

THE PROBLEM OF THE ASSISTANT
PROFESSOR. III

PART II

The foregoing part represents the problem as seen from one point of view. It is therefore partial, incomplete. For the sake of completeness, a questionnaire (Appendix B) was prepared and sent to the presidents of the twenty-two institutions. The queries were drawn up for the purpose of showing, if possible, some of the broader movements which have affected and are affecting the status of the assistant professor, and also to get light from the administrative standpoint on the lower and upper limits of requirements for the position, etc.

An unfortunate clerical error, discovered too late for correction, called for data concerning students and staff for the years 1890-1 and 1900-1, instead of 1899-1900 and 1909-10. This was kindly remedied in some of the replies; while it was possible from other data available partially to remedy the error in a few other cases. It

is greatly to be regretted that but ten practically complete replies had been received when the time for compilation arrived. It is obvious, for instance, that the present actual average salary of the assistant professor in these institutions could have been obtained (and used as a check on the result in Part I., as to whether the replies came from typical representatives of the rank), if answers had been received from each institution as to the number of assistant professors and the average salary. Because of partial answers, the showing of growth of student body and staff must also be omitted. The general trends of these are too well known to need demonstration here. The following table (VII.) has been compiled, however, from the data at hand, to show the change in the proportionate composition of staff which has taken place in the past twenty years.⁹

It is seen that while the assistant professors have formed a practically constant or slightly increasing proportion of the entire staff, the proportion of the staff above

TABLE VII
Proportionate Composition of Staff

	Assistant Professors in Staff						Staff above Assistant Professor						Staff below Assistant Professor						
	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	Yr.	%	
California	'87	5.6			'07	26.4	'87	44.5			'07	26.8	'87	50			'07	46.8	Assoc. and full above. Assoc. and full above. Also professorial lecturers.
Chicago			'00	14.7	'08	14.1			'00	36.9	'08	39.9			'00	49.4	'08	46	
Columbia	'89	6.1	'00	4.3	'09	10.7	'89	16.7	'00	20.5	'09	27.7	'89	77.2	'00	75.2	'09	61.6	Adjunct profs. Probably more legitimate to take "associates."
Cornell	'89	16.5			'09	17.1	'89	35			'09	18.2	'89	48.5			'09	64.7	
Harvard	'89	15.2	'00	12.2	'04	13.7	'89	37.3	'00	23.2	'04	23.8	'89	47.5	'00	64.6	'04	62.5	A few associates. Assoc. and full above.
Indiana	'89	0	'00	23.8			'89	85.2	'00	40.2			'89	14.8	'00	36			
Iowa	'89	7	'00	9			'89	69.6	'00	53.9			'89	23.4	'00	37.1			Called "associates." Assoc. and full above.
Johns Hopkins	'89	20.8	'00	20.7	'03	18.5	'89	56.4	'00	45	'08	46	'89	22.8	'00	34.3	'08	35.5	
Kansas			'00	28.4	'09	25.2			'00	56.7	'09	42.5			'00	14.9	'09	32.3	Assoc. and full above. Assoc. and full above.
Leland	'91	15.6			'09	18.2	'91	46.9			'09	35.3	'91	37.5			'09	46.5	
Stanford Jr.																			" " " "
Minnesota	'89	11.1	'00	8.7			'89	66.7	'00	30.4			'89	22.2	'00	60.9			
Missouri	'89	22.6	'00	15			'89	67.7	'00	66.7			'89	9.7	'00	18.3			" " " "
Wisconsin	'89	11.5	'00	22	'07	15	'89	73.1	'00	34.6	'07	26.4	'89	15.4	'00	43.4	'07	58.6	
Yale	'89	6.3	'00	7.7	'09	18.4	'89	46.5	'00	36.5	'09	27.4	'89	47.2	'00	56.7	'09	54.2	

⁹ See also SCIENCE, May 14, 1909, pp. 767-770.

this rank has diminished to about one half what it was twenty years ago, and the proportion of the lower ranks has correspondingly increased. The assistant professor of to-day, in other words, must win his way *out* of a larger group and *into* a much smaller group, relatively, than did the assistant professor of twenty years ago. This means that the competition is severer both for the position and for promotion out of it.

The replies to query 2c were unanimous that the present requirements for the position are more exacting than they were twenty years ago. These facts explain the high age of the men (36.8 average) shown in Part I.

When we compare our incomplete results with those shown in Bulletin No. 2 of the Carnegie Foundation (pp. 29-32), we find our average reported salary of \$1,790 for twenty of the strongest institutions as compared to an average of \$1,600 for about one hundred institutions. It is there found that the age of entrance to a grade allotted an average salary of \$1,500-\$2,000 is thirty years. We find from our replies 31.25. This checks remarkably well, the difference being such as we should expect to find, owing to the difference represented by the smaller and the larger group of institutions.

The returns for the age of entrance into full professorship, there stated to be 34 years, based on those *now holding* the rank, would show a considerable change, I feel sure, if we had the average of those *now being appointed* to that rank. This is obvious, since a large proportion of those making up the entrance age of 34 were appointed under the conditions prevailing 15 to 20 years ago. The conclusions drawn on page 32 of the bulletin: "A man acceptable to these institutions for a position worth \$1,250 will be on the average 25 years

old; a man appointed to a position worth \$1,750 will be on an average 31 years old when appointed to it; one appointed to a position worth \$2,500 or over will be on the average 34 years old" necessarily refer to what has been rather than to what is.

It would probably be nearer present-day facts in the average of these institutions to state that from 27 to 31 a man receives an average salary of \$1,100; from 31 to 41 an average of \$1,800, and from 41 on \$2,500 or more. It would be interesting to get the actual facts in any institution as to this trend in change of age of promotion, by taking the average age of those promoted to full professorship in each year for the past twenty-five years; thus showing the tendency as affecting the most highly successful members of the profession.

Table VIII. has been compiled partly from the replies, partly from data already in the hands of the writer, and partly from Bulletin No. 2 of the Carnegie Foundation. Owing to its incomplete nature, we are not justified in drawing from it the general conclusions which it was hoped to obtain. It is, however, introduced on account of its value for purposes of comparison.

The replies to the queries in general are grouped alphabetically by institutions, and are, by permission, credited to their authors.

Queries 2a, b asked:

(a) Whether any basis of requirements for eligibility to promotion from instructorship to assistant professorship had been formulated, and (b) what would be considered suitable qualifications.

The replies:

(a) No. (b) It would be difficult to be precise. An instructor's term is three years. One or two such terms should indicate whether one is qualified for promotion.—President Judson.

TABLE VIII
Salary of Assistant Professor
 (compiled from various sources)

	Year	Minimum	Maximum	Average	Year	Minimum	Maximum	Average
California	'89			1,800	'07			1,620
Chicago					'09	2,000	2,500	2,102
Clark					'07			1,650
Columbia ¹⁰					'07			2,201
Cornell	'88			1,760	'07			1,715
Harvard	'89	2,000	2,500		'07	2,500	3,000	2,719
Illinois					'09			1,851
Indiana					'07	1,000	1,300	1,083.33
Iowa	'89	1,200	1,800	1,400	'09	1,100	1,800	1,418
Johns Hopkins					'07			1,344
Kansas	'89			1,050 ¹¹	'09	1,000	1,500	1,250
Leland Stanford Jr.	'91	2,000	2,500	2,250	'08	1,500	2,500	1,827
Michigan					'07			1,624
Minnesota	'89	800	1,350	1,162.5	'09	1,400	2,400	1,791
Missouri					'09	1,500	2,000	1,800
Nebraska					'07			1,500
Pennsylvania					'07			1,850
Princeton					'07			1,824
Virginia					'07			1,425
Wisconsin	'89	1,100	1,500	1,250	'09	1,500	2,500	1,733
Yale	'88	1,750	2,500	1,900	'09	1,800	2,500	2,100 ¹²

(a) No fixed requirements. (b) I should be unable to put them into the shape of any fixed formula.—President Lowell.

(a) The doctor's degree or the equivalent. (b) If, as is usually the custom, the assistant professor is to teach freshmen, he should be a man whose character, disposition and training make him fit for this important work. Many young doctors are notably unfit.—President Bryan.

(a) The university has not definitely formulated a basis of requirements for eligibility for promotion from instructors to assistant professors. (b) Assistant professors should be from 30 to 35 years of age; have had training equivalent to that required for the degree of doctor of philosophy; should have demonstrated their ability as teachers to impart knowledge and inspire interest in their subject; should have had a minimum of perhaps five years of teaching experience.—President MacLean.

(a) Nothing very definite. (b) Ordinarily the instructorship should serve as an apprenticeship for the candidate for a position in the required teaching force of the institution. The instructor should have such training and qualifications as to fit him for the minor work in his department, and to cause him to be seriously regarded as a prospective candidate for permanent position.—Dean Templin.

(a) A man who fills well a position permanently needed. (b) (1) Character. (2) Teaching ability with enthusiasm. (3) Scholarship. (4) Fitness for advancement as an original scholar. I should place age and experience lowest.—President Jordan.

(a) No. (b) Age 23 to 30. Scholarship, A.B. and Ph.D. degrees with what they are supposed to indicate. Teaching ability, clear view of things and power to impress and inspire. Experience, as much as possible at the age.—President Northrop.

(a) The general understanding is that for promotion to rank of assistant professor, a man must give definite evidence of productive scholarship as well as teaching ability. (b) Can not formulate answer.—President Hill.

(a) No. (b) Do not feel able to formulate answer to this question offhand.—President Van Hise.

(a), (b) We promote a man from an instructorship to an assistant professorship if, after three years of teaching, he has shown exceptional fitness for teaching and research; or if, after five years of teaching, he has shown such reasonable degree of success in instruction and administration as entitles him to promotion.—President Hadley.

Query 2c asked if these requirements are more exacting than they were twenty

years ago. The replies were unanimous that they are so.

Query 3*a*, *b*, asked the minimum, maximum and average salaries paid in this rank now, and twenty years ago. The replies are included in Table VIII.

The question to be raised here is, ignoring all change in cost of living, whether there has been a change in salary commensurate with the higher requirements for the position. Of the nine institutions whose data are available, three (California, Cornell, Stanford) show an actual decrease in the average rate of salary for the assistant professorship; one (Iowa) shows practically no change; one (Yale) an increase of 10 per cent.; one (Kansas) an increase of 20 per cent.; one (Harvard) about 25 per cent.; one (Wisconsin) about 40 per cent.; and one (Minnesota) 55 per cent.

The increase at Wisconsin has been uniform over the period, as can be seen from the following table:

Year	1889	1892	1901	1907	1909
Salary	\$1,250	\$1,383	\$1,500	\$1,636	\$1,733

At Harvard the increase came suddenly about three years ago, due to the Teachers' Endowment Fund; and at Minnesota suddenly about two years ago, largely due to the pressure brought to bear by the alumni upon the legislature and regents, in consequence of which a considerable general increase was made in the salary roll.

In looking at Table VIII., it should be borne in mind that some of these institutions have the associate professorship, intermediate between assistant and full professorship, while some do not.

¹⁰ New regulations 1909. \$1,600 at appointment, 100 annual increment four years.

¹¹ An increase of 20 per cent., approximately, in twenty years.

¹² Two or three exceptional cases make an apparent range from \$1,500 to \$3,000.

Query 3*c* asked, from the point of view of the value of their services to the institution, what would be considered a proper ratio between the average salaries of assistant and full professors.

The replies:

With us the assistant professor's salary is from \$2,000 to \$2,500, and the full professor's from \$3,000 to \$4,500. That indicates our view.—President Judson.

A little less than double.—President Lowell.

Assistant professors should have a higher salary. Full professors should have salaries sufficient to induce the best men to follow this occupation.—President Bryan.

From the point of view of the value of their services to the institution as well as from the point of view of the demands upon them, the assistant professor's salary should be roughly two thirds or three fourths that of the full professor.—President MacLean.

One to two.—Dean Templin.

Average about half. But "full" professors do not always "grade up."—President Jordan.

Impossible to establish a fixed rate. If professors get \$3,500, assistant professors ought, after trial, to get \$2,500.—President Northrop.

At present the salaries of [assistant professors range from \$1,500 to \$2,000, average \$1,800 and of] full professors here range from \$2,200 to \$3,000. This seems as fair to the former as to the latter class.—President Hill.

Question disregards fact that at Wisconsin we have associate professors.—President Van Hise.

It must depend wholly upon the character of the institution.—President Hadley.

Queries 4*a*, *b*, *c* were drawn up to elicit information regarding: (*a*) Recognition of the existence of a class of permanent assistant professors, (*b*) if it existed, whether the present salaries were adequate for efficient life service, and (*c*) calling for suggestions in regard to meeting the problem of a permanent class of assistant professors.

The replies:

(*a*) Not formally. Practically an assistant professor who may not expect promotion would not be continued in the faculty. (*b*) It is not considered by us expedient to have such a perma-

nent class. (c) I should not have such a class at all.—President Judson.

(a), (b) We do not. After a certain length of service an assistant professor has hitherto been expected to win promotion or drop out. (c) This is a difficult problem as yet unsolved.—President Lowell.

(a) Yes. (b) No. (c) Instead of making a permanent class of assistant professors I would make a special class of professors who devote themselves to the training of college boys—a task as important as that of those who devote themselves to research.—President Bryan.

(a) We do not at present. (b) If conditions tend to form a permanent class of assistant professors the present salaries will not be adequate for efficient life-service in this work. (c) I would give them votes in the faculty and after the first five years of satisfactory service, life tenure and make their salaries proportionate to full professors' salaries rather than to instructors' salaries.—President MacLean.

(a) Yes. (b) No.—Dean Templin.

(a) Those most indispensable as men or as teachers or in research may look forward. (b) No. Salaries should be higher and discriminations keener. (c) I wish I could give any. It is one of the administrative problems most difficult to handle.—President Jordan.

(a) No. They are permanent if good enough. If vacancy occurs above them they may or may not be promoted. It depends upon whether a better man can be obtained. (b) No. There should be a general lifting of the salaries of the whole grade. (c) None.—President Northrop.

(a) No. All assistant professors are on permanent appointment and may look forward to promotion. (b) I think not, but with chance for promotion before all, the salary seems reasonable for assistant professors in comparison [about two thirds of full professors' salary]. (c) I should prefer not to make a man "assistant professor" till he demonstrates his fitness and capacity to become "professor" when maturer. I would also treat all teachers of professorial rank as equal in freedom, initiative, etc., before the administration.—President Hill.

(a) Assistant professors for definite period of appointment, commonly three years; associate professors, indefinite. (b) Salaries for assistant professors are too small, but not more so than for other classes of staff. [Ratio to full professors' salary (1907), associates 73.5 per cent., assistants 59 per cent., instructors 38.5 per cent.]

(c) Would keep rank of assistant professor for definite period, and make that of associate professor permanent appointment.—President Van Hise.

(a) We desire not to form a permanent class of assistant professors if we can help it. If a man is not ready to rise above \$2,500 with us, we make it easy for him to go to some other institution where research qualifications are less necessary for a full professorship. It occasionally happens that a man makes himself more useful to us as assistant professor than he could anywhere else and obtains a quasi-permanent position of this kind. (b) No. (c) I think it can be practically done away with if we recognize that nearly all men who make good assistant professors will make better independent teachers in schools where original deep thought is not so much required as it ought to be in university teaching.—President Hadley.

At Columbia it is recognized that there are certain men who might well remain assistant professors so long as they were in service, no matter what their compensation or the length of their experience. Persons whom it might prove to be desirable to retain in the service of the university, either as instructors or assistant professors, might, after having served for five years, be appointed by the trustees to serve during their pleasure, and their salaries fixed regardless of their grade. By making this provision for academic officers of this type, who are rather numerous, much of the pressure which is now felt to advance men to adjunct professorships and professorships, in order to reward them for long service or to give them increased compensation, would be relieved.

Queries 4*d*, *f*, *g*, *h*, *i* and *j* had bearing on the relation of length of service to salary and promotion. 4*d* asked whether salaries were graded with respect to length of service.

The replies:

Yes. \$2,000 for first four-year appointment. \$2,500 on reappointment.—President Judson.

Yes. \$2,500 for first five-year appointment. \$3,000 on reappointment.—President Lowell.

Yes.—President Bryan.

Length of service is one element to be taken into consideration.—President MacLean.

Yes.—Dean Templin.

Theoretically not so much as in fact.—President Jordan.

Yes.—President Northrop.

Yes, but not entirely, and we reckon the service elsewhere as well as here.—President Hill.

Yes.—President Van Hise.

First three years, \$1,800; next five years, \$2,500. A continued appointment after eight years' service is a rare exception.—President Hadley.

4*f* inquired whether length of service should constitute any claim to promotion.

The replies:

Not by itself.—President Judson.

Yes, if the other qualifications exist.—President Lowell.

No.—President Bryan.

One claim for promotion, but only one and must be considered with several other factors.—President MacLean.

Not alone, but should be considered.—Dean Templin.

Not much.—President Jordan.

Yes, other things being equal.—President Northrop.

Not apart from essential qualifications.—President Hill.

Yes.—President Van Hise.

Not after reaching the age where maximum service can be rendered.—President Hadley.

4*g* asked the length of service of the senior assistant professor in the institution.

The replies:

Fourteen years.—President Judson.

Not over ten years.—President Lowell.

Eight years.—President Bryan.

Eight years.—President MacLean.

Ten years.—Dean Templin.

Eight years.—President Jordan.

Eighteen years.—President Northrop.

Eight years.—President Hill.

Sixteen years.—President Van Hise.

Eight years. One with nominal rank, seventeen years.—President Hadley.

4*h* inquired the percentage of assistant professors promoted each year, on the average.

The replies:

20 or 21 per cent.—President Judson.

Cornell promoted nineteen assistant professors last year.—President Schurman.

Assistant professors are promoted at the expiration of the second five-year term—with very rare exceptions.—President Lowell.

Perhaps one or two [men?].—President Bryan.

One, two or three promotions out of eight to sixteen or seventeen.—President MacLean.

10 per cent.—Dean Templin.

9 per cent., average past six years.—President Jordan.

Can't tell. It depends on needs and money.—President Northrop.

Unable to answer, as I have been president only one year.—President Hill.

12 per cent., average for past seven years.—President Van Hise.

Perhaps from 5 to 10 per cent.—President Hadley.

4*i*, *j* asked (*i*) whether promotions are as rapid or as general as the highest efficiency of the institution demands, and (*j*) if not, what are the chief causes of delay.

The replies:

(*i*) On the whole, yes. Rapid promotion is seldom desirable. (*j*) We have sometimes been delayed by lack of funds.—President Judson.

(*i*) Yes, I think so.—President Lowell.

(*i*) No. (*j*) Lack of money.—President Bryan.

(*i*) No. (*j*) Financial reasons.—President MacLean.

(*i*) Yes.—Dean Templin.

(*i*) Yes, but salaries are too low.—President Jordan.

(*i*) Yes, in most cases. (*j*) Lack of money.—President Northrop.

(*i*) Yes, I think so, as there are no barriers to the promotion of men who win the right. (*j*) Financial causes are most likely to operate against promotions here, but I do not believe that difficulty is as serious as appears in some institutions. In most deserving cases adjustments can be made.—President Hill.

(*i*), (*j*) Yes, so far as rank is concerned, but not as rapidly as desirable in the matter of money.—President Van Hise.

(i), (j) If I understand the question, I think so. Of course, if we had more money we should make more promotions instead of allowing some of our good men to go away; but I do not think increased rapidity of promotion as important a question as increased salaries for full professors.—President Hadley.

Query 4e asked the essential qualifications for eligibility for promotion from assistant professorship to the rank above. In considering the replies it is to be borne in mind that some of these institutions have an associate professorship and some have not.

The replies:

Assured capacity as a scholar and teacher, and as a productive investigator. Of course, personal character is fundamental.—President Judson.

I could not formulate this with definite precision.—President Lowell.

An adequate measure of excellence of some sort, primarily in scholarship, but excellence in the training of college youths is also recognized as a valid ground for promotion.—President Bryan.

Scholarship, proved by the results of a reasonable amount of research work together with some publications; teaching ability, proved by perhaps ten years of successful teaching; the test of success being applied a little more rigidly when promotion to a professorship is made, than before promotion to an assistant professorship.—President MacLean.

To be promoted, the assistant professor must have established himself as a permanently desirable member of the university faculty. His scholarship must be beyond question, as must also be his ability either as a teacher or an investigator.—Dean Templin.

(1) Character. (2) Ability as teacher. (3) Ability to form independent judgments. (4) Enthusiasm in work.—President Jordan.

Thorough knowledge of the subject, and executive ability to manage the department, and enthusiasm for the work that will inspire assistants and pupils.—President Northrop.

Greater maturity and more complete demonstration of ability in research, teaching, and general usefulness to the university.—President Hill.

Before promoting from assistant to associate professor, must become convinced that instructional power and investigational capacity suffi-

ciently high, so that institution desires services of man for life.—President Van Hise.

The three qualifications for full professorship, in the order of average importance are, original scholarship, organizing ability and teaching power. Teaching power is placed third, not because of any under-estimate of its importance, but because men who are good teachers at thirty, but have not original scholarship or organizing ability, are apt to be (I do not say are always) less good teachers at fifty.—President Hadley.

To determine the academic and administrative status of the assistant professors, questions 5a, b, c and d were drawn up. They inquired (a) the participation of this rank in the legislating bodies, faculty, council, senate, etc.; (b) the voice in departmental matters; (c) whether on the same footing as full professors in respect to appointment to administrative and academic committees, which formulate, control or direct educational policies; and (d) in respect to appointment as executive heads of departments.

The replies:

(a) The senate consists of full professors. Council, of administrative officers only. Assistant professors are members of all faculties. (b) Yes. (c) Yes. (d) No.—President Judson.

(a) Yes. (b) Yes. (c) Yes. (d) Nearly so.—President Lowell.

(a) They are made so by law. (b) In most cases, yes. (c) Yes. (d) We have no such cases.—President Bryan.

(a) Not members of university legislating bodies. (b) Presumably they have a voice in departmental matters, though it can not be said that there is uniformity of practise in the different departments. (c) May be appointed, but such appointments are rare. (d) Occasionally made acting heads of departments. This is only on occasions when there is no one of rank of professor in the department.—President MacLean.

(a) Are members of the faculties of their schools, but not of the university council. (b) Yes. (c) Theoretically, yes. (d) No.—Dean Templin.

(a) Are members of faculty. New appointees are not admitted to council until the end of three years. (b) Yes, by regulations. (c) All mem-

bers of council eligible to all committees. The advisory board, however, is elected by the council from the full professors only. (d) Have been sometimes acting heads, where there was no full professor.—Stanford.

(a) Faculty, yes. Council, no. (b) Subject to the head of the department. (c) Yes. (d) If there is a head professor, he is head. If there is none, an assistant professor in the department may act as head.—President Northrop.

(a) Yes. (b) They are supposed to have, and our policy is to give them, equal voice with full professors. (c) Yes. (d) They have not been in the past, but I have positively committed my administration to an affirmative answer to this question for the future. I have had no new permanent heads of departments appointed, and shall not hesitate to appoint assistant professors.—President Hill.

(a) Yes. (b) Yes. (c) Yes. (d) Yes as to law, but not as a matter of practise.—President Van Hise.

(a) They are members of the faculty and have votes in all administrative matters; but they are not as a rule members of the higher bodies that deal with legislation in the narrower sense. (b) Yes. (c) Practically so, except as the greater experience of full professors creates a greater demand for their services on committees. (d) No. It is only in exceptional cases that an assistant professor becomes an executive head of a department.—President Hadley.

Question 5e asked whether it was advisable for the younger men of an institution to take an active part in forming and executing its policies, and if so, why.

The replies:

Yes. For their own development, and to prevent the undue conservatism of age.—President Judson.

Yes. Because he is more apt to be progressive.—President Lowell.

Yes, assuming that the younger men are on the average equal in ability to the older, they have the advantages of their youth in terms of spontaneity and energy, and these should not be lost to the university.—President Bryan.

I think it advisable. With the balance given by the older men of the faculty the university has the advantage of the strength and activity of the younger men, without the danger of their forcing wrong policies on the institution through lack of judgment. Their recognition as a part of the

administrative machinery, which does not exist if the younger men are not taken into the administrative counsels.—President MacLean.

Yes, to promote progress.—Dean Templin.

Yes, in order to realize their difficulties. But they should not be too zealous before studying problems.—President Jordan.

Yes. Because the institution may profit by the best thought of all—and the younger men sometimes know more than the older.—President Northrop.

I do. Because they can often render valuable services, and because they thus become more serviceable, more loyal to the institution, and find greater satisfaction in their work.—President Hill.

Yes. Advantageous to have them consider themselves as part of the institution in the full sense.—President Van Hise.

Yes. I regard it as self-evident.—President Hadley.

Query 5f asked whether it was desirable to have departments conducted on a democratic or autocratic basis.

The replies:

A qualified democracy is the better.—President Judson.

Democratic.—President Lowell.

Autocracy means, as a rule, more immediate efficiency. Democracy of the right sort means lasting health in the organization, with all the good consequences which flow therefrom.—President Bryan.

It is desirable that departments be conducted on a democratic basis.—President MacLean.

Neither. Republican rather.—Dean Templin.

Democratic in so far as experience and circumstances permit.—President Jordan.

Democratic with a head.—President Northrop.

Democratic.—President Hill.

Democratic.—President Van Hise.

It depends wholly upon the men you have on the staff. If the president is wise and the rest of the teaching force foolish, it is desirable that it should be autocratic. If the president is foolish and the rest of the teaching force are wise, it is desirable that it should be democratic.—President Hadley.

To the request for suggestions concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency, there was much more reticence on the part of the presi-

dents than on the part of the assistant professors. Two replies only were received. Fortunately, they sum up the conclusions most adequately:

The principle ought to be established that "there is always room at the top." Under an autocratic system or even where permanent appointments are made of "heads of departments," there is never room at the top. A more democratic organization of department faculties seems to me to be one of the most important and pressing reforms demanded in educational institutions.—President Hill.

Better pay: greater insistence on superior life—which involves zeal, character, interest in students, interest in knowledge and ability to distinguish scholarship from pedantry.—President Jordan.

The writer's task is completed. For the opportunity offered him to prepare this paper, and to all those who burdened themselves with so thoroughly answering his many questions, he wishes to express his grateful thanks. He has made no attempt to trace the historical development of the assistant professorship in the American university system, nor to disentangle the combinations of regular and acting, adjuncts, assistants, associates and juniors where these exist,¹³ nor to show the possibilities of university teaching as a career. He has merely tried to present a faithful cross-section of the existing conditions of the assistant professorship in the institutions represented in this association.

Both sides have been heard; their conclusions are in striking accord. The initiative for improved administrative status and adequate salaries lies in the hands of the one; that for increased zeal, worth and efficiency in the hands of the other. The outlook is full of opportunity and promise.

GUIDO H. MARX

¹³ One institution has twenty regular titles in its list of staff.

APPENDIX A

QUERIES FOR ASSISTANT PROFESSORS

Suggestions and comments on points not covered below will be gratefully received.

1. Age?
2. Degrees?
3. Years spent in collegiate and graduate (or professional) study?
4. To what extent did you hold fellowships or receive similar assistance?
5. To what extent did you go into debt for your training?
6. How long did it take to pay this debt?
7. Length of teaching service below rank of assistant professor?
8. Length of teaching service in rank of assistant professor?
9. Married or single?
10. Number of children?
11. Present salary?
12. Average salary during entire teaching service?
13. Total savings from salary (exclusive of insurance)?
14. To what extent have you supplemented your salary by income from other sources?
15. Is your income sufficient to make both ends meet or are you running behind?
16. If willing, will you state your present net deficit or indebtedness?
17. How much insurance do you carry?
18. What are your opinions concerning the status of the assistant professorship (*a*) in sharing in the determination of general policies of your institution; (*b*) in departmental policy, curriculum and assignment of courses; (*c*) in conduct (*i. e.*, direction) of individual classes?
19. What are the conditions of nature and amount of work, etc., and do these reasonably favor carrying on advanced work and intellectual growth?
20. What are the conditions governing tenure of the assistant professorship and are they the best for reasonable independence of thought and action?
21. Have you any suggestions to make, concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency?

APPENDIX B

QUERIES FOR PRESIDENTS

Suggestions and comments on points not covered below will be gratefully received.

1. Kindly fill in this table:

'89-'90 '99-'00 '09-'10

Number of full professors

Number of associate "

Number of assistant "

Number of instructors

Number of assistants

Number of students

2. *a* Have you formulated any basis of requirements for eligibility to promotion from instructorship to assistant professorship?

b What would you consider suitable qualifications of age, training, scholarship, teaching ability, experience, etc.?

c Do you consider the present requirements for the position of assistant professor to be more or less exacting than they were twenty years ago?

3. *a* What are the minimum, maximum and average salaries paid assistant professors of your staff this year?

b What were these salaries in 1889-1890?

c From the point of view of the value of their services to the institution, what would you consider a proper ratio between the average salaries of assistant professors and of full professors?

4. *a* Do you recognize two general classes of assistant professors, temporary and permanent; that is, those who may reasonably look forward to promotion and those who, for one reason or another, may not?

b If conditions tend to form a permanent class of assistant professors, are present ruling salaries adequate for efficient life-service in this rank?

c What suggestions would you make in regard to meeting the problem of a permanent class of assistant professors?

d Do you grade assistant professors' salaries at all with respect to length of service?

e What do you consider essential qualifications for eligibility to promotion from assistant professorship to the rank above?

f From the point of view of the administration, should length of service constitute any claim for promotion?

g How long has your senior assistant professor served in this rank?

h On the average, what percentage of assistant professors are promoted by you each year?

i Are promotions as rapid or as general as the highest efficiency of the institution demands?

j If not, what do you consider the chief causes of delay?

5. *a* Are your assistant professors members of the legislating bodies, faculty, council, senate, etc.?

b Have they a voice in departmental matters?

c Are they on the same footing as full professors in respect to appointment to administrative and academic committees which formulate, control or direct educational policies?

d In respect to appointment as executive heads of departments?

e Do you consider it to be advisable for the younger men of an institution to take an active part in forming and executing its policies? Why?

f As a matter of the highest efficiency of the institution, do you consider it desirable to have departments conducted on a democratic or autocratic basis?

6. Have you any suggestions to make concerning the problem of the assistant professorship, looking toward higher individual or institutional efficiency?

7. Are you willing to have your name attached to quotations from these answers?

SCIENTIFIC NOTES AND NEWS

MR. ALEXANDER AGASSIZ died on March 28, on the steamship *Adriatic*.

SIR ERNEST SHACKLETON gave an address on his Antarctic explorations before the National Geographic Society on March 26, and was presented with the gold medal of the society by President Taft. On March 28 he addressed the American Geographical Society in New York City and received its gold medal.

THE date for the delivery of the Romanes lecture at Oxford University by Mr. Roosevelt has been fixed for Wednesday, May 18.

At the annual meeting of the Institution of Mining and Metallurgy in London, on March 17, the following awards were presented: the gold medal of the institution to Professor William Gowland, the "Consolidated Gold Fields of South Africa," gold medal to Mr. W. A. Caldecott and the premium to Mr. C. O. Bannister and Mr. W. N. Stanley.