

# Notre Dame

*A Magazine of the University of Notre Dame*

Summer • 1955



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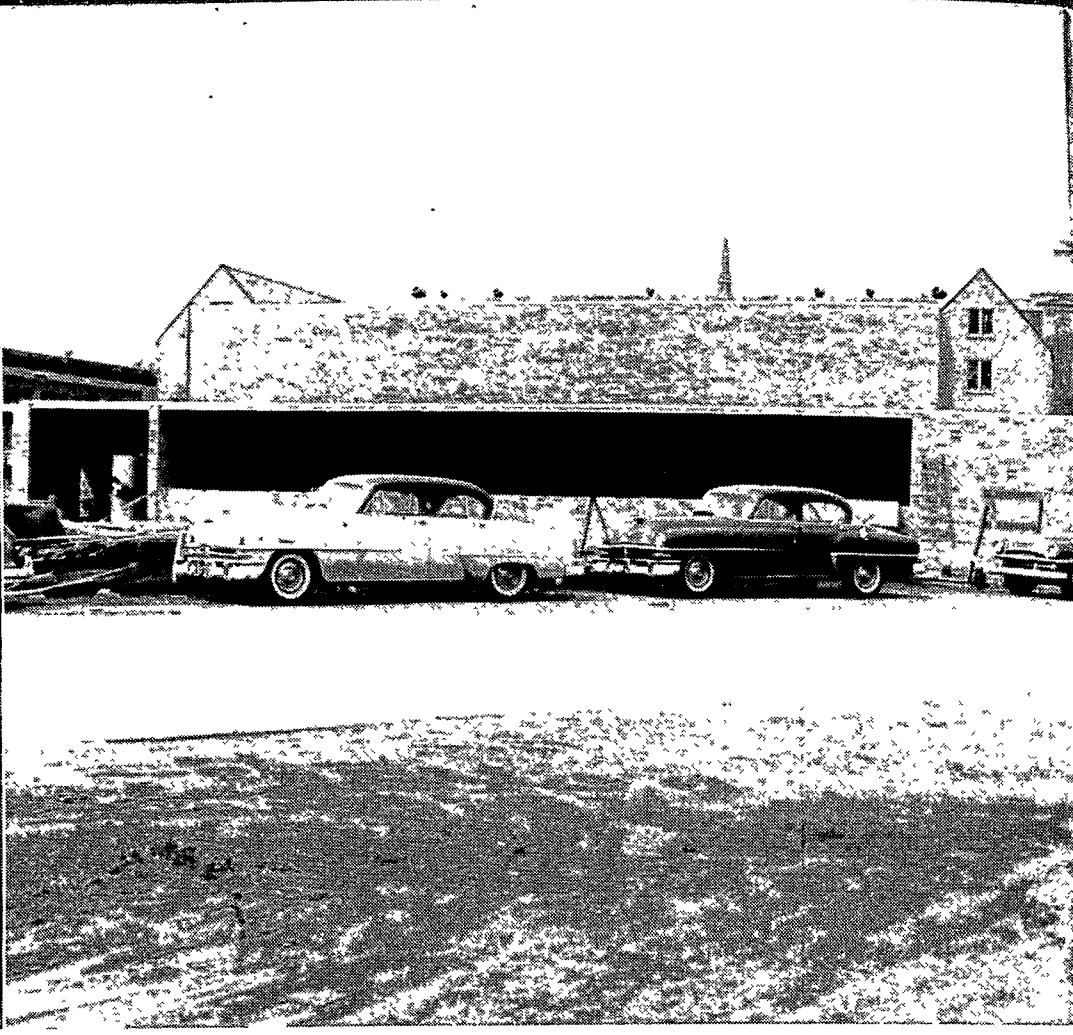
More than 1,000 students received degrees at Notre Dame's 110th annual commencement on June 5. Attorney General Herbert Brownell, Jr., (top left) gave the commencement address and Most Rev. John J. Wright, Bishop of Worcester, Mass., preached the baccalaureate sermon. Presentation of the 1954 Laetare Medal to retired diplomat Jefferson Caffery (center) was an added feature of this year's commencement program.



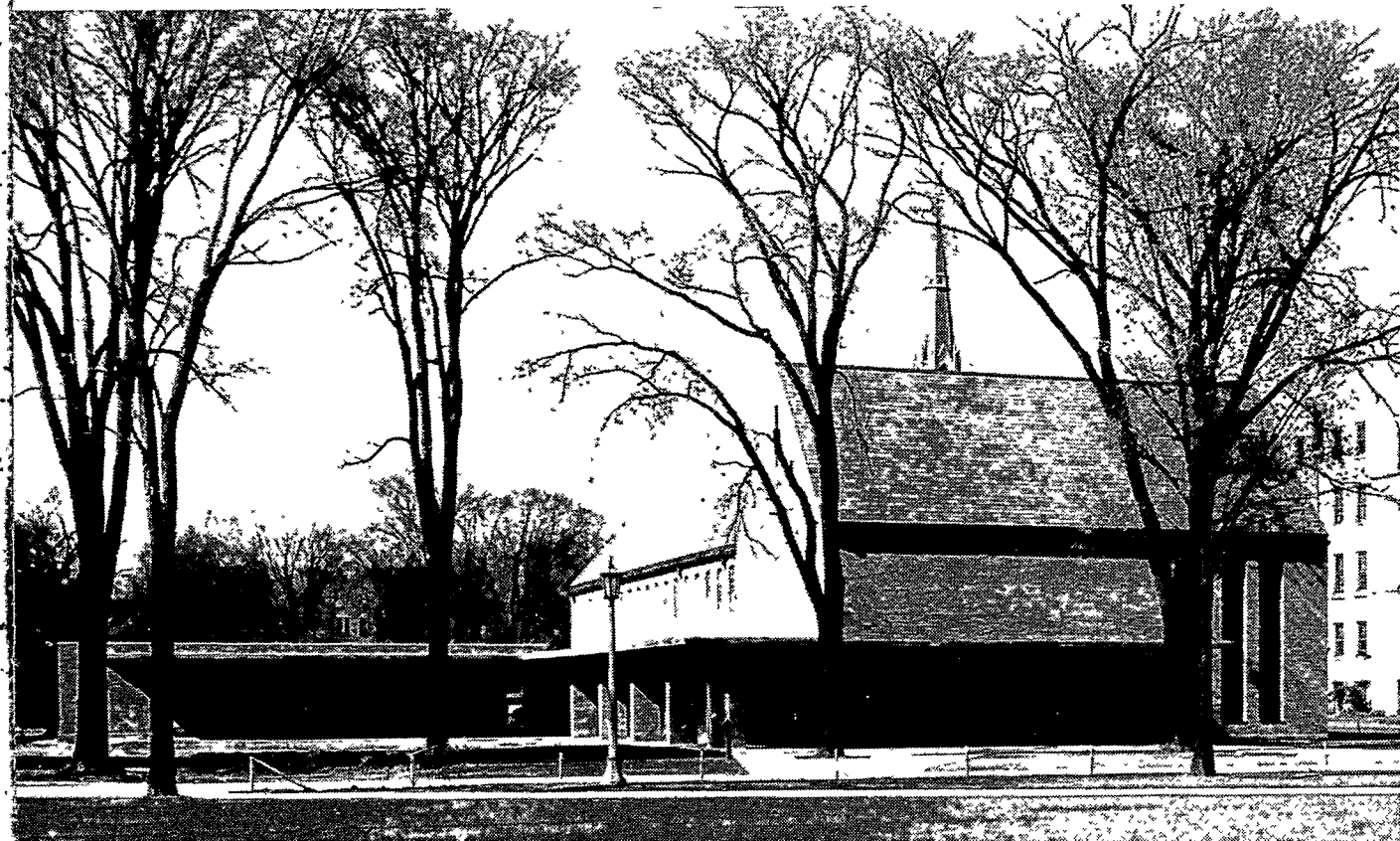
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LaFortune Student Center Lounge



WNDU-TV Station



Hammes Shopping Center

Fisher Residence Hall (4th Floor)

## Notre Dame's

Five campus buildings, shown on this page, are under construction and all will be completed during the Summer.

Since the beginning of the Notre Dame Foundation in 1947 generous benefactors, alumni and non-alumni, have contributed more than \$8,000,000 to building expansion including the following:

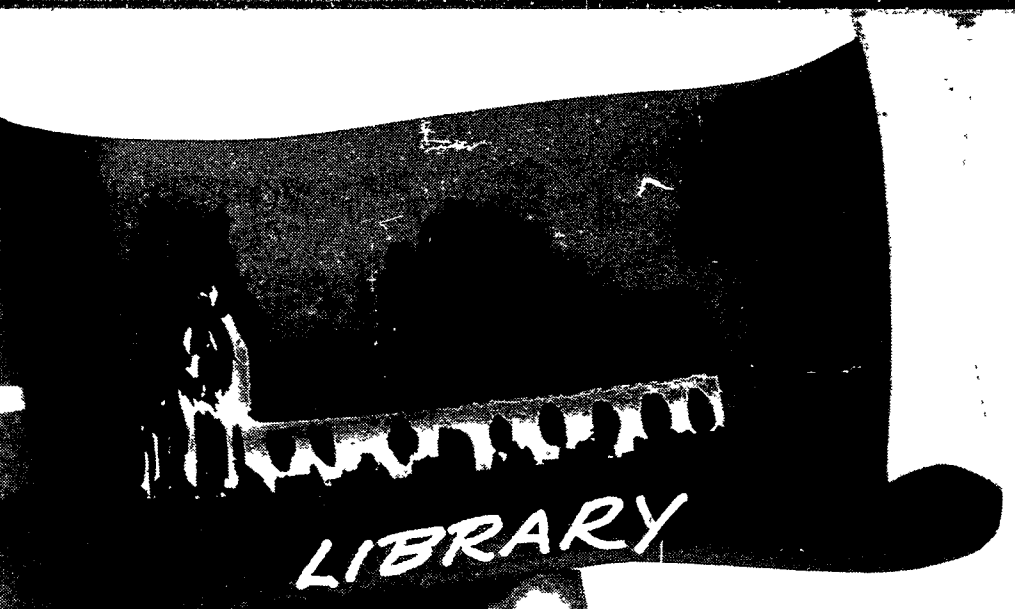
- Morris Inn
- Nieuwland Science Hall
- O'Shaughnessy Hall of Liberal and Fine Arts
- Fisher Residence Hall
- Lobund Germfree Laboratory
- Lewis Bus Shelter
- LaFortune Student Center
- Pangborn Residence Hall
- Hammes Shopping Center

Pangborn Residence Hall





RESIDENCE HALLS



LIBRARY

1947



1957

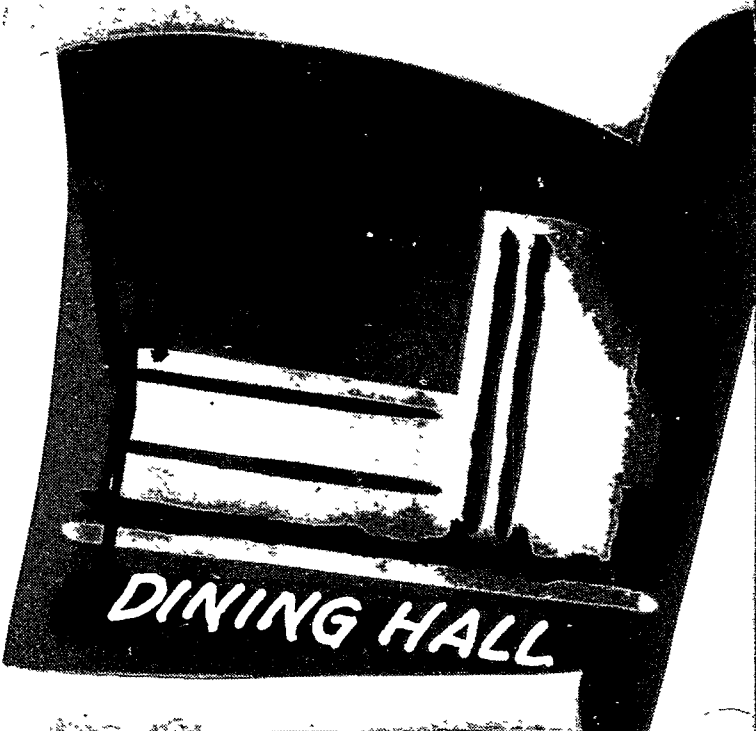


FIELD HOUSE  
AUDITORIUM

## Long Range Program

The buildings portrayed on this page are in the 'urgently needed' category to care adequately for the increased enrollment of 5,400 students at Notre Dame. Still remaining on the 10-year program, announced in 1947, are the following:

- Student Residence Halls**—Minimum of two new buildings;
- Dining Hall**—Current dining facilities were built for 3,000;
- Library**—Need for substantially improved conditions;
- Fieldhouse-Auditorium**—Total seating capacity in present fieldhouse is 4,200;
- Maintenance Center**—To effect greater efficiency and savings;
- Graduate Hall**—For increased enrollment in Graduate School;
- Priests' Residence**—To accommodate Holy Cross Fathers;
- Administration Building**—Present main building erected in 1879.



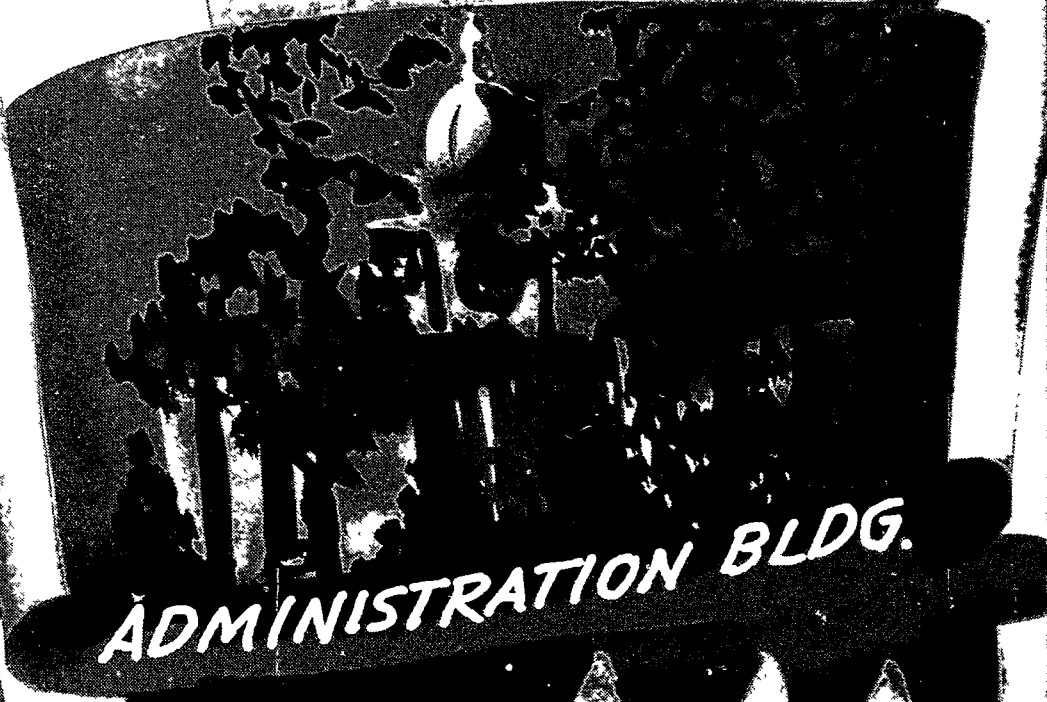
DINING HALL



MAINTENANCE CENTER



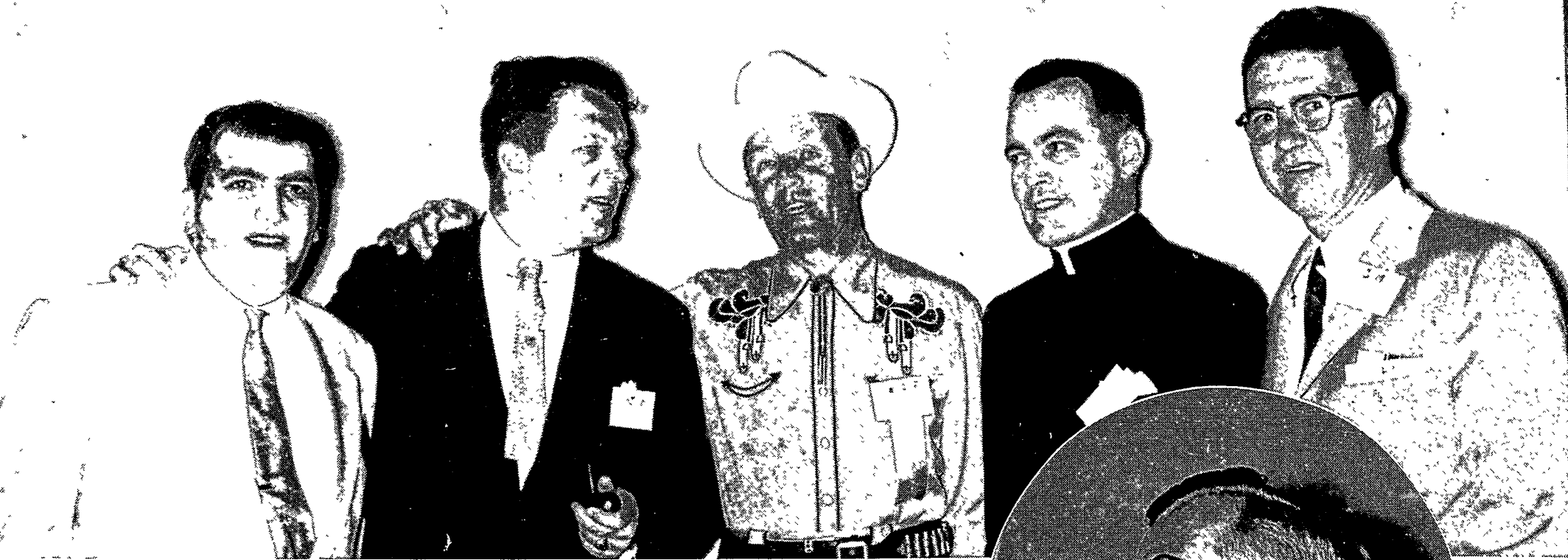
GRADUATE HALL



ADMINISTRATION BLDG.



PRIESTS' RESIDENCE



(Left to right): James J. Fayette, '42; Robert L. Hamilton, '34; National President Chiles; Fr. Hesburgh, '38; James Cleary, '40; and (inset) William H. Coleman, '40.



# the YPO

## Young Presidents' Organization Includes 5 Notre Dame Alumni

It could happen only in America—where a young man, named Ray T. Hickok, president of the Hickok Manufacturing Co., in Rochester, N. Y., developed a powerful idea into an aggressive organization of 800 men and women with membership *strictly limited to those who became president of their own company before they reached the age of 40!* Known as the Young Presidents' Organization, one of its newest members is Rev. Theodore M. Hesburgh, C.S.C., who was named to guide the destinies of the University of Notre Dame in 1952 when he was only 35 years old.

Four other Notre Dame alumni are active participants in this unique organization, including: Robert L. Hamilton, president of the Dumore Company, Racine, Wis., and a member of Notre Dame's Advisory Council of the College of Commerce; William H. Coleman, president of Aero Supply Mfg. Co., Corry, Pa., who chairmanned the 1955 national meeting and who is heir-apparent to the Organization's presidency next year; James Cleary,

president of Cleary-Shelvin Mfg. Co., Van Dyke, Mich.; and James J. Fayette, president of the Vermont Fruit & Grocery Co., Burlington, Vt.

Further eligibility to the YPO requires that the applicant's company be either an industrial corporation with annual sales of \$1,000,000 or more, or a non-industrial corporation with an annual turnover of \$2,000,000. Notre Dame's budget during the current fiscal year is just short of \$12,000,000.

The Young Presidents' Organization is youthful in 'organizational age' as well as in individual membership and this year is celebrating its fifth anniversary. Ray Hickok was motivated by a conviction that young men on the top executive level of their firms should become friends; face their futures together; share their business experiences; and, while growing up and continuing to learn, join in helping to maintain and improve the free enterprise system.

It captured the public imagination and Hickok's ideas crystalized into action which resulted in 24 chapters being formed from New England to

California and the Pacific Northwest. For many members in YPO it is the Horatio Alger 'type' of story. Many of them founded their own companies with personal savings or borrowed money; others came up through the ranks of established firms. Still others were elected presidents of firms founded by fathers or grandfathers.

Nearly every business type of activity is represented in the Young Presidents' Organization. Throughout the country the 24 chapters hold a monthly seminar on topics concerning management while once each year the national meeting on modern management methods is also conducted in lieu of the usual organization convention. Its national headquarters is located in the Savoy Plaza Hotel in New York City.

The Young Presidents' Organization will be a definite factor in the support of this country's success in business and will contribute a substantial share toward progress of the United States this year and in the years to come.

### NOTRE DAME

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James E. Armstrong, '25, Editor.  
John N. Cackley, '37, Managing Editor.

Vol. 8, No. 2

Summer, 1955



I wish that I could tell you that Friday, last December 17, dawned bright and clear at the University of Notre Dame. On the contrary, it was overcast and sleety, but the weather did not matter that day. All our students were happy to see the day come, because it was the joyful day of going home for the Christmas holidays. Of all the boys at Notre Dame, young Freddy Miller of Dillon Hall had special reasons to be happy on that day and other days. As the world judges means of happiness in money, he had plenty, for his father was a millionaire. On a more personal scale, he had ample reason, too: He was a handsome, personable lad, with a fine body that made him a good athlete. His mind was of equal measure. He was an honor student with about a 95% average in a difficult course. He had a wonderful family and home: a successful, likeable father, a charming and vivacious mother, six sisters and a brother. He had just about everything a young man could desire, a host of friends, Summer vacations in Europe, a wonderful family and home.

So December 17 was the same as every other day in his young life. I suppose it was more hurried, since he was rushing to get off on a hunting trip to Canada with his father. But the last thing he did before leaving Notre Dame was to attend Mass and receive Holy Communion in his hall chapel. As he and some of his friends were driving to Milwaukee, one of them warned the boy driving to take it easy as the road was becoming slippery. "I'm not really worried," said young Fred, "after all, I'm in the state of grace." It was a way of saying that

with God within him, he was not afraid of meeting God.

As the sun went down that day Fred's body was charred inside a crashed and burning plane, but I'm sure that his soul was glorious in the sight of God, and that he really knew then, as he certainly knows now, how right he was on his values. His looks and personality and brains and money and sports car seem very unimportant beside the fact that he began his last day with God, lived it with God in the state of grace, and ended it with God to begin an eternity of sharing God's glorious happiness.

How did December 17 begin for Fred Miller, Sr.? As was their custom, he and his wife, Adele, were up before dawn, driving down the treelined road around Lake Oconomowoc to the parish church in the town where they attended the 6:30 Mass and both received Holy Communion. Here was an unusual man. Fred, Sr. was more famous than his son at Notre Dame, an All-American tackle and captain of one of Knute Rockne's last teams. He was widely known as a sportsman, a director of the Green Bay Packers, and influential in bringing the Braves to Milwaukee. He could still beat his athletic son at handball, his daughters at tennis, and enjoyed being a volunteer coach with Frank Leahy during the ten years that Frank was coach at

Notre Dame. He was a good business man, too, having quadrupled his business in the past six years and having invested forty millions in a new plant.

The story I like best about him was the fact that he had adopted the habit of making a retreat once a year to check up on his spiritual life. This year, he took a dozen men with him, two of them being his pilots who were making the first and last retreat of their lives, the weekend before they died, getting prepared with Fred to meet God, although none of them knew it at the time. Yes, this man had a full life, but like his son, he knew what really mattered. He began his last day on earth by receiving Holy Communion that morning.

There will be a final day to all of our lives. What will it be like? Largely, I think, like the rest of our lives. Our final day on earth will probably reflect the values we hold today, the strength of our character today, the closeness of our union with God today. In reflecting these, our last day will indicate to God and to ourselves the kind of eternity that awaits us. That is why I want to tell you about the day that, unknown to them as they began it, was the last day on earth for these two Notre Dame men, Fred Miller, Jr., and Fred Miller, Sr.

*John H. O'Sullivan, S.J.*

President, University of Notre Dame

An internationally-recognized creator of fashions in automobile styling was a student of art and design at the University of Notre Dame in the late 1920's.

He is Virgil M. Exner, Sr., Director of Styling for Chrysler's billion-dollar corporation, who not too many years ago at the age of 16 bought a Model T for \$32 and started experimenting in automobile design. This does not necessarily guarantee that "hot-rodding" is the shortest path to success in the styling of attractive sports coupes or convertibles. Actually Virgil Exner arrived at the top of his profession fast, but it was by way of General Motors,

Studebaker and as an illustrator of car catalogs.

When the Chrysler Corporation decided to scrap its old dies and come up with a car as new as the atomic submarine, President L. L. Colbert singled out Exner, then in the advance styling section, as the man for this assignment. It was a wise move because Exner was ready. He put his futuristic blueprints to work with a staff of more than 200 stylists, designers, and clay modelers.

The result was some new and startling approaches to present-day automobile design. The K-310 sports sedan, the C-200 sports convertible, the D'Elegance two-passenger sports

coupe and the DeSoto Adventurer, all products of his imaginative skill, have won for him the admiration of automobile enthusiasts in the United States and abroad. His work is reflected on new models made in Plymouth, Dodge, DeSoto and Chrysler plants.

"The distinctive features of practical design in these cars have established new styling standards for the entire industry," praised James C. Zeder, Vice-President of Engineering at Chrysler. He noted that the K-310 touched off a new styling trend and he pointed up other Exner "firsts" such as the off-center divided front seat arrangement

# Chrysler's Styling



and the continental appearance of cut-out fenders.

After studying in Notre Dame's Fine Arts Department, Mr. Exner's first professional job was with Advertising Artists, Inc., in South Bend. He stayed there for six years designing car catalogs before moving on to GM in 1934. In his initial year with General Motors he won first prize in a styling contest and soon was elevated to the head of Pontiac Design Studio.

He joined the Studebaker Corporation in 1938, at the age of 29, as Chief Styling Engineer. During World War II he contributed an important part in

the development of Uncle Sam's Weasel Army truck and various types of aircraft engines.

Mr. Exner was mainly responsible for the first revolutionary change in the present-day auto, when he modernized the Studebaker with items that have been accepted as standard: lots of glass area, curved windshields, and wrap-around rear windows. It was Exner who fashioned a new and different Studebaker—streamlined like a torpedo.

Exner's ideas have been favorably received by the industry and customer alike for their original and tasteful approach to the automobile safety and comfort and roadworthiness desired by the American motorist. He believes that future cars will be much lower, faster—and that there will be additional safety features and better highways.

His hobbies, besides auto racing and

sports cars, are oil painting and football. Not all of the plaudits in the Exner family however, go to Virgil, Sr. A young man by the name of Virgil Exner, Jr., who is a senior at the University of Notre Dame, is close on the heels of his illustrious father. At the age of 13, Virgil, Jr., won the first national award given by the Fisher Body Craftsman Guild in the National Automobile Design Contest—a \$4,000 college scholarship.

The Exner family resides in Birmingham, Michigan, and also includes Mrs. Exner and two other children, Bronwen and June Marie.

If the reader has gone this far it should be evident that success in automobile styling is spelled with a capital "E" and pronounced "Exner." And Notre Dame is proud of one of her most prominent sons who is heralded as a leader of modern design in the automobile industry.

*Chief*

## N.D. ALUMNUS—VIRGIL EXNER, SR.

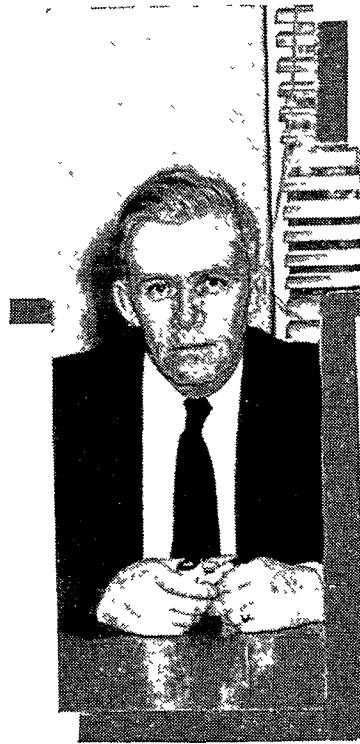


# American



Mr. Sandeen

Mr. Frederick



Mr. Abell



Mr. Kennedy

## New Program Highlights Political Science Dept.

By Pat Brennan

*The author is majoring in Journalism and is a member of the Junior class.*

**T**HE welfare state and the administrative state are emerging in America! Is this good or bad? How close is the West to a cataclysmic war? Did Malenkov's fall mean the rise of a truculent war party in Moscow? What is the Communist "world view"—how do the men in the Kremlin "think?"

In order to attack such problems, the University of Notre Dame Political Science department has directed its attention—on the graduate and research level—toward two vital concepts of our day: The so-called "American way" and Soviet "Communism."

Devoted to the former is the new Program in American Studies, estab-

lished in 1954 as a joint project of Notre Dame's political science, history, and English departments. It "represents the current trend in the university world of getting away from the highly specialized curriculum and pulling together several studies." It has as its goal the training of students "who can do for the United States what Edmund Burke did for England"—"men who know or can predict tolerably well the effects of any given policy on the basic structure of the American society." This is "not a policy making program," stressed the Rev. Stanley Parry, C.S.C., head of the University's political science department, but an effort "to turn out men who have competences necessary to make good policy for the United States and academicians who will continue the pedagogical work.

"In modern society, crimes are so frequent and they require such deep changes in many aspects of our life that unless we understand the American ethos ('American way') there is danger that we will lose it unconscious-

ly. It will be the goal of our graduate students, as citizens of the future, to prevent this by suggestions and policy making functions. There are four or five policies you could study in a certain situation; one of these could be disruptive, one or more could be conducive to the American ethos. We will educate Notre Dame men to preserve and improve this ethos. If the Christian intellectual does have the knowledge to improve America, he has a political and religious duty to do so."

An objective of the American Studies program, headed by Aaron Abell—author and since 1945 associated with the university's history department—is the establishment by the spring of 1955 of a scholarship program which would bring to Notre Dame deserving young men interested in making America a better place to live in.

In an effort to penetrate the pall cast over the free world by the Red menace, the University of Notre Dame, with the aid of a \$57,000 Ford Foundation grant, in 1953 set up its much-publicized "Center for Soviet and East European Studies" dedicated to research and training in this area. Sparked by the influence of the late Waldemar Gurian of the University faculty, a famed specialist in Bolshe-



# and Soviet



Mr. Fizer

Mr. Pap

Fr. Papin

Mr. Caponigri

Mr. Szczesniak

vist thought, and the Rockefeller Foundation grant, "interest in Russia and East Europe" has grown within Notre Dame's political science department since 1948.

"The first thing necessary when faced with a hostile and threatening neighbor," points out Father Parry, "is to understand him, what his actual condition is, what his motives are, and how he thinks—and to understand him not as a matter of idle speculation but through a disciplined analysis of his thought and action and motives as they have appeared in the course of his history. As it has appeared, perhaps, in his treatment of the once free states that surround his borders. It is necessary in our society that we have both business and government men who can offer this knowledge to the country as a whole. The purpose of this Soviet Studies program, therefore,

is twofold: The extension of research and the training of further experts.

"The object of the research is not a quantitative addition to data on the Soviets, but a meaningful synthesis of available data. Notre Dame's scholars want to 'add a new dimension' to these data by interpreting it in the light of the Communist world view and Marxist ideology."

To do this they brought in Dr. John Fizer, who holds a Ph.D. in Slavic studies; Michael Pap, Ph.D., an expert in domestic problems of Russia; and, as head of the department, Stephen Kertesz, who was Hungarian minister to Italy until the Reds seized his homeland after World War II.

With this outstanding personnel, Notre Dame "will train students in the techniques and methods necessary to continue this work in the academic world." Also, it will educate young

Christian intellectuals "in the skills and knowledge necessary to continue in the political order the on-going process of policy formation and adjustment."

The Soviet studies curriculum now includes courses in Russian history, dialectical materialism, and atheistic Communism and represents the unified efforts of prominent men in the fields of religion, history, philosophy, and political science. In 1955-56, the political science department will bring in an established specialist in scientific socialism and Bolshevism to replace Dr. Gurian.

The Soviet and American studies at Notre Dame are illustrations of "idea men" in action, men whose lives are dedicated to the solution of internal and external perils that each moment threaten to destroy the foundations of our democracy.

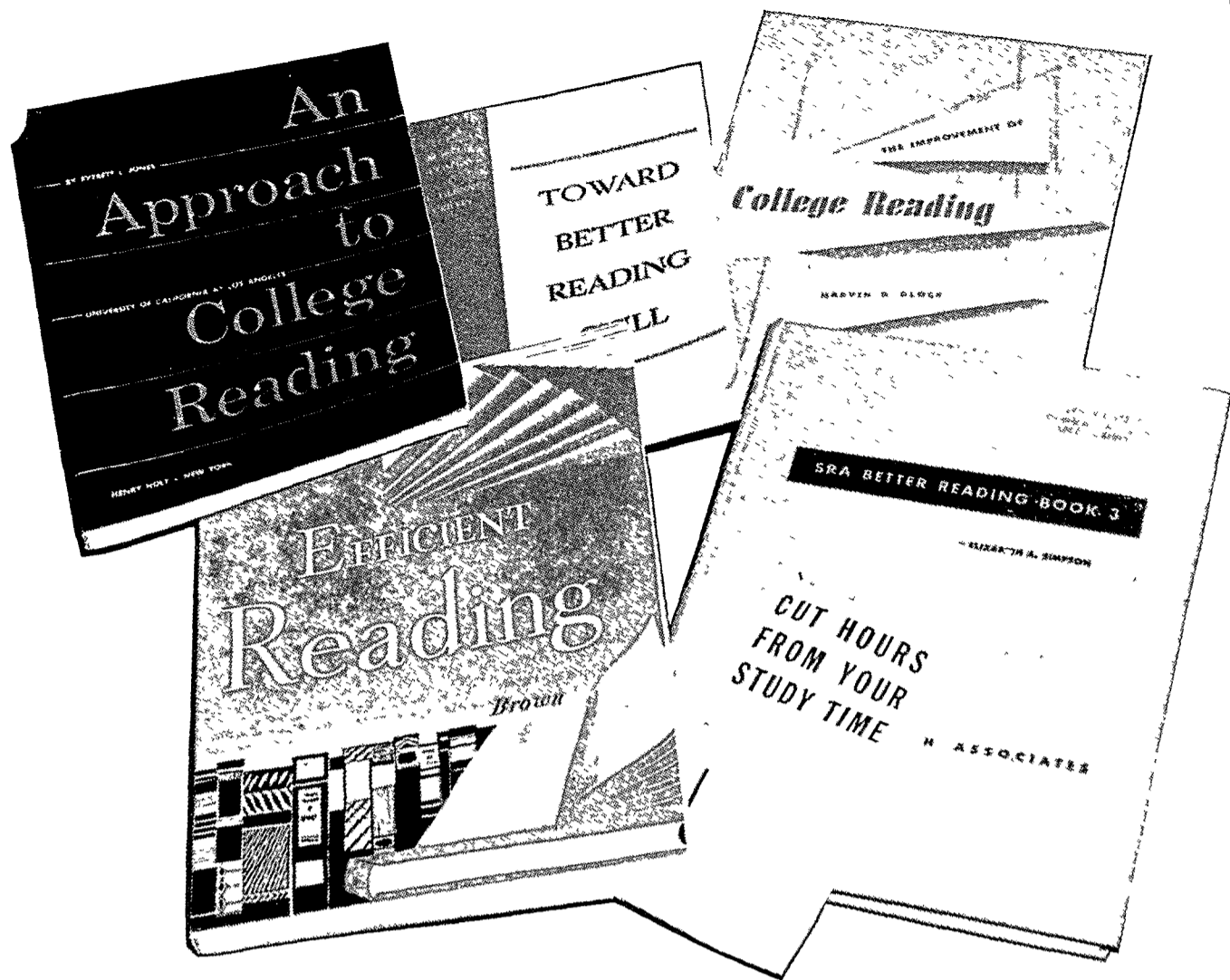
(continued on page 14)

Mr. Kertesz is head of Notre Dame's International Relations Committee.



# Reading Clinic

## Scholastic Improvement Through Special Means



Readin', 'ritin', and 'rithmetic! There are these three; and the most engaging of these is readin'. Anyway that's the case on this campus according to 400 students who every year better their class work at the University of Notre Dame partly because they have the intelligence and initiative to recognize—and do something about—their faulty reading habits. They go for diagnosis to a specialist, "Dr." R. D. Willemin, the Head of Notre Dame's Developmental Reading Program. His therapy demands real effort and a willingness to dig hard for constant improvement, and when his patients cooperate parents appreciate the scholastic improvement that results. "Dr." Willemin has helped near-failing students to remain in school and good students to become outstanding.

But why this reading program? Can't students eligible for admission to a world-famous university READ?

"Yes, they *can* read," said Willemin, "but many come to Notre Dame with outstanding potential that needs development through special means. They are hamstrung by a society that places a premium on superficial, passive activities such as too many radio and television programs, and on other non-academic activities outside the school and home. Also there are countless students with fine minds who come to

the University unfortunately possessing poor reading habits which date back to those years when they were learning to read and which have never been remedied prior to entering college. "The reading of these students is 'passable' at the high school level," continued Willemin, "but falls short of the reading requirements of college studies."

Closely associated with poor reading skill is inadequate vocabulary, lack of phonetical skill (incorrect pronunciation), and improper study methods.

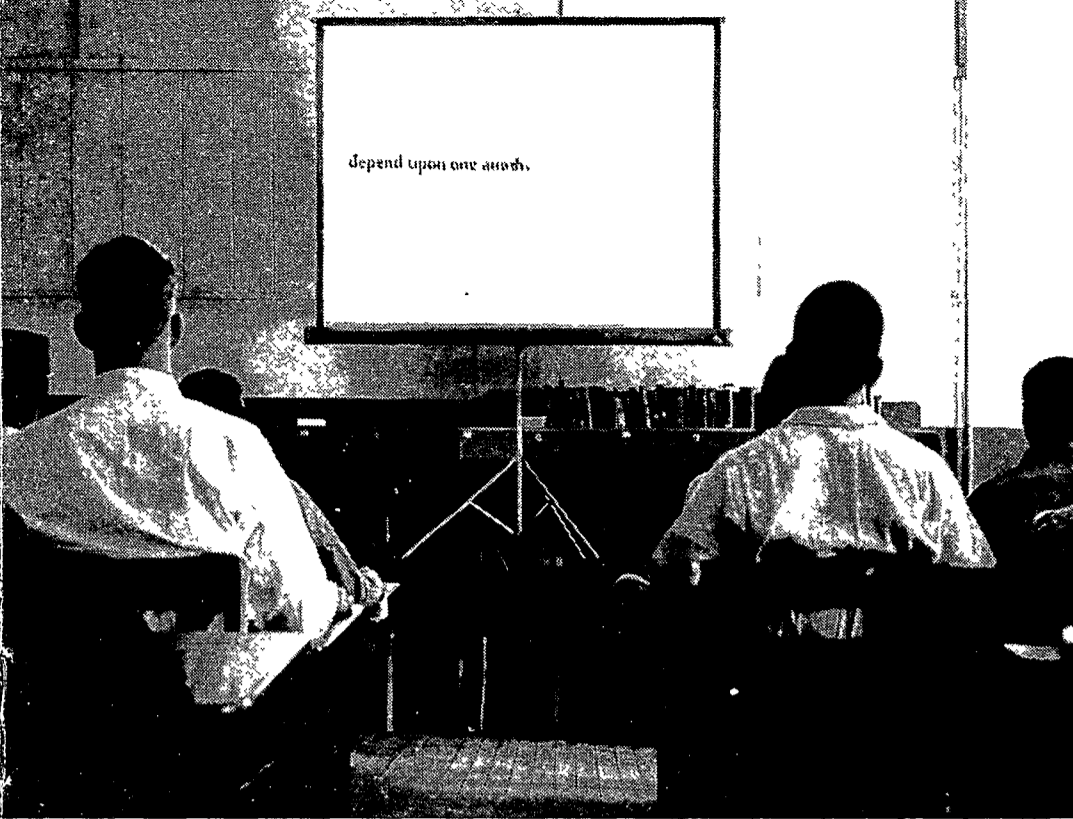
Referring to some typical traits, Willemin observed: "We get innumerable students who read words for words' sake. They plod, "plow under each word," pronounce each word silently; are unable to pick out main ideas from subordinate description and details; have difficulty in defining simple, perhaps unfamiliar, words as they are used in context. They fail to pre-read by first skimming over the material to be read and to vary the reading rate according to the nature of the material and the purpose for reading it. These and many other not so obvious reading problems make reading a difficult, discouraging and, sometimes, a fearful chore for many students. In a few cases, defective eyesight played an obvious part in the reading experience of the students. In the past two semes-

ters, for example, about twenty-five students were found to be in need of corrective glasses.

"We also attempt to develop in them through this reading program increased concentration," emphasized Willemin. "We teach them how to read class assignments with maximum effectiveness, how to broaden their vocabulary, and how to study well for examinations. There is also a substantial increase in both their rate of reading and comprehension. Specifically, the rise in reading speed alone is from 270 to 450 words per minute for the group average in each semester."

At the beginning of the program two diagnostic reading tests are given to each student to determine his speed and comprehension. Similar tests are then given throughout the course. Conferences with individual students are conducted throughout the semester by Willemin and Mr. C. E. Birder, Assistant.

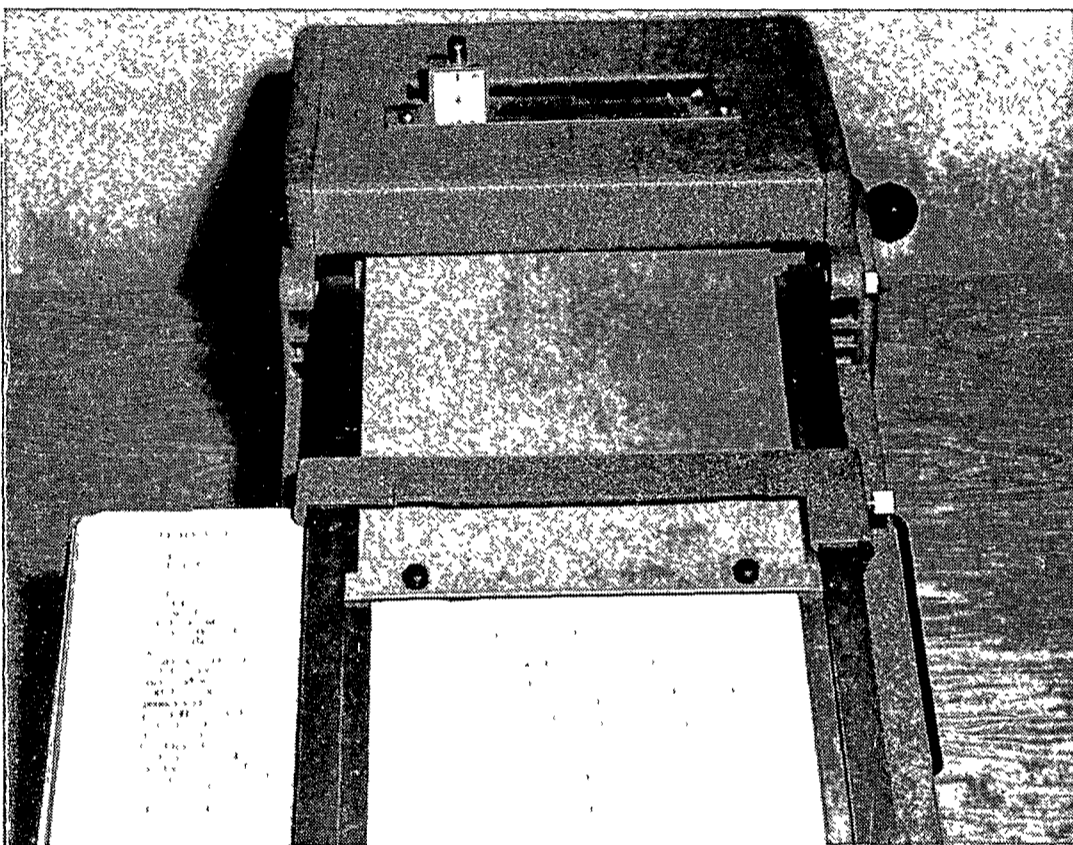
Developmental Reading originated in the Department of Guidance and Testing five years ago with a limited class of two students. In 1953 the program was established as a separate department with Willemin in charge. In the past year more than 400 Notre Dame students participated in the program, including many students of high scholastic ability.



Use of films speeds reading progress to 470 words per minute.



Reading methods improve through aid of stopwatch.



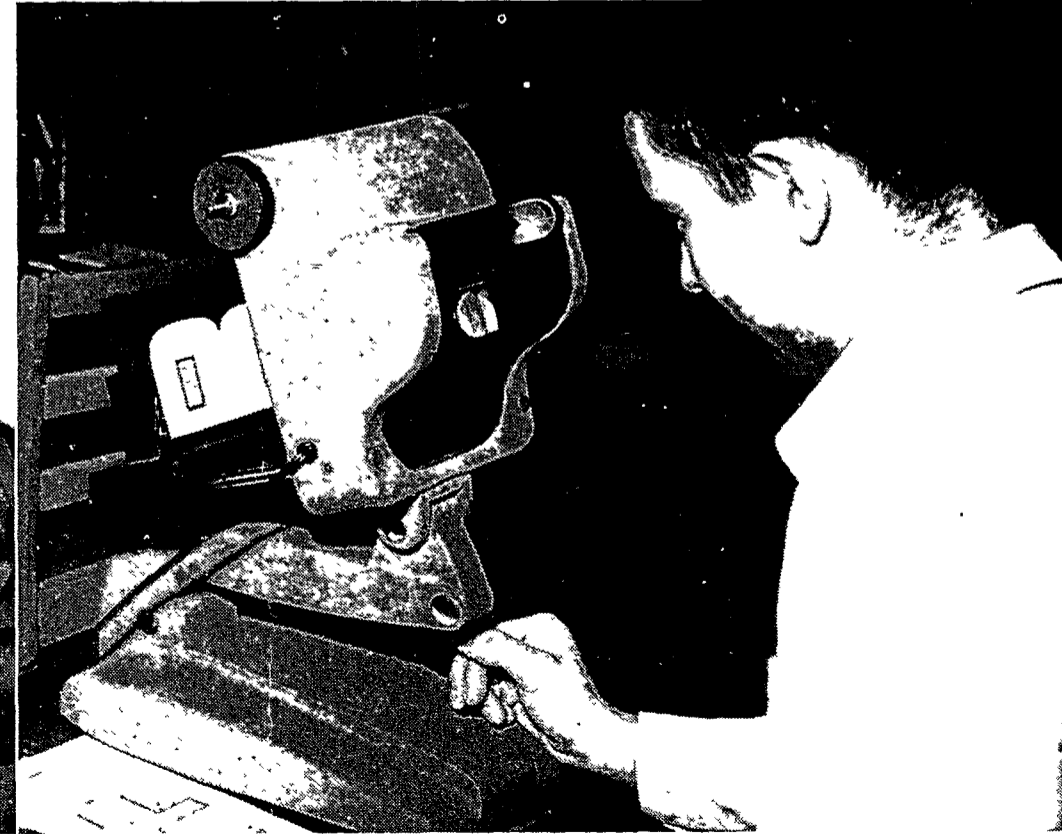
'Pacer' provides the stimulus for developing efficient reading habits.



Reading 'pacers' demand concentrated effort.



Individual conference is conducted by Mr. Willemin.



An ocular check is made on all Reading Course students.

# The Library's New Look

## *Important Changes Instituted*

By John T. Mullin III

*The author is vice-president of the student Press Club and a native of Baltimore, Md. Mr. Mullin is majoring in Journalism in Notre Dame's College of Arts and Letters.*

A modern version of an old library has provided many practical and recent innovations for the building which houses the major portion of Notre Dame's 450,000 volumes. This ivy-clad structure, erected at the height of World War I in 1917 for a student-body of 1,200, is now required to service a present-day enrollment of 5,400 undergraduate and graduate students.

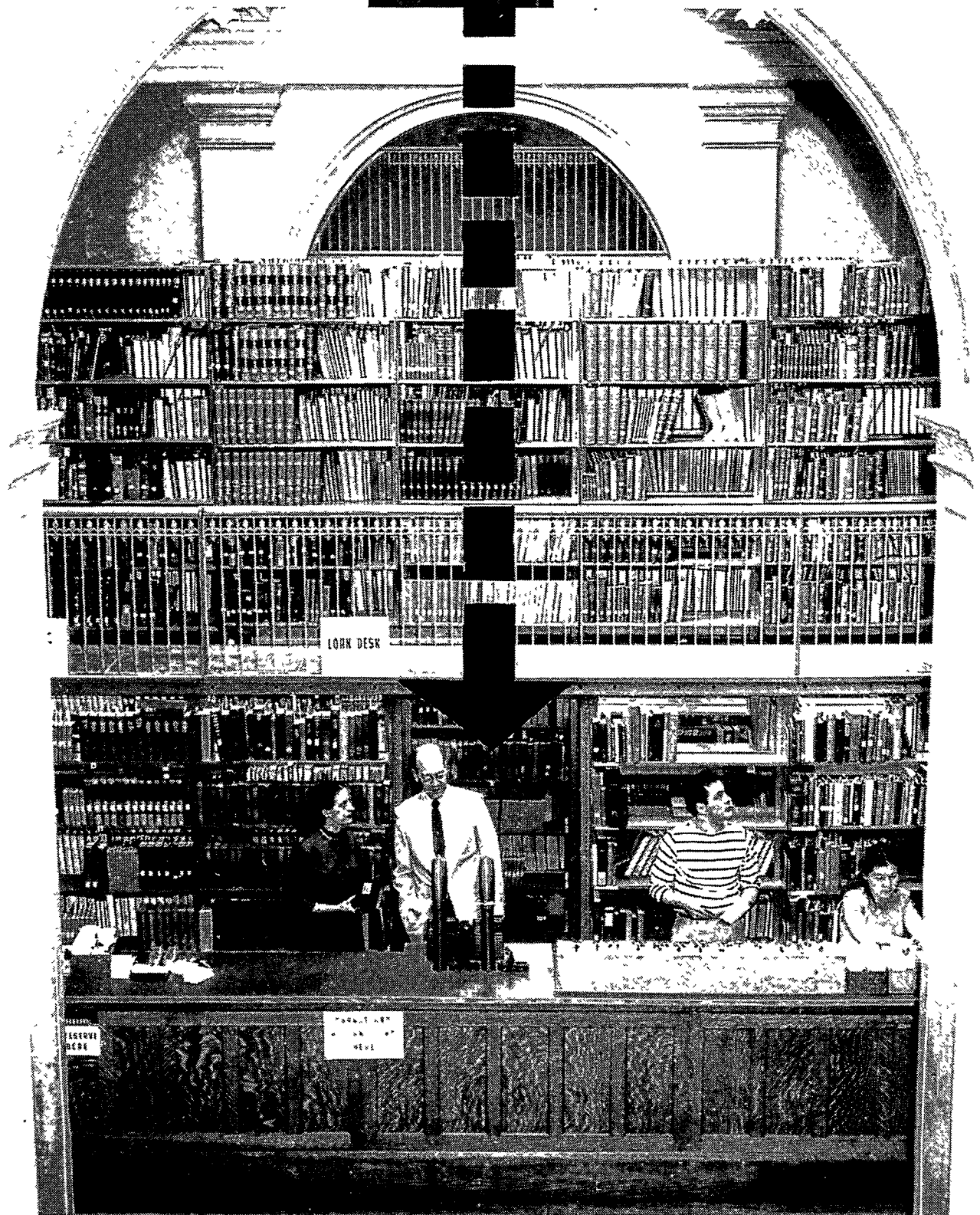
To keep pace with the rapid physical expansion program at the University and also with the increased number of students, the Library has instituted the following important changes: a new streamlined system for getting books from stacks to the main desk; the establishment of three divisional libraries within the main library; additional seating facilities; increased book space; and a new lighting system.

An efficient method using air tubes has been installed which speeds call slips of desired books from the circulation department to the stacks in a matter of seconds. Electrified lifts then return the books to the main desk before you can say William V. Shakespeare. The supersonic age has *really* arrived!

An outstanding innovation is the "open shelf" idea for three divisional libraries — Humanities, Business - Economics, and Social Services. It had been previously tried with great success



Air tubes speed call slips of desired books to circulation department. (Below): Miss Ida Bonicelli, head of Circulation Dept., and Mr. Schaefer, Library Director, inspect new equipment.



## University Library Has 450,000 Volumes

In 1873, the Reverend Augustine Lemmonier, C.S.C., fourth President of the University of Notre Dame, first formed the University Library through the cooperation of members of the Congregation of Holy Cross, the academic departments and student societies, all of whom had maintained small collections of books for exclusive use of their members. By 1879 the University Library had grown to about 30,000 volumes. But in April of that year fire destroyed the Main Building, which housed the Library, and only a few books were saved. In the seventy-six years since the fire the University Library has developed into a collection of about 450,000 volumes excluding approximately 40,000 uncataloged documents in the following libraries: the Law Library, the Architecture Library, the Engineering and Metallurgy Libraries, the Science Library (Chemistry, Mathematics, Physics), and the Biology Library. The Greene Botanical library of 3,000 volumes is especially rich in early botanical literature. The Julius A. Nieuwland botanical library of 10,000 volumes is noted for the several botanical incunabula and publications of botanical societies. The Main Library holds about 260,000 volumes including the Zahm South American collection of 1,500 volumes, and a Hibernia collection of 3,000 volumes. The Mediaeval Library of 5,000 volumes is strong on mediaeval education and mediaeval universities, having recently purchased the Stokes' collection. The Dante Library of about 3,500 volumes is especially rich in incunabula and post-incunabula editions. The Library has a small collection of literary manuscripts and a fairly substantial part of the manuscripts of Louise Imogene Guiney, some Francis Thompson items, and the papers of Mary Eileen Ahern. The present building is believed to have been the first library building in a Catholic University specifically built for library purposes.



(Top): Open shelf collections. (Center): Study cubicles for faculty. (Right): "Friend of the Library" book contributor plate.



in the branch libraries of biology, science, architecture, engineering and law. This plan offers the student more accessibility to books. "Open shelf" collections contain current journals as well as books on various subjects recommended by the faculty.

Seating facilities have been extended which now permit more than 500 students to work in the Library at one time. This is a definite improvement as previous top capacity was 185. Included in this setup are 57 carrels—individual study tables in a small cubicle for graduate students and faculty members. Re-locating the art gallery in O'Shaughnessy Hall of Liberal and Fine Arts has been a tremendous advantage in securing additional space for Main Library facilities. The primary result of this transferral is

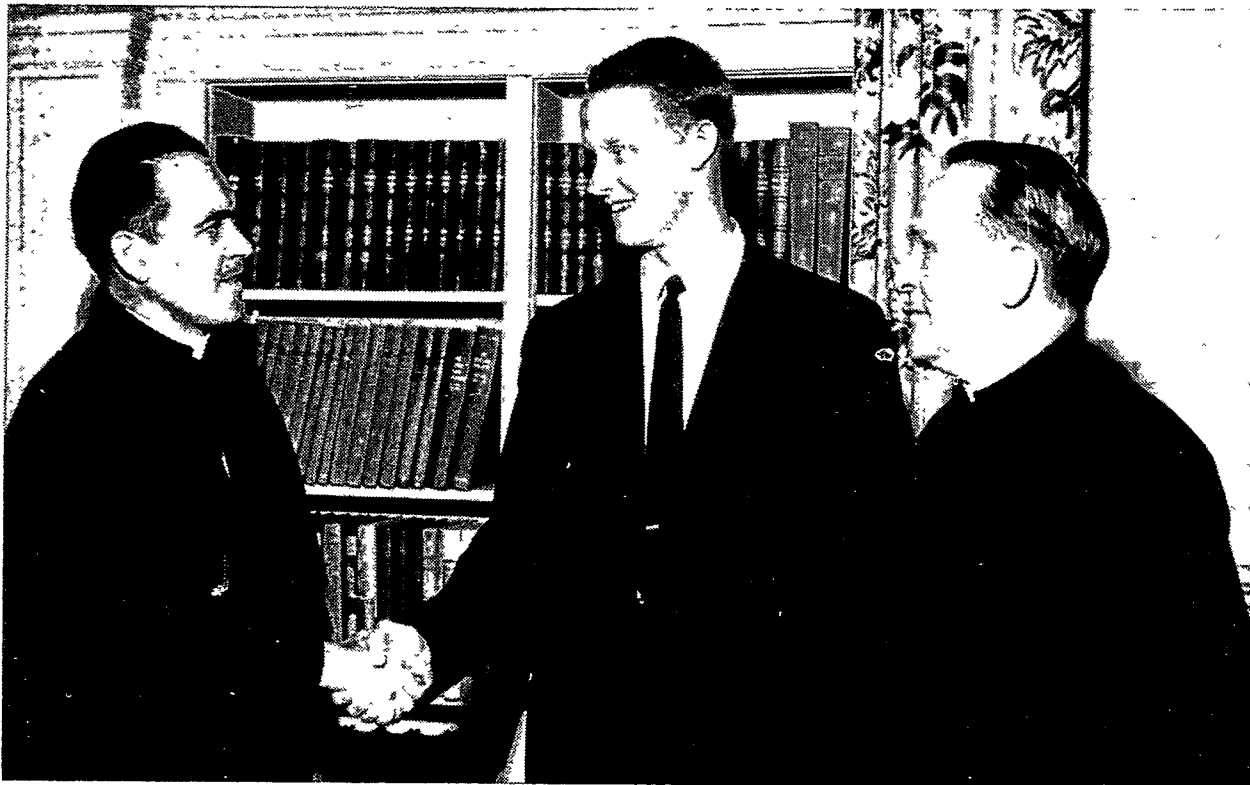
book space for at least 100,000 additional volumes. A new fluorescent lighting system and two huge ventilating fans have been added to complete the major improvements.

Notre Dame's Library has enjoyed a phenomenal record of progress over the past two decades. Between 1935-45 the average annual increase was about 6,000 books. From 1945-54 an average of 22,000 volumes were added each year.

Book contributors are being designated as a "Friends of the Library" group. It is hoped that the University will continue to receive private libraries or collections from individual donors. Already Mr. John B. Shaw, a 1937 Notre Dame alumnus of Tulsa, Okla., has contributed 1,000 of his personal 11,000 book collection. An-

other loyal Library friend is Mr. Joseph Kotcha, a steel-worker in Homestead, Pa., who has given 11,000 books to the Notre Dame Library in the past 26 years.

Mr. Victor A. Schaefer, Library Director, heads a staff of fifty people—forty of whom are full-time employees. Eighty-three students work as part-time librarian assistants. Mr. Schaefer came to Notre Dame in 1952, when Mr. Paul Byrne then head librarian was appointed curator of the art gallery. Mr. Byrne, a Notre Dame alumnus of the 1913 class, served as director of the library for 30 years. A graduate of the University of Michigan, Mr. Schaefer (continued on page 15)



(Left to right): Father Hesburgh; Student Foundation Chairman Jack Moynahan; and Father John J. Cavanaugh, C.S.C., director of the Notre Dame Foundation.

## A.B. Students May Major in Science

Students in Notre Dame's liberal arts school may major in one of the physical or biological sciences beginning in September, Rev. Charles Sheedy, C.S.C., dean of the College of Arts and Letters, has announced.

Students who will be sophomores this Fall may elect to major in botany, chemistry, geology, physics or zoology, Father Sheedy said, while still benefiting from much of the content and method of a liberal education. A program of pre-medical studies also will be offered for the first time in the liberal arts school, he said, and a mathematics major, offered in former years, will be continued with some revisions. The bachelor of arts degree will be awarded at the conclusion of the four year program.

Traditionally, science majors have been available at Notre Dame only in the College of Science whose curriculum will remain unchanged. The curriculum for science students in the liberal arts school will differ from the traditional curriculum in content, sequence and method, Father Sheedy explained.

Included among the changes are an intensive foreign language course which will be taught six days a week for a year instead of over a two-year period. Students also will take a year-long social science course embracing economics, sociology and political science. In their junior year science majors will take a two semester seminar in the masterworks of literature. The sequence of other courses will be changed so as to harmonize simultaneous training in the liberal arts and natural sciences.

## Student Foundation Week Achieves 93% Participation

Ninety-three per cent of the Notre Dame students living on the campus contributed funds to their alma mater during Student Foundation Week. The campus-wide drive was launched by the Student Senate to acquaint the student body with the pressing financial problems of the University and the work of the Notre Dame Foundation which coordinates University development and public relations activities.

According to Chairman Jack Moynahan, LaGrange, Ill., sophomore, 3,668 of the 3,940 students living in campus residence halls participated in the unprecedented campaign. A survey of other colleges and universities indicated that the Notre Dame campaign was probably the first of its kind conducted on a college campus.

Moynahan stressed that no goals or quotas in terms of dollars were set in advance and acknowledged that funds realized from the drive were relatively small. "We did strive for 100% student participation regardless of the amount of the gift," he said, "and we are heartened that we approached a perfect participation record."

Rev. Theodore M. Hesburgh, C.S.C., president of the University, commended Moynahan, members of the Hall Council and Student Senate officials who planned and conducted the campaign. "Your remarkably successful Student Foundation Week demonstrates," he said, "that our students

place great value on the education which Notre Dame provides and realize, too, that the University must receive support from its friends to insure that this caliber of education will be available to thousands of other young men like yourselves in the years to come."

Helping Moynahan in the Foundation drive were senior Harry Edelstein, junior John Engler, and freshman Charles Clesi.

### American and Soviet Studies

(continued from page 9)

Dr. Gurian's work was world renowned. His writings on "Sovietism" were thought to have influenced the State Department's Kennan in the composition of the famous article on international affairs announcing the West's anti-Communist "containment" policy.

And other Notre Dame scholars, such as Father Parry, Sandeen, Frederick, Kennedy, Father Papin, Caponigri, and Szczesniak "through depth and theoretical penetration" continue to seek a "greater understanding" of the errant philosophies and political doctrines in a world that seems bent on self-extinction. As they do, they "contribute to knowledge necessary" for the survival of the free world.

### NOTRE DAME IS TRULY NATIONAL

Enrollment ranking by states includes these top 12:

1. Illinois .....	912
2. Indiana .....	786
3. New York .....	683
4. Ohio .....	438
5. Michigan .....	377
6. Pennsylvania .....	306
7. New Jersey .....	260
8. Wisconsin .....	146
9. Massachusetts .....	134
10. Missouri .....	124
11. California .....	120
12. Texas .....	84

## Conventions Slated on Campus This Summer

Notre Dame's campus will serve as headquarters for over a dozen conventions and meetings this summer.

The first meeting was the Community Priest and Brother retreat, June 7-8. Following this retreat was Alumni Reunion weekend, June 10-13.

More than 1,500 attended the tenth biennial convention of the Catholic Theatre conference, June 12-16. During the same time, June 13-14, a Parasitologist meeting was also on campus.

The National Newman club meeting convened from June 19-26.

A Vocational institute is the chief convention scheduled for July. It assembles from July 14-17.

### Layman's Retreat

The program for August begins with the Spiritual Institute for Sisters, Aug. 3-9. Aug. 7-10 has been designated as the time of the Probation Officers' convention.

The largest aggregation of the summer will be here for the Annual Layman's retreat. Over 2,000 are anticipated to make this retreat, Aug. 12-14.

Also on Aug. 14 the Young Christian Students' movement begins its six-day assembly. Aug. 19-21 are the dates of the Christian Family congregation.

The Catholic Band session will be the longest meeting. It is scheduled for Aug. 16-31. The last gathering of the summer months is the Crossroad assembly, Aug. 27-Sept. 4.

### The Library's New Look

(continued from page 13)

fer has studied in Rome, Italy, and has been librarian at Scranton U., Catholic University of America and the Army Library in the Pentagon. He was assistant director at the University of Michigan Library before accepting the position at Notre Dame.

Even with the decided improvements Notre Dame still is in urgent need of a new Library. But until this 'hope' materializes the University's Library will continue rendering a great service to the student body as an integral part of educational progress under the Golden Dome.



Rev. Theodore M. Hesburgh, C.S.C., receives \$50,000 check given by representatives of American brewing industry for scholarship fund in memory of the late Fred Miller, Sr. Left to right: Edwin J. Anderson, president, Goebel Brewing Co.; Edward V. Lahey, president, U. S. Brewers' Foundation; Father Hesburgh; and Mrs. Fred Miller.

## Brewers Contribute \$50,000 to Fred Miller Scholarship Fund

Representatives of the American brewing industry recently presented checks totalling \$50,000 to the University of Notre Dame to establish a scholarship fund in memory of the late Frederick C. Miller, president of the Miller Brewing Co., Milwaukee, Wisconsin. Miller, his son Fred, Jr., and two pilots were killed in a plane crash at Milwaukee last December 17. The elder Miller was a Notre Dame alumnus and his son was a Notre Dame student at the time of their deaths.

Edwin J. Anderson, president of the Goebel Brewing Co., Detroit, chairman of a special committee within the industry, made the presentation to Rev. Theodore M. Hesburgh, C.S.C., at a

luncheon in the Morris Inn. Miller's widow, Adele, joined Father Hesburgh in accepting the industry's tribute to her husband.

Scholarships provided by the Miller Memorial Fund will be available to sons of employees in the brewing industry, Anderson explained. The University will administer the fund and select the scholarship recipients, he said.

Other industry representatives attending the luncheon were Edward V. Lahey, president of the U. S. Brewers Foundation, New York City; Philip Liebman, president of Liebman Breweries, Brooklyn, N. Y.; and Joseph Griesedieck, president of the Falstaff Brewing Co., St. Louis.

### MASS INTENTIONS

Arrangements have been made for the Holy Cross Fathers, assigned to the University of Notre Dame, to discharge Mass Intentions of alumni and other friends of the University. Please mail your requests to:

REV. EDWARD FINNEGAN, C.S.C.  
Corby Hall, Notre Dame, Ind.

# Water Power

## Student Engineers Learn Techniques Of Building Dams

By David Davin

*The author is a Journalism major and has been assistant sports editor of the Notre Dame Scholastic. His home is in Rochester, N. Y.*

**T**RAINING students how to harness one of nature's most valuable resources—waterpower—has been an important project for the past year in Notre Dame's new hydraulics laboratory. Two connecting channels extending thirty feet in length are "models" which provide a continuous flow of water.

Under the direction of Professor Steponas Kolupaila (Ko-lou-pie-la), Doctor of Engineering, student mechanical and civil engineers are taught how to plan America's waterways, and make waterpower serve Eastern industry as well as the West's vital irrigation network. Professor Kolupaila has been a member of the University's faculty since 1949. He was born in Latvia, his home was in Lithuania, he attended school in Russia and he is now a naturalized American!

Waterpower, says the scientist, "can be man's friend or man's enemy." A specialist and outstanding author in the field of fluid mechanics, Professor Kolupaila is primarily concerned with teaching and research in hydrometry and hydrology. Hydrometry is studying water flow and rate by instrument and observation—hydrology seeks to apply these findings in determining water resources and waterpower.

The two channels, which are used by students in his course, permits water to flow through them at the rate of two cubic feet per second; one has built-in observation windows. Efficient desk models, charts and instruments of all sizes indicate every phase of currents—and all can be controlled from a central location. An extremely interesting piece of equipment in the lab is the "traveling screen"—the only one of its type used in this country. The screen is an accurate device that measures cur-



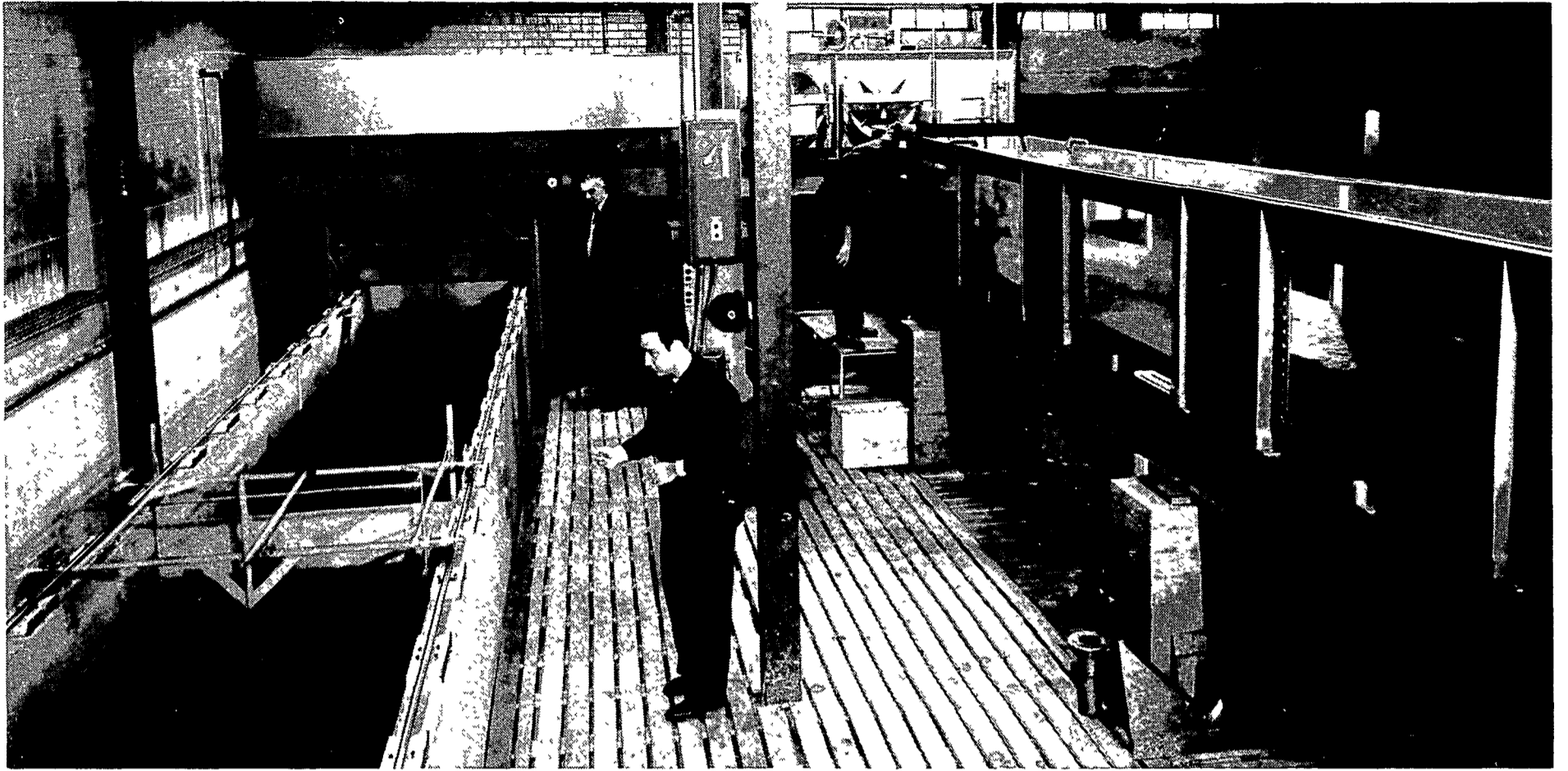
Students study waterflow in hydraulics laboratory.

rent rate by moving along with the flow of water through the channel.

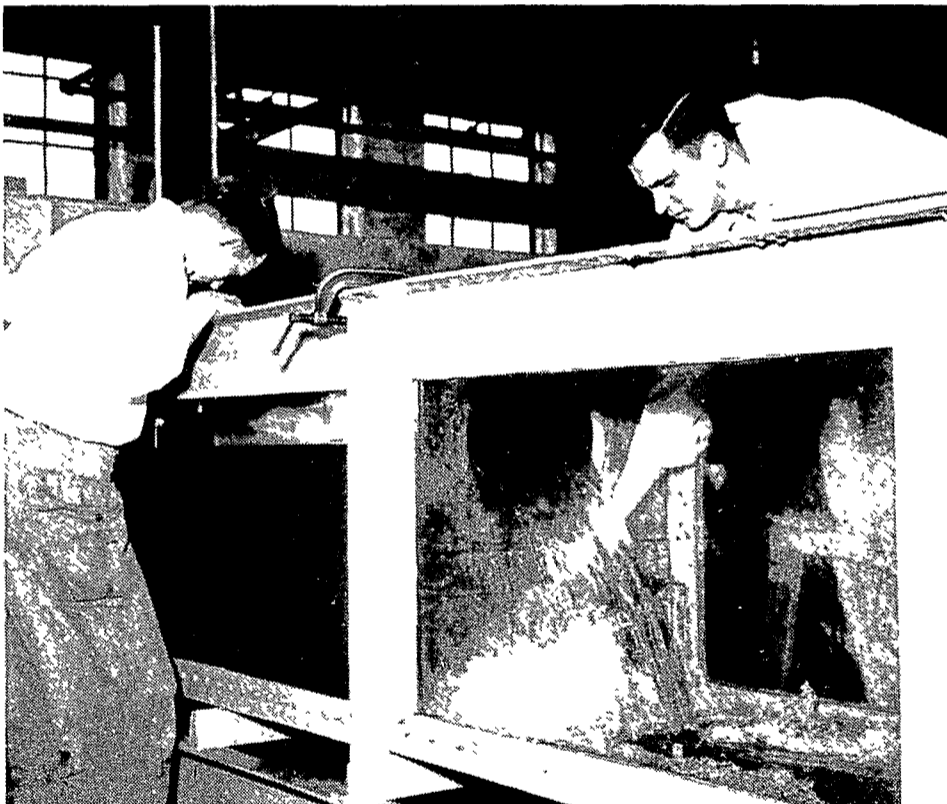
At the present time Professor Kolupaila is in the process of preparing statistics on every major river in the world. He is the author of many books, the first of which was *Hydrometry*, published in 1918. His books or articles are in ten languages—mostly Lithuanian—and the latest, *Nemunas*, was printed in the United States five years ago.

Through a knowledge of applied mathematics Notre Dame students who are enrolled in his class learn how to compute the size of bridges, how to build toll roads, how to design dams—and apply their 'know-how' of these important projects to the tremendous

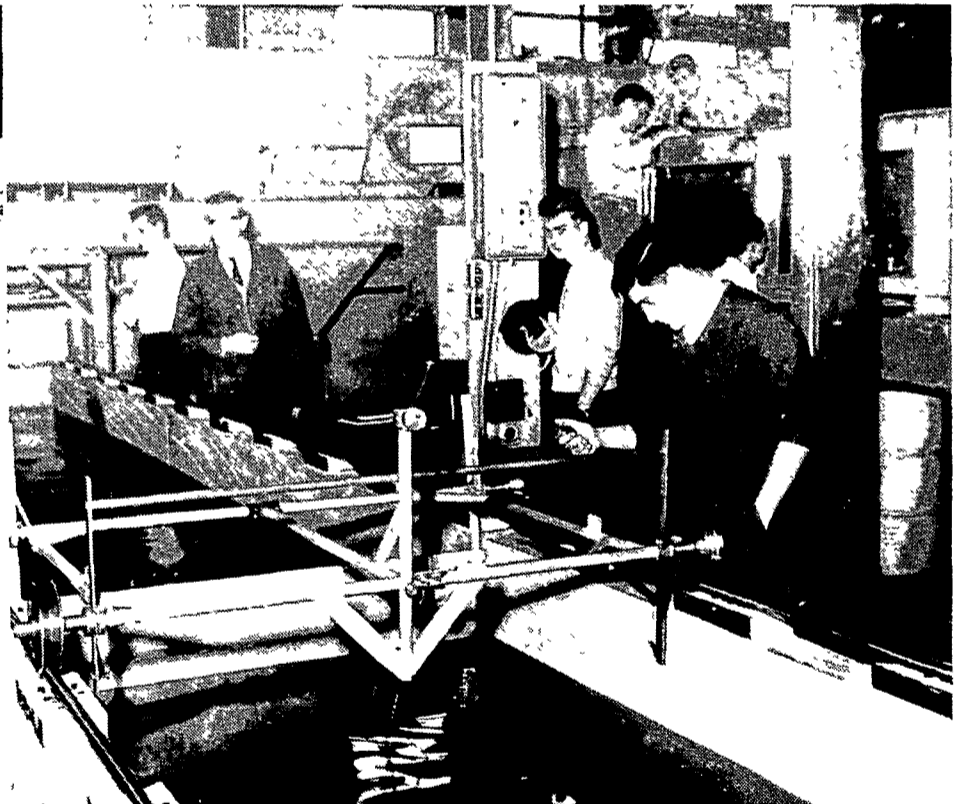




These two connecting channels are 30 feet in length.



(Left): Waterflow at the rate of 2 cu. ft. per second.



Prof. Kolupaila (second from left) inspects "traveling screen."

work of flood control. Professor Kolupaila emphasizes that "waterpower should be controlled for the benefit of mankind."

Students, however, and not laboratory equipment, are the professor's real interest in life. Lab sections are purposely kept to a minimum in number of students so as to permit special attention for each man in the class.

Professor Kolupaila's personal life is as crowded as his academic schedule. For a man of 63 he still walks a brisk mile from home to school each day. His hobby is photography and one of his

prized possessions is a gold medal won at the photographic World's Exhibition held in Paris during 1937. Over a career of 40 years at various times the professor has taught in five languages and speaks all European tongues except three.

His early academic training was received at the Geodetic Institute in Moscow. Later he did graduate work in hydrology and hydraulic engineering. Professor Kolupaila did research in Moscow for six years and was an advisor on the Dnieper River Dam project.

Professor Kolupaila, his wife and three daughters all became United States citizens last year. It is a rare combination of talents and tastes that will mark a man as a linguist, teacher, writer, engineer, photographer. Notre Dame students who have studied under Professor Kolupaila consider him more than just a person who can do many things well—they hold him in high esteem as one who has a great personal desire to contribute the best instruction possible toward their education as a professional engineer.



**GERM  
FREE**

*developments*

**Experiments in Tooth Decay and Amoebic  
Dysentery Conducted by Lobund Staff**

Germfree guinea pigs are used in scientific tests at Lobund Institute.

By James E. Murphy

*The author is Director of Public Information at Notre Dame.*

**B**Y COLLABORATIVE research demonstrating that certain bacteria cause tooth decay, scientists of the University of Notre Dame's Lobund Institute and Chicago University have earned the plaudits of the Chicago Dental association. And, in so being honored, the eight-man research team announced that new studies are already under way on the Notre Dame and Windy City campuses to determine if other strains of bacteria will produce dental caries in rats that were previously germ free.

Professors James A. Reyniers, Philip C. Trexler, Robert F. Ervin, Helmut A. Gordon, and Morris Wagner of Lobund shared in a \$500 prize annually awarded by the Chicago Dental Society for excellence in dental research, and their group received a plaque emblematic of its achievement at the society's recent meeting.

The group from Chicago University

included Dr. Roy J. Blayney, former director of the Zoller Clinic; Prof. R. Wendell Harrison, bacteriologist and University of Chicago vice-president; and Dr. Frank J. Orland.

Working on the theory that tooth decay is caused by germs normally found in the mouth, the research team studied a group of germ-free white rats over a period of 150 days at the Notre Dame laboratories. These animals, uncontaminated by any microorganism detectable by modern science, were inoculated with a strain of acid-forming streptococci and a rod-shaped bacillus. *Dental decay resulted in all these animals whereas other germfree rats, even when fed a highly cariogenic diet, failed to show any trace of dental caries.*

These unique findings were reported in the March issue of the *Journal of the American Dental Association*.

In the prize-winning research paper delivered at the meeting, Dr. Orland reports that new studies are already under way on the Notre Dame and Chicago campuses to determine if other strains of bacteria will produce dental caries in rats that were previously germ-free.

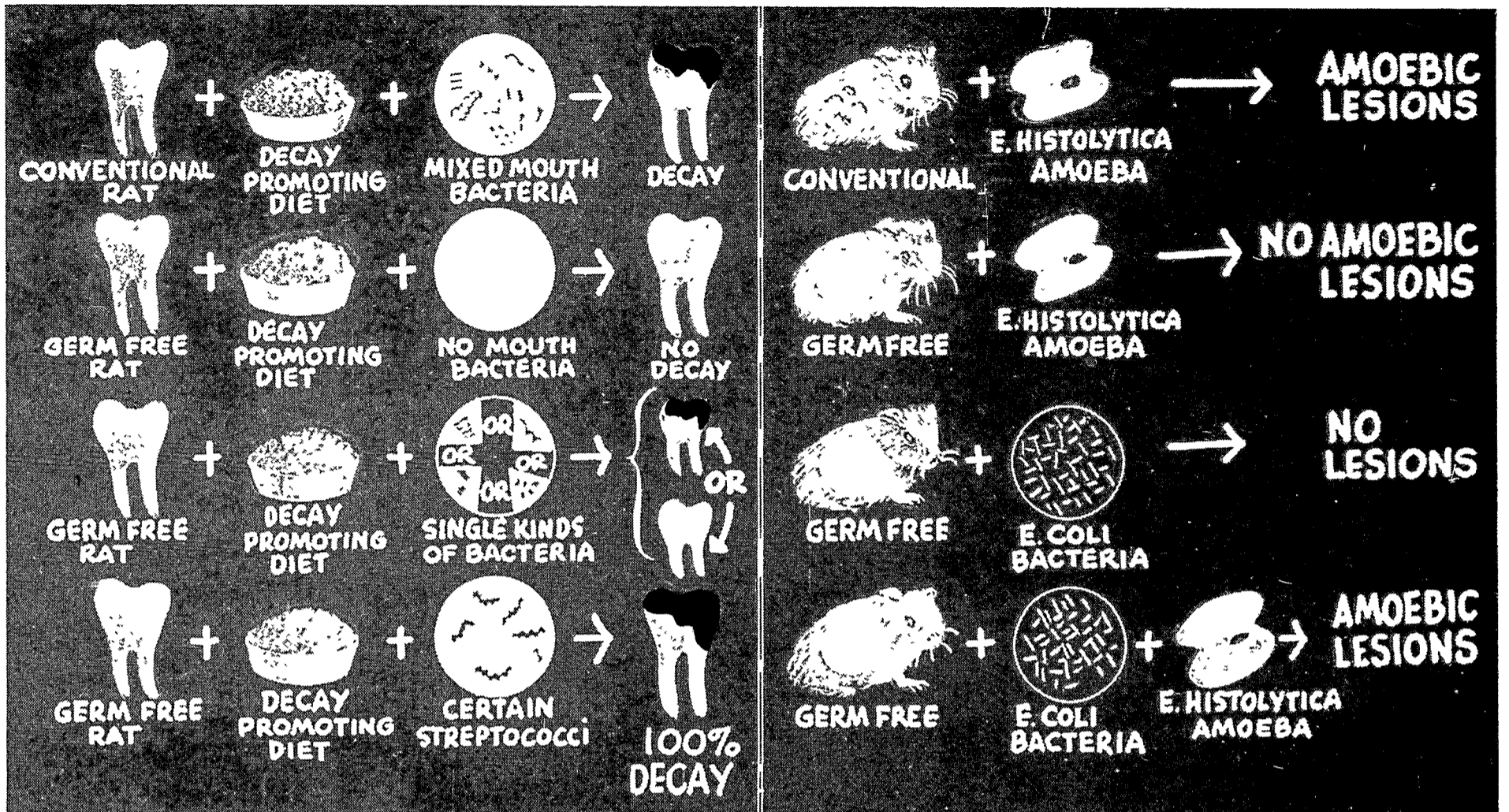
This collaborative project on the cause of tooth decay is long range. Earlier the Notre Dame and Chicago scientists demonstrated for the first time that tooth decay does not occur in the absence of microbes.

**LOBUND MOVIE**

The Journalism Department at Notre Dame, as part of its training program for students, produces one motion picture per year on some phase of University activity.

The current project is entitled "Life Without Germs." The outdoor scenes of LOBUND'S buildings have already been completed and some historical shots of Prof. Reyniers as a young student working in old Science Hall have also been made. The technical footage showing the operation of germfree apparatus, obtaining the animals, feeding techniques, bacteriological testing, etc., will be made next fall. This film will be on 16 mm. and will run approximately 14 minutes.

**These research projects illustrate how germfree animals are used to study diseases in which microbes are believed to be involved but whose exact role is difficult to investigate in conventional animals.**



A parasite previously regarded as the sole cause of amoebic dysentery cannot survive much less produce disease in an animal that is otherwise germ-free, it was reported recently at a meeting of The American Society of Parasitologists meeting jointly with The American Society of Tropical Medicine and Hygiene.

Research conducted over a period of three years at the University of Notre Dame's Lobund Institute indicates that this parasite, an amoeba known to scientists as *Endamoeba histolytica*, requires help from at least one other microorganism in order to produce dysentery. A report on the research was made by Bruce P. Phillips, medical protozoologist of the National Microbiological Institute, a component of the National Institutes of Health.

#### Disease Affects Millions

This amoebic dysentery research was conducted by Phillips with the collaboration of W. H. Wright and C. W. Rees, also of the National Institutes of Health and P. A. Wolfe, H. A. Gordon and J. A. Reyniers of Notre Dame.

Amoebic dysentery or amoebiasis, although classified as a tropical disease, affects people the world over. It has

been estimated that between 12 and 15 million Americans harbor the disease organism as carriers even though only a small percentage of this number are disabled by it.

#### Use Germfree Animals

Germ-free guinea pigs, available only at the Lobund Institute, were inoculated with 300,000 of the organisms which usually produce a fatal amoebic dysentery in normally contaminated animals within 14 days, Phillips reported. However, within a few days every trace of the amoebic dysentery organisms had disappeared from the intestines of the germ-free animals, he said.

Phillips and his associates speculated that some bacterium normally found in the intestine must be present for the amoebic dysentery parasite to thrive and produce disease. While further research may indicate more than one organism that fulfills this function, the investigators have established that one of the bacteria most commonly found in the intestine, *Escherichia coli*, is entirely adequate to render the amoeba capable of producing dysentery.

While Phillips' findings are of great significance to scientists and public health officials engaged in the interna-

tional fight against amoebic dysentery, the use of germ-free animals in microbiological investigations has even greater long-range importance in his opinion. The development of the germ-free animal as a unique tool in biological and medical research has attracted international attention to Notre Dame's Lobund Institute. There, scientists have contradicted the theory that animals need microorganisms for survival. This research with amoeba reemphasizes that it is possible for scientists to introduce various disease organisms one at a time into germfree animals, an entirely new research technique that may lead to a better understanding of many diseases and disease mechanisms.

#### Superior Service Award

Because of the excellence of this work at Notre Dame, Phillips was presented the Superior Service Award of the United States Public Health Service by Oveta Culp Hobby, Secretary of the Department of Health, Education and Welfare, at a ceremony in Washington, D.C., April 11.

The research was supported by the National Institutes of Health, the Office of Naval Research, and Notre Dame.

Mr. Edward J. J. Tracey, Jr.,  
200 Bradley Avenue,  
State College, Pa.

