long or short, was a well-known fact long before the development of the coastal oil fields. That the coastal plain contained structural irregularities—as at Sulphur—was early discussed by Hilgard, as all students of Louisiana geology must admit. The idea was temporarily discounted by some subsequent writers who saw no signs of structural complications at the surface. The drill has settled all this. What the nature or origin of such irregularities really was as hinted at by Captain Lucas in the expression "nascent dome theory" we have little from his pen to indi-Some said afterwards that his ideas were thus and so; even the Captain seems now to prefer to quote from these sources rather than from contemporary statements of his own. However, to Captain Lucas belongs the credit of not only believing that something worth while was under Spindletop (as Higgins did ten years before) but of influencing capital to go in with him in making a thorough test (for sulphur?).

In studying the geology of the coastal plain for some ten or a dozen years the writer has had occasion not only to learn what others have thought as to the origin of those remarkable coastal structures, but to make observations and collections in the field for himself. He too has proposed a "nascent" or at least an embryonic dome theory (not claiming it as "the dome theory") whereby the "movement upwards of huge masses of rock salt," etc., must produce structures, not only of the wellknown inverted saucer-shape at top, but of upturned, pinched out, slickensided beds along their flanks. All these when there is an alternation of pervious and impervious beds may aid in oil concentration. Lateral or flank oil, in contradistinction to crest oil as at Beaumont, is well known at Anse-la-Butte, Vinton and now at Pine Prairie and doubtless occurs in paying quantities at Belle Isle, Sulphur and many other domes. The insistence by the writer on the proper locations for oil in the "flank" condition is what the director of the Myles Mineral Co. had in mind when he wrote:

I consider this a most remarkable vindication of a theory originated by you and we attribute a large measure of success thus far to your advice.

With all the above facts in mind the undersigned still sees no harm in referring to the workings of his own dome theory, provided he labels it as such—as he did. Nor can he see how such references can in any way detract from the credit due Captain Lucas for his views on dome structure—whatever they were.

As a parting shot the Captain calls attention to my incompetency in "locating wells" because the Producers well at Pine Prairie "failed to produce." Allow me to state I had no hand in its location. It is too far away from the flanks of the dome for any economic results. So far, the locations I have approved have yielded oil or gas or both in fair quantities. Can others say more?

G. D. HARRIS

PINE PRAIRIE, LA., June 29, 1912

UNIVERSITY CONTROL

LETTERS FROM CORNELL UNIVERSITY

It is certainly curious, to say the least, that in a democratic country we should have developed what is apparently a monarchical system of university government, whereas in monarchical countries they have democratic systems of university control. However, I doubt whether the government of American universities is really as monarchical as it sounds, or as the organization would suggest. Of course, there are good systems of government and bad systems of government as such. but the success of any system depends in the end largely on the personality of the members of the board and of the president. It is possible to work out a thoroughly democratic system even under the monarchical form that we have established in this country. I am afraid that a discussion of this question is likely to be largely academic, for I do not see any reason for thinking that we shall be able to make any radical departures in the general philosophy of the administration of our institutions. In the case of state institutions particularly, the representatives of the people must in some way have charge of the institution; and this of itself throws the organization of the governing board into one of three or four alternatives. I am afraid myself that the plan that you have proposed would in the end prove to be too complicated, although it seems of itself to be simple. The general tendency in our busy American life is that persons will delegate their authority and their responsibilities to persons who are willing and in position to take them. My own feeling is that we must accept the general block outline of the American system, and then make changes here and there, but more particularly try to develop a better spirit of cooperation and correlation between all parts of the institution. For myself, I think that the developing of this new spirit is really the keynote to the whole situation. I think this can be developed by free public discussions of all the questions involved, just such as you yourself are making. I should not myself be so much interested in any scheme as I would to put before the college and university people of the country a dignified series of discussions, running over a series of years, that would uncover the weak spots and the inefficient and domineering practises that are likely to result in the American systems. I think that we should soon find ourselves able to distinguish four or five cardinal principles around which we could group all the varying opinions and that we could make very great progress toward the development of a greater cooperative responsibility on the part of all persons who are parts of the institutions.

(1) I am afraid that this is not feasible. I doubt whether the professors would pay dues. As you yourself point out, there are special difficulties in the case of state institutions. (2) Not feasible. The president has to travel and entertain in a way that the professor does not. He can't do this unless he has a larger salary directly or indirectly. (3) Sound. (4) Sound, except that it makes no provision for a department which has run down and which really needs reorganizing. Of course the members of the department are outvoted

two to one, but I am not certain how it would work. While the principle of equal salaries is good, I don't know whether the average university would not be handicapped under it. (5) Sound. To my mind the worst feature about the university situation is that the president is the only man who explains the views of the faculties to the trustees and vice versa. No man can do that fairly. There ought to be at least two other members of the faculty on the board of trustees. This would be an easy reform to put through and would eliminate many, though of course not all, of the present difficulties.

While I agree with the main principles of your proposition for university control, I could not agree with all its details. I am heartily in accord with your proposition to limit the activities of the American university president, particularly with reference to the appointments of professors and to their tenure of office. At the same time it seems to me that there is need of a more centralized organization than your plan proposes. There surely seems to be need of a competent executive, and in private endowed institutions there has apparently been justification for the view that there is need of an executive who can also secure funds for the university. It is my feeling that the activities of the American university president should be distinctly curtailed, and that he should receive supervision on the faculty side as he has on the trustee side, but I am not of the opinion that the office should be abolished. I believe the evils that have crept into the system can be amply checked by very light modification in existing conditions.

In university control the wisdom of having both a chancellor and president is questionable. Although separate duties and qualifications may be required of each, there would doubtless arise occasion where there would be an overlapping of function, giving rise to divided authority and divided responsibility. This usually means less harmony and less efficiency. The university executive should possess high educational and business standards. Not all of the university's business is done through the treasurer's office. In this modern age why should not education and business go hand in hand? Some universities have been able to demonstrate that it can be done. If there are peculiar and exacting qualifications demanded of the executive, it is only fair that there should be greater compensation. some universities a certain number of the alumni are elected to the board of trustees by their fellow alumni. Why should not the faculty elect a certain number of their members to the board? Is there any other group in the university which has a greater interest in its success and welfare? A board of trustees composed of certain members elected by the trustees themselves, others elected by the faculty, and still others by the alumni, would be a truly representative body. (If a state university and the trustees are appointed by the state, the election of trustees by the trustees themselves would probably not Alumni, faculty, trustees and president, all would participate in the administration of the university. In this way all of the constituent parts would come into closer relation with each other and if unity is strength in the republic it should be so in the university. Sections (3) and (4) of your circular seem to me very desirable.

I agree that the system of control current in American universities calls loudly for readjustment. The powers vested in the presidency should be more narrowly limited than at present, especially as regards appointment, salaries and the departmental distribution of The authority of the officers of instruction should be augmented in matters directly or indirectly touching the conduct of the several departments. The trustees should be responsible to the whole university. (1) The type of "corporation" proposed might work; I am uncertain. I suspect that its most difficult occupation would be the equitable distribution of income from university properties. (2) It is absurd to declare that the president's "salary should not be larger, his position more dignified or his powers greater than those of the professor." The important point is, surely, that the authority be properly delegated, and the dignity and salary earned. (3), (4) and (5). I find myself in substantial agreement; though the prescriptions are, in part, Utopian.

The present system could no doubt be much improved. The great trouble seems to be that investigators do not give time or interest enough to such matters. They will always be too deeply buried in the laboratories and this renders the situation difficult to improve.

The plan you propose would certainly be vastly superior to the present plan. As to its details I am not competent to judge.

The form of organization outlined by you seems to me to be an ideal one and I would be prepared to endorse every paragraph as you present it.

I have read your tentative plan of university control to be reached as the result of gradual evolution with much interest. It seems to me perfectly feasible and I am certainly in hearty accord with its main purpose, viz., to do away with the despotism of the president and of the heads of departments. The present system of control in our universities is certainly not the best that could be devised and is unworthy of a democratic country like ours. Your plan has much in it that commends itself to me from my experiences as a university professor and I hope that you may succeed in bringing about some reform of the present system at least. Intelligent discussion of the subject can certainly do no harm and it may direct attention to the matter and thus ultimately do some good.

While I may not have very definite views on the points you raise, still a few of them have of course been considered by all academic men. (1) The body of trustees should be large enough to prevent perpetuation of whims and irregularities that may creep in in times of special pressure. Footnote 2 is a

good safeguard. (2) As most of my own preparation was in a German university, I heartily endorse this view. It is not a promotion when an able and active professor is asked to assume the executive duties of a president. It frequently stifles the man and does not magnify the office. (3) These groups should not have enough autonomy to allow one group to pool its interests against those of another. It can be remedied easily by enlarging the relations you outline in (5). There is danger of lessening the community of interests with other departments when one or two groups grow in numbers and importance. Other groups may be forced to the wall. Footnotes 8 and 9 meet my hearty approval. An instructor should not feel that it is simply a matter of routine to await promotion, but rather that it lies largely with himself whether he advances.

In general, taking your plan for granted, and without going behind it at any point, I should say: It is too bureaucratic; it substitutes one mode of high organization for another. But I do not believe in organization at all; or rather, given the minimum with which an institution can exist, I should prefer to let the organizations within the institution grow at haphazard. My ideal, still in terms of your plan, would be: (1) A faculty with an annually changing chairman; (2) a board of trustees; (3) an annually changing faculty committee of say ten men, to meet with a similar trustee committee; and (4) paid permanent extra-faculty officials; registrar, treasurer, secretaries of faculty, whatever they may be called and as many as the size of the university may demand. Everything else in the way of predetermined or foreseen organization—directors, deans, school-units, appointing boards, etc.—I regard as cumber. And, publicity being presupposed, I should let every institution follow its own natural line of development. If I turn now to your proposal in detail, I should have the following criticisms; I can only state them dogmatically: (1) I think that the state universities are not comparable to the endowed universities; I think it will be a long time before they can possibly be universities; and I think that they are tending away from that ideal towards the development of vocational and professional schools. Your plan contemplates the perpetuation of the large universities, i. e., of the present college-university mixture. I believe that college and university should be personally and spatially separate. I do not think that one can start with the corporation; and it is not necessary to do so, as we have boards already. I mistrust alumni, in anything like equal numbers with faculty; here, I suppose, everything depends on the age of the university, the character of its student body, etc.; I can only speak from experience. I also mistrust the "community," if that means the immediate surroundings of the university. (2) All right as an intermediate measure; but I believe in annual rotation, and I think it would suffice. (3) These are natural units, and need no organization. To make them formal would have its positive disadvantages (inbreeding of ideas, cliquism) and would also do injury to the smaller divisions, which would have to be affiliated to some stronger unit. Psychology, e. g., would have to go to philosophy or education or biology. If a formal unit is required at all, I prefer a unit in which men of very varied interests are bound to meet together in behalf of the university. It would, I think, be a good thing for me to have to dine once a month with an architect, engineer, historian, agriculturalist, biologist, lawyer. These units, if necessary or advisable, might be determined by lot. (4) Far too bureaucratic. Let all business be wholly public, but let representation, appointment, etc., be settled in detail locally by the separate institutions. Do not try to measure "amount of work"; let the candidate understand the present duties of the chair, and then, if he is elected, give him a free hand. (5) Still too bureaucratic. Let every proposed measure that finds a specified number of seconders be voted on always by the whole faculty by postcard; if a meeting is wanted, let it be demanded of the permanent secretary by a specified proportion of the

whole. If the mover is keen, he can print and distribute his arguments. As the first step in advance, I should accept your suggestion of a regular joint-committee of faculty and trustees. As the second step, I should abolish all salaries of deans and directors. I should put extra-faculty permanent clerks in training. Meanwhile, if a faculty-member has to be dean or director, I should excuse him in so far from university work, but should allow him only the professorial salary. I should aim throughout at the realization, by every member of the faculty in the widest sense, that he must be both responsible and loyal to the university, i. e., to his fellow faculty-members and to the students. I should hope that in time the idea of the "university" might include the trustees; though it will, I fear, be long before the professor ceases to regard the trustee as his natural enemy, and the trustee to regard the professor as a fool to be kept harmless. should hope, also, that in time the whole university, faculty and trustees, might be capable of combined action on definite educational lines; even if this took a generation, I should not mind. I dislike difference of title; and I should hope that in time there would be no difference, save of permanency of appointment. We should then have, perhaps, professors elect and professors designate, and that is all; perhaps we might even abolish titles altogether. I do not believe in specially high salaries within the university. A great deal of this is, under present conditions, utopian; I do not think that I could myself live up to my ideals; brutalities and jealousies warp one even against one's will. But I think that with some suffering and many relapses for a generation, the utopia might be approximated.

Your general summary of university evolution from comparatively small colleges to their present dimensions and complex interrelations I have seen with my own eyes. I think that every one who has helped in the evolution of the American university to the present stage expected a simpler organism than actually came from their efforts; and perhaps sometimes we feel hardly willing to accept our own

creation. As you say, there was comparative order and simplicity in the smaller institution; but there is now complexity, and reversing the order of the creation described in Genesis, there is considerable chaos as a result of our creative efforts. But we are not through yet, and in some such plan of representative government as you have outlined, I believe a glorious youth and maturity are before the American university. To answer the questions in order: (1) This is practically the system I have lived under. (2) This seems to me an unnecessary complication. In No. 5 there would naturally be a chairman chosen for the group or groups meeting together. (3) This is entirely practicable and works (4) This is the kernel of the whole well. matter, and by contrast brings out the real difficulty in American universities. We are too much "boss ruled," and have too little of the true principles of self government; and self government is at the root of all permanency in a free commonwealth whether political or educational. The method you propose, in part, I have lived under and know that it is practicable. I have also lived under a system in which over-lords were appointed by a higher over-lord to rule over each province-in a word "boss rule"; and it destroys the fine spirit of a university as it does that of the state and the nation in political matters. I think that in no situation in life is leadership more desired and appreciated than in a university; but leaders, to be followed, must be chosen by, not imposed upon, a faculty group. (5) This is a logical sequence to (4).

LETTERS FROM THE UNIVERSITY OF CHICAGO

I FEEL very little sympathy for the type of organization which you recommend. I spent seven years in an institution which had a democratic organization on its faculty, and I am persuaded that that organization is defective in more ways than the organization at such an institution as Harvard or Chicago. It is defective first, because of the difficulty which always arises when one tries to convert a body of men to new and progressive policies. It is very much easier to get the ear of one