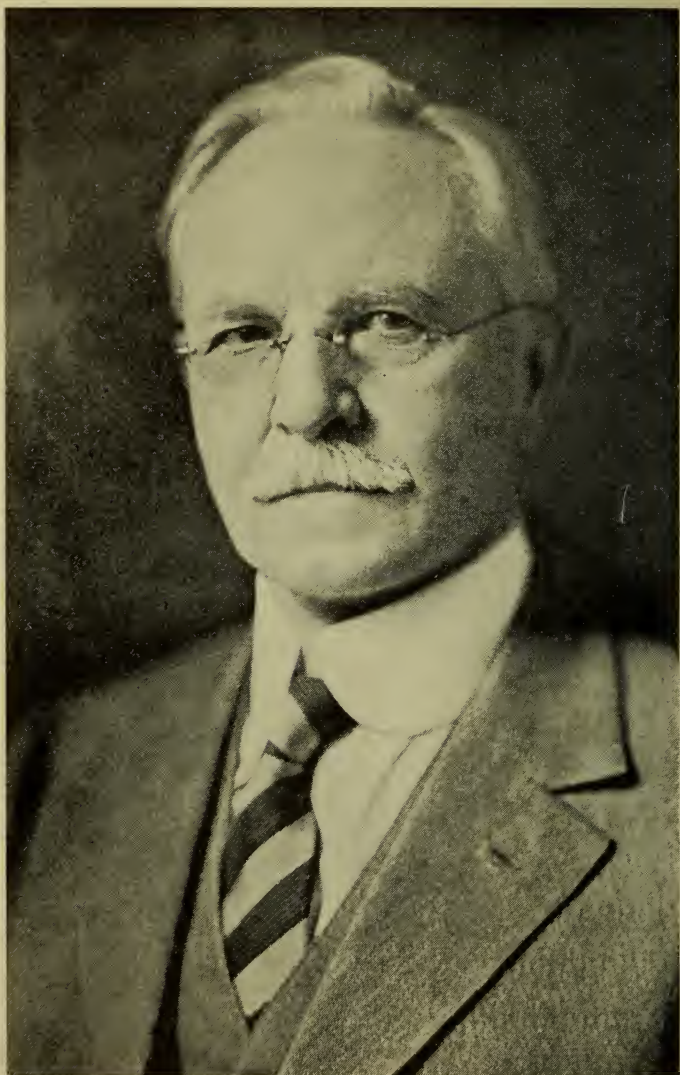
Or the
Lo
auth
pictu
rather
with
glamor
and th
man
curta
and
a
q
a
that
of pa

the
ing
t
e

du

Reprinted from the *Chicago Sunday Tribune* of June 2, 1929

PUBLISHED BY THE UNIVERSITY OF ILLINOIS
URBANA



DAVID KINLEY
PRESIDENT



THE University of Illinois is a vast laboratory of science and citizenship built by and for the people of Illinois.

It is primarily that, and last year it spent more than seven and a quarter millions of dollars on the children of the people of Illinois.

But its discoveries are always at the world's service and the whole world seeks its service.

Within the memory of graduates still active enough to toddle onto the campus and sedately whoop it up on commencement day it was a provincial industrial school on a bit of prairie. That was 61 years ago. The school was then called the Illinois Industrial university. It opened with an enrollment of 50 students. There were three teachers. They taught algebra, geometry, physics, history, rhetoric, and Latin.

Today the University of Illinois has 14,000 students, nearly 1,200 teachers, a thousand clerks, stenographers, and laborers, and more world contacts growing out of solution of practical problems of existence than any other school in this country.

It is known throughout the world for discoveries that have made buildings safer to live in, trains safer to ride in and tracks safer to ride on.

Service That Overleaps Frontiers

Tonight in faraway Japan people are sleeping better in their beds because of Prof. Arthur Talbot's discoveries at the University of Illinois in the adaptation of building materials to the shock and strain of earthquakes.

In leper colonies of the Far East many of the world's three million lepers who thought they were doomed to the most dreadful of deaths are being restored to hope and health because Prof. Roger Adams developed at the University of Illinois synthetic chaulmoogric. Natural chaulmoogric oil was effective in the treatment of leprosy. Unhappily, it could not be given in sufficient quantities without causing violent suffering and sometimes death. In the laboratories of the University of Illinois it was, so to speak, tamed.

Glance up at the smoke begrimed wall of a remote Texas roundhouse and you will see a lithograph showing a cross section of a locomotive and bearing this notice: "The following facts relative to the economical use and firing of a locomotive have been determined by the Engineering Experiment Station at the

University of Illinois." Then follow instructions which are simply worded but which represent years of tests and retests at the University of Illinois.

Heard Hopkins "As If a God"

In Greece, nearly eleven years after the war, farmers and economists still treasure the memory and profit by the instruction of Prof. Cyril Hopkins. He went among them in wartime to



THE LAW BUILDING

show them how the discoveries which he and his colleagues had made during twenty-five years on the testing fields of the University of Illinois could be applied to their own land. "They listened to him," said one familiar with the success of that mission, "as if he were a god." The great man died in 1919 at Gibraltar while on the journey home after the completion of his work. But his work goes on. The next generation of Greeks will have forgotten his name but they will be doing what he told their fathers to do.

Daily thousands of people riding through the Holland tunnel connecting New York and New Jersey are safe from the peril of noxious gases because Prof. A. C. Willard built on the campus of the University of Illinois concrete tubes which were one-fourth the capacity of the ventilation ducts of the Holland project and there definitely proved that systems which he and other engineers had devised were efficient and would carry off monoxide gas.

Facts That Earn Millions

The University of Illinois is bold in propaganda when once it *knows*. It may—and it has—taken ten, twenty, thirty, and even



NEW AGRICULTURE BUILDING

fifty years to make up its mind about the validity of a proposition on which it is working but when it has the data all in hand and the results before its eyes, then it goes aggressively forth to make new scientific and industrial history.

In 1904 the first carload of agricultural limestone was applied to Illinois land, and that land was one of the experiment station fields of the University of Illinois. The university awaited results. Having obtained them it demanded that farmers take heed of them. The farmers did take heed. In less than 20 years 500,000 tons of agricultural limestone were being applied annually to Illinois land, and that was one-fifth of all the agricultural limestone used in the United States.

Deep cultivation of corn was once universal. The mind of man ran not back to the time when, if ever, it had not been the rule. The University of Illinois has changed all that. More than 40 years ago it began to doubt the ancient tradition. Doubt begat experimentation. Experimentation begat revolution. Revolution begat huge profits. For the University of Illinois has proved to farmers in every part of the globe capable of growing corn that an average of nearly five bushels more corn per acre can be produced by shallow cultivation than by deep cultivation. That solid fact has grown millions upon millions of money for corn growers everywhere, but it was given them as freely as heaven gives them the sunshine which warms their fields. That fact and scores more like it were in the mind of the agricultural publicist, F. J. Keilholz, when he said:

“Enough wealth has been realized by the state of Illinois alone from the results and teachings of the university’s agricul-

tural investigations to cover, many times over, the cost of the entire university."

The University of Illinois is always doing something that compels the wide world to take notice. Having done that, the university imparts the fact with a laconic touch which in an age of clamorous exploitation is like the touch of a cool, steady hand.



THE ADMINISTRATION BUILDING

Illinium and Illinois

A standard book of academic record is "American Universities and Colleges," edited by David Allen Robertson, and published by the American Council of Education. The head of each institution admitted to the book is permitted to make his own record of what he considers the institution's outstanding achievements for a given year. If you glance at page 696 of the volume, which reached publication in 1928, you will find this paragraph, written by David Kinley,

president of the University of Illinois, on what the university did to make history in 1925-26.

"Achievement of the year ending June 30, 1926: Discovery of chemical element No. 61 (since named Illinium) by Prof. B. Smith Hopkins of the department of chemistry."

The entry was intensely characteristic of David Kinley—no flamboyance, no record of matters which, although they may have been momentous campus history, were not world history.

Kinley's Proud Brevity

"Yes," said the laconic David Kinley, "that was all we put in—but we built as many buildings as the other fellow. Building buildings is not necessarily achievement. Contributions to knowledge are."

Prof. Hopkins' discovery of chemical element No. 61 was flashed to the world by cable. It is the only chemical element ever discovered in the western hemisphere. To the end of recorded time mankind will have to take account of it.

Knowing that, President Kinley also knew he could afford to be brief.

The naming of the discovery was as characteristic of Smith Hopkins as the manner of recording it was characteristic of Dr. Kinley. The discoverer did not tag chemical element No. 61 with the label hopkinsite. He named it illinium in honor of the University which for sixteen years has honored him with its confidence, and in making for the current "Who's Who" a record of his career, he wrote these words:

"With colleagues discovered the new element illinium."



THE CHEMISTRY BUILDING

The words "with colleagues" validate the perhaps obsolete but still illustrative comparison which I heard applied to Smith Hopkins on the campus. That comparison was "And yet he remains as modest as a girl."

One third of this school's money goes into research and approximately the same amount of the faculty's energy. That is what makes it a university of world rank instead of a kind of collegiate department store. In twenty-four words President Kinley defined the difference between a college and a university. "A college," said he, "is only or principally a purveyor of knowl-

edge. A university is the purveyor of higher knowledge and also the producer of knowledge."

Research the Vitalizer

Therefore, one of the fundamentals of the university's policy is, in the words of its president, "Every department, if it is to

be alive, must conduct research." Its four major tasks are, in the order of their urgency, teaching, research, dissemination of the results of research, and developing teachers and researchers.

The intense energy given to the investigation of the problems of life as it has to be lived has brought upon the University of



UNIVERSITY HALL

Illinois the criticism that it is too much concerned with bread and butter courses and that its vast curricula of highly specialized and technical subjects diminish the young student's zest in and respect for the purely cultural subjects—the humanities, as the Renaissance called them.

But it is the university's conviction that discoveries which lower the cost of and simplify living enrich life; that discoveries which correct material waste make in time distinct contributions to the leisure and the funds which permit greater and ever greater development of mankind's cultural and spiritual life.

Hence the emphasis on and the multitude of technical subjects at Illinois. Its Engineering Experiment Station has 82 major research projects in hand and they concern the problems of more than twenty industries. Its College of Agriculture is working on 350 major and minor problems and experiments. That college has nearly completed the most exacting and extensive soil test ever undertaken by man. It has put agricultural Illinois through the laboratory.

Test-Tubing a Commonwealth

That work began 27 years ago with a general survey which covered the fourteen great soil areas of the state and which gave

an invoice of the stock of fertility in 25 of the main types of soil in those fourteen areas. In the detailed work that followed the aim was to discover, map, and investigate each different kind of soil on each farm in each of our 102 counties, even down to five acre lots. The task has been completed in 101 counties. It has cost hundreds of thousands of dollars. It is worth millions. The Illinois farmer now can know what he has to work with; how to work with it; how in short, to cure his farm land if it is ailing. "Every farmer can," in the words of Joseph Wright, the ardent day-by-day chronicler of the university's achievements, "now evaluate his own farm."



THE LIBRARY

The work of charting this tremendous diagnosis is being done with such scrupulous care that the maps are printed in underground chambers of unvarying temperature and unvarying moisture in order to prevent the stretching of the paper. Thus, the slightest distortion of lines and shadings is avoided.

Equal exactitude is maintained in the university's agricultural publications. "In all the thousands of pages recording our experiments," said Dean Mumford of the college of Agriculture, "we have never been hauled up on an error." With the modesty of the true scientist he added, "The university's proofreaders have the eyes of eagles."

Drama for Expert and Layman

The dean believes that the imagination of the city man will be stirred—as the imagination of the farmer certainly is—by contemplation of the historic Morrow plots on the campus. They

lie convenient to the visitor's wanderings over the 400 acres of the campus proper and the 1,200 acres of experiment farms into which the campus blends.

Anybody can point you to the Morrow plots.

They are small but they are world famous.



THE WOMAN'S BUILDING

Men who were willing to wait half a century for the final proofs of the matters they were studying laid them out in 1875. They now commemorate George E. Morrow who was professor of agriculture at the University from 1876 to 1894. They are the oldest soil experiment plots in the western world and they have been called "a monument marking the tragedy of soil exhaustion in America."

The aim of experimentation on the three narrow parallel strips was to compare the effects of a single crop system as against more diversified systems of farming. Even a layman knows now that

crop rotation is essential to profitable farming, but in the untutored, hit or miss period of American farming it was the Morrow plots which finally bore it in on the farmer that crop rotation—even without soil treatment—increased his financial returns at least fifty per cent.

What the Morrow Plots Prove

During half a century this was proved over and over again, and to the hilt, by the continuous planting of corn in strip No. 1, by the planting of corn and oats in rotation in strip No. 2, and by the planting of corn, oats and clover in rotation in strip No. 3.

During a 12 year period ending with the Morrow plot crops of 1927 more elaborate experimentation was carried on, with the result that these golden facts were imparted to the world:

1. Crop rotation alone increased the yield of corn 88 per cent.
2. Soil treatment alone—that is to say, treatment of the soil with manure, limestone and phosphate—increased the yield of corn 76 per cent.
3. And when crop rotation and soil treatment were combined, the yield of corn was increased by 177 per cent.

These eloquent plots which reward the glance of the passerby with momentous economic history are so adequately placarded that the layman can readily grasp their significance. If he would learn more of their meaning he can obtain leaflets and booklets free of charge in the nearby agricultural building.



SMITH MEMORIAL MUSIC HALL

But an article which made even the barest record of all that the University of Illinois, as a laboratory of science, has done for mankind would run to dozens of newspaper columns. This article has merely sketched the extent and variety of that service. What is it doing as a laboratory of citizenship?

The answer is found in President Kinley's reply when he was asked what he considered the most impressive sight which the campus of the University of Illinois unfolds to the citizen of Illinois.



THE "BROAD WALK" BETWEEN CLASSES

An Army 10,000 Strong

"There it is," said he, and nodded toward "the Broad Walk."

An army of youth, 10,000 strong, was sweeping by him.

The time was the hourly 10 minute interval between classes. The morning was bright, the air balmy. The new foliage of the elms arching overhead dappled the Broad Walk with dancing shadows. From lecture halls, classrooms, laboratories, museums and from a library that houses nearly three-quarters of a million volumes thousands of young men and women were hurrying and into those structures other thousands were going. The long avenue of elms hummed with their talk and sang with their laughter. Excited birds caught up the conversation and the merriment and carried both aloft in their own language. The scent of wide lawns and of freshly tilled experiment fields beyond the lawns filled the air. Deeply carved over one of the stone portals of the library into which part of the army was moving were these words:

*The Hope of Democracy Depends on the Diffusion
of Knowledge and Wisdom.*

And over another portal these words:

*The Whole World Here Unlocks the Experience of
the Past to the Builders of the Future.*

The concrete Broad Walk is five city blocks in length and sixteen feet wide. Stand at the south end of it, in front of the

new Commerce building, during the ten minute interval between classes and you do indeed see not only the greatest sight which this campus provides but also one of the greatest sights which the empire of the Mississippi valley provides.

"There they go," mused David Kinley again, "all the hopes and fears of the future marching by."

Illinois' Most Influential Man

If, as he spoke, there was elation in his tone there was solicitude in his eyes. He is 67 years old. As an assistant professor



RESEARCH HOSPITAL*

and professor of economics, as dean of the college of literature and arts, as acting president of the university for a year, and president for nine years he has given 36 years of his life to this school. His presidency has marked the period of its greatest growth and its weightiest problems. He comprehends its perils, its problems and its opportunities as no other man does. Estimating him by the effect which his ideas and his policies have had upon teachers and students for 36 years he may reasonably be acclaimed as the most influential man in Illinois and one of the

greatest of living American administrators.

David Kinley's Problems

And he knows that, with a student body of more than 12,000 dwelling in the twin cities of Urbana and Champaign, the university has—numerically and temperamentally—a handful to deal

*The College of Medicine, College of Dentistry, and School of Pharmacy, are located in Chicago.

with. (The hourly march-past of 10,000 at class interval does not, you see, include the whole university student body living in Urbana-Champaign nor any of the 1,400 students enrolled in the university's colleges of medicine, dentistry and pharmacy in Chicago.) He knows—none better—all the inspiring and all the wearing phases of the task of drilling common sense into potential geniuses, the task of giving the right direction to talent, the task of making something of mediocrity, the task of controlling the lawless and the impetuous without putting them in jail or on bread and water, the task of inspiring the timid; the many sided task, in short, of running a vast machine that must run with the precision of a delicately attuned machine and still shall not be a machine, but shall stand in loco parentis to 12,000 children away from home—fresh, gabby, o'er confident children, to say nothing of a faculty of nearly 1,200 adults among whom is the inevitable proportion of the pompous, the fantastic, and the half baked.

Control Without Tyranny

The glory of the Kinley decade at Urbana-Champaign is that the University of Illinois has been fatherly without being grossly paternalistic. It has exercised a firm and searching supervision without indecent espionage. It has put the student body through the laboratory with the same particularity that it has put the agricultural soil of Illinois through the laboratory. It knows its children down to the decimals. It knows that one of its problems is the overcrowding of students in private lodgings and that such crowding hurts scholarships. It did not, in that matter, accept an impression as a fact. It made tests and discovered that in a selected group of students the average of scholarship of those living two in a room was 3.22, of those living three in a room was 3.08, while the average of those living four in a room—which from the hygienic point of view alone is scandalous—is 3.04.

Where Wilful Children Win

Before some indecorums—such as miss in her 'teens smoking at restaurant tables or in the booths of soft drink parlors overlooking the campus—the university has lain down. It has lain down because it knew that it could not correct the indecorum without an amount of clamor and intrusion and hectoring out of all proportion to mischief involved.

But before the student owned and student driven automobile the university has not lain down. There the mischief amounted to moral peril and justified emphatic measures.

A school with more than 8,000 mettlesome boys and nearly 4,000 personable and underclad girls on its campus has to look facts in the face.

Decatur is 50 miles away; Danville only 32 miles. Bootleg liquor is to be obtained in both places. Sequestered nooks and roadhouses are along the way. Via the hard roads and, running his own car, a student could have his frolicsome party far from university jurisdiction in twenty minutes. Yes, it was better to look facts in the face. Two years ago the ban was placed on student operation of automobiles except under special and temporary permission. The university was a pioneer in this measure. Other institutions have followed its lead, notably the University of Michigan, which has bettered the instruction and made the control stricter. Hundreds of parents have written the authorities of our school, thanking them for placing the ban. But here is a curious point: most of the protests against it and the pleas for special exemption came from mothers. It is, I was told, almost always so when the faculty appeals to parents for their support in enforcing discipline.

World's Greatest Time-Waster

President Kinley did not emphasize the moral safeguards which the ban aims to provide, merely remarking in his compact Scotch way, "Thus we have eliminated one of the most successful time wasters which modern science has invented."

This campus is one of the most highly fraternalized in the United States. About three thousand boys live in eighty-seven fraternity houses and eleven hundred girls in thirty-four sorority houses. The total fraternity-sorority holdings represent a property value of \$7,260,000. The average value of each house is \$60,000 but the most expensive fraternity house cost \$125,000 and the most expensive sorority house \$100,000. The average sized fraternity house lodges thirty-five boys at a cost for room and board not greatly exceeding the cost of living in a private house. Board in a private house will run about \$30 a month and a room from \$12.50 to \$15 a month. Board, room rent, and house dues in a fraternity house will come to about \$55 a month.

The university authorities direct the boys to build on the Champaign side of the campus and the girls on the Urbana side. This segregation was diplomatically inaugurated many years ago.

Fraternities No Unmixed Blessing

The authorities are far from considering fraternities and sororities as an unmixed blessing. In the first place they are time

devouring gab centers, and in the second they provincialize their members and sometimes make arrant snobs out of small minded boys and girls. But, for a wholly practical reason, the deans of discipline and their aids work in friendly coöperation with the fraternities and sororities. Control and guidance of obstreperous and reckless students are more easily exercised when the university authorities can work with a strong, self respecting fraternity in helping its weaker brethren back into the path of sense and decorum. The fraternity, for its own honor, will aid the university in this task, and it thoroughly understands that, if it employs concealment and subterfuge to protect a culprit, its whole organization will pay the penalty of deprivation of privileges.

Didoes and Drink

The system works well. In 1927-28 there were no cases of discipline resulting from misbehavior at dances in fraternity houses. In 1926-27 there were four cases. Mr. Turner, the celebrated Dean Clark's first aid in the dean of men's department, told me that one of those four offenses was "boorish conduct"; the second and third were "unconventional arrangements, such as not enough lights in some of the rooms," and the fourth was "drinking." In three of the cases the penalty was "no social functions in those houses for the rest of the year."

The university is combating cruelty and roughness at fraternity initiations in rather an adroit way. It has somehow got the fact to yeasting in the student mind that such hoodlumism is "common," that "it isn't done" in schools of learning which have come out of the juvenile squawk stage. The result is that more and more the decent boys are saying to the gangster-wits, "O, let's not be 'college'! Let's be human beings!"

To fraternity gangsters who continue recalcitrant the authorities merely say, "Keep on with your antics and we'll have your charter taken away."

The development of a rational ideal of campus conduct at Urbana-Champaign has, as such developments move, been so rapid and so heartening that the faculty believes that fraternity hoodlumism will finally go the way of hazing, which used to be flagrant at Illinois, but is now considered "just common."

A Churchly Student Body

If the statistics mean as much as they seem to, which statistics seldom do, the student body at Illinois is emphatically a churchly body. Seventy-five per cent of the boys and 85 per cent of the

girls are either members of or express a preference for some church. Another tabulation made last year showed that "out of these 12,150 students, 9,604 declared they were affiliated with some religious organization." They represented about 40 denominations. The Methodist Episcopal church led with 2,458 students; the Presbyterian church was second with 1,393, and the Roman Catholic church third with 1,129.

The churches have leaped to the opportunity which those figures epitomize.

Seven thoroughly organized religious foundations sentinel the campus. The Catholics and the Methodists center their service to the students in stately structures which are thoroughly academic in architecture and richly equipped with facilities that make for ennobling social and cultural life. The Episcopalians, Presbyterians, Baptists, Congregationalists, the Disciples of Christ and the Jews have as yet no such structural equipment as the Newman foundation (Roman Catholic) and the Wesley foundation (Methodist Episcopal), but their work is well organized.

A Welcome to the World

The spirit of that work, whether it be directed from the Wesley foundation, which cost half a million, or from the Newman foundation, which, with its lovely chapel, cost a million, is perfectly conveyed by words which I copied from a bronze tablet on an interior wall of the Newman foundation. Thus they read:

This group of buildings comprising the Newman foundation has been erected to offer to the students at the University of Illinois, who come from all parts of our nation and from foreign lands as strangers in our midst, the comfort of home, the warmth of the fireside, and the touch of the family life.

To students sprung from every race and from every political and religious creed it offers a common home for the fostering of friendship and democracy, a sanctuary for the perpetuation of the finest traditions of Illinois, and a shrine for the development of the noblest ideals of American life and manhood.

To every last syllable the Newman foundation fulfills the promise and meets the obligation of those words, for in its dormitories dwell in amity Catholics, Protestants, Jews, and those of no affiliation. In amity, I said, and on the whole, that is true, although one of the twinkling chaplains of the foundation told me that there was an occasional moan from the Irish boys that the Jewish boys were "somewhat aggressive."

“And that,” added the wise cleric, “would seem to indicate that we have before us the interesting phenomenon of an irresistible force meeting an immovable object. That, I’m thinking, will be good for both of them.”

School and Church Working Together

These religious foundations are not a part of the university, but they are at one *with* the university, and the university with them. They are supported by their denominations and share in no state funds. But the university allows credits up to eight hours for study in the history of religion, which its students pursue under the theologians of the foundations, and in the matter of giving a civilizing spiritual direction to the life of the students it takes counsel with the foundations as the foundations do with it. It knows that you can pour all the world’s culture into men and still breed only a race of pitiless materialists. It knows that what Cardinal Newman said on that subject is as true and as final as it is brief. The words shine in bronze on another tablet adorning the foundation which bears his name. They read:

Quarry the granite rock with razors or moor the vessel with a thread of silk; then you may hope, with such keen and delicate instruments as human knowledge and human reason, to contend against those giants, the passion and pride of men.

And so the university welcomes the religious foundations and these foundations work without clashing. During the days I recently spent in Urbana the Wesley foundation was boldly and alluringly announcing on the big bulletin board on its lawn an impending discourse to students by the Roman Catholic bishop of Oklahoma.

Thus the spirit of this great school is as broad and humane toward mankind in the mass as its attitude toward the individual student and his problems is tender and solicitous.

A Great Man’s Wisdom and Patience

That spirit and that attitude are beautifully conveyed in two utterances by the calm, wise, searching David Kinley. They were the best treasures I brought home from the campus.

Of the true significance of a state university he said:

“A state university is one of the finest illustrations of self-denial that democracy affords. For here the aim of the people is freedom of opinion and of teaching for the sake of social progress.”

And of the young people to whom he has given the great
years of his life he said:

"It is not for us older people to check youth's dreams, to tell
them that their gold is but tinsel, or turn the glow of their spring
morning to the gray of autumn skies. Those skies will turn gray
soon enough. Fortunately they do not believe us when we try to
do this. Otherwise progress would cease."

3 0112 105630435



11, 93