A CENTENNIAL OBSERVANCE is an opportune time for retrospective appraisals and for estimates, at least, of prospective trends. A superficial view may see no pertinent connection between the open prairie outpost and the modern metropolis of learning. A farmhouse, a few outbuildings and a single college hall have become a physical plant valued at approximately 50 million dollars. The original college farm of 648 acres has become a campus of 460 acres, plus more than 6,000 acres of research and demonstration at Ames and throughout the state. A handful of professors, a matron and a farm superintendent have become a faculty of approximately 1,000 with hundreds of clerical, technical and maintenance helpers.

But, with all the profound and spectacular changes and transformations in size, organization, and program of the most dynamic of centuries, the basic problems have persisted. Hence the main consideration of this over-all survey
is not primarily the growth in size and form but rather the fulfillment, amid the changing conditions, of the motivating idea.

As regards extent of service, Iowa State College has shared generously in the mid-century bulk enrollments which have boosted the nation’s total from less than a quarter million at the turn of the century up to three million at the Centennial year, with predictions of doubling by 1970. For the College with student population around ten thousand, conservative estimates have predicted from twelve to thirteen thousand by 1965, unless definite restrictions are imposed or unforeseen contingencies intervene. To set rigid tests for superior ability or grade requirements beyond the prevailing standard of the state certification would seem contrary to the aim and spirit of the land-grant system. After all, the problem of size is a relative one that was by no means peculiar to the mid-century. In an address to the N. E. A. in 1900, Beardshear expressed great alarm for the effectiveness of learning in large universities with several hundred graduates. In 1922 at the land-grant association meeting, a pioneer agricultural scientist referred to the “alarming” increase in college enrollment. Big colleges and universities have been but a phase of bigness in all other social institutions. The main consideration has been and will continue to be whether the collegiate throng was seeking the most socially desirable type of training and, if so, whether their needs were being adequately met.

The large enrollments were representative in area truly national, representing all regions and states, and international, with students from all continents.

In tradition and practice, economic and social democracy has persisted. On an equality socially and in leadership in college enterprises with the owners of sport convertibles
have been the large proportion who earned their way, in whole or part. Thus in 1942 there was no special surprise or comment on the fact that the president of the student body earned his board in a second-class restaurant and the Veishea queen was employed on a cafeteria line.

Steadily mounting costs of higher education have brought proposals that in state, as in private institutions, fees be increased to bear a substantial portion of the added burden. In an inflated economy certain upward adjustments are inevitable. But fairly to maintain the inherent economic opportunity, a considerable gap in cost should be maintained between the land-grant and the private colleges. Superior attainment may be rewarded by scholarships, and loans can to a certain extent supplement self help for other worthy but needy students. Although such aid has not kept pace with the real need, undoubtedly the proportion of the youth of Iowa to whom this training is available is much larger than in the average state.

**DEMOCRACY PRACTICED**

There has been no distinction or discrimination of race or creed in admission or in participation in any of the scholastic or extra-curricular programs. Occasional attempts of fanatical agitators—usually from the outside—to unearth discriminations in civil rights have been quite futile, aside from baseless rumors.

With all the highly colored stories of college pranks and disorderly conduct related by old grads, and the untoward occurrences that from time to time capture the headlines, the general tone of the student body through the years has been relatively serious and purposeful. Inevitably a certain number enroll "just to go to college," to try the social thrills and/or to indulge in favored activities. But the
number of career conscious has always been high. Solid foundation and technical courses have not encouraged shopping and browsing about.

With all the silly cliches about studies and college life, scholarship has always been highly valued, if not as generally or thoroughly cultivated as could be wished. By the very inclusiveness of mass education, the curves of both intelligence and attainment extend over a considerable range. Entrance by certification has reflected the limitations of mass education at the secondary level, in "democracy's high school." The average modern high school is a victim of its multiple purposes, in seeking to be all things to all taxpayers. From the old narrow, formalized prescriptions intended for the few who were college bent, the modern public educational spirit has decreed a varied and elastic program of generalized surveys, vocations, and activities that rise to and sometimes above coordinate position. In the case of the smaller schools a truncated offering of the least expensive and easiest combinable subjects has been all that the district traffic could bear. As a result of such "preparation," too many college entrants have lacked both a mastery of foundation subjects and of effective study methods and habits.

But in spite of the system and the prevailing practices, there always have been outstanding high school teachers who have found receptive minds and provided a modicum of superior students who not only have secured prizes and scholarships, but have shown the capacity and foundation for higher learning in a real sense. Honors Day and honor society awards attest that a growing number of the saving remnant come to Iowa State College. The symbolic keys, pins, and badges have been worn as proudly and confidently as the letters of athletic prowess and to an increasing degree
have been accorded no less respect by the student body. But, most happily, the two lines of achievement are by no means always in conflict. To an increasing extent, high scholarship is being associated with leadership in varied branches of activities—including athletics. The modern objective is neither skill in amassing grades or in breaking physical records in themselves, but rather in developing the "all around person"—the sound mind in good physique along with social awareness.

► RELATED INTERESTS

The term "activities" has covered a multitude of salutary and helpful undertakings as well as over-emphasized and at times perverted enterprises. The negative aspects probably have been given most attention by reason of their disturbing influence. Thus Woodrow Wilson contrasted the appeal of the side shows with that of the "main tent," and Jacob Schurman referred sardonically to the regular studies as "passivities." In the large and varied offerings of Iowa State College, the so-called "activities" have often related and intermingled with the regular scholastic program. In its varied enterprises, student journalism has given practical application of theories, including business management running to sizable investments. Shop and laboratory exhibits in Veishea and other displays have involved skilled techniques in preparation and operation. Debating has provided a direct training not only for future lawyers and legislators, but also for all who have had occasion to prepare, organize, and defend a case or cause. Dramatics and pageantry have led to professions for a few while providing attractive pastimes for many others. Athletics of both the inter and intra brands have served as indispensable laboratories for majors in physical education.
Athletics stand apart among college activities in emphasis and consequently as a problem — with football the college sport par excellence and, in the opinion of opponents like Robert Hutchins, *contra bonos mores*. The natural appeal of this sport has led at times to its perversion in commercialization, professionalism, and gambling. Periodical and regional cleanups have been only transitory. The only solution seems to be a de glamorizing that will put this particular sport in its proper perspective and keep it there. “Big time” football, with all that the term signifies, is demonstrably a sport “not worth the candle” — or the bowl. No institution has suffered in scholastic or professional rating by failing to make a high national football ranking. Fortunately Iowa State College, in spite of all pressures, has kept its efforts at fielding “respectable teams” always on a high plane of operation.

**Maturity in Behavior**

The curve of student conduct, like the imaginarily conceived curve of social progress, shows marked ups and downs with a gradual upward trend over a long span, subject intermittently to sudden and disruptive reversions. Whether the improvements reflect more effective social control, urbane conformity, and the multiplied outlets for surplus physical and emotional energy, rather than superior moral convictions, might merit serious consideration. At any rate the cruder earlier depravities have gone largely into limbo. Barbarian hazing of freshmen has gone out with the waning of class loyalty and rivalry. Sadistic fraternity initiations have been replaced in considerable part by constructive services to the community, whether due to a more brotherly spirit or to a desire to cultivate better public relations. No doubt both have entered into the amendment.
One always hesitates to proclaim the arrival of a fully civilized campus, due to periodical reversions to outbreaks of mob violence with destruction and desecration of property, scandalous papers and posters, hangings in effigy, wild and riotous parties, and the perennial problem of cheating in examinations. Usually a comparatively few bring this discredit upon the whole student body and the entire institution. It is notable that of late at the College such lawless disturbances have been spearheaded by underclassmen from large city high schools who have thus imported to a generally law-abiding and socially-minded campus the reactions and conduct of their "blackboard jungle." No responsible observer would suggest a return to the brutalities and indignities of hazing, but it would seem that the "freshman rule" applied to athletics might well be extended to restraints in other realms.

Student government has functioned, in some form and to varying degrees, from the days of Welch who was an enthusiast for it. All of his successors, with the possible exception of Hunt, have welcomed cooperation within the realm of special student interests but have not always been in agreement as to the bounds of that area. The main organ, the Cardinal Guild, has grown in definiteness and seriousness of objectives, though like all governments has fluctuated in influence with varying student interest and the consequent leadership. The whole problem of student self-government reduces largely to the matter of the acceptance of responsibility, the willingness of the determining student opinion to enforce their recognized standards by the application of sanctions however stringent. Such conformity to government under law, the foundation of all freedom, must—as in the notable case of an oft-proposed
“honor system” — depend upon firmly established traditions. Again, the establishment of such traditions depends upon a moral conviction which, in turn, should be most securely generated by a reasoned religious belief.

► RELIGIOUS FOUNDATIONS ACTIVE

The most effective and realistic adjustment of the religious interests of students, in this as in other state institutions, is in the organization and functioning of the foundations of the leading sectarian groups which, in consonance with the plan of Jefferson for his model state university, provide worship, counsel, and so far as desired, doctrinal instruction. The common religious activities of the campus have come to be directed through an inter-faith council supervised from the office of student affairs. The work of the Y's has become largely supplemental to these general programs.

Through these agencies, the main faiths are served as fully and sedulously as in the closest church-related college. Rather than being in danger of neglect, as was charged in the past, the conscientious undergraduate is more liable to be overburdened by the elaborate and exacting programs devised by enthusiastic church directors and their boards. In any case, a college student should grow in this as in other aspects of thought and experience. Certainly there is no better opportunity to apply religion and morality than in the daily obligations of study and social participation on the campus. From his student experience of a century ago, the graphic figure of Phillips Brooks is an enduring admonition of the duty to keep the emotional boiler in contact with the operating engine.

A highly qualified, when not depreciatory recognition,
is given to land-grant education by certain ill-advised critics in the judgment that while this type of education trains specialists in various lines, it fails to develop well balanced personalities. As this present interpretive survey of a typical representative has tried to show, this has been the basic aim throughout. Any seeming departure has marked an errant straying from the real spirit and purpose. The test is in the end product. Like wisdom herself, this College, as all others, finds justification in her children, as they have gone out in ever lengthening lines to their share of the work of the nation and of the world. Former students are to be found in all parts of the globe providing contacts—often highly strategic—for the College. Occupationally they are to be found in all fields of business, the professions, and public affairs. In all these "pursuits and professions," former students have developed high leadership.

➤ OLD TIES STRONG

In alumni relations with the College there has been a marked development in understanding participation. Advice, especially in technical areas, has been helpful in fuller developments and in pioneering in new realms of research. Alert organizations have aided in recruiting not only athletes but superior students at both the undergraduate and graduate levels. The supplemental financial aid, not only of certain special donors but also of the smaller sums of an increasing number coming annually in the achievement fund, has met needs and provided highly appropriate enterprises that would not have been possible through the regular channels of support. Unquestionably this source of income will have a steadily increasing influence upon the progress of the College. There is a growing recognition by leaders
in education that state institutions, as well as private, are dependent upon their alumni for helping to meet the increased demands which they are facing. "College loyalty," in which the students of state institutions proudly claim to be second to none — ivy halls and traditions not excepted — should recognize this "bounden duty" to alma mater.

**Reflect on Effectiveness**

One of the most constructive services of the large and rapidly growing host of former students is in giving deliberate and thoughtful appraisal of the institution — especially of departments and staff. In the case of honest if candid expressions, free from undergraduate prejudices, such judgments — reflecting the test of actual experience — may differ considerably from their earlier immature opinions. At any rate, mature recognition should be much more indicative than student rating sheets, letters to the editor, or the certitudes of "bull sessions."

Throughout the years, teaching has been given a central emphasis. This has extended to adult teaching and sharing of information, as the extension services with their appropriate methods and devices have developed. Consequently, unusual attention has been given to the selection of the teaching staff, especially to those of permanent tenure. As a result, the faculty has come to have a wide representation of national and foreign universities, including all of the leading graduate institutions. The great proportion of the College's graduates on the staff have done advanced study elsewhere; the height of inbreeding was reached in the 1880's.

With the competition of commercial and governmental organizations, as well as of the highly endowed private and
The Land-Grant Idea

the affluent state universities, the recruiting and maintenance of a top rank faculty—especially in the technical departments—has loomed large in administrative perplexities. Matching of such optional compensation, either directly or in "special benefits,” has been and seems likely to remain unattainable. Hence to attract and maintain a staff of high caliber, other inducements appealing to the academic temperament have been and will increasingly need to be provided.

To begin with, the prevailing disparity of salary scales, within the different grades, should be more nearly equalized, with definite and substantial floors as well as ceilings and without too great an intervening spread. Professorial dignities, however pleasing otherwise, should not become a substitute for commensurate material reward.

> Academic Freedoms

One of the most valued and indispensable conditions of satisfying academic life and work is security of tenure through freedom of teaching and research. In spite of well-established principles and practices, these essential guarantees have continued to be flagrantly disregarded in institutions large and small, public and private. After the disturbing and disrupting influences of politicians and agrarian agitators in the formative years, the record of the College on this vital interest during the past long generation in general has been highly commendable. But in an age of pressures, constant and alert vigilance is called for by board, administration, staff, and alumni.

Opportunities and encouragement for professional growth are essential to personal satisfaction and the fullest service to the College. There is particular need for such
support in the general subjects that lack the incentive and provision of the organized research agencies. Such serious self-initiated and "set up" projects in writing and in participation in the work and programs of professional societies justify a reasonable aid, in adjusted schedules, needed equipment, and financial help for off-campus research and publication—especially to supplement grants from foundations. The Alumni Achievement Fund has provided timely aid for a number of worthy projects and it is to be hoped that this source may be steadily increased.

**BOOKS OF MERIT**

The Iowa State College Press has given appropriate and dignified publication to an increasing list of books in the areas of special interest to a land-grant college in furthering its purposes. The Press is dedicated to the premise of "sharing knowledge." Some 80 staff members in agriculture share efforts in presenting the farmer authoritative information in the *Midwest Farm Handbook*. *Old Orchard Farm*, by Hugh Orchard, recorded accurately an Iowa farm boyhood in the 1880's before all those who had lived in this era had passed from the scene. *A Century of Farming in Iowa, 1846–1946*, was proclaimed by highly respected editor W. Earl Hall of Mason City as "the best thing to come out of the State Centennial." George W. Snedecor's *Statistical Methods* has earned world acclaim through five editions and paced the output of the more technical writings. *Diseases of Poultry*, edited by H. E. Biester and L. H. Schwarte, was a monumental undertaking in sharing valuable knowledge in the field of veterinary medicine on a professional level. *America's Sheep Trails*, by Edward N. Wentworth, '07, a distinguished historian of American livestock, is a definitive
study of this branch of the industry. At the Centennial, the Press was carrying the name of the College into 77 foreign countries on the title pages of outstanding books in the areas of College interest.

One of the most helpful opportunities for concentration on a subject of investigation, as well as for a refreshing change of scene, is provided by the sabbatical year. Unfortunately, this salutary institution has never found full acceptance in land-grant colleges. The constructive aspects of the system have not been appreciated, and it has been regarded as a payment for personal rather than institutional advantage. A scientist, highly skilled in his particular field but with a curiously benighted social outlook, boasted of having defeated a state child labor measure by deriding it as a "child loafer bill." A demogogical wisecrack could easily represent a year off on full or part pay as a "prof loafer" design. On the contrary, the recipient of such a stipend is more in danger of overwork and strain in his zeal to get forward a book manuscript or at least to collect the makings of several fully documented articles. Without such provision, the ambitious private researcher in state, as in impecunious private colleges, is forced to utilize his scant relaxation time and the ironically termed "long vacation" with — of late years, if able to "make a good case" — modest financial aid from a grant-in-aid by a foundation.

That such "do-it-yourself" officially unprojected enterprises have really been something more than hobbies and pastimes is attested to by a few typical examples: the technical foreign language dictionaries of Louis DeVries; the agricultural history studies of Louis B. Schmidt; the personally carried on and in part financed anthropo-economic studies in Latin America and Africa by Elizabeth Hoyt; the
interpretative studies of Mark Twain by Fred Lorch; the creative and critical writing of Pearl Hogrefe; the arresting studies in international relations by Norman Graebner; the studies in the history of engineering and the writing of an outstanding naval biography by Eugene Ferguson; and the archeological findings of Robert W. Breckenridge. Of course one who has the urge to investigate and create will do it in spite of hell and high water—or the academic equivalents of quiz sections, blue books, and reports. However, a certain recognition and facilitating of these labors—that go far beyond the immediate call of duty and of any remuneration but the "psychic" satisfaction—is encouraging.

PARTICIPATION VALUABLE

While teaching and research are the main tasks of staff members, certain administrative duties and a possible share in policy making are included, congenially or tolerantly, in their programs. They may have a voice in the selection of the heads of their departments; and there would be many advantages in having the selection outright in a rotating chairmanship. Such a system would tend to deflate the importance of administration in comparison with teaching and research and to share the routine of departmental work and thus make a fuller and better balanced use of talent through the years. Such regular selection would likewise obviate the temporary resort to the anomalous and at times confusing status of "professor-in-charge." Committee service on divisional and general faculties, if not too burdensome (and a member should seldom have more than one major assignment) and in line with the particular interest of the member, may be informing and stimulating.
The faculty council in operation at the Centennial, if it arouses the interested support that it merits, may provide unexampled opportunity for representative sharing in policy making. As a forum for discussion, fact finding, and recommendation, the A. A. U. P. should continue to provide a complementary service not only for its increasing membership, but for the staff as a whole. This society, whatever its limitations of action, is after all the nearest approach to a professional organization for higher education in general.

Equally essential for maintaining a staff at fullest service with selective recruitment and professional advancement, is an adequate provision for automatic retirement at an age when on the average, diminishing returns begin to be manifested, but before the physical and mental infirmities of senescence necessitate termination. In most cases there should still be time to "mature the unfallen fruit" in completing or perfecting scholarly projects, which in many cases may have been long contemplated. This assumes, as any adequate retirement should, a sound and reasonably adequate annuity system.

► FUTURE PROSPECTS BETTER

However, inhibited by an unreal individualism, retirement systems of land-grant institutions have been tardy and inadequate. The pioneer Carnegie pension plan, based upon mistaken philanthropy and with actuarial miscalculation, was not generally available to state institutions. So far as the passing generation is concerned, any provision — coming at this late date — must be rather makeshift and supplemental. But with all the actuarially established probabilities and with the counsel of the leading financial experts in an endowed non-profit corporation with individual and college participation, the junior staff mem-
bers should be able to look forward to being able to "obey the voice at eve obeyed at prime" without undue distraction over the commodity index. At the Centennial, staff members were under term life insurance with two-thirds of the premium borne by the College, and under an annuity policy with the same sharing of cost or else under state retirement program with contributions equal from employee and the College.

Both in active career and in full or partial retirement, staff members through the years have been influential in community affairs. More often than not, members have been serving on the city council or boards, and upon the local board of education. In many cases the city has benefited immeasurably from the advice on technical problems that the academic members have provided.

Whatever the range and interest of the staff members, their main contributions to instruction, research, and community service have inevitably been in the areas of their specialties. The old-time "born teacher," who could "teach anything" with equal facility, belonged to an age of limited and highly formalized subject matter. The modern pseudo-progressive sentiment of teaching "not a subject but boys and girls" is a typical pedagogical inanity. The elemental symbol of instructional relationships in the traditional triangle of the teacher, the student, and the log should really be a square with the addition of the subject to be taught. Every subject of instruction and investigation has its own peculiar values. True teaching and research involves their finding, appraisal, enlargement, and application to life.

This College, as is incumbent upon a member of the land-grant group, has been committed from its inauguration to a wide content, as inclusive as socially expedient at the time, to be given at the higher level in liberal manner for
dynamic objectives. No other type of higher education has been as responsive to the changing interests of the constituency. Consequently, in the relative adjustment of the liberal or general and of the practical or applied, the College has moved in somewhat of a circular course. To the 1890's, before the large and growing demand for technical experts, the general subjects largely prevailed; from the nineties to the world war era the technical and vocational had an increasing ascendancy; in "our own times" of technology and world consciousness the avowed and deliberate trend has been toward a more reasoned and purposeful balance.

► INTERRELATIONSHIPS STRONGER

The pre-war society put the emphasis upon increased and bettered production with inadequate consideration of the social consequences of technological change. In the midst of the one divided world with prevailing process of technology extending to the mechanical completeness of automation and the power attainment of unloosed nuclear energy, the inextricable interrelations of the physical and social, the technical and liberal, are being increasingly recognized. Quite apart from "cultural" values, it should be noted that many of the general subjects today have a directly utilitarian purpose. Modern language has become an essential tool for increasing world contacts in business or governmental positions, diplomatic or economic. At least an elementary knowledge of economics is essential for modern living at every sphere, and with the place and part which governments at all levels have come to occupy in the daily experiences of every citizen, the study of American government, especially in its functional aspects, has become no less a "must." "Communication," in its varied forms, has become essential in every line of endeavor.
In recognition of such special "practical" demands, as well as a growing appreciation of the need for a trained leadership in all of the professions and industries, the technical curricula have been considerably "liberalized" by the inclusion of general subjects, either as requirements or electives. The difficulty has been that at the same time professional requirements have been increasing and standards rising. Thus schemes to have the general and technical run concurrently within the traditional quadrennium are confronted with the expanding scope of both areas. The full and ultimate solution seems to be that made by law, medicine, and theology during the past generation, in the requirement of a general degree for admission to professional study. Veterinary Medicine has taken a long step in this direction in the requirement of two years of general college work prior to entering its curriculum.

**PROVISIONS FOR COMBINED EMPHASIS**

For many years, the College has made provision for students to combine their general with technical degree courses as is done in law and medicine, but there have been few applicants. The strong demand for graduates in most technical lines in the current stage of industrial expansion has retarded the requirement of such a broadened foundation. But as the output of graduates catches up with this demand and the emphasis becomes one of quality rather than of numbers, competition will force up professional standards as it has in the older professions. Already some of the engineering colleges are requiring a fifth year, which for many years was an option at Iowa State College, and it seems highly probable that the leading land-grant colleges relatively soon will provide general foundations for their technical curricula.
The division of general subjects—"Science," or more adequately "Arts and Sciences"—affords a rare opportunity for a well balanced liberal education in which the basic sciences are judiciously intermingled with the humanities. This may serve as the basis for specialization in any of the professions or for graduate study in any of the sciences. Legal authorization for such a fully developed coordinate division is given in the definite provision for "other scientific and classical studies" of the Morrill Act and the precise confirmation for the state in the Sutton Act. In recent years precedents have been provided by the elaborate programs in the general studies of other leading land-grant colleges and the establishment of such a division by the conservative land-grant college association. While notable advances have been made in this direction at Iowa State College, they have not gone as far as the organic act assumes or as the current trend in general education indicates as desirable, especially as regards the humanities. The rounding out of the program of this division remains one of the unfinished tasks at the close of the first century. Plans for accelerating general education by interlocking it with the long-established and highly essential preparatory years and by allowing credit for basic courses upon acceptable test of mastery, to the end that the professional or graduate study may be reached at the earliest possible stage, involves a dilution and depreciation of the basic baccalaureate that, if widely adopted, would be calamitous to the standards of American higher education.

The experimental work has served the economy and society of the state with increasing effectiveness. The service has been greatly widened with supplemental federal and enlarged state provision. But there is still need for further
inclusions, especially in the social sciences. In line with the trend of the economy, the long sought federal aid to engineering experiment stations should be given. It would undoubtedly make for the most economical and effective utilization of available talent and equipment to have the whole research program of the College integrated under one supervisory head—vice-president or director. This would be in line with the trend toward concentration of policy making with decentralization of operation.

**APPROPRIATIONS ARE FOUNDATION**

As the varied programs of instruction, research, and extension have developed and grown, relations with the state and federal governments have become increasingly involved and determining. Costs of operation, plant, and equipment have grown enormously. The federal subventions, while most helpful, are for specified purposes and tend to be level over long periods. The return from investment funds constitutes a small proportion of the annual expenditures. Marked increase of student fees has seemed not fair or feasible. Alumni aid is generally for services outside the general funds, and grants by foundations and corporations are earmarked for special projects that would not otherwise be undertaken. Hence the main dependence for support, operational and capital, is upon the biennial appropriations of the state legislature. The members understandably are guided in the main by the manifest opinion of their constituents. Hence intimate and understanding public relations become the ultimate determining influence.

The elaborate complex technological university of the age of applied science is a far cry indeed from the pristine agricultural college and farm or “farmers’ college” of the
unbroken prairie. But the industries and social institutions of the state have had a corresponding transformation and their College has continued to serve them with progressing effectiveness. Not the least of the educational achievements of any land-grant college is in creating a pride and reasoned recognition by the citizenry that will insure a loyal support for its needs—not only for subjects and projects of immediate utility, but as well for the programs of general education and basic research. The more the people of the state can experience the regular purposeful work of the College and the less that atypical, too easily exploitable episodes of disorder and dissension are brought to their attention, the more favorable the reaction is certain to be.

**ALERT TO RESPONSIBILITIES**

Assuredly Iowa State College has not failed to recognize and meet with steadily increasing adaptability its obligations under the organic act. Experts have been trained in numbers corresponding to demand for the industries and the professions and for government service—civil and military. Research conducted separately or in collaboration with federal agencies and made available through the state-federal extension service has contributed immeasurably to state, national, and world wealth and well-being. Training for citizenship in formal study and in and through the total program has been afforded to the host of enrollees from short course to post-doctoral. A goodly number of leaders in all lines of endeavor has emerged from the ranks.

The government of such a complex of instruction, research, and varied public services demands the most capable talent that—amid political exigencies and the availability of a public spirited elite—can be brought together. From
the separate board of trustees of varying size to the present centralized Board of Regents, the membership as a whole has maintained a relatively high caliber — undoubtedly well above the traditional college board — in understanding and vision. Partisan and regional politics have entered into selections probably to a lesser degree than in most of the other appointive state boards. The occupational balance of members has been better maintained in recent years. The records indicate that with few exceptions members have been conscientious and impartial. The early dominant influence of traditionally-minded educators like Henry S. Pritchett, who had a biased and narrow opinion of technical education — especially land-grant education — ceased to be felt with the passing of the last of the original board and its finance committee. Relations with other state institutions and with the private colleges and universities have been increasingly cordial and cooperative from the 1920’s. The controversial and to some degree anomalous finance committee seems to have become more definitely delimited and adjusted in its functions. It may be that a single executive secretary might perform the essential functions involved. Under the most favorable conditions, service on the board involves a personal sacrifice that reflects a high degree of public spiritedness.

**WIDESPREAD DEMANDS**

If formulating and supervising the general rules of this modern land-grant college is an exacting and perplexing task, “the immediate regulation and direction of the academic, research, and extension activities of the College” is demanding and absorbing of the thought, patience, and energy of the most robust, able, and adaptable chief executive. The
services of administrators of such stature are always at a premium. As President Emeritus Hughes has concluded in his *Manual for Trustees*, "No task that confronts a board of trustees is more difficult than the selection of a new president." And a land-grant president, in particular, has a peculiarly involved and complicated task that calls for the highest type of academic statesmanship. No contrast in the life of this College could be greater than that from the "old-time president" who personally directed everything from the enrolling, counseling, supervising the conduct, and sharing and directing the instruction of the students along with management of the plant and conducting public relations, to the head of a modern public technological institution, with all its multiple functions and ramifications.

**DELEGATION OF RESPONSIBILITY**

Obviously there must be an ever-increasing delegation of both detail and authority, within certain limits. A modern chief executive who fails to recognize this needs to be admonished by some temeritous Jethro: "This work is too heavy for you, and you cannot manage it alone." The larger metropolitan universities are coming to have a corps of vice-presidents, deans, and directors that suggest the official hierarchy of an industrial corporation, and land-grant institutions are of necessity fast moving in that direction.

In addition to the selection and direction of key administrative and instructional leaders and the determination of major policies of the College, the modern land-grant executive must deal with a round of state and federal relations that have increased greatly in number, size, and complications since the world war period. First of all, in
this College he must deal with a board on which he has no membership. He must stand before governors and among legislators. He is—ultimately if not directly—responsible for conducting relations and adjusting misunderstandings with varied federal agencies. He is accountable for cordial public relations with the people and organizations of the state, and for cooperative dealings with the alumni. He is the leader and chief spokesman of the state's delegation at the annual meetings of the land-grant association where his stand on controverted issues is matched with that of his fellow executives. Clearly he cannot profitably devote his time and energy to operational routine and technical supervision, hence the necessity for desirable functioning of dependable and adaptable divisional, departmental, and service deans, heads, and directors, a competent and well stabilized faculty, and a responsible student body.

It may be said of the presidents of Iowa State College that they have ranked somewhat above the average of land-grant executives. All have been energetic, conscientious, and honorable. None have involved the College in partisan or sectarian divisions, such as have too often disrupted both state and private institutions. With one brief exception, they have been men of competent scholarship with an appreciation of the field and responsibilities of higher education. Some were the victims of unsettled conditions on the campus and in the state for which they were only in part responsible. All who left the College prematurely had creditable, and in some cases notable careers in their later work. In varied ways and degrees they contributed to the testing and unfolding of the land-grant idea in Iowa.

In striking the balance of the first century of the Iowa
State College of Agriculture and Mechanic Arts, so far as the debits and credits may be ascertained, the showing should be most gratifying to the state-wide constituency and to the national and world-wide alumni. This experiment with democratic education has exceeded the expectations of the most far-visioned of the founders in ways and to a degree beyond their widest imaginings.

**Promise Ahead**

The best assurance for the coming years is in the manner in which the College has adapted its organization and program to the changing needs of the economy, society, and security of the state and nation. While at the close of the first century much remains to be completed or perfected, the record shows a progressing commitment to the great idea of the most original of American institutions of higher education. That idea may be best epitomized in the term "service," as used in the truest and fullest sense. The growing and widening appreciation of this responsibility may be noted in the expanding interpretation of the motto of the College as it has passed from the age of individualism to one of ever extending social consciousness.

In the first issue of the *Alumnus*, in 1905, President Storms gave succinct phrasing to the "creed" of the College and extended the motto to emphasize the central objective:

> We believe in I. S. C.; we believe in Iowa, we believe in the kind of education which I. S. C. offers. We believe in the people of Iowa; we believe that in the future, as in the past, the graduates of this college will command for themselves positions of important responsibility and wide usefulness. We suggest as the motto of the college for its future: "Science with Practice for Service."
at Iowa State College

In the fiftieth anniversary issue of the same publication, President Hilton made timely addition with the confident perennial forecast which may well provide the keynote and challenge to the Centennial observance:

Since President Storms penned his faith in the future of Iowa State, its graduates have gone out in ever larger numbers into "positions of responsibility and wide usefulness." We are continuously working to do an even better job in providing our students with that combination of technical training and humanitarian philosophy which will equip them to build the world's progress. Imbued with Iowa State's old ideals of democracy and service, our graduates can help give stability and continuity to a world in which change is almost catastrophic.

Your Iowa State College, as one of the operating agencies of democracy, will continue to alter its methods to meet the changing needs of men. Indeed the operating and methological changes of the next 50 years may make those of the last half-century appear dull and primitive by comparison. But the end purpose of your college will remain the same. The motto of "Science with Practice for Service of Mankind" will be just as relevant, just as worthy for Iowa State College in 2005 as it was in 1905 and as it is in 1955."

And, it may be added, as it is at the beginning of the second century.