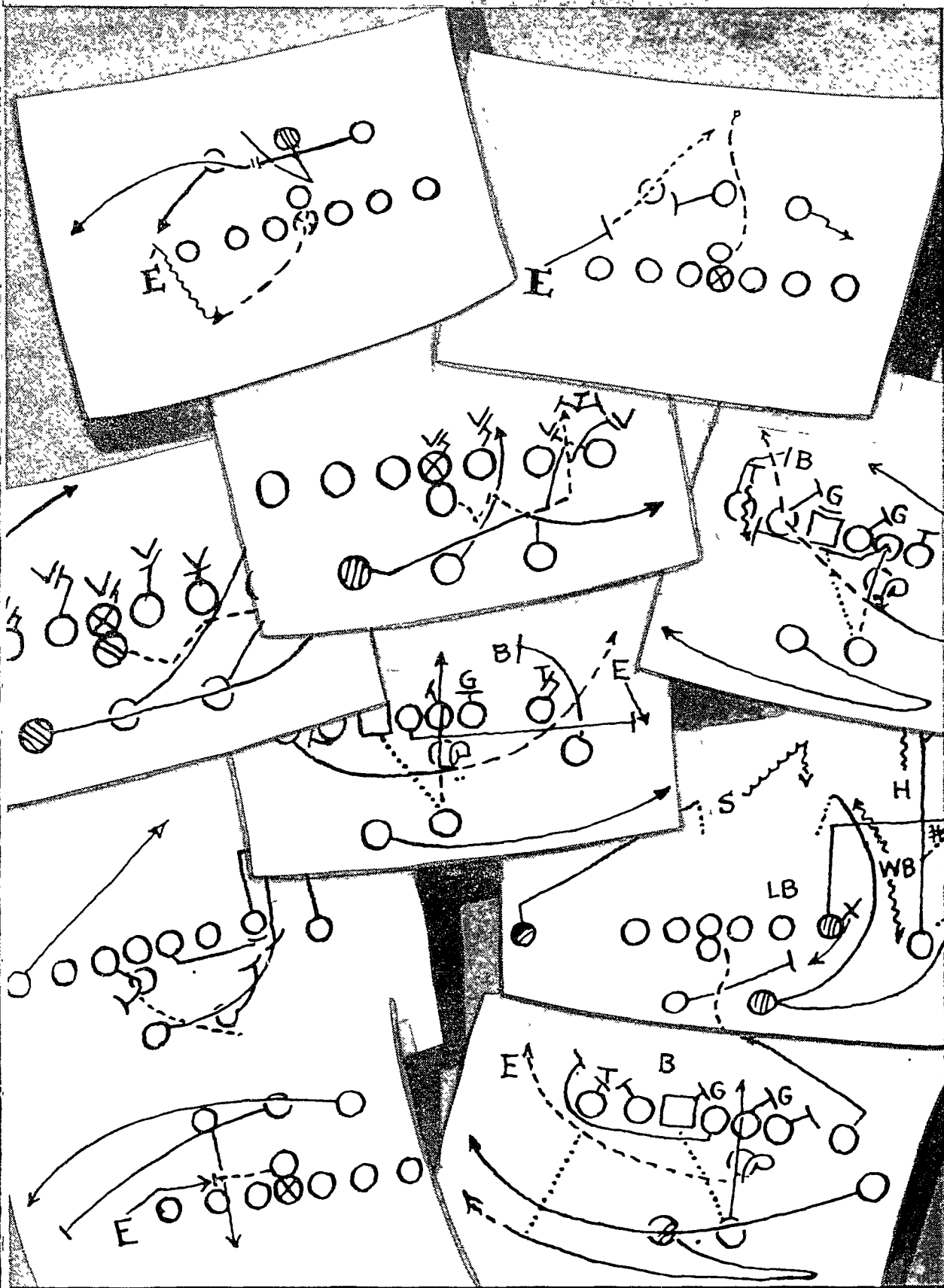


Notre Dame

A Magazine of the University of Notre Dame



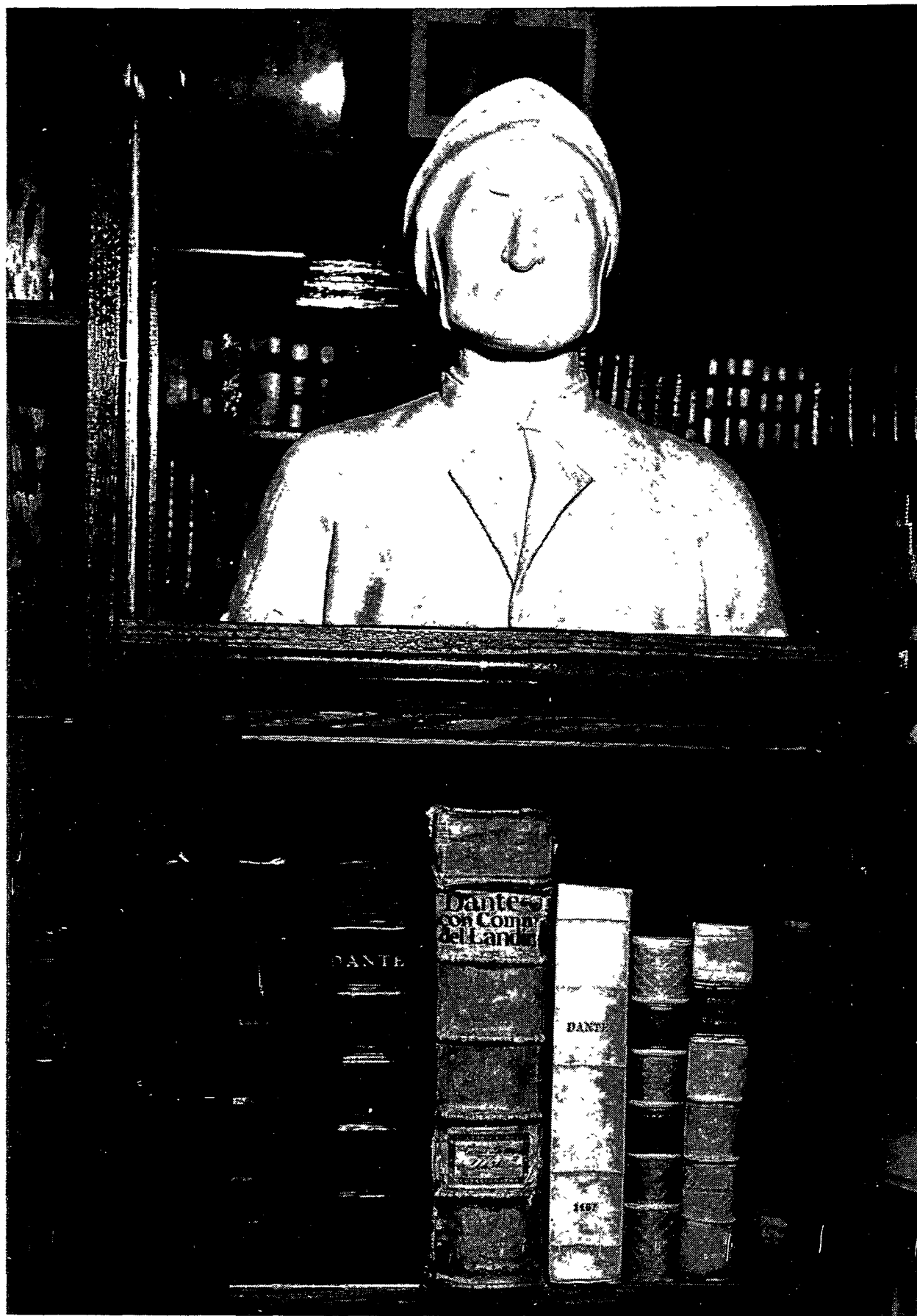
The above diagrams will remind sports-loving Americans that football is "in the air." For a better understanding of the game, read Terry Brennan's story on pages 6-7.

Contents:

- 2 The Zahm Dante Library
Rufus William Rauch
- 5 President's Page
Rev. Theodore M. Hesburgh, C.S.C.
- 6 This Game Called Football
Terry Brennan
- 8 What America Stands For
- 10 The \$100,000 Hering Scholarship
- 11 Dynamic Stabilization
- 12 58° Below Zero
Captain William M. Hawkes, U.S.N.
- 14 Atomic Education
- 16 Six Supreme Court Justices
at Notre Dame
- 18 Sponsors of Living Chairs
- 19 \$5 Million Faculty Fund

FALL

• 1957



THE ZAHM DANTE LIBRARY

By Rufus William Rauch

The author has been teaching English literature, at Notre Dame for the past thirty years. He received a bachelor's degree from Loras College and a master's from the State University of Iowa in 1925. Prior to accepting a position at Notre Dame, Professor Rauch taught at Marquette University from 1925-27. He was a Visiting Tutor and Great Books Lecturer at St. John's College, Annapolis, Md., in 1946-47. Professor Rauch has written numerous articles in AMERICA, CATHOLIC WORLD, AMERICAN REVIEW and the REVIEW OF POLITICS. He is married and the father of five children.

Professor Rauch has been elected president of the Notre Dame Faculty Club for the 1957-58 schoolyear. In recent years he has been working on a large book, called "A Companion to Dante."

One of the less well known but nevertheless notable treasures of the University of Notre Dame in its intellectual and cultural heritage is the Zahm Dante Library. This great collection of valuable books is one of the finest of its kind in the United States. It is named in memory of its founder, the Reverend John A. Zahm, C.S.C., the distinguished scientist, educator, apologist—popular lecturer and book collector also—who flourished at Notre Dame in the late nineteenth and early twentieth century. Father Zahm was a man of wide interests and many accomplishments. One of the earliest Notre Dame scientists, he worked particularly in geology and zoology, and in evolutionary theory. He was responsible, as vice president of the University, for the building of Old Science Hall (now reconstructed into the LaFortune Student Center) and the collecting of materials for the Science Museum. He travelled extensively in the Southwest, in South America, where he was associated with Theodore Roosevelt in a famous geographical and exploratory expedition, and in his latter years in Europe. He was the author of many volumes, on scientific subjects, on South American exploration, and on the relation between Christian dogma and the then new and highly controversial hypotheses of evolution. For a relatively short time he held executive posts in the University and in the Congregation of Holy Cross, serving for a term as vice president, then as American provincial, and finally as procurator-general in Rome.

With these multifarious activities

and professional duties in the earlier part of his career, Father Zahm developed a great interest in and enthusiasm for the life and works of Dante Alighieri, the greatest of all Christian poets. It was said of Zahm at the time of his death in 1921, by Father John W. Cavanaugh who had known him intimately, that as faithfully as Father Zahm said his daily Mass and office he was in the habit of reading at least one canto of the *Divine Comedy* every day before retiring.

It was this love of Dante's divine poem that made Father Zahm an avid and very successful collector of books by and about Dante. There have probably been more books written about Dante, his life, his works, their meaning and value, more editions and translations of his works into all the various modern languages, than is the case with any other writer ancient or modern, including Shakespeare. And to collect a first-rate scholarly Dante library today, not to say a definitive one, would require the resources of a millionaire, and even with unlimited resources the task would be almost impossible.

Zahm began his collection privately in the early years of the century, probably with money earned from the royalties on his own books, at a time when some of the great private libraries in Italy and in England were being dispersed. There was a remarkable revival of interest in Dante throughout the Western world during the nineteenth and early twentieth centuries, especially in England and the United States; among collectors and the great institutional libraries the market was very lively. Even so, though prices for rare and early editions rose rapidly, the money value of such volumes will have multiplied many times over in the years since then. The Fisk Dante Library at Cornell University was formed at that time; the Charles Eliot Norton private collection had been bequeathed to Harvard to form the nucleus of the Dante collection in the Widener Library there. These three, the Fisk, the Widener and the Zahm, are the richest Dante collections in the Western hemisphere.

The Zahm Dante Library consists now of about 4000 volumes, from the earliest printed editions to the latest critical works in various languages and the current issues of the scholarly Dante journals. Of the fifteen incunable editions of the *Divine Comedy* (those printed before 1500) the Zahm Library

has copies of eight, including a copy of the first Florentine edition, 1481, notable for its engraved illustrations based on the beautiful drawings by Botticelli and for the philosophical commentary of Cristoforo Landino. As a substitute for the very first printed edition, published at Foligno in 1472, it has the handsome facsimile published in 1911; it has also a copy of the first Aldine edition, Venice, 1502, and of the counterfeit Aldine published at Lyons in the same year. In all of these early editions, Dante's famous poem is named simply *Le terza rime di Dante*. The first use of the term *divine* came in the title of the first collected edition (though actually incomplete), *Opere del divino poeta Danthe*, Venice, 1512; later, by general acclamation, the title *Divina Commedia* was given to the poem.

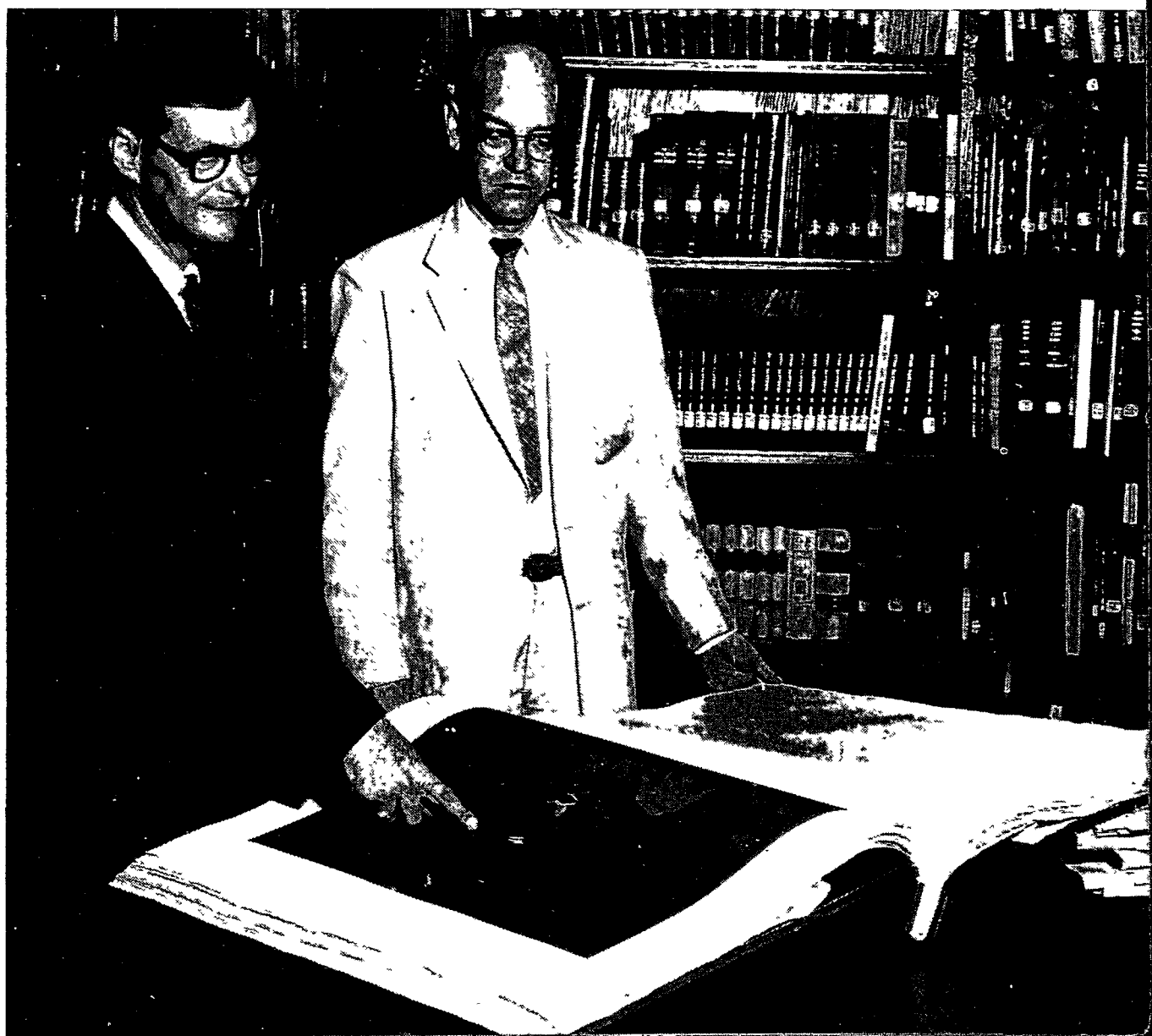
The Zahm Dante Library has no holdings of the manuscripts of the *Divine Comedy*, of which the surprising number of about 600 are known to exist. The most important manuscripts are in the Vatican and Florentine libraries. There is no known manuscript from Dante's own hand, unless possibly the marginal notes in a manuscript in the Vatican Library of the poems of Arnaut Daniel, the Provençal poet to whom Dante refers fondly in the *Purgatorio*, are in his handwriting. Some of the codices of the *Divine Comedy*

have been published, usually in handsome facsimile, and these are available in the Zahm Library.

The grandeur, scope and profundity of Dante's work were recognized very early. Commentaries and elaborate exegeses appeared soon after his death in 1321, and translations began to appear in the fifteenth and sixteenth centuries. Among the very early formal commentators were Dante's own sons Jacopo and Pietro, working independently of each other; Dante's great admirer and a great writer in his own right, Giovanni Boccaccio, who wrote also the first Life of Dante; Graziolo de' Bambaglioli, the Chancellor of Bologna, and Jacopo dello Lana, professor of the University of Bologna. All of these commentators (and others) wrote within a generation after the death of Dante.

The great surge, however, after the Renaissance and the Reformation, when Dante's prestige had declined and his work was only poorly understood, came with the Romantic Movement, in Germany, France and England, and with the Risorgimento in nineteenth century Italy. From that time to this, hundreds of editions and commentaries, translations, biographies, and learned specialized studies have appeared, in nearly all the languages of the civilized world. Most of these works, if not quite all, are available in the Zahm

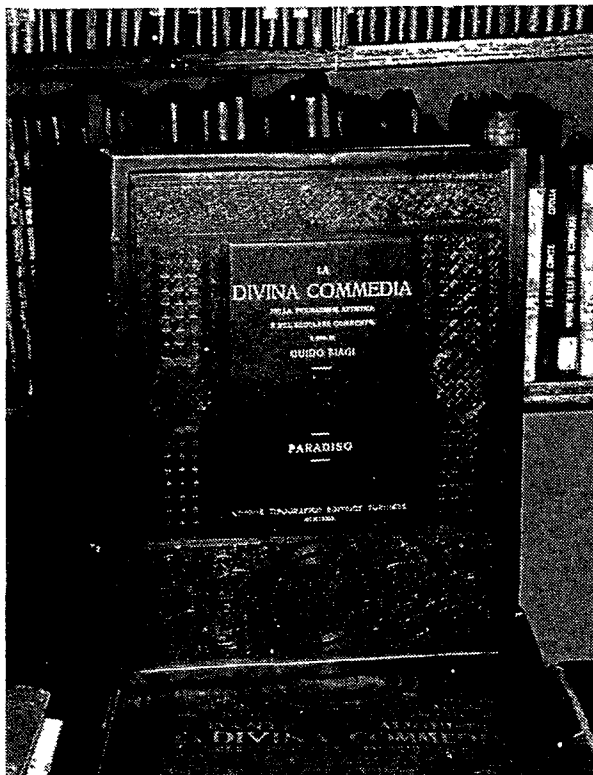
Mr. Rauch (left) and Library Director Victor Schafer inspect a copy of Dante's "Inferno."



Library. Some great controversies in the scholarly world have been waged about Dante's work (the *De Monarchia*, for example, was listed in the *Index Librorum Prohibitorum* for many years, for political reasons) and more than a few moot questions and unsolved problems still remain. Some of the translations are startling, in the very fact of their having been made, because good translation at best is very difficult and usually an unrewarded labor of love. For example, there is a translation into Japanese, but of the *Inferno* only, published in Tokyo in 1914. The title of the book, on the last page instead of the first, since the pagination is, to us, in reverse, would read something like this, literally translated: "a godlike poetic composition about the underground jail!" There are translations into Hebrew, Arabic, modern Greek, Finnish, Croatian. Strangest of all, perhaps, a translation of the *Paradiso* into Russian was published in 1945 in Moscow.

But these are only curiosities. The Zahm Dante Library is a superb workshop for the scholar and an inspiration, if rather an awesome one, for the serious student. All of the important editions in Italian, past and present, of all of Dante's works, are there, and the English translations, from the early ones by Cary and Longfellow and Charles Eliot Norton to the most recent ones by Binyon and Sayres and Bickersteth and Ciardi; and all the accumulated scholarship of generations of critics and experts, on the work which has been described as one of the supreme achievements of the human mind. The bound volumes of the learned journals are at hand: the *Giornale Dantesco*, the *Societa Dantesca Italiana Bulletin*, the *Deutsches Dante-Jahrbuch* and *Studi Danteschi*—both of which have resumed publication after a lapse during the war—and the Proceedings and Papers of the Dante Society of America. And there are dictionaries, biographical and linguistic, concordances, and other works of reference.

One of the most valuable modern editions for the scholar is that of Guido Biagi and his collaborators: *La Divina Commedia nella figurazione artistica e nel secolare commento*. This was an enterprise begun in 1921 in honor of the sixcentenary of Dante's death and finished in 1939. In three handsome folio volumes bound in morocco, this is a variorum edition, based for the text on a careful study of the extant manuscripts and including the most



The "Divine Comedy" is required reading in the College of Arts and Letters.

important passages from the best commentaries from the fourteenth to the eighteenth centuries. This compendium of commentary is so extensive that on each folio page a few lines of the poem, two or three stanzas at most of three lines each, are surrounded by two columns of explication. A copy of the *Paradiso* volume is shown in the illustration above.

The most luxurious (and expensive) edition is "elephant" folio in size (about two and a half by three feet), in three volumes bound respectively in three shades of morocco (for Heaven, Purgatory, and Hell) over boards bolted with bronze bolts, and illustrated in one hundred full-page colored reproductions of paintings by Amos Natini. The open volume of the *Inferno* is shown in the illustration on page 3. This was also a project for the sexcentenary, but was not finished until several years later. The text is printed by engraving in gold on especially made paper. The illustrations, one for each of the hundred cantos of the *Divine Comedy*, are very colorful and naturalistic in detail. The principal interest of this edition however, is that of an extremely lavish (and somewhat gaudily expensive) work of book-making.

Father Zahm's original collection came to the University Library after his death in 1921. It was carefully catalogued under the direction of Mr. Paul Byrne, and then housed in a large attractive room of its own, with an especially decorated ceiling using the Florentine lily as its motif. The cases are surmounted by various busts and sculptures of Dante, and the walls

lined with various reproductions and photographs of paintings and subjects relevant to the general theme, all of them collected by Father Zahm. These accoutrements are now in need of refurbishing and further development. The growth of the Zahm Dante Library has been made possible by use of the income from a small fund of money originally derived from the royalties on Father Zahm's books, at his request and so designated by the University. But this has not been entirely sufficient to fill the gaps of the original collection and at the same time to acquire new works as they are published anywhere in the world.

There has been a continuous tradition of courses in Dante at Notre Dame through several generations: from Father Zahm to Father John W. Cavanaugh (whose then famous course, after his retirement from the presidency, was given in the Dante Room for about ten years); to Professor Charles Phillips and Father Thomas Brennan, down to the 40's and 50's, when the present writer and more recently Professor John Frederick Nims have been giving such courses. In the revised curriculum of the College of Arts and Letters the *Divine Comedy* is again being read and discussed by students at Notre Dame, in a "great books" course called the Junior Collegiate Seminar, required of all juniors in the College. Thus the tradition, though at times almost at the point of vanishment, is being sustained and nurtured. Certainly it is a defensible thesis that every student of the humanities, particularly in a Catholic university, should know the *Divine Comedy*. Happily it is true again that no student will graduate Bachelor of Arts from Notre Dame without having read and discussed the great Christian poem of Dante Alighieri.

It is hoped that with this resuscitation a Dante professorship may some day be established at Notre Dame. Perhaps in the nearer and more practicable future, an annual Dante lectureship may be founded, as a step toward that goal.

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Fall, 1957

THE PRESIDENT'S PAGE



Rev. Theodore M. Hesburgh, C.S.C., is Notre Dame's sixteenth President.

During the present era, many state supported institutions of higher learning are expanding their physical facilities and increasing their teaching staffs to meet the rising tide of enrollment. In view of this situation we might consider the reasons why there should be a great Catholic university or any Catholic university at all.

The only legitimate answer would have to demonstrate that a Catholic university has a function, as a university and precisely as Catholic, fulfilled by no other. This function would have to meet a real and vital need in the world today, a need being met by no other agent. All other universities would suffer by comparison to such a providential institution. This institution would be proud of its place in the world, would fulfill its mission with enthusiastic zeal and unrelenting effort.

Universities, like all other institutions, came into being because men saw in them an answer to an urgent human need. Obviously, these needs vary somewhat from age to age. This results in a varied emphasis on the part of the university. This much though,

I think, should be stated as a matter of stable principle regarding university objectives irrespective of the actual cultural, political, religious, or economic climate of any age: The university is by its essential nature committed to the mission of learning and teaching. The university is born when human minds are at work together for intellectual purposes. The university prospers when men are willing to stand firmly for the value of things intellectual, to devote themselves wholeheartedly to study and learning and teaching that the human intellect may "become richer and stronger, broader in appreciation and sympathy, more firm in judgment, more sure in action . . . to gain at least some measure of wisdom, some vision of truth, some understanding of the Will of God."

It was such a vision and such an intellectual human need that first drew men together in an association that became a university at Paris, Bologna, Chartres, Oxford and Cambridge. It might be noted that all of these were Catholic universities at one time, since all their learning was ordered under

theegis of theology, the highest wisdom. They are not Catholic today because much has happened since, religiously, culturally, politically, and economically, to further complicate this essential intellectual task of the university.

Notre Dame's own history is a thrilling account of sacrifice, devotion, and sheer pioneering perservance that brought this university from a struggling grammar school to what it is today. In this the 116th year of Notre Dame history our immediate problems are the present and the future. Ours is a demanding spiritual task of the highest order, in fullest accord with the rich age-old tradition of Christian wisdom. Ours is an apostolate that no secular university today can undertake—for they are largely cut-off from a tradition of knowledge which comes only through faith in the mind and faith in God, the highest wisdom of Christian philosophy and Catholic theology. We must be conscious of our past heritage, and enthusiastic in bringing new insights of Christian wisdom to the present. Here is a task for the greatest minds, and the most devoted hearts and completely dedicated lives. I know of no other place on earth where we might make a better beginning than at Notre Dame, a new center of Christian culture, an awakening of the potential of Christian wisdom applied to the problems of our age. As a Catholic university we must not fail to exploit the full power of Christian wisdom to order what is disordered, to complete what is good but incomplete, to meet insufficient knowledge with the fullness of truth, to give a new direction and a wider, saner perspective to all that is good and true in our times.

Theodore M. Hesburgh, C.S.C.



THIS GAME CALLED

FOOTBALL

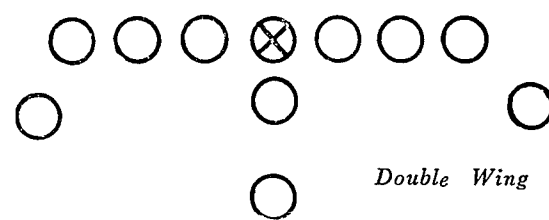
'Extra Points' to Enable You to Enjoy Those Gridiron Spectaculars

By TERRY BRENNAN

The author was appointed head coach of football at Notre Dame on Feb. 1, 1954. He was an outstanding athlete in high school and college, and played halfback for the Fighting Irish under Frank Leahy. Coach Brennan graduated in 1949 with an A.B. degree and majored in philosophy. While coaching at Mt. Carmel High School, Chicago, he attended night school at

DePaul University and received a law degree in 1953. Terry is married to the former Mary Louise Kelley of Milwaukee, and they are the parents of one son and two daughters. This article was prepared with the cooperation of McNaught Syndicate.

Thousands of sports-minded Americans are 'dyed-in-the-wool' football fans but most of them are not familiar with the basic formations and styles of



Double Wing

play that they view from a stadium seat or see on the television screen. This is not intended to be a short course on 'how to know the intricacies of football' but some of the following paragraphs may be helpful for you to enjoy the game this fall.

First of all, read the sports pages of your newspaper to pick up all the information possible about the two teams you're going to watch on Saturday afternoon. In that way you'll know what players to watch closely, the comparative size and speed of the teams, their strongest offensive and defensive maneuvers, and their style of play.

When a sports writer describes a team as a "split-T" eleven or a "T" or a "single-wing" or a "double-wing" club, you shouldn't have any difficulty recognizing those offensive formations as the team lines up to run a play before the snap of the ball.

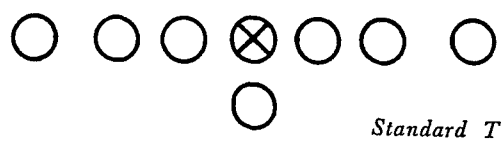
The "T" formation presents a team with a balanced line—a guard, tackle and end on each side of the center. The backfield lines up to resemble a "T" with the quarterback directly behind the center ready to take the ball and the fullback perhaps five feet behind the quarterback with the halfbacks spaced on each side of the fullback.

In the "T" formation the quarterback handles the ball on every play usually handing the ball off to one of the other backs or passing. Linemen are positioned close to each other, each lineman blocking an opposing lineman singly although they can double-team, two offensive linemen on one defensive man.

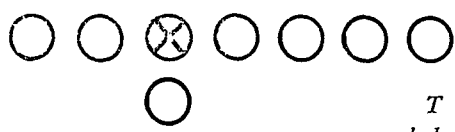
Occasionally you'll see a man-in-motion from the "T"—a back who runs parallel with the line before the ball is snapped. Deceptive ball handling is a trademark of the "T" along with quick thrusts into the line which makes it difficult oftentimes to follow the back with the ball.

The "split-T" is like the "T" in that the line is balanced with a guard, tackle and end on each side of the center with the backfield positioned in the shape of a "T"—the quarterback directly behind the center. The difference between the "T" formation and the "split-T," and from this difference

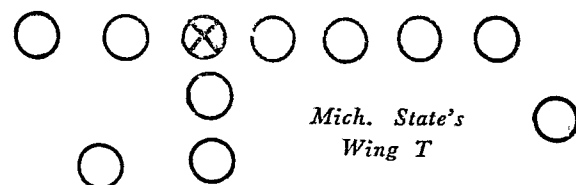




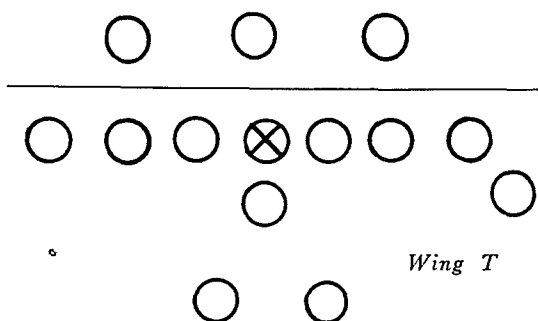
Standard T



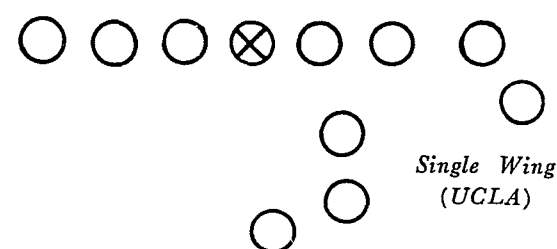
T with
unbalanced line



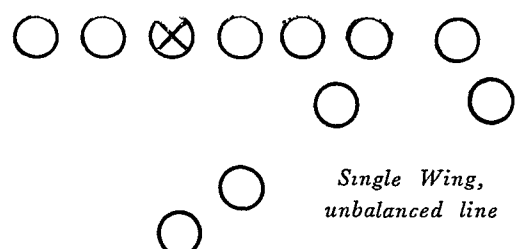
Mich. State's
Wing T



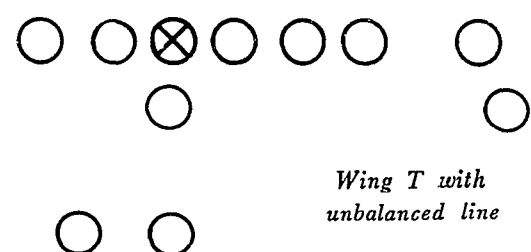
Wing T



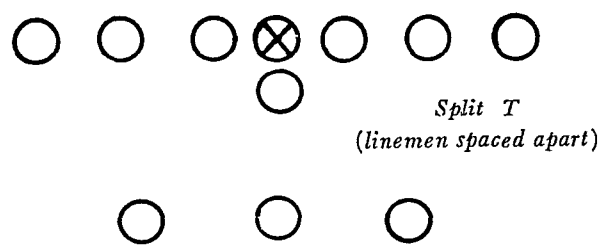
Single Wing
(UCLA)



Single Wing,
unbalanced line



Wing T with
unbalanced line



Split T
(linemen spaced apart)

comes the name, is a noticeable space—or split—between the linemen.

In the "split-T" you'll also notice that the quarterback carries the ball more often than his straight "T" counterpart. After taking the snap from center, the quarterback will move parallel with the line and he can either lateral to a back moving with and slightly forward but still behind him or he can run wide himself or cut sharply into the line depending on what the defense does.

Linemen in the "split-T" block one-on-one and you will see tricky ball handling with quick starting, fast-moving plays designed to prevent the defense from slashing through the gaps left on the line by the widely spaced offensive linemen.

The split offensive line obviously forces the defensive line to spread giving the defense a greater area to cover and consequently presenting the offense with more openings to run through.

The quarterback in this type of offense is usually the passer but he must be a good ball carrier and a quick thinker to execute to best advantage the optional plays in which he must decide in a split second whether to carry the ball himself or to hand off or lateral to another back. There is still another possible option play that is an integral part of the "split-T." The halfback who takes a lateral from the quarterback can either run or pass.

The "single-wing" and "double-wing" formations as a rule employ an unbalanced line with four linemen on one side of the center and two on the other. The backs may line up in a "T" but then they will shift either right or left with one back just outside the end, another a couple of yards behind the center, and the remaining two lined up roughly in between. The back who receives the pass from the center is usually a triple-threat man who can run, pass and kick.

In the "double-wing" backs are lined up outside each end which gives the system its name. Otherwise the formation is like the "single-wing" with an unbalanced line and triple-threat tailback. The "double-wing" is also a great passing formation because you can send the two ends and two backs downfield so quickly. Spread the "double-wing" out a little and you have a "spread" formation.

Both the "single" and "double-wing" systems emphasize power with their double-team blocking but more recently the formations have utilized more deception and trapping of opposing linemen than the old style "single" and "double-wing." In both formations you enjoy a great power threat to the strong side of the line, the side presenting four linemen against the opposition. This sets up weak side attacks and a number of trap plays.

There are variations to all of the systems but if you recognize the basic formations and know why they are being used and what they can do you

will recognize the changes. At Notre Dame last fall, for example, we occasionally used the "split-T," our basic formation, with an unbalanced line.

Each of the systems has advantages the others cannot offer but one thing is true of each. If you have proper execution of plays, if each man does his job, you can move the ball under any system.

"Football Nomenclature"

MOUSE TRAP—permitting a defensive lineman to charge through the line unmolested, then hitting him from broadside, thus opening up a hole.

BOOTLEG PLAY—is characterized by the entire backfield flowing, or running to either the left or right side. The quarterback will fake a hand-off to one of the halfbacks, then will hide the ball against his hip, or thigh. The quarterback then circles to the opposite side of the backfield flow and will either continue to run or stop to throw to the end.

STATUE OF LIBERTY—the play whereby a back will appear to pass, but will hold his position until another back, or end runs from the opposite side and grabs the ball from the posed passer-to-be.

BELLY SERIES—also called the "ride series." The quarterback will seemingly place the ball in the "mid-section" of another back, "riding" a short distance with him, while maintaining possession of the ball, then either completing the handoff or keeping the ball.

PITCH OUT—the lateral pass made behind the line of scrimmage to a back who will try to run to the outside.

FLANKER—any offensive back usually set into position outside of his own end.

WEAK SIDE PLAY—a play geared to the side of the center on which there are fewer offensive linemen aligned.

FAKING—a deceptive maneuver in which a player will seemingly do one thing and suddenly do another. The object of faking is to deceive opposing players causing them to commit themselves in a defensive manner.

DOUBLE TEAM BLOCK—two players "double" up on an opposing player in order to take him completely out of the sphere or area of attack.

OPTIONAL PLAY—a play in which the ball carrier has the choice of running with the ball or passing it. Basis of Split T formation plays.



What America stands for

"A Clear Presentation of American Ideas, Institutions, Goals and Practices"

"What America Stands For" was the subject of a symposium held at Notre Dame recently and sponsored by the University's Committee on International Relations.

Notre Dame's Committee on International Relations was established in 1948 under the leadership of the late Dr. Waldemar Gurian. Since then it has published twelve books and sponsored a number of campus symposia. These symposia, which have drawn together noted foreign affairs specialists from western Europe as well as this country, have dealt with problems arising from the "cold war" and the ethical and religious as well as political aspects of our relations with foreign powers. The research of The Committee on International Relations is supported in part by a \$100,000 grant received from the Rockefeller Foundation in 1955.

Dr. Stephen Kertesz succeeded Dr. Gurian as head of the committee. He is former Hungarian minister to Italy. Other Committee members are M. A.

Fitzsimons, editor of Notre Dame's *Review of Politics* and professor of history at the University; F. A. Hermens, professor of political science; John J. Kennedy, associate professor of political science; and W. O. Shanahan, professor of history.

Seven specialists in various aspects of American life spoke at the symposium whose object was "a clear presentation of American ideas, institutions, goals and practices," according to Prof. Kertesz. Rev. Theodore M. Hesburgh, C.S.C., Notre Dame president, served as chairman of the sessions which were held in the Law Auditorium on campus.

Visiting speakers and their subjects included Prof. Jerome G. Kerwin, University of Chicago, "The Living Constitution"; Prof. Louis Brownlow, Washington University of St. Louis, "The American City"; Don K. Price, vice president of The Ford Foundation, New York, N. Y., "Government and Science"; and George N. Shuster, president of Hunter College, New York, New York, "The Meaning of Higher Education in the United States."

Three Notre Dame faculty members, in addition to Dr. Kertesz, also spoke

at the symposium. They are John T. Frederick, "The Meaning of Literature in America Today"; Aaron I. Abell, "The Religious Factor"; and Matthew A. Fitzsimons, "American Culture: Universal Elements and Specific Features."

Distinguishing between European and American colleges, Dr. Shuster said the institutions differ principally in three characteristics. In Europe the selection of students for higher education is rigorous and personal with the instructor, while here it is based on authority as expressed in entrance exams. In Europe the lecturer presents the material and the students absorb it, but here the teacher and student cooperate in discovering material through discussion. And in Europe there is a unity of culture, but here the cultures vary widely from one

school to another.

"By our system of educating almost anyone who comes to the University, we pour into the nation innumerable riches which are squandered by other nations which categorically chop off all but the finest students," Dr. Shuster said. But this raises problems, he added. American colleges have neither the room nor the teachers to handle the great flood of students who will apply for entrance in a few years. To insure that our finest young minds are educated as they should be, the New York educator said, we must adopt a new system of selection which will come into operation in the early grades of high school, channeling some students into academic programs and others into "terminal high school courses."

Prof. John T. Frederick of the Notre Dame English Department said that American literature of the past century has been characterized by a moral earnestness and a "particularness or vital contact with the texture of American life."

"These two principles have been stated critically and realized creatively during the past century in the nation's letters," Frederick stated, and he traced the characteristics in the work of virtually every major writer in the period.

Speaking on "Government and Science," Don K. Price, of New York, a member of the Ford Foundation staff, said that while the role of the scientist is and had been on the rise for the past century, there is little danger of a

scientific plutocracy in this country. He explained that while problems of policy at the bottom of the scale can be answered with scientific formulas by experts trained in various fields, the ultimate course of action taken by any political unit must depend on a philosophical and moral decision made at the top of pyramid.

Price pointed out that Congress increasingly turns to experts in the government for answers to problems which their party platforms used to supply. In a way, Price maintained, the experts in the government bureaus pre-



Dr. Stephen Kertesz, head of International Relations Committee.

sent the policies and let the parties fight over them.

In another area of science, the government can exert great leverage on industry through the money spent on research. Half of all the money spent in this nation on aircraft and electronic research comes from federal funds, he said. The government expenditures for research have soared from 10 million dollars in 1900 to 2½ billions in 1957, he added.

The genius of the U. S. Constitution is its "flexibility," Dr. Jerome G. Kerwin, professor of political science at the University of Chicago, told those attending the symposium.

"The problems raised by mass education, urbanism, science, automation and world-wide stability seem staggering," Professor Kerwin observed. "As the Constitution has stood the rapid changes of the past, I feel sure that it will be wisely adapted to fit the changes of the future," he said.

"If the ability to apply wisely the written word to changing circumstances is lacking in a state, no written constitution can last through the storms that periodically break in the affairs of men and nations," Professor Kerwin asserted. After 168 years, he pointed

out, the Constitution of the United States "stands as the oldest of written documents governing the destiny of a free people. From a hodge-podge of ill-asserted resolutions, cleverly but not logically pieced together, it has become a living symbol of a free government," he said.

The trend toward greater central governmental control "has been a world-wide phenomenon for the past seventy-five years in all countries," Professor Kerwin noted. Nevertheless, he pointed out, "in this country more local self-government remains — dynamic and effective — than in any other civilized power on the face of



Fr. Paul Beichner, C.S.C., Graduate School Dean.

the globe." Some might marvel, he said, "not at the extent of federal power but at the restrictions still imposed, respected and observed."

"America cannot content itself with preaching universalism while we are preoccupied with domestic affairs," Fitzsimons explained to the audience. "Human dignity and freedom are inseparable, and in affirming them we directly meet their difficult consequences. These are that we cannot manufacture a simple global faith to



Prof. Jerome G. Kerwin, University of Chicago.

rival Communism and that we must soberly remind the restless people of the world that ultimately each nation makes itself to its own flourishing or undoing," he declared.

Pointing out that America's civilization is characterized by diversity and variety, Fitzsimons said that "from the foundation there was pluralism rather than unity."



Don K. Price, Ford Foundation vice-president.



Prof. Louis Brownlow, Washington University of St. Louis.

Speaking on "The Religious Factor," Aaron I. Abell, also of the Notre Dame faculty, dwelt on diversity in American culture in its religious aspects. The presence of many religions in this country led to the inclusion of religious freedom guarantees in the Constitution, he said, and he emphasized the continuing contribution of the churches to education on all levels, to Americanization and understanding among the diverse racial and immigrant strains in the population, and to social service and social reform.

According to Professor Kertesz, the symposium "unfolded the picture of how the dynamic American system of government has made possible a profound revolution without upheavals and how traditional American concepts and values have been applied to the rapidly changing conditions of modern life." The various speakers, he said, endeavored to make a "critical appraisal and sincere evaluation" of our country whose "intellectual strength, determination and courage" greatly influence the direction of world events today.

The \$100,000 Hering Scholarship Fund

University Receives Generous Bequest



Mrs. Hering

Mrs. Claribel O. Hering, who died on June 4 in her South Bend home, has bequeathed \$100,000 to the University of Notre Dame besides a vast personal collection of books, and cultural and art pieces. The will stipulates that the proceeds be used for student aid and that it be known as the "Frank E. Hering Scholarship." With regard

to her personal effects, the University is directed to display them in an exhibit called the "Hering Room."

The entire estate was valued at \$180,000 and Mrs. Hering gave generously also to various local, civic enterprises and national welfare programs. Mrs. Hering, the former Miss Claribel Ormsby Orton, was born in Milwaukee, Wisconsin. She devoted much time and effort to the Hering House Community Center in South Bend, the St. Joseph County Humane Society and the Morningside Youth Center. During her entire life she was especially fond of animals and often displayed unusual interest in them.

She married Frank E. Hering who was Notre Dame's first professional football coach and a former grid captain



Mr. Hering

of the Fighting Irish eleven. Mr. Hering, before his death in 1943, served with great distinction in various capacities for his Alma Mater. For many years he was a member of the Associate Board of Lay Trustees and in 1930 he was elected national president of the Notre Dame Alumni Association. The University awarded him a bachelor of literature degree in 1898 and a bachelor of laws degree four years later.

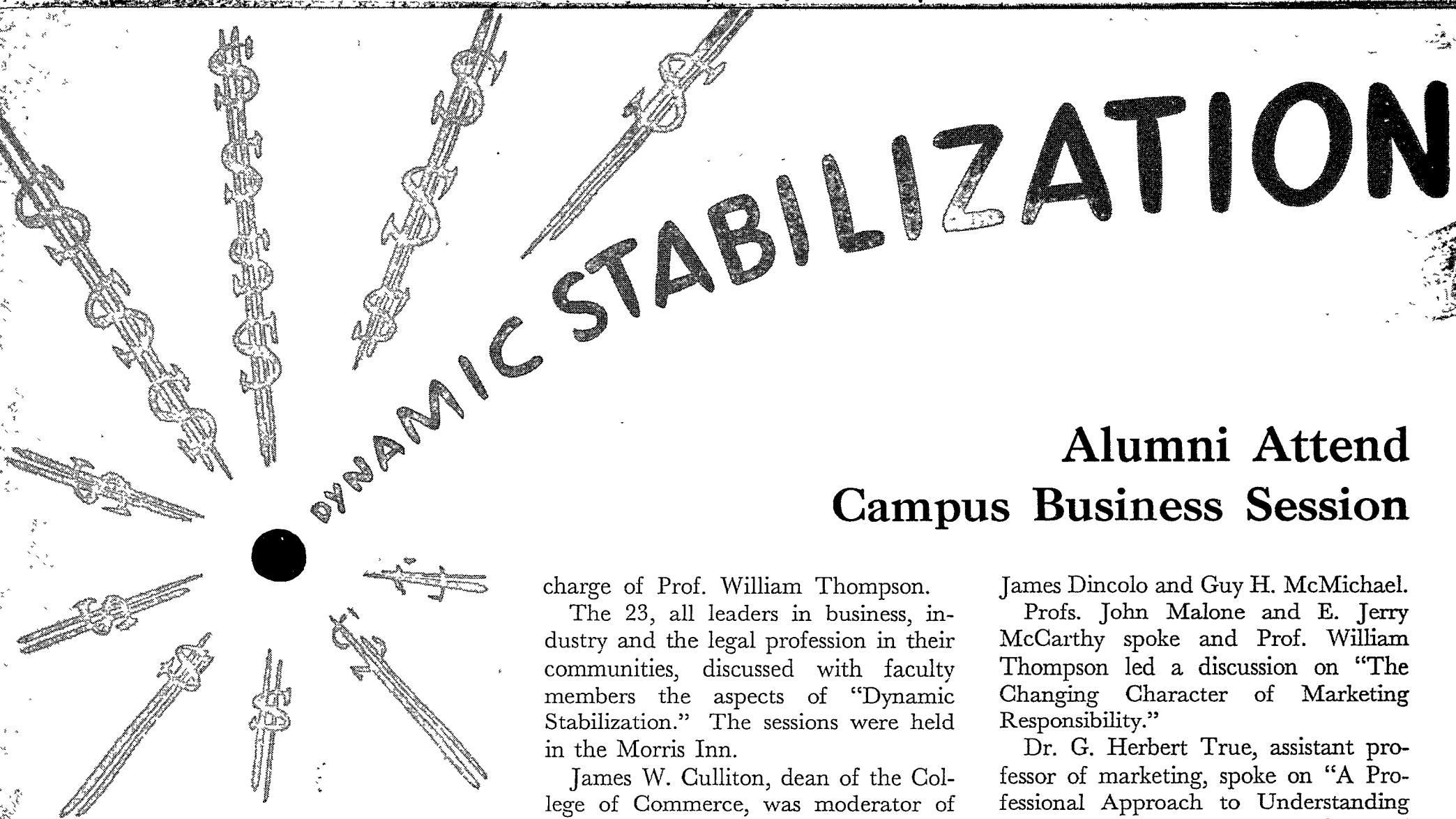
In addition to coaching the football team, he was the first basketball coach at Notre Dame, and served as coach of the baseball and track squads. Besides tutoring athletes, Mr. Hering taught History and English as a member of the faculty.

This versatile alumnus was one of the country's outstanding public lecturers and edited the nationally-circulated Eagles magazine for a number of years. He is generally recognized as the founder of 'Mother's Day,' in 1904. Although neither Mr. or Mrs. Hering were Catholics both maintained a keen, personal interest in the University's educational program.

For the guidance of those considering making a bequest to the University of Notre Dame, the following form is suggested:

I hereby give and bequeath to the University of Notre Dame du Lac, an Indiana corporation, at Notre Dame, Indiana, the sum of dollars.

All the rest, residue, and remainder of my estate, both real and personal, I give, devise, and bequeath to the University of Notre Dame du Lac, a corporation, located at Notre Dame, Indiana.



Alumni Attend Campus Business Session

Twenty-three Notre Dame graduates from a cross-section of business and industry in 14 states returned to the campus for a two-day Alumni Business Conference sponsored by the College of Commerce. Arrangements were in

charge of Prof. William Thompson.

The 23, all leaders in business, industry and the legal profession in their communities, discussed with faculty members the aspects of "Dynamic Stabilization." The sessions were held in the Morris Inn.

James W. Culliton, dean of the College of Commerce, was moderator of a discussion on "Monetary and Fiscal Policy" at the opening session. Faculty members taking part included Thomas T. Murphy, assistant dean, and Profs. Raymond P. Kent and LeClair H. Eells.

Participating in a session on "Taxes — a Bridge Between Fiscal Policy and Business Management" were Prof. Louis Anderson as moderator and Profs.

James Dincolo and Guy H. McMichael.

Profs. John Malone and E. Jerry McCarthy spoke and Prof. William Thompson led a discussion on "The Changing Character of Marketing Responsibility."

Dr. G. Herbert True, assistant professor of marketing, spoke on "A Professional Approach to Understanding Creative Behavior" at a luncheon of the group.

Five members of the Federal Mediation and Conciliation Service gave a demonstration in union-management contract negotiations. They were: Chester E. Ralston, South Bend; Douglas Brown and George L. Kennedy, Chicago; Virgil H. Burtz, Milwaukee, Wis., and Arthur C. Ingles, Indianapolis. Prof. Wayne Anderson led a discussion after the demonstration.

The conference closed with a dinner at which Prof. Murphy addressed the alumni on "Permanence and Change in the Notre Dame College of Commerce."

Those registered for the sessions included John G. O'Malley, Phoenix, Ariz.; George R. Meeker, Arcadia, Calif.; Vincent J. Ryan, Playa Del Rey, Calif.; Richard L. de Golian, Atlanta, Ga.; Leonard H. Skoglund, LaGrange Park, Ill.; Frank J. O'Laughlin, Wilmette, Ill.; William F. Flaherty, Great Barrington, Mass.; E. Joseph Moore, Grand Rapids, Mich.; Vincent R. Shiely, St. Paul, Minn.; Donald L. Doheny, Creve Coeur, Mo.; and John J. Griffin, University City, Mo.

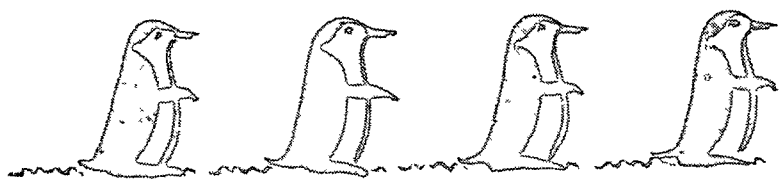
Also John C. Mowbray, Las Vegas, Nev.; Frank L. Linton, Garden City, N. Y.; Thomas P. Liston, Rochester, N. Y.; John T. Whitely, Sands Point, N. Y.; Leo J. Burby, and P. Joseph Mulligan, Cleveland Heights, O.; Roy A. Walter, Lima, O.; Carl J. Senger, Tulsa, Okla.; Joseph P. Somers, Glenshaw, Pa.; James M. Hufnagel, Ivyland, Pa., and Thomas W. Carroll and Robert T. Rolfs, Racine, Wis.



Left to right: Dean Culliton; Joseph Mulligan, Cleveland Heights, O.; John O'Malley, Phoenix, Ariz., and Roy Walter, Lima, O.

Twenty-three prominent alumni attended the conference.





Alumnus Has Prominent Part in "Operation Deep Freeze," Antarctic Expedition

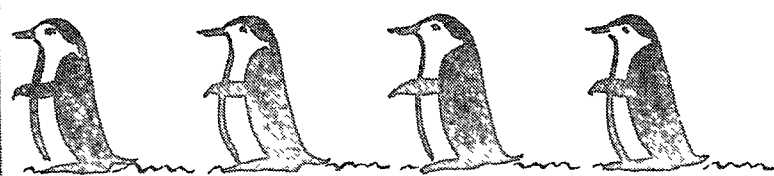
By Capt. William Hawkes, '33

(Ed. Note: The foregoing account vividly describes the landing of the first plane at the South Pole. A prominent Notre Dame alumnus, Captain William M. Hawkes, USN, '33, served as co-pilot of the seven-man expedition. The only other explorers who had previously journeyed to the Pole were the British who arrived there on foot in 1912. Scientific discoveries at the Antarctic during the International Geophysical Year may prove of inestimable value affecting the lives of people all over the world. The American group braved frigid blasts of 58-below-zero when the R4D Douglas Skytrain landed on this frozen Sahara. Captain Hawkes' article has been officially approved by the United States Navy. John Cackley.)

My association with the Antarctic began in 1939 when Lt. George Dufek (now Rear Admiral Dufek) sailed South with the U. S. Antarctic Service Expedition as navigator of the BEAR. He and I were, up to that time, flying mates in Scouting Three, a dive-bomber squadron of what was then called the Battle Force, Pacific Fleet.

We met occasionally during World War II and were reunited in 1946 when we both went South; he as commander of the seaplane group which engaged in the mapping of the Antarctic coastline, and I as head of the long-range exploratory ski-planes which were employed in photographic mapping of as much of the interior of the continent as could be reached from our base at Little America. My passenger for much of the expedition was Rear

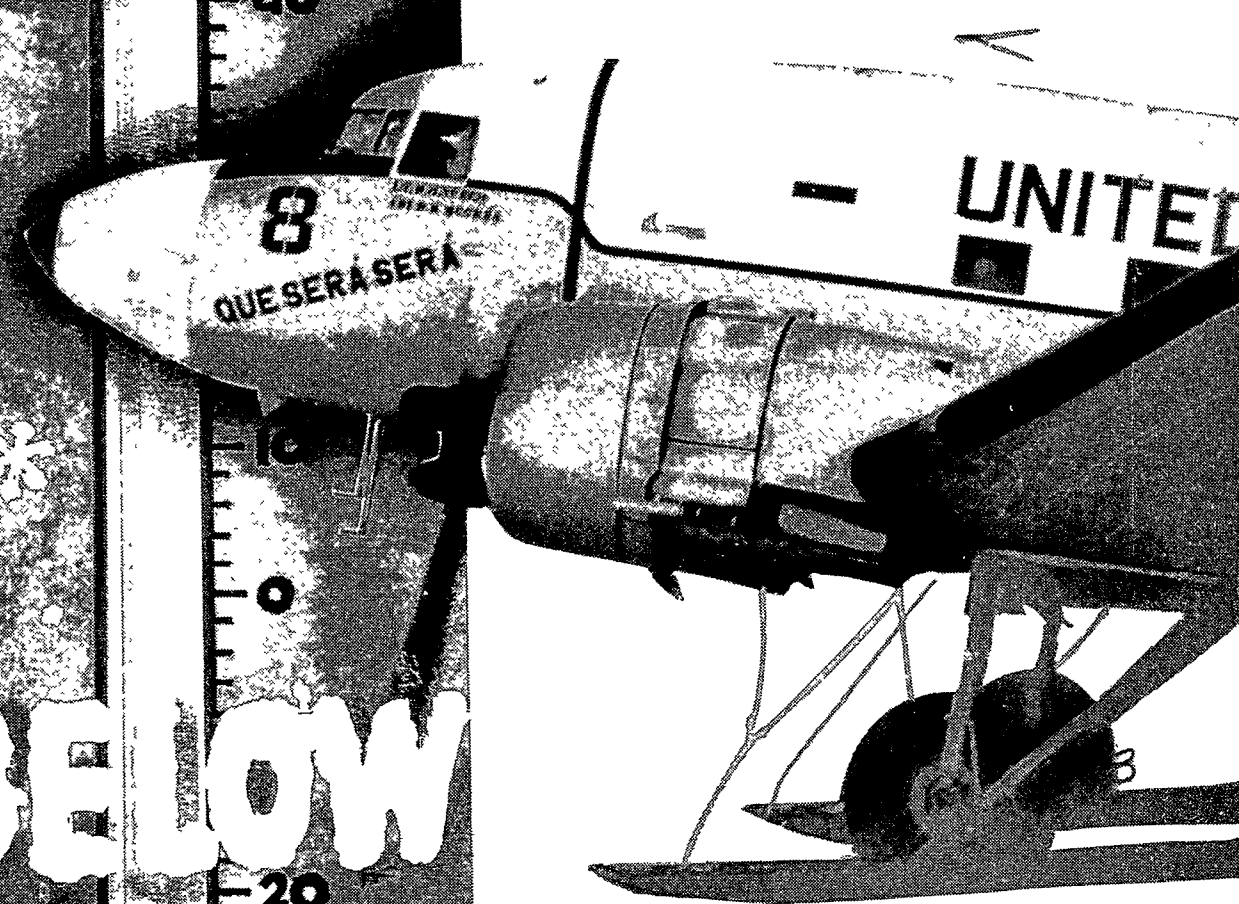
The "bee" is symbolic of those hardy construction men who built shelters at the Pole — the famed Seabees of World War II.



Admiral R. E. Byrd and my co-pilot was Lt. Conrad Shinn, about whom more later.

In 1949 the Navy was again called upon to continue its exploration in the South and we were just about ready to sail when the powers-that-be had a change of heart and the program was cancelled.

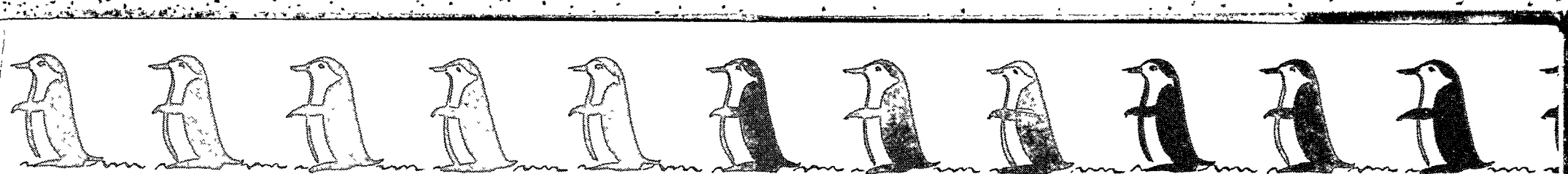
In 1954, with the advent of the International Geophysical Year, Operation Deep Freeze was established and the routine again started but this time on an elaborate scale; larger and better aircraft, many bases, scientists by the dozens, etc. I was safely ensconced behind a desk when the phone rang and once more I was on my way, to Rear Admiral Dufek's Staff as his Aviation Officer.



By October 1955 all was ready aviation-wise and we flew to New Zealand and then to McMurdo Sound, a spot in the Antarctic about 2300 miles from New Zealand. The ships followed and set up camps on the fringe of the continent, a prerequisite to the scientific bases to be established later in the interior.

From the cockpit of a Navy patrol bomber I had the good fortune to drop a Notre Dame pennant on the Pole as I passed by on the first flight ever to span the continent—from the Pacific to the Weddell Sea and return, about 3500 miles. The primary mission of





CAPTAIN HAWKES

the aircraft was to determine whether bases could be erected at the areas selected and requisite personnel and equipment flown in by the ski-planes. I therefore visited all the projected sites and had a good look at plenty of frozen real estate on the way. The oncoming Winter night forced the ships and aircraft to withdraw early in 1956 and we left behind about 160 men to keep things going until we returned.

So, the following October, back we came and the question which loomed largest was whether we'd be successful in our first attempted landing at the South Pole where we intended to erect a scientific base. While professing its ease to one another those of us who were to be directly engaged all felt some private doubt. In an attempt to reassure myself I flew very low over the Pole on three occasions and I wasn't reassured at all. The surface looked hard and rough—waves of snow 10 to 30 inches high, swells measured in feet—a snowy waste frozen into the immobility characteristic of the Antarctic, aggravated by its 2-mile height and -50° temperature. But, no matter how often I looked, it surely wouldn't get any lower or much warmer and meanwhile time was wasting.

On 31 October 1956, New Zealand date, we made our first and fortunately successful attempt. The aircraft we employed was a specially-equipped Navy R4D similar in external configuration to the conventional twin-engine transports used by many airlines. With the exception of accommodations for two

passengers its interior was completely occupied with survival equipment and auxiliary fuel. As pilot I had selected Lieutenant Commander Shinn, my copilot from the 1947 expedition. I went along as copilot, Rear Admiral Dufek as passenger.

Weather conditions were forecast to be excellent, and the 24 hours of continuous daylight was a particular blessing. For the first 400 miles we flew at low altitude, unwilling to sacrifice the fuel required by an early climb in our greatly overloaded condition. Our aircraft skis slowed our cruising to 98 knots, barely above stalling speed. Four hours after take-off we reached the foot of the Beardmore Glacier, a gigantic river of ice a hundred miles

supply. It was later a source of satisfaction to observe the C-124 flying lazy circles dead ahead, with the Pole directly beneath.

As a prelude to landing we had to determine the wind direction, flying triangular patterns at decreasing altitude. While so engaged we became distressingly aware that it was cooling off outside, the temperature dropping with every foot of altitude and already at -40°F .

I lowered the landing gear and watched the skis drop into position. All looked well but a red warning light blinked on, indicating an unsafe ski condition. Hoping that it was due merely to a frozen switch we squared away on final approach. Large clods



Captain Hawkes (holding microphone) and Rear Admiral Dufek after they landed at the South Pole in 1956.

long and a dozen wide, sweeping down from the Antarctic Plateau.

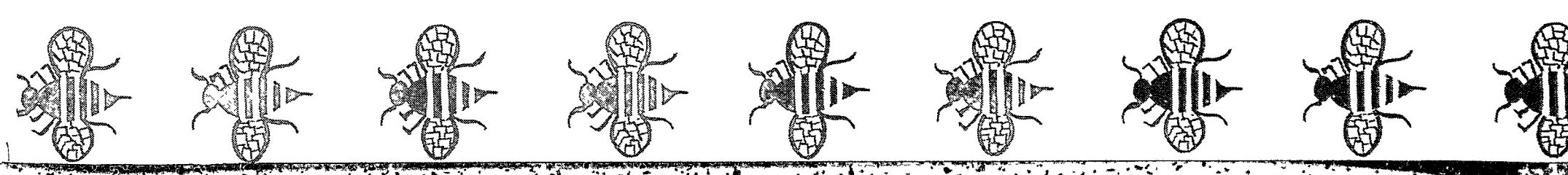
Being lighter by 3000 pounds due to expended fuel we labored to the 10,000 foot altitude required to surmount the glacier and finally reached the plateau. The Pole itself lay 300 miles due South.

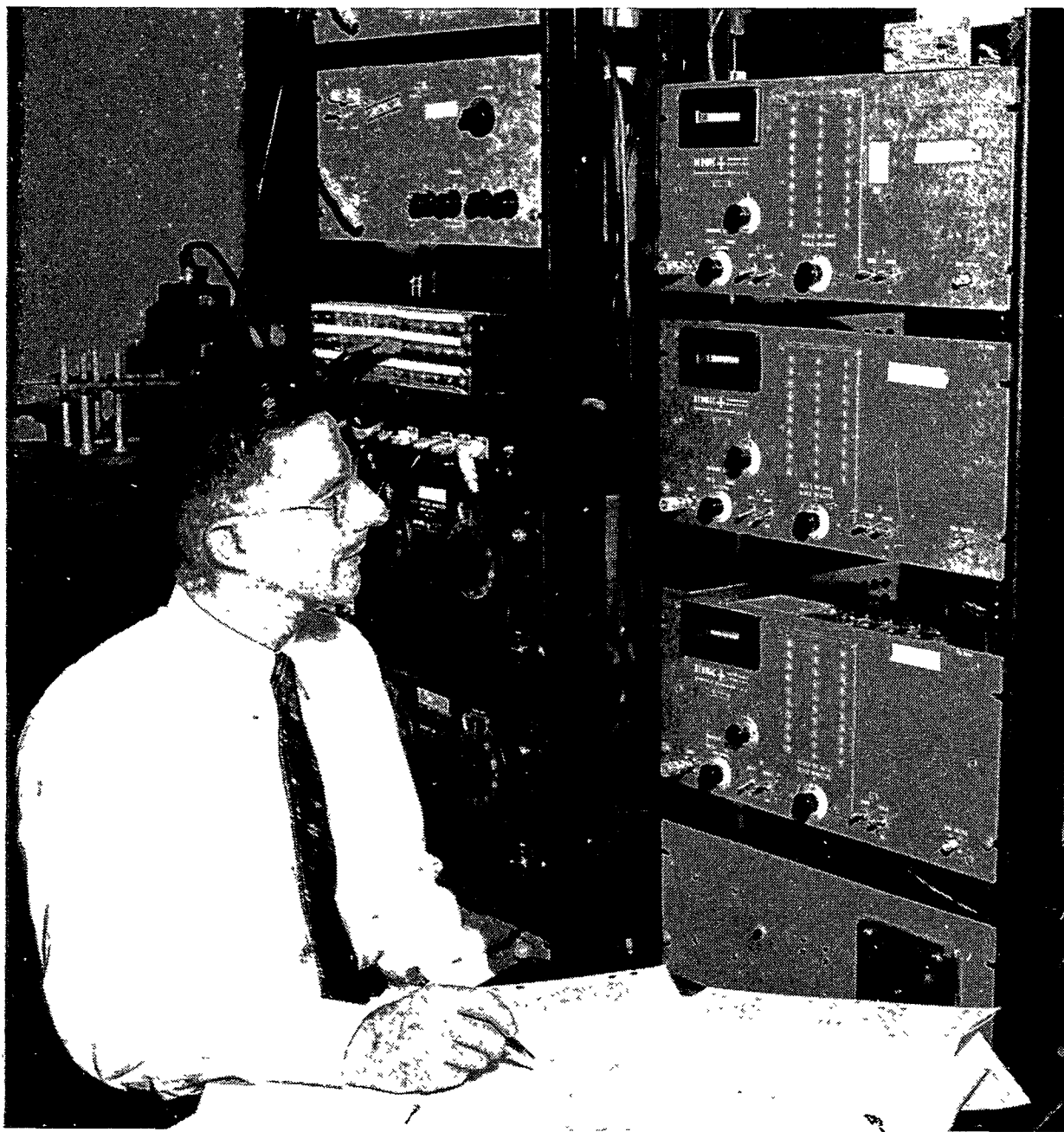
At that time we were passed by an Air Force C-124 Globemaster, assigned to drop to us the tents, food, sledges and other items needed for survival in the event our projected landing and take-off met with misadventure. Cruising at double our speed the C-124 was to reach the Pole before us and undertake the plotting of its precise location, a time-consuming affair we in the R4D could ill afford with our limited fuel

of congealed oil began pouring out of the starboard engine and struck the control surfaces with a nerve-wracking thump. Not exactly a heartening picture, 800 miles from base.

Finally, we touched down. Not gently, but down. The plane slithered to a rough stop in a few hundred feet on a surface akin to a frozen ocean—closely packed waves of icy snow, flint-hard and 20 inches high, remnants of past storms, interspersed with patches of new fallen snow granular as sand at the -58°F . our thermometers then indicated.

All aboard promptly busied themselves at their prearranged tasks. Rear Admiral Dufek stepped out, the first
(Continued on page 17)





Dr. Newman is head of the Mechanical Engineering Department.

ATOMIC EDUCATION

Current Program Is for Undergraduates in the College of Engineering

Notre Dame students in the College of Engineering are learning the application of nuclear fission to industrial uses in a new series of courses which has already enrolled a number of undergraduates in it.

To retain its stature as a great modern university, Notre Dame must recognize and satisfy the needs of contemporary society. In a few short years the use for atomic power, until re-

cently thought to be only military, will become more far-reaching than that. The United Nations Conference on Atomic Energy, held at Geneva in the summer of 1955, emphasized the amazing increase in energy consumption that has accompanied industrialization. In 1950, the world was taxing its power sources at ten times the rate of a century before. If the demands of modern living continue to push the power con-

sumption upward at the present rate, then fossil fuels such as coal, oil, and natural gas will be virtually depleted in the foreseeable future. Right now, fossil fuels account for about 80% of the world's total power reserve. The problem boils down to this: If we don't develop a suitable substitute for fossil fuels as a power source and do it soon, we're going to be faced with a serious power shortage as early as the year 2,000.

At present, the atom seems to provide the most workable solution to the energy problem. The nine-member McKinney Panel on Peaceful Uses of Atomic Energy, whose work was authorized and financed by Congress, was concerned with the prospects of energy shortage, and more immediately with the dearth of competent nuclear engineers and scientists in our country. It is primarily the responsibility of higher education to alleviate this manpower shortage. The committee's recommendations emphasized that there is no single master plan for colleges and universities to follow. It advocated several alternative plans, specifically recommending, among other things, an increase in the number of nuclear reactors to be made available to universities.

A nuclear reactor is a device in which fissionable material can be split. This breaking up of the nuclei of atoms

Three Grants Totaling \$40,000

Three grants totaling more than \$40,000 have recently been awarded by the National Science Foundation and the Atomic Energy Commission to Notre Dame's Department of Mechanical Engineering.

Dr. M. K. Newman has received a grant of \$14,900 from the National Science Foundation to conduct a two-year research program on "Thermo-Elastic Damping in Impact Vibrations of Beams."

A second National Science Foundation grant of \$12,800 will be used by Dr. Kwang Tzu-Yang, assistant professor of mechanical engineering, for a "Study on Unsteady Laminar Boundary Layers with Heat Transfer."

An Atomic Energy Commission grant of \$13,400 is being used to purchase equipment and instrumentation for the nuclear engineering program, Dr. Newman said.

is controlled in the reactor to bring about a chain reaction in many atoms, producing atomic energy. This energy can then be utilized to generate power.

The inevitable development of nuclear energy for peaceful uses and the need for trained nuclear engineers was recognized by Dr. Karl E. Schoenherr, Dean of the College of Engineering, soon after World War II. About 1948 plans were formulated under his leadership for the development of a nuclear engineering program at Notre Dame. At first, there was some uncertainty whether the development of this program should be entrusted to the Chemical or the Mechanical Engineering Department. This uncertainty resolved itself when it became apparent that the near-future application of nuclear energy was in the field of power production—the traditional field of the mechanical engineer. Thereafter, the Dean assigned the program to Dr. Marcel Newman who had joined the faculty in 1950, and had the requisite theoretical background in nuclear physics.

Dr. Newman received his basic engineering background at the Polytechnical Institute of Hannover, Germany and the University of Kentucky, earned

his Master's degree at Pittsburgh, and holds a doctorate from Columbia.

Notre Dame's nuclear engineering program is a fundamental one concerned with the application of principles of chemistry, nuclear physics, and modern physics to problems of nuclear engineering, radiation shielding, metallurgical requirements, and other related subjects. An elective course in nuclear engineering was first offered in 1954. Based on principles of nuclear physics, the course stressed reactor theory. This year the curriculum was expanded into a full program, giving the mechanical and other engineering students the opportunity to take a Nuclear Power Option beginning in the second semester of the junior year. The option has a total of 18 credit hours in chemical physics, nuclear physics, and nuclear engineering.

The present program is therefore for undergraduates and its purpose is educational. Eventually it may be expanded into a graduate program with research. There are several reasons for not entering into graduate work immediately, as explained by the Dean. First, the dire need at present is for trained engineers and not for more research, since the large government re-

search laboratories such as the Argonne, Oak Ridge and Brookhaven, are fully able to handle all research problems. This is well illustrated by the fact that the Atomic Energy Commission last year announced a program by which grants of up to \$350,000 may be made to a school for instructional purposes in Nuclear Engineering, but not a penny for research. Secondly, graduate studies require extensive and very expensive preparation, while an undergraduate program can be developed at relatively small expense. Finally, it is quite difficult to attract graduate students to a school, even after a program has been developed, while it is relatively easy to "sell" it to undergraduates now on campus.

This brings up the question whether or not the University should install a reactor. As long as the program remains mainly educational a large expensive reactor is not necessary. Many of the most instructive experiments can be performed equally well or even better on a small power reactor or a sub-critical assembly as on a large reactor. On the other hand, should the program be eventually expanded into research graduate studies, then the

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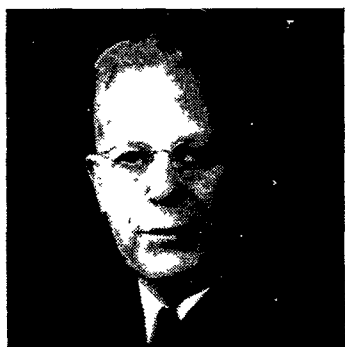
Work is progressing on the nuclear engineering laboratory in the Heat-Power building.



Six Supreme Court Justices at Notre Dame

In what may be a precedent-shattering record, distinguished jurists participating in past and future Law School and other programs at Notre Dame include six members of the United States Supreme Court. All but Justice Brennan have appeared on campus in recent months while he will be one of the judges in the October Moot Court trials.

Chief Justice Earl Warren was the principal speaker at this year's Commencement exercises when more than 1,200 Notre Dame students were graduated. He was appointed Chief Justice of the United States Supreme Court by President Eisenhower in 1953, after a brilliant career in public office. The Chief Justice received his legal training at the University of California where he was awarded a Bachelor of Laws degree in 1912 and a J.D. degree two years later. Many universities and colleges have conferred honorary doctorates upon him including the University of Redlands, College of Pacific, University of Southern California, Santa Clara, University of Alaska and Notre Dame.



Earl Warren

A native Californian, the Chief Justice served his state as governor from 1943 to 1953. He had also been attorney general, temporary chairman and keynote speaker of the 1944 Republican National Convention, and Republican nominee for vice-president of the U.S. in 1948. President Eisenhower named Chief Justice Warren as this country's Special Ambassador to the coronation of Queen Elizabeth in 1953. For the past four years he has been Chancellor of the Board of Regents of the Smithsonian Institution and Chairman of the National Art Gallery's Board of Trustees.

Chief Justice Warren has received decorations from many foreign nations including the Luxembourg Crown of Oak, British Coronation Medal and Italian Star of Solidarity.

Honorable Stanley F. Reed, retired

associate justice of the Supreme Court, was the principal speaker at the Law School's fourth annual honors banquet. A native Kentuckian, Justice Reed received an A.B. degree from Kentucky Wesleyan College and also from Yale University. He studied law at the University of Virginia and Columbia University. Justice Reed has been the recipient of honorary degrees from Kentucky, Columbia, Yale and the University of Louisville. This distinguished jurist was admitted to the Kentucky Bar in 1910 and had an outstanding career in private practice as well as in government. At various periods he served in the following capacities: general counsel of the Federal Farm Board; general counsel of the R.F.C.; special assistant to the Attorney General; solicitor general of the United States; member of the Kentucky legislature; and chairman of the President's Committee on Civil Service Improvement. He is a veteran of World War I, having been commissioned a First Lieutenant in the U.S. Army.

Justice Reed was appointed to the nation's highest tribunal by President Roosevelt in 1938. He retired from the Court this past February after 19 years as associate justice. Chief Justice Warren recently cited him as "a man who served the Court and served the nation to a remarkable degree."

Associate Justice Tom C. Clark presided at Notre Dame's sixth annual Moot Court Competition along with two other distinguished jurists, Judge Potter Stewart and Judge W. Lynn Parkinson. Born in Dallas, Justice Clark attended school at Virginia Military Institute and received a bachelor of laws degree from the University of Texas in 1922. He also has been



Stanley F. Reed



Tom C. Clark

awarded honorary degrees from Bethany College, Centre College, Missouri Valley College and Texas Tech. During World War I, he was a member of the 153rd Infantry.

After five years of law practice, Justice Clark became Civil District Attorney for Dallas County, and was associated with a Dallas law firm for two years. In 1937 he joined the Department of Justice as an attorney and President Truman named him Attorney General in 1945. As Attorney General he was recognized for his fight for civil rights and better citizenship, his support of public education against crime and his aggressive attack on communist infiltration.

Mr. Justice Clark is the first Texan to be appointed to the Supreme Court, succeeding Mr. Justice Murphy in 1949. He has helped to awaken the nation to the necessity of expanding juvenile opportunity.

Associate Justice John Marshall Harlan assisted in judging Moot Court competition at Notre Dame during the 1956-57 school year. Born in Chicago, he attended Princeton University and received a Bachelor of Arts degree from that institution in 1920. During the next few years Justice Harlan was a Rhodes Scholar and was awarded several degrees from Oxford University in England. He took his legal training at New York Law School and is the recipient of a Bachelor of Laws degree.

Justice Harlan was appointed to the Supreme Court in 1955 following an outstanding career in private practice and in government posts. He has been chief counsel of the New York State Crime Commission, assistant U.S. attorney general of the Southern District of New York, special assistant to the attorney general of New York State, and also judge of the U. S. Court of Appeals. As a colonel in the U.S. Air Force in World War II, Justice Harlan was decorated by this country with the Legion of Merit and was presented the Croix de Guerre from both France and Belgium.

Notre Dame's Moot Court contestants have appeared in the National Moot Court Finals three times, in



John M. Harlan

1950, 1951 and last year. It is an extremely beneficial courtroom procedure in preparing students for the practice of law.

Associate Justice Charles E. Whitaker assisted, along with Justice Harlan, in judging the Moot Court competition at Notre Dame last Fall. He



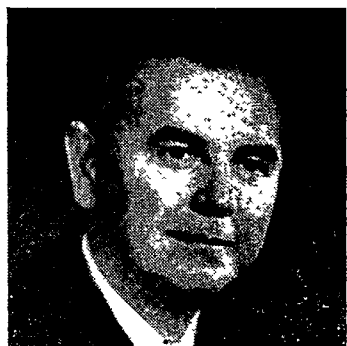
Charles E. Whitaker

was born on a farm in north-eastern Kansas and received his early education in a one-room, one-teacher school-house. Later he attended Kansas City Law School, graduating in 1924. Justice Whitaker practiced law in Kansas City and concentrated on corporation cases. In 1953 he was elected president of the Missouri Bar Association. President Eisenhower appointed him to the United States District Court for the Western District of Missouri in 1954 and two years later to the U.S. Court of Appeals. His clearly stated opinions soon won favorable attention throughout the Justice Department and he was named to the U.S. Supreme Court this year.

Married and the father of three sons, Justice Whitaker, a Methodist, has sent his boys to Rockhurst High School, a Jesuit institution in Kansas City. He owns a 160-acre beef cattle farm twenty miles north of K-C.

While still a practicing lawyer, Judge Whitaker made a concise statement of the legal profession as follows, "Justice cannot be produced through any system of procedures alone. In the main it is, and must always be, the product of long hours of hard, diligent, painstaking labor by highly competent, experienced, careful and practical lawyers."

Associate Justice William Joseph Brennan, Jr., will be one of the judges in October of Notre Dame's Moot Court trials.



William J. Brennan, Jr.

Justice Brennan graduated from the Business School of Wharton at the University of Pennsylvania in 1928. He was recipient of a bachelor

of laws degree at Harvard three years later. Justice Brennan was admitted to the New Jersey Bar in 1932 and practiced law for 10 years with the law firm of Pitney, Hardin and Skinner. During World War II he served with the Armed Forces as a specialist in manpower and personnel work and was discharged with the rank of colonel. In 1949 he ascended the bench as a trial judge in the New Jersey Superior Court. Two years later he was elevated to a judgeship in the Appellate Division of the same court and in 1952 Governor Driscoll appointed him an Associate Justice of the New Jersey Supreme Court.

While serving on this court he was given national recognition for his role in the nation-wide drive to clarify court congestion and delays in litigation. President Eisenhower appointed him an Associate Justice of the United States Supreme Court on October 15, 1956. He is a trustee of the Newark College of Engineering, a member of the American Bar Association and the New Jersey Bar Association and maintains his residence in Rumson, New Jersey. Married to the former Miss Marjorie Leonard, they are the parents of two sons and a daughter.

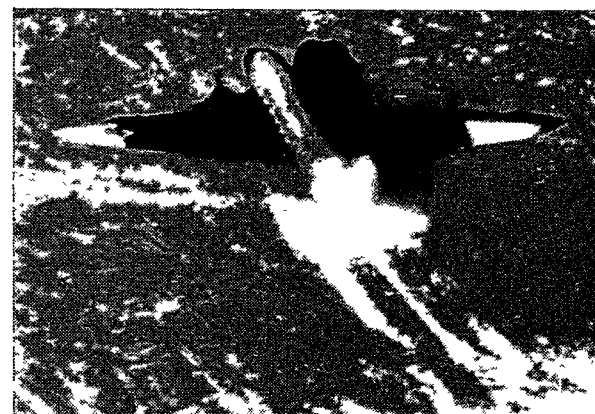
58° Below Zero

(Continued from page 13)

American to set foot at the South Pole and the first human to visit the site since 1912 when Captain Robert Falcon Scott of the Royal Navy and his companions departed, only to perish on their return journey to McMurdo Sound. Lieutenant Commander Shinn did his best to keep the engines going, and the plane mechanic made emergency repairs to the oil system. I busied myself outside attempting to free the skis, setting up radar reflectors to guide those who were to come later, and performing other necessary chores. Needless to say the biting wind and low temperature gave added zest to our movements.

Conditions portended a difficult if not hazardous take-off. Our primary concern was that our aircraft skis might be firmly welded to the surface, much as an ice-cube tray in a refrigerator. We had developed a number of methods to free the skis in such event and our main hope was that they would work.

About three-quarters of an hour after landing we re-embarked for the return flight to base. Throttles were advanced



After landing at the Pole, jet-assist power containers were necessary to get the "Que Sera Sera" airborne.

to full power but to no avail. There we sat. Anticipating a need for their use we had equipped the aircraft with 15 jet assist bomb-shaped metal containers (JATOS), each capable of furnishing 1000 pounds of thrust for 15 seconds, by which time we should have become airborne. So we fired four JATOS but without effect. An additional four and the plane moved sluggishly. Then the last seven and we gained enough speed to become airborne. The starboard engine gave some concern as its oil pressure momentarily failed but its power output was not diminished and as the pressure returned to normal my heart left my throat and resumed its normal position.

The rest was without incident. We landed at a cache, thoughtfully provided at sea level at a point 500 miles from base, and picked up enough fuel to return to McMurdo, where we landed at 4:15 a.m., a tired lot.

Atomic Education

(Continued from page 15)

purchase of a relatively large power reactor may be indicated.

In line with this reasoning, present plans are to supplement classroom instruction by laboratory work on instrumentation and on a sub-critical assembly. Fortunately space for a nuclear engineering laboratory was available in the Heat-Power Laboratory designed by the former head of the Mechanical Engineering Department, Carl C. Wilcox, and erected in 1940. Instrumentation such as Geiger counters, cathode ray oscillographs, ionization chambers, binary scales, etc., is now on order with a grant of \$13,400 obtained from the Atomic Energy Commission for this purpose. The Dean explained that a proposal for an additional grant of \$50,000 is now in preparation to cover the cost of manufacture and erection of a sub-critical assembly in the new laboratory.

SPONSORS OF "LIVING" CHAIRS

Notre Dame's Faculty Development Program was initiated in 1953 when the nation's corporations were invited to underwrite the expenditures for an additional 45 renowned professors to the teaching staff. That phase of the plan has been most successful as evidenced by the total of more than \$2 million in contributions last year from corporations and foundations. It remains an integral part of the overall project and will continue to be expanded as additional corporations indicate their willingness to extend financial support.

The "Living" Chairs plan was developed in 1956 for the advancement of the teaching staff, based on the correlation of student educational cost and its deficit. It has long been recognized that the student only pays about two-thirds of the cost required to educate him. The difference is derived from endowment, auxiliary enterprises, and gifts from other sources such as alumni, non-alumni and corporations. "Living" Chairs have been established to subsidize faculty salaries by permitting the donor to pay one-third of the amount of the mean salary within the category selected. For example, in the four levels of teaching at Notre Dame, the following figures are evolved:

	Salary Mean Total	Student Pays	Gifts Required
Professor	\$7200	\$4800	\$2400
Associate Professor	6000	4000	2000
Assistant Professor	5050	3400	1650
Instructor	4150	2800	1350

"Living" Chairs already sponsored by generous gifts from corporations, individuals and alumni clubs are as follows:

Professorships—

- Mr. and Mrs. Neil Hurley, Jr.,
Aurora, Ill.
- Mr. and Mrs. John A. McGuire,
Aurora, Ill.
- O'Neill Brothers Foundation,
Cleveland, O.
- Mr. and Mrs. William Sheehan, Sr.,
and Family,
Cleveland, O.
- Hon. Joseph P. Kennedy,
New York City
- Armco Foundation,
Middletown, O.
- Commercial Shearing & Stamping Co.,
Youngstown, O.

Associate Professorship—

- G. Franklin and John McSorley,
Pittsburgh, Pa.

Assistant Professorship—

- Notre Dame Club of St. Petersburg-
Tampa, Fla.

Instructorships—

- American Chicle Co.,
Long Island City, N. Y.
- Notre Dame Club of Toledo (O.)
- Dumore Company,
Racine, Wis.
- Notre Dame Club of Philadelphia (Pa.)
- Judson S. Sayre Foundation,
Chicago, Ill.
- Mr. and Mrs. Julius L. Tucker,
South Bend, Ind.
- Notre Dame Club of New York City

\$5 Million Faculty Fund

A munificent grant of \$3,074,000 from the Ford Foundation combined with a total of \$1,400,000 contributed by alumni and corporations will form the nucleus for the creation of a FIVE MILLION DOLLAR faculty development fund at Notre Dame. This announcement was recently made by the Rev. Theodore M. Hesburgh, C.S.C., president. Father Hesburgh indicated that he believed the \$600,000 balance needed to complete the fund will be donated in the near future by alumni, non-alumni friends, corporations and foundations.

Notre Dame was in the top ten of universities and colleges receiving large amounts for the Faculty Development Program from the Ford Foundation. It was the largest single gift ever received by Notre Dame and also was the largest amount given to any Catholic institution by the Foundation. The total of a half-billion dollars to the nation's accredited four-year colleges and universities and to privately operated hospitals established an all-time record in philanthropy from any organization.

Income from the fund will be used by Notre Dame to increase professors' salaries, to finance their advanced studies and to permit the publication of research findings. Father Hesburgh stated that during the past three years, faculty salaries have been revised upward and the payroll raised by approximately \$750,000.

The final installment of \$1,549,500 from the Ford Foundation was sent to Notre Dame recently. The first portion of the grant was paid in 1956. Included in the Ford gift was a \$1,177,000 accomplishment grant, recognizing the University's previous leadership in the furtherance of faculty salaries. Although this part of the grant was unrestricted, it will be used to support the Faculty Development Program.

Many distinguished teachers have been added to the Notre Dame staff since the inception of faculty development four years ago. In 1956, 363 prominent corporations and foundations were included among the list of contributors. It was estimated that \$450,000 annually would be required to project this phase of the Faculty Development Program. About half of the anticipated forty-five internationally-known teachers have been brought to the Notre Dame campus for lectures, temporary appointments and as permanent members of the University staff.

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