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1912

**Report of Educational Committee of the American Association of  
Public Accountants Giving Information of the Department of  
Commerce, Accounts and Finance of One Hundred of the Leading  
Universities in the United States**

American Association of Public Accountants

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REPORT OF  
EDUCATIONAL COMMITTEE  
OF THE  
**American Association of Public  
Accountants**

Giving Information on the  
Department of

COMMERCE, ACCOUNTS AND FINANCE

OF

**ONE HUNDRED OF THE  
LEADING UNIVERSITIES**

IN THE UNITED STATES

To

The Trustees of

The American Association of Public Accountants,

55 Liberty Street, New York.

Gentlemen:

I take great pleasure in transmitting to you herewith, in accordance with your instructions, report of your Committee on Education.

Respectfully yours,

J. B. Geijsbeek, Chairman.

Denver, Colo., September 2, 1912.

## INTRODUCTION.

The Committee on Education submitted at the convention at San Francisco in the Fall of last year, a preliminary report containing the following introduction:

“Your Committee on Education found upon investigation that the work done heretofore by similar committees had not been in an organized manner, and therefore it decided to map out a line of investigation and work which may be pursued by following committees, so that it might result in regular annual reports of the same nature which may ultimately become of value. It was, therefore, necessary that some inquiries be made preliminary to the planning of future work.”

The Committee, having been instructed at the San Francisco convention to complete the investigation, continued along the line mentioned and now desires to report as follows:

For the purpose of facilitating reading and for ready reference as well as to bring out at the start the large scope of the investigation, we have divided the report under the following thirty-six subjects:

Introduction.

Letter and Questionnaire sent to 100 Universities.

Letter and Questionnaire sent to Departments of Commerce.

General review of replies received.

Undergraduate schools.

Undergraduate courses.

Graduate schools.

Variety of names given to schools.

Partial tabular comparison.

Lack of uniformity in everything.

Aid given by the "Efficiency Society."

Subjects in the course.

Complete course of compulsory subjects.

Suggested complete courses of elective subjects.

Comparison of above two courses.

Text-books.

Chairman's suggestion on "Five-Foot Shelf" for accountancy students.

The Five-Foot Shelf.

Elective or compulsory studies.

The problem or lecture methods.

Hours of recitation in each study.

Courses adapted for C. P. A. examinations.

Attendance at lectures.

Comparison with Europe.

Urgent need for establishment of courses.

Prof. Binz of Berlin quoted.

R. W. Babson quoted.

Schedule of studies for "Economic Engineers."

Practical courses becoming popular in Universities.

Value to students and practical results.

Statistics obtained by University of Illinois.

Results at New York University.

Results at Denver University.

Correspondence courses.

Conclusions.

Recommendations.

## LETTER AND QUESTIONNAIRE SENT TO ONE HUNDRED UNIVERSITIES.

The following circular letter and blank of inquiries were sent to all the state universities and in addition thereto to such institutions of learning of the university class as had either over one hundred instructors or over one thousand students:

“Dear Sir:

“The Educational Committee of the American Association of Public Accountants is very anxious to learn the exact status of higher education in commercial subjects as reflected in the curriculum of the institutions of higher education at the present time.

“You are doubtless aware that the need for instruction in higher business methods is very much felt all over the country. It is a subject which has been taken up and discussed at almost every educational meeting which has been held during the past few years. This committee desires to record the progress made in commercial education as such progress is made from year to year.

“We would, therefore, like to ask you to be kind enough to answer the inquiries on the enclosed sheet as accurately as may be possible and return it to the chairman of this committee at as early a date as convenient.

“We appreciate that some work may be entailed in answering the enclosed inquiries, but we feel that this committee cannot properly reply to the inquiries which it is receiving in regard to what thus far have been found to be the subjects best adapted to be taught in a commercial course in higher education unless it can obtain the experience of existing educational departments.

“We trust, therefore, that you will be kind enough to make an extraordinary effort to comply with our request.

“Thanking you in advance, we are,

| SUBJECTS   | Hours in class work given | Estimated hours required in preparing for each hour of class work |
|--|---------------------------|---|
| <b>ECONOMICS.</b>  |                           |   |
| 1 Business Economy .....   |                           |   |
| 2 Railroad Transportation .....                                      |                           |   |
| 3 Industrial History .....   |                           |   |
| 4 Public Finance .....   |                           |   |
| 5 History of Banking, Money and Credit ..                            |                           |   |
| 6 Industrial Values .....  |                           |   |
| 7 Railroad Traffic Problems .....                                    |                           |   |
| <b>COMMERCIAL LAW.</b>   |                           |   |
| 8 Contracts .....  |                           |   |
| 9 Agency .....   |                           |   |
| 10 Partnerships .....  |                           |   |
| 11 Negotiable Instruments .....                                      |                           |   |
| 12 Property—Real and Personal .....                                  |                           |   |
| 13 Corporations .....  |                           |   |
| 14 Receivers .....   |                           |   |
| <b>ACCOUNTING.</b>   |                           |   |
| 15 Philosophy of Accounts .....                                      |                           |   |
| 16 Practical Banking .....   |                           |   |
| 17 Practical Accounting .....  |                           |   |
| 18 Auditing .....  |                           |   |
| 19 Accounting Problems .....   |                           |   |
| 20 Accounting Problems Advanced .....                                |                           |   |
| 21 Accountancy of Investment .....                                   |                           |   |
| 22 Railroad Accounting .....   |                           |   |
| 23 Accountants' Reports .....  |                           |   |
| 24 Advanced Auditing .....   |                           |   |
| 25 Accounting Procedure .....  |                           |   |
| 26 Accounting Systems .....  |                           |   |
| 27 Insurance—Life and Fire .....                                     |                           |   |
| 28 Cost Accounting .....   |                           |   |
| 29 Corporation Finance .....   |                           |   |
| 30 Private Auditing .....  |                           |   |
| 31 Commercial Arithmetic .....                                       |                           |   |
| <b>MISCELLANEOUS.</b>  |                           |   |
| 32 Advertising .....   |                           |   |
| 33 Real Estate .....   |                           |   |
| 34 Journalism .....  |                           |   |
| 35 Consular Service .....  |                           |   |
| 36 Business English .....  |                           |   |
| 37 Spanish .....   |                           |   |
| 38 German .....  |                           |   |
| 39 French .....  |                           |   |
| 40 (List on the reverse those subjects given but not entered above.) |                           |   |

- In what studies do you use text-books? .....
- In what studies do you give lectures only? .....
- For what studies do you distribute a syllabus or synopsis of lectures? .....
- (Designate the studies in reply to the above 3 questions by the numbers used in the list herewith.)
- Number of professors engaged in above subjects .....
- Number of instructors engaged in above subjects .....
- Number of persons giving occasional lectures only .....
- How many of the above are practicing public accountants? .....
- Number of students taking full commercial course .....
- Number of students taking partial commercial course .....
- Number of above contained in the 1910-1911 Freshman Class taking full course .....
- Number of above contained in the 1910-1911 Freshman Class taking partial course .....
- (The above figures should be given for the season ending this summer.)
- What degree do you confer for the completion of study in commercial subjects? .....
- How many hours are required for the degree? .....
- How many hours are required for the commercial subjects alone? .....
- Have you a distinct and special department, such as in the Universities of New York, Pennsylvania, Denver and the Northwestern of Chicago? .....
- Is your commercial department merely a branch, so to speak, of the department of economics? .....
- Is your commercial department merely a branch, so to speak, of the department of arts? .....
- Are your commercial classes strictly night classes? .....
- Are your commercial classes strictly day classes? .....
- Are your commercial classes held both at day and night? .....
- Kindly give name of professor or dean at the head of commercial department .....
- Do you permit as special students in the commercial department those who could not otherwise regularly matriculate? .....
- May students take an examination without having attended the classes? .....
- May a student take a three years' course in two years or in one year as in other professional courses like law? .....
- Is the commercial course open to undergraduates or must the matriculant possess a degree? .....
- Do you consider such a course as you give in this direction a training for entering the profession of accountancy? .....
- If so, what results do your students get in taking C. P. A. Examinations? .....
- Has your Department of Commerce any course which provides an equivalent to practical experience, such as a dispensary in a law or medical school? .....



LETTER AND QUESTIONNAIRE SENT TO THOSE  
INSTITUTIONS HAVING A DEPART-  
MENT OF COMMERCE.

"Dear Sirs:

"The American Association of Public Accountants, through its Educational Committee, is endeavoring to make itself useful as an advisory bureau, to schools, colleges, and universities that are contemplating the introduction of, or have already introduced, courses leading to preparation for the profession of Accountancy. It is the desire of this Committee to profit by the experience of those institutions that have been pioneers in this field of training. Towards that end and for the purpose of securing all necessary data as to what such training should comprise, you would greatly assist the Committee by filling in answers to the enclosed questionnaire and in making such suggestions as your experience may show to be pertinent.

"Thanking you in advance for your unflinching courtesy, we are,

1. Do you require any general training in accountancy of all students in the College of Commerce, whether or not they have elected the Accountancy group of studies as a major; if so, what course or courses are prescribed?
2. Of those who have elected the Accountancy group, what courses in accountancy are required as fundamental training?
3. In addition to those under No. 2, *supra*, what amount of work in accountancy is prescribed? (Give answer in actual number of hours of class-room lectures or recitations.)
4. In the Accountancy group, is the purpose of your course to give adequate preparation for the State Board of Accountancy examination?
5. In a general way, have the results of such examinations proven the sufficiency of your training?
6. In your opinion and the experience of your school, are such examinations a fair test of a candidate's qualifications for the practice of Certified Public Accountancy? If not, what changes as to method or content of the examinations would you suggest?
7. How many students have you enrolled in each of the following courses?"

## GENERAL REVIEW OF REPLIES RECEIVED

Replies were received from all those addressed. Seventy-six replied that they had no specific department of Commerce and Accounts, nor any course in this line. Of those replying that they had a separate department, your Committee classifies two as merely commercial colleges and not schools of commerce of a university standing. This leaves 22 institutions which replied that they had a department or courses in commerce, accounts and finance.

These 22 may be separated into two principal divisions, *those aiming to give the COLLEGE student a BUSINESS training*, and *those aiming to give the BUSINESS man a COLLEGE training*. These two diverse aims are responsible for the great diversity in subjects taught and the importance attached to each subject. Which of the two aims is the better is difficult to judge at the present time, but it will become apparent from what is quoted here below that the university and college managements are endeavoring to answer this question.

If the figures given below are based on information which may be termed reliable, it will not be difficult for anyone to answer the question. Taking for our guide the beneficial results which have been shown to come to those who are inexperienced in business but receive a college training, we maintain that the results will be enormous if we make a college-trained man out of a person who is already a good business man with experience. Furthermore, it would seem, under the present public demand from universities for more practical education than that of liberal arts and the universal demand by business men for better commercially trained young men, that we accountants should aim in the direction of giving the business man a college training. If we properly train the business young man in the sciences of commerce, accounts and finance, the natural

result will be that the profession of accountancy as a profession will become better known and elevated, and that then the accountant will not be called upon to do a large amount of work which belongs either to the business man or to the latter's principal assistant, the bookkeeper.

We might further state that it is the opinion of this Committee that a business training to a college student is of immense value, but it maintains that *a training of this kind only reaches a few, whereas a college training to the business man reaches a large number* and does not prevent the college student from attending and obtaining his business training.

As stated before, the college and university managements are really at variance in their opinion on this subject, but they are nearly all willing to concede the fact that they must give some instruction in commerce, accounts and finance. The Committee, therefore, feels that the time has arrived for the American Association of Public Accountants to direct and guide the thoughts of the managements of the universities and colleges of this country, and that the first step in this direction is the dispensation of information in respect to what has already been done by the leading educational institutions in this country.

In accordance with appropriation made and instruction given at the San Francisco convention, a copy of this report will go forward to each member of this association and to the one hundred leading educational institutions mentioned, with a letter setting forth the willingness of the American Association of Public Accountants, through its Educational Committee, to aid them in the establishment of, or improvement in, their department of Commerce, Accounts and Finance.

Viewing the 22 replies from another angle, we might divide them into four: first, those having distinct and separate schools, colleges or departments; second, those having distinct courses; third, those having distinct departments, but which are not of the

grade of a university; and fourth, those having some studies or some course in accounting in their departments of economics or sciences. Having these four divisions in mind, we find that only 2 have commercial colleges, which we have already mentioned and which are not included in the 22 referred to. Twelve have specific departments, 5 have distinct courses, 3 have accounting in their department of economics, and 2 claim to have distinct departments, but from the replies and publications received we failed to so classify them. Out of the 12 which have specific departments, we must again distinguish between those which have an undergraduate school and a graduate school—10 are undergraduate and 2 are graduate.

#### UNDERGRADUATE SCHOOLS.

The 10 institutions claiming to have specific departments of commerce, accounts and finance are:

- 1—Columbia University,
- 2—New York University,
- 3—Northwestern University,
- 4—Oregon Agricultural College,
- 5—St. Louis University,
- 6—University of California,
- 7—University of Denver,
- 8—University of Illinois,
- 9—University of Pennsylvania,
- 10—University of Pittsburgh.

#### UNDERGRADUATE COURSES.

The 10 institutions giving courses in accounting and commerce in their curriculum are:

- 1—Cornell University,
- 2—George Washington University,
- 3—Millikin University,

- 4—Radcliffe College,
- 5—Simmons College,
- 6—University of Minnesota,
- 7—University of Ohio,
- 8—University of South Dakota,
- 9—University of Wisconsin,
- 10—University of Wyoming.

Out of these, Cornell and Radcliffe and Ohio University give but very little.

From the list of inquiries hereinbefore given, you will notice that a school of commerce, accounts and finance gives considerable of what may be called economic and law studies, and we must, of course, mention that these two subjects are included in practically all the curriculums of all the institutions of learning. Among these economic and law studies are some which touch on commerce, accounts and finance, but wherever the universities had them listed among their law courses or in their departments of economics, political science, or political economy, we have not strictly considered them as subjects in which we are interested. Some of the institutions are enlarging the number of courses included in their studies of economics, political science, and political economy, and special favorites in this line are transportation, banking, business management, public finance and trusts. Most of the institutions which have enlarged the scope of economic studies in the direction of commerce have invariably informed the committee that they are hoping and looking forward to the establishment of a permanent independent school of commerce, accounts and finance, showing again the trend of thought and the public demand for instruction in which your committee is interested.

#### GRADUATE SCHOOLS.

As stated, there are only two institutions giving a course in commerce, accounts and finance for graduates of universities.

The school at Dartmouth College, which is called the "Amos Tuck School of Administration and Finance," was started about 1904, and consists of a two years' course, leading to the degree of Master of Commercial Science (M. C. S.). The courses are given only in day session, and the total hours of class work for the entire course we estimate at 1,200. The school occupies a building of its own.

The school at Harvard University is called the "Graduate School of Business Administration." It was established in 1908, and gives a two years' course, leading to the degree of Master of Business Administration (M. B. A.). The classes are day sessions only, with an estimated total hours of 1,200.

The Universities of New York and Denver confer a degree of Master of Commercial Science (M. C. S.) to graduates of universities having already completed courses in distinct commercial branches equal in requirements to their own schools of commerce.

At New York it requires the work of an additional year of 180 hours, besides the preparation of a thesis. At Denver it requires the work of an additional year of 540 hours, which includes the time for the preparation of the required thesis.

## VARIETY OF NAMES GIVEN TO SCHOOLS.

The lack of uniformity in almost everything connected with the new movement of establishing schools under observation is prominently and forcibly illustrated by the names given the departments or schools which aim to give instruction in commerce, accounts and finance. In the name the word "accounts" is only used in those institutions where from its inception in the establishment the influence of some accountant predominated.

Below we give a list of such names, each one being preceded by a number which indicates the frequency with which that name is used:

- 4—School of Commerce, Accounts and Finance.
- 1—School of Finance, Commerce and Accounts.
- 2—School of Accounts and Finance.
- 4—School of Commerce.
- 1—School of Finance and Commerce.
- 1—School of Commerce and Finance.
- 2—School of Business Administration.
- 1—School of Business Administration and Finance.
- 1—School of Commerce and Business Administration.
- 1—School of Economics.

## PARTIAL TABULAR COMPARISON.

|   | Columbia             | New York                                | North-western                  | Oregon Agric.   | St. Louis                               | California                | Denver                                  | Illinois  | Pennsylvania                                 | Pittsburgh                                   |
|---|----------------------|---|--------------------------------|---|---|---------------------------|---|---|--|--|
| Approximate date of establishment.....  | 1911                 | 1900                                    | 1908                           | 1909  | 1910                                    | 1908                      | 1908                                    | 1910  | 1904   | 1908   |
| Preliminary Education needed for "regular" students desiring to obtain a degree.....  | High School graduate | High School graduate                    | High School graduate           | Two years in High School                                    | High School graduate                    | High School graduate      | High School graduate                    | High School graduate                              | High School graduate                         | High School graduate                         |
| Length of college course needed for the degree.....   | 3 years              | 3 years                                 | 3 years                        | 4 years   | 3 years                                 | 4 years                   | 3 years                                 | 4 years   | 4 years                                      | 4 years                                      |
| Day or night classes upon which degree is given.....  | Night                | Late afternoon and night                | Night                          | Day   | Night                                   | Day                       | Night                                   | Day   | Day  | Day  |
| Night classes given, but they do not lead to a degree.....  | None designated      | Bachelor of Commercial Science B. C. S. | Not yet named but contemplated | No Bachelor of Science in Commerce and Finance B.S. in C.F. | Bachelor of Commercial Science B. C. S. | Bachelor of Science B. S. | Bachelor of Commercial Science B. C. S. | No Bachelor of Business Administration AB in B.A. | Bachelor of Science in Economics B. S. in E. | Bachelor of Science in Economics B. S. in E. |
| Name of degree conferred.....   | None designated      | Bachelor of Commercial Science B. C. S. | Not yet named but contemplated | No Bachelor of Science in Commerce and Finance B.S. in C.F. | Bachelor of Commercial Science B. C. S. | Bachelor of Science B. S. | Bachelor of Commercial Science B. C. S. | No Bachelor of Business Administration AB in B.A. | Bachelor of Science in Economics B. S. in E. | Bachelor of Science in Economics B. S. in E. |
| Students can complete course in less than required time for degree by taking standing in subjects through special examinations and without attending classes..... | Not stated           | Yes                                     | No                             | Not stated  | Not stated                              | No                        | Yes                                     | No  | Yes  | Yes  |
| Is course aimed to give a training for C. P. A. Examinations.....   | Yes                  | Yes                                     | Yes                            | Yes   | Yes                                     | Yes                       | Yes                                     | Yes   | Yes  | Yes  |
| Does school have a commercial dispensary or laboratory to provide practical experience.....   | No                   | No                                      | No                             | No  | No                                      | No                        | No                                      | No  | No   | No   |

The above tabulation is only approximately correct. It contains the only answers which could be reduced to tabulation, and the source may prove not to have been exactly reliable, but it will answer our purpose.

It will be noticed that with the exception of New York and Pennsylvania the other eight schools are comparatively new. Some of them have just completed their first experimental cycle of work, or in other words have just put forth their first class of graduates. All aim at the preparation for C. P. A. Examinations, but none have facilities for providing practical experience which is a pre-requisite of the C. P. A. degree. All require a complete High School graduation with the exception of Oregon Agricultural College. The length of the course for night classes is uniformly three years and for day classes four years. The additional year of the latter being generally used for additional studies in economics and languages. Pennsylvania and Pittsburgh give day and night classes, but do not confer a degree for night work alone. The degree conferred is by no means uniform.



## LACK OF UNIFORMITY IN EVERYTHING.

A careful study of the replies to our inquiries from the institutions having departments of commerce, accounts and finance, plainly indicates that no uniformity (even in the slightest degree) exists in anything whatever connected with the movement or in the courses given, as to hours of study and recitations required, as to elective and compulsory studies, as to the use of text-books or synopses of lectures, or as to the problem or lecture method, and other matters as will appear further on.

## AID GIVEN BY THE "EFFICIENCY SOCIETY."

That this lack of uniformity is well known and greatly deplored, can be learned from prospectus of the recently created national body, called "Efficiency Society," which started with a membership of over one thousand, composed of the most prominent men, who realize the value of efficient methods of accomplishment. In its recently printed announcement of its objects and purposes, we read the following:

"The Society has in hand a program following up the work initiated at its first meeting and intended to develop the sciences of Organization and Management in ways that will lead to efficiency in the industrial and other fields. This program will be a dual one, in part curative of present inefficiency and in part preventive of inefficiency in the future. Simultaneously with this program the actual situation will have to be carefully studied, and for this purpose a canvass will be made to find out the causes of inefficiency existing in each of a great many enterprises and to note the results of the efforts which have been made to correct it.

"In the Fall these data will be presented at a conference which will be attended by the Deans of the Colleges and Universities throughout the country which have established courses in Commercial and Business Administration, and an effort will be made there to harmonize and standardize these courses and to embody in them the proper

information which will not only qualify the future employer for his work, but will also better equip men to do reorganizing and systematizing work in offices and factories and to modernize the methods of present employers. This conference will be addressed not only by men who have been successful in the various fields of human activity, but by the graduates of these schools, who will say whether the present curricula have been of value in their practical work, and suggest changes accordingly."

### SUBJECTS IN THE COURSE.

Averaging the matter, and taking a broad view, all institutions are agreed that accountancy will not be taught in universities as a distinctive course under that name, for it has by custom, due to logical position, been included in the courses on commerce, which has already become a distinct term and fixed designation, even though the official name of the school may include the word "accounts"; also that the proper business and accounting training should include the subjects of economics, law and accounting; but what should be given under each subject, and how much, are by no means uniform.

### COMPLETE COURSE OF COMPULSORY SUBJECTS.

One of the schools which makes all of its studies compulsory to the student desiring to obtain the degree of Bachelor of Commercial Science (B. C. S.), gives the following schedule and submits its conclusion by stating that, *in its opinion, the course contains the least that should be demanded of any one desiring to be successful as a business man, or for his state examination for certified public accountant.* It is based on ten hours per week for "regular," or "full time," students, and a three years' course of a total of 960 hours of actual class recitation work for the degree; recitation being from 5:40 to 7:40. Its schedule is given below. All these studies must be taken by all students,

and nothing more or less than this can be taken. The school does not permit electives and offers none. The figures to the right are actual hours of sixty minutes each of recitation class work. Each recitation in any subject continues for two hours. The report shows that these long recitations have proven more satisfactory for mature minds than short recitations and frequent changes.

#### ACCOUNTING.

|    |  |    |     |
|----|--|----|-----|
| 1  | 1st Yr.—Philosophy of Accounts .....           | 26 |     |
| 2  | 1st Yr.—Practical Accounting .....             | 50 |     |
| 3  | 1st Yr.—Auditing .....                         | 24 |     |
| 4  | 1st Yr.—Mathematical Computations .....        | 48 |     |
|    |  |    | 148 |
| 5  | 2nd Yr.—Advanced Accounting and Procedure..... | 40 |     |
| 6  | 2nd Yr.—Systems of Accounting.....             | 24 |     |
| 7  | 2nd Yr.—Accountancy of Investment.....         | 20 |     |
| 8  | 2nd Yr.—Cost Accounting .....                  | 32 |     |
| 9  | 2nd Yr.—Private Auditor .....                  | 4  |     |
| 10 | 2nd Yr.—Insurance .....                        | 8  |     |
|    |  |    | 128 |
| 11 | 3rd Yr.—Accounting Problems .....              | 60 |     |
| 12 | 3rd Yr.—Accountants' Reports .....             | 40 |     |
| 13 | 3rd Yr.—Advanced Auditing .....                | 40 |     |
| 14 | 3rd Yr.—Railroad Accounting .....              | 20 |     |
|    |  |    | 160 |
|    |  |    | 436 |

#### LAW.

|    |   |    |     |
|----|---|----|-----|
| 15 | 1st Yr.—Contracts .....                           | 36 |     |
| 16 | 1st Yr.—Agency and Partnership.....               | 36 |     |
|    |   |    | 72  |
| 17 | 2nd Yr.—Property, Corporations and Receivers..... | 48 |     |
| 18 | 3rd Yr.—Negotiable Instruments and Insurance..... | 42 |     |
|    |   |    | 162 |

#### COMMERCE AND ECONOMICS.

|    |  |    |     |
|----|--|----|-----|
| 19 | 1st Yr.—Business Economy .....                 | 40 |     |
| 20 | 2nd Yr.—History and Geography of Commerce..... | 40 |     |
| 21 | 2nd Yr.—Industrial Efficiency .....            | 40 |     |
|    |  |    | 80  |
| 22 | 3rd Yr.—Railroad Transportation .....          | 36 |     |
| 23 | 3rd Yr.—Industrial History .....               | 42 |     |
|    |  |    | 78  |
|    |  |    | 198 |

## FINANCE.

|          |   |           |
|----------|---|-----------|
| 24       | 1st Yr.—Practical Banking .....                   | 24        |
| 25       | 2nd Yr.—Money and Credit, History of Banking..... | 32        |
| 26       | 2nd Yr.—Corporation Finance .....                 | 32        |
|          |   | <hr/> 64  |
| 27       | 3rd Yr.—Public Finance .....                      | 40        |
|          |   | <hr/> 128 |
| ENGLISH. |   |           |
| 28       | 1st Yr.—Business English .....                    | 36        |
|          |   | <hr/> 960 |
|          | Total hours.....                                  |           |

## SUGGESTED COMPLETE COURSES OF ELECTIVE SUBJECTS.

The oldest and largest school which makes none of its courses compulsory, but all electives, gives the following suggestive programs of studies. It is also based on ten hours per week for "regular," or "full time," students, and a three-year course with a total of 900 hours of actual class recitation work for the degree; recitation being principally in the evening from 4:45 to 6:45, or 5:45 to 7:45, or 7:45 to 9:45. Its schedules are given below. They are, however, rearranged by subjects and the years in which they are given, and the hours computed as best we could from the catalogue. It will be noted that the total hours as suggested do not agree with the 900 hours required for the degree.

## Suggested Courses of Study for Public Accounting, Private Accounting, and Auditing.

## ACCOUNTING.

|  |           |
|--|-----------|
| 1st Yr.—Principles of Accounting ..... | 60        |
| 2nd Yr.—Theory of Accounting .....     | 60        |
| 2nd Yr.—Accounting Practice .....      | 60        |
| 2nd Yr.—Cost Accounts .....            | 60        |
|  | <hr/> 180 |
| 3rd Yr.—Auditing .....                 | 60        |
| 3rd Yr.—Accounting Systems .....       | 60        |
| 3rd Yr.—Fiduciary Accounts .....       | 60        |
| 3rd Yr.—Advanced Problems .....        | 60        |
|  | <hr/> 240 |
|  | <hr/> 480 |

|  |       |
|--|-------|
| LAW.   |       |
| 1st Yr.—Contracts and Agency .....                           | 60    |
| 2nd Yr.—Sales and Mortgages, Bankruptcy .....                | 60    |
| 3rd Yr.—Commercial Paper, Partnership and Corporations ..... | 60    |
|  | — 180 |
| COMMERCE.  |       |
| 1st Yr.—Political Economy .....                              | 60    |
| 2nd Yr.—Business Organization .....                          | 60    |
| 3rd Yr.—Analysis of Corporation Reports .....                | 60    |
|  | — 180 |
| FINANCE.   |       |
| 1st Yr.—Corporation Finance .....                            | 60    |
|  | 60    |
| ENGLISH.   |       |
| 1st Yr.—Business English .....                               | 60    |
|  | 60    |
| Total hours .....  | 960   |

### Suggested Courses of Study for Banking and Brokerage.

|   |       |
|---|-------|
| ACCOUNTING.   |       |
| 1st Yr.—Principles of Accounting .....                        | 60    |
| 2nd Yr.—Accounting Practice .....                             | 60    |
|   | — 120 |
| LAW.  |       |
| 1st Yr.—Contracts and Agency .....                            | 60    |
| 2nd Yr.—Sales and Mortgages, Bankruptcy .....                 | 60    |
| 3rd Yr.—Commercial Paper, Corporations and Partnerships ..... | 60    |
|   | — 180 |
| COMMERCE.   |       |
| 1st Yr.—Political Economy .....                               | 60    |
| 2nd Yr.—Trade and Transportation .....                        | 60    |
| 3rd Yr.—Statistics .....                                      | 60    |
| 3rd Yr.—Analysis of Corporation Reports .....                 | 30    |
| 3rd Yr.—European and South American Trade .....               | 60    |
|   | — 150 |
| FINANCE.  |       |
| 1st Yr.—Corporation Finance .....                             | 60    |
| 2nd Yr.—Money and Credit .....                                | 30    |
| 2nd Yr.—Banking Theory and History .....                      | 30    |
| 2nd Yr.—Banking Practice .....                                | 30    |
| 2nd Yr.—Financial History of the United States .....          | 30    |
| 2nd Yr.—Crises and Depressions .....                          | 30    |
|   | — 150 |
| 3rd Yr.—Banking in Europe .....                               | 30    |
| 3rd Yr.—Foreign Exchange .....                                | 30    |
| 3rd Yr.—Investment and Speculation .....                      | 60    |
|   | — 120 |
|   | — 330 |

|                                |     |
|--------------------------------|-----|
| ENGLISH.                       |     |
| 1st Yr.—Business English ..... | 60  |
|                                | 60  |
| Total hours .....              | 960 |

### Suggested Courses of Studies for Mercantile and Manufacturing Business.

|  |     |
|--|-----|
| ACCOUNTING.                            |     |
| 1st Yr.—Principles of Accounting ..... | 60  |
| 2nd Yr.—Accounting Practice .....      | 60  |
| 3rd Yr.—Cost Accounts .....            | 60  |
|  | 180 |

|   |     |
|---|-----|
| LAW.  |     |
| 1st Yr.—Contracts and Agency .....            | 60  |
| 3rd Yr.—Sales and Mortgages, Bankruptcy ..... | 60  |
|   | 120 |

|   |     |
|---|-----|
| COMMERCE.                                       |     |
| 1st Yr.—Political Economy .....                 | 60  |
| 1st Yr.—Ethics of Business .....                | 15  |
|   | 75  |
| 2nd Yr.—Business Organization .....             | 60  |
| 2nd Yr.—Industrial Resources and Values .....   | 60  |
|   | 120 |
| 3rd Yr.—European and South American Trade ..... | 60  |
|   | 255 |

|  |     |
|--|-----|
| FINANCE.                                 |     |
| 1st Yr.—Corporation Finance .....        | 60  |
| 2nd Yr.—Money and Credit .....           | 30  |
| 2nd Yr.—Banking Theory and History ..... | 30  |
|  | 60  |
|  | 120 |

|  |     |
|--|-----|
| LANGUAGES.                               |     |
| 2nd Yr.—Spanish, French, or German ..... | 60  |
| 3rd Yr.—Spanish, French, or German ..... | 60  |
|  | 120 |

|                                |     |
|--------------------------------|-----|
| ENGLISH.                       |     |
| 1st Yr.—Business English ..... | 60  |
|                                | 60  |
| Total hours .....              | 855 |

### Suggested Courses of Studies for Teaching of Commercial Subjects.

|  |    |
|--|----|
| ACCOUNTS.                              |    |
| 1st Yr.—Principles of Accounting ..... | 60 |
|  | 60 |

|  |    |       |
|--|----|-------|
| LAW.   |    |       |
| 1st Yr.—Contracts and Agency .....           | 60 |       |
| 2nd Yr.—Sales and Mortgages, Bankruptcy..... | 60 |       |
|  |    | — 120 |
| COMMERCE.                                    |    |       |
| 1st Yr.—Political Economy .....              | 60 |       |
| 1st Yr.—Ethics of Business .....             | 15 |       |
|  |    | — 75  |
| 2nd Yr.—Business Organization .....          | 60 |       |
| 2nd Yr.—Commercial Geography .....           | 60 |       |
|  |    | — 120 |
| 3rd Yr.—Industrial History .....             | 60 |       |
|  |    | — 255 |
| FINANCE.                                     |    |       |
| 1st Yr.—Corporation Finance .....            | 60 |       |
| 2nd Yr.—Money and Credit .....               | 30 |       |
| 2nd Yr.—Banking Theory and History .....     | 30 |       |
|  |    | — 60  |
| 3rd Yr.—Financial History .....              | 30 |       |
| 3rd Yr.—Public Finance .....                 | 60 |       |
| 3rd Yr.—Foreign Exchange .....               | 30 |       |
| 3rd Yr.—Banking in Europe .....              | 30 |       |
|  |    | — 150 |
|  |    | — 270 |
| LANGUAGES.                                   |    |       |
| 2nd Yr.—Spanish, French, or German.....      | 60 |       |
| 3rd Yr.—Spanish, French, or German.....      | 60 |       |
|  |    | — 120 |
| ENGLISH.                                     |    |       |
| 1st Yr.—Business English .....               | 60 |       |
| 2nd Yr.—Business English .....               | 60 |       |
|  |    | — 120 |
| Total hours.....                             |    | — 945 |

## COMPARISON OF ABOVE TWO COURSES.

We give but two definite schedules of studies, and have given the two most uniform in character in some aspects, and, at the same time, the most opposite in character as compared with others:

One all compulsory, the other nearly all electives;

One aiming to reach as many varieties of students as practicable in a limited community as to population and local demands

of business; the other aiming to reach as large a variety of students as may wish to come, and suiting the most extended demands of business, local or world-wide;

One believing in a combination of lectures and text-books written by other people than its own professors; the other leaning more to teaching by synopses of lectures by its own professors, furnished to the students in multigraph style;

One east; one west;

One connected with a large university; the other with a small.

*Yet with these great opposites, they agree positively and definitely on the following:*

Both have complete, distinct departments and separate locations for their schools, and there is no doubt in this respect;

Both are centrally located in the heart of natural business centers, although the importance and extent of these centers are again in opposite extremes;

Both have about an equal number of class hours leading to the degree;

Both have about the same recitation hours (namely: late afternoon or evening work);

Both have well defined, plainly outlined courses and schedules;

Both actually give full complement of courses, and not merely list a course, depending on the attendance whether the course will actually be given or not;

Both are independent of the university or other colleges as to financial aid, or the furnishing of professors;

Both practically draw their students entirely from outside the regular student body of the university;

Both confer a specific and distinct degree at the completion of a three years' course in their own departments;

Both are located in states where the C. P. A. requirements stand very high;

Both charge about the same for the full course, namely: \$90 to \$100 per year;

Both have large and excellent libraries in their specialized field.



## TEXT-BOOKS.

An examination of the replies to the inquiries shows plainly that text-books are not uniformly and generally used. They are used for certain courses and not for others. This does not seem to be due to a disinclination or an aversion to the use of text-books, but rather to an idea that the field of text-books for these comparatively new studies is believed to be exceedingly limited. The Committee finds that such is not the case. In the past three or five years a large number of most excellent works have been put upon the market, making it possible for nearly every subject in the present curriculum to be covered by a text-book. One head of a recently established school informed us that he was dumbfounded at the large number of works existing in this field. He asserted it would be no trouble to obtain, in short order, a library of 300 volumes of reasonably good works.

The replies, however, indicate a very diversified opinion on the use of text-books, and we give the leading thoughts on this subject, so the entire matter will be before you. In the absence of text-books in the early career of the older schools, the professors were compelled to prepare their lectures with more than usual care. It soon developed that the students would derive more benefit if the principal points to be brought out at the lecture were handed to them to take the place of their note-taking. Thus the student received the equivalent of a text-book written by the professor. The custom has become a habit, and, in some schools, is now the rule. The argument in favor of this method is that the professor knows just what the student gets in the way of notes, and that he gets it strictly according to the professor's views.

The argument on the other side is that these notes are more or less hastily prepared by persons who are not text-book writers and authors, hence their works would, in most instances, be

inferior to a good text-book. Furthermore, it is argued that the students attending schools of commerce are not children, and therefore by reading the text beforehand, would be acquainted with the substance of the lecture, thus saving the lecturer considerable time, permitting him to go deeper into the subject, and enabling the student to participate in that rapid-fire challenge debate of such incalculable value in a class room to mature young men of business habits. Furthermore, a good professor, master of his subject, should have no difficulty in elucidating the salient points of his subject, even if he does not fully agree with the text-book.

Numerous texts now in use have been submitted to the Committee, but it feels that only teachers can judge the value of text-books, and since only the minority of the members of the Committee have experience in this line, and since the Committee is too widely scattered to meet and discuss the subject, it refrains from recommending any text-books; furthermore, such an official action on the part of the Committee might lead to "invidious distinction" and trouble.

The Committee is agreed, however, that the text-book method for this class of students has distinct merit, but it also wishes to go on record by stating that when it comes to text-books on accountancy subjects, *a text-book is valueless unless there is considerable practical experience back of it.*

#### CHAIRMAN'S SUGGESTION ON "FIVE-FOOT SHELF" FOR ACCOUNTANCY STUDENTS.

The chairman, however, feels that with his experience in the line of text-books on this subject, an opinion may be ventured on a five-foot shelf of books for accountancy students, in order to give a clear and unmistakable conception of the class of work performed in the school of commerce, accounts and finance of the university grade.

The chairman, with due apologies to President Emeritus Elliott, is willing to stand the criticism that may come his way, or the nick-name that may become attached to his suggestion, considering the immense value that may come from it to students or those others who are seeking proper information for the starting of a school of commerce, accounts and finance.

### THE FIVE-FOOT SHELF.

|  |                                    |
|--|------------------------------------|
| A. B. C. of Wall Street . . . . .                          | S. A. Nelson                       |
| Accountancy of Investment . . . . .                        | Charles E. Sprague                 |
| Accountancy Problems, Vols. 1 & 2 . . . . .                | Leo Greenlinger                    |
| Accounting Systems . . . . .                               | Edward Moxey                       |
| Accounts of Executors and Testamentary Trustees . . . . .  | J. Hardcastle                      |
| Advanced Accounting . . . . .                              | L. R. Dicksee                      |
| American Accountants' Manual . . . . .                     | Frank Broaker                      |
| Auditing Theory and Practice . . . . .                     | R. H. Montgomery                   |
| Commercial Geography . . . . .                             | C. C. Adams                        |
| Corporation Accounting and Law . . . . .                   | J. J. Rahill                       |
| Corporation Finance . . . . .                              | William H. Lough, Jr.              |
| Cost Accounting . . . . .                                  | L. W. Hawkins                      |
| Economics of Business . . . . .                            | E. S. Meade                        |
| Factory Costs . . . . .                                    | Frank E. Webner                    |
| Fraud in Accounts . . . . .                                | No. 30 of the Accountants' Library |
| History of Accounting and Accountants . . . . .            | Richard Brown                      |
| History of Commerce . . . . .                              | C. Day                             |
| Lombard Street . . . . .                                   | Walter Baghot                      |
| Manual of Commercial Law . . . . .                         | E. W. Spencer                      |
| Modern Accounting . . . . .                                | Henry Rand Hatfield                |
| Partnership Accounts . . . . .                             | P. Child                           |
| Philosophy of Accounts . . . . .                           | Charles E. Sprague                 |
| Pratts' Digest of National Banking Laws . . . . .          | A. S. Pratt & Sps                  |
| Rowe's Bookkeeping and Accounting . . . . .                | Harry M. Rowe                      |
| Scientific Management . . . . .                            | Frederick A. Parkhurst             |
| Shop Management . . . . .                                  | Frederick W. Taylor                |
| Short Rules for Commercial Calculations . . . . .          | Patrick Murphy                     |
| Theory of Business Enterprise . . . . .                    | Thorstein Veblen                   |
| File of Rules and Forms of Interstate Commerce Commission. |                                    |

File of Publications on Terminology and Uniform Systems of  
Accounting by U. S. Census and Labor Bureau.  
Revised or Annotated Statutes of the State of Residence.  
Journal of Accountancy.  
American Association of Public Accountants' Year Book.

### ELECTIVE OR COMPULSORY STUDIES.

The old, old arguments which have unsettled educational boards of all kinds of institutions of learning from time immemorial, apply, of course, here.

The Committee feels that, inasmuch as the American Association of Public Accountants is especially interested in the subject of teaching accounting to the limit, it follows that those courses giving the largest number of compulsory hours in accounting are best suited to the needs of those it desires to aid.

We further believe that the study of accounting, in combination with commercial law and economics, affords as valuable mental discipline as the so-called culture studies, and, in addition, furnishes the technical knowledge and habits of thought that make for efficiency in business.

We further submit, that the training in accounting and business is that of a profession, distinct and peculiar, just as much as that of the lawyer, dentist and doctor; and yet we would not think of permitting the aspirants to these three professions to select what is best for them to study (except it be in selecting a special school of medicine).

However, as the profession of business (to which we have seen the accountant must subordinate his studies in the universities) is somewhat flexible as to specialties, we feel that *some studies ought to be elective, but that the majority should be compulsory.*

A study of the school catalogues reveals that this is the requirement of but four of those that claim to have distinct departments.

The one institution not permitting any electives whatsoever, submits as its reason that electives are a burden to new and small schools, because they require more class rooms, more instructors, greater salary and expense lists, and smaller and scattered attendance; and it attributes its success, financially and otherwise, to this ruling and to its making the course broad enough to include alike prospective accountants, teachers, and business men.

## THE PROBLEM OR LECTURE METHODS.

Whether to adopt the problem or lecture methods, is another feature brought out by the inquiries. It is parallel with the question of teaching case law in the law-school, or of having a clinic connected with a dentistry school, or a hospital with a college of medicine. The Carnegie Institute has recently refused financial aid to colleges of medicine unless good sized hospitals are connected with them and maintained by them. In the law school, if the case method is not employed, certainly the student is required to apply the lectures to a large number of cases prescribed as additional reading. All of this indicates to the Committee that *professional subjects are and must be practically applied*. In accountancy subjects this can be accomplished only by men with practical accounting experience, who can apply the text to common-sense, every-day, and actual business activities and problems.

This would mean that theoretically educated professors could not handle accounting subjects in a satisfactory manner, and it is surprising to note how few practical business men and accountants teach these important subjects in those institutions claiming to have separate departments of commerce, accounts and finance; there are 8 out of a total of 22.

The reason seems to lie in the fact that practical, professional men are usually poor teachers, and besides are better

paid than college professors, and thus are not attracted to this field.

#### HOURS OF RECITATION IN EACH STUDY.

The two schedules of courses submitted above, represent a fair average of the hours required for recitation in each study. While these figures are representative, they are not actual, for the reason that it is difficult to state each course definitely.

A tabulation of hours devoted to each study given would be impossible from the replies. Each university or school has a different method of calculating "hours" of recitation. It would take half a dozen Philadelphia lawyers and C. P. A.'s to reduce them to a standard, such as an hour—by the clock—sixty plain minutes. A good illustration is a reply to our question of how many hours of class work are required for the degree. The answer read: "132 semester hours, *i. e.*, one hour a week for 18 weeks."

Furthermore, it all depends on what the writer of a particular catalogue or the party describing the courses in the catalogue includes within a certain course. There is no uniformity in the naming of courses in connection with what they contain.

If, however, the courses are classified under the four distinct heads of accounting, law, economics, and finance, we then find that if the full study is for a training in accounting and auditing, the accounting subjects comprise about one-half of the full three years' course; and the law, economics, and finance combined, the other half. If, on the other hand, accounting is not the specific aim, then economics and finance predominate.

As to the selection of courses by the students themselves, it is very unsatisfactory to draw any conclusions. All who answered our inquiries state that it is extremely difficult to keep the students from specializing too much in the field of accounting, and to insist upon their taking at least a certain

amount of each of the other main branches offered by the school, namely: commerce, finance, and commercial law.

It would appear, however, from some of the replies, that *between four hundred and five hundred hours of class work in the three years' course for the subject of accounting, are barely sufficient to do it justice.* This, coupled with the fact already pointed out, that it is difficult to obtain instructors for the accounting subjects, from the view-point of practice and experience, has, beyond a doubt, led to the exclusion of these subjects from the curriculum of those institutions which are not situated in commercial centers.

#### COURSES ADAPTED FOR C. P. A. EXAMINATIONS.

In the Committee's second letter of inquiries, some questions were propounded in regard to the C. P. A. examinations, with the result that *all the courses of distinct schools were aimed to be preparatory to the C. P. A. examinations, and all report marked success,* although no definite data could be obtained giving a comparison of results at these C. P. A. examinations as between students and non-students, only one institution having accurate statistics on the subject.

We have noted in the preceding sections that the problem confronting the schools is how to keep the students from specializing too much in the field of accounting, and from refusing to take the subjects of commerce, finance, and commercial law. The same objection is registered in regard to the C. P. A. questions propounded at the C. P. A. examinations. Nearly all insist that economics, commerce, and finance should be examined into in conjunction with the practical questions. Here we find the reason for the difficulty of inducing the student to take a broad education, because the C. P. A. examining boards do not examine on the fundamentals of the accounting subjects. The students

naturally claim that if the state examiners are not worrying about it, they should not be compelled to take courses in such subjects.

As to question 6 of the second questionnaire, inquiring whether in "the experience of your school, are such examinations a fair test of a candidate's qualifications for the practice of certified public accountancy; if not, what changes as to the method or content of the examination would you suggest?"—some answer in full but others refuse to commit themselves. From this, the Committee believes that this subject is one which should be referred to a special committee for further investigation, as it is too large to be incorporated in this report.

## ATTENDANCE AT LECTURES.

The attendance is difficult to tabulate, because in all but one of the schools, the courses are not compulsory, and therefore larger attendance will be found in some attractive subjects. We therefore give the attendance at the most popular courses, indicating therewith the number interested in the study of accountancy subjects. We have not attempted to tabulate any figures other than these. Neither could we obtain reliable figures from all the 22 institutions listed above, and we therefore have tabulated only 10 of the institutions, having a specific, separate department of commerce, accounts and finance. Of these we find 169 professors and instructors engaged in this work, and these dispensed their valuable services to 3,523 regular and special students. There is no doubt, in the Committee's opinion, that this number could easily be made to exceed four thousand, if all the courses were taken into consideration. From this it will be clearly noticed that already *a large number of young men are interested in this work, at a time which we may really term the starting period for this new field of*



instruction, New York and Pennsylvania universities being practically the only institutions having a branch of this kind older than three or four years.

## COMPARISON WITH EUROPE.

That we are in a degree ahead of some European countries in this phase of education might be gathered from the fact that one of our noted commercial educators who recently made a visit to Europe, stated that:

“During my visit abroad, I paid visits to six of the leading European schools of Commerce, those at London, Brussels, Antwerp, Cologne, Frankfort, and Berlin. All these schools are better supplied with funds and equipment than any of our American schools, but I do not believe that any of them are getting the practical results which American schools are achieving. They do not seem to have grasped the idea of studying business conditions and problems at first hand, and of working out in a constructive way new principles of business action.”

Another of our educators in this specific branch, reported that he had received a very flattering offer to go to Vienna and there organize the profession of accountancy, and in connection therewith operate a school of commerce, accounts and finance, as known in this country.

## URGENT NEED FOR ESTABLISHMENT OF COURSES.

The Committee has no doubt, from the replies received and from the results of its investigation, that there is urgent need for the establishment of more courses in accounting, commerce and finance, provided it is agreed that accounting is a practical economic study of value to future business men. For the past few years, educators of this country have agitated the discrep-

ancies in high school education from the standpoint of practicality, which has indicated that the public is clamoring for a more practical education, and *there is no doubt that the school of commerce takes the place of the antiquated, but nevertheless useful, system of apprenticeship.* Higher commercial education, such as is given in these schools, recognizes the value of rigid education, but endeavors to adapt it to information useful in the making of a living. *It enables the student so to equip himself that a crowding from the field of success through lack of business experience becomes impossible.* It supplies a happy medium between the thinker, the scholar of the so-called "Liberal Arts," and the successful, practical, self-made, shrewd business man. It overcomes the apparently unbridgeable gap between business and education.

#### PROFESSOR BINZ OF BERLIN QUOTED.

Numerous quotations could be given here to support and substantiate the need for these courses, but prominent among them is one by Professor Arthur Binz of the Berlin Commercial University, as quoted in the New York Journal of Commerce of December 27, 1911:

"Modern business life involves, among others, one great danger—onesidedness. The all-round business man is becoming scarce, because the huge amount of work makes men specialists. Now everyone ought to be a specialist, but not merely that he ought to know everything about something, but also something about everything. But for this latter accomplishment there is no chance nowadays by simply picking up things during practical life. The field is too large for that, and every man too much occupied by his special business duties. Leaders and employes drudge through their daily work, and unless they have nerves of iron they find it very difficult to obtain that broadness of view which they need for their own satisfaction and for the benefit of their firm. Consequently they ought to have previous teaching in a time of life when the mind is young, open and easy.

“These are the reasons leading to pronounce scientific commercial training a necessity of the new time we are living in. And although doubts have been uttered by those who have not seen our students at work, those who know with what eagerness they stick to their work are beyond all doubt. We therefore know our ground to be sound, and though our task be difficult, there is nothing that can dishearten us. The only question arising is: What particular course have we to take, what subjects have we to teach, and how are they taught best? \* \* \*

“Of the subjects we teach we put forward as a matter of course the so-called commercial sciences—bookkeeping, understanding of balance sheets, business calculations, and so forth. One has termed all this private economy, as opposed, though similar to, political economy.

“Then science comes next. It means taking the scholar up to some great height, and from there viewing a wide land with the streams of wealth flowing, and the sources, connections and accumulations being visible to him and forgotten.

“Then languages, law, especially commercial law, insurance, things which every business man ought to know about.

“In geography we put particular stress on commercial geography, enabling a man to judge about the natural treasures of a country, whether according to climate and soil it is worthy of enterprise and investment of capital.

“Then last, but not least, physics and chemistry, each of them the key to the understanding of anything connected with industry, mills, factories, patents and patent cases.

“Such is a part of all details of our programme. It contains many items that are taught at university and polytechnical schools. Nevertheless, the commercial school is a thing quite of its own, because it gives all this in two years' time, in a nutshell, which is done nowhere else, but must be done here, as a young business man cannot spare more of his time. Here, of course, arises a difficulty. Is it possible to be brief without being shallow? It is, because we

do not aim at making a man a complete economist, a complete lawyer, a chemist or an engineer. We simply want him to understand the elements of all this, so that if in after life he has to confront a particular subject, he knows his way about, starting with the guide book of his knowledge in his hand and not being at the mercy of circumstances.

"It stands to reason that this educational task is difficult, and in fulfilling it the advice of practical business men is constantly sought."

### R. W. BABSON QUOTED.

Roger W. Babson, famous through his commercial statistics, a little while ago, wrote, in the Saturday Evening Post, an article on "A New Profession for the Young Man," in which he names the new profession "Economic Engineers," and evidently forgot about the existence of this profession under the name of "Certified Public Accountants." From the article we quote the following, giving with it a selection of studies which his experience taught were beneficial:

"Moreover, when I say this, I speak most seriously, because our nation's progress during the next twenty years must be due to something more than our natural resources. Up to the present time our country has grown in spite of itself, because of what its great mines, forests and fertile fields have produced. Moreover, our products have had little competition and our country has thus far been the only 'land of the free and home of the brave,' and the only land to which the enterprising and industrious European could go to win his way. Now times are changed. Argentina and the South American countries are becoming great competitors of ours; the Japanese, with the great Chinese empire, are bound to cause us much thought; while Russia, Siberia, Africa and other countries are beginning to present great opportunities. This is likely to result in the reduction of immigration, foreign trade and many other factors upon which the success of our country has been so dependent.

“Therefore, more than ever before, this country will need, during the next decade, men thoroughly trained in the fundamental principles of economics; men who will not permit this country to be handicapped either by reckless periods of prosperity or by distressing periods of depression; men who will eliminate unhealthy booms and ruinous panics; men who, graduating as economic engineers in this new profession, will understand the scientific management, direction and development of our great industrial, transportation and banking enterprises.”

Some Studies that a Young Man May Select After the First Year at College in Order to Prepare for Economic Engineering.

(Taken from R. W. Babson's Article.)

SECOND YEAR.

| WHEN PREPARING FOR BANKING AND BROKERAGE   | WHEN PREPARING FOR MANUFACTURING   | WHEN PREPARING FOR TRANSPORTATION  |
|--|--|--|
| History<br>Languages<br>Physics<br>Economics<br>Bookkeeping<br>Business Arithmetic | History<br>Languages<br>Physics<br>Economics<br>Bookkeeping<br>Mechanics and Drawing | History<br>Languages<br>Physics<br>Economics<br>Bookkeeping<br>Mechanics and Drawing |

THIRD YEAR.

*First Term.*

| BANKING AND BROKERAGE  | MANUFACTURING  | TRANSPORTATION   |
|--|--|--|
| Mines and Geology<br>Financial History<br>Investments<br>Applied Economics,<br>Panics, etc.<br>National Banking System<br>Foreign Monies, Weights<br>and Measures<br>Bank Accounting | Mines and Geology<br>Financial History<br>Investments<br>Applied Economics,<br>Panics, etc.<br>Industrial Chemistry<br>Industrial Mechanics<br>Manufacturing<br>Accounting | Mines and Geology<br>Financial History<br>Investments<br>Applied Economics,<br>Panics, etc.<br>Industrial Chemistry<br>Industrial Mechanics<br>Railroad Accounting |

*Second Term.*

| WHEN PREPARING FOR<br>BANKING AND BROKERAGE  | WHEN PREPARING FOR<br>MANUFACTURING  | WHEN PREPARING FOR<br>TRANSPORTATION   |
|--|--|--|
| Industrial Electricity<br>Taxation and Customs<br>Investments and Exchange<br>Clearing Houses and<br>Bank Statements<br>Foreign Banking Systems<br>Applied Economics<br>Brokerage Accounting | Industrial Electricity<br>Taxation and Customs<br>Investments and Exchange<br>Industrial Chemistry<br>Steam Engineering<br>Industrial Management<br>Mechanical Drawing | Industrial Electricity<br>Taxation and Customs<br>Investments and Exchange<br>Industrial Chemistry<br>Steam Engineering<br>Railway History and<br>Practice<br>Railway Survey |

FOURTH YEAR.

*First Term.*

| BANKING AND BROKERAGE   | MANUFACTURING   | TRANSPORTATION   |
|---|---|--|
| Commercial Law and<br>Contracts<br>Corporations and<br>Management<br>Trust Companies, Savings<br>Banks<br>Insurance Companies, etc.<br>Bond and Stock Business<br>Applied Economics<br>Journals | Commercial Law and<br>Contracts<br>Corporations and<br>Management<br>Electrical Engineering<br>Steam Engineering<br>Relations with Employes<br>Patents and Trademarks<br>Journals | Commercial Law and<br>Contracts<br>Corporations and<br>Management<br>Electrical Engineering<br>Railroad Engineering<br>Relations with Employes<br>Patents and Trademarks<br>Journals |

*Second Term.*

| BANKING AND BROKERAGE  | MANUFACTURING  | TRANSPORTATION  |
|--|--|---|
| Commercial Law and<br>Contracts<br>Analyzing Railroad and<br>Corporation Reports<br>Note Brokerage and<br>Insurance<br>Psychology and<br>Advertising<br>Applied Economics<br>Salesmanship<br>Stock, Produce and<br>Oil Exchanges | Commercial Law and<br>Contracts<br>Analyzing Railroad and<br>Corporation Reports<br>Note Brokerage and<br>Insurance<br>Psychology and<br>Advertising<br>Government Regulation<br>Electrical Engineering<br>Steam Engineering | Commercial Law and<br>Contracts<br>Analyzing Railroad and<br>Corporation Reports<br>Note Brokerage and<br>Insurance<br>Psychology and<br>Advertising<br>Government Regulation<br>Railroad Engineering<br>Railroad Operation |

## PRACTICAL COURSES BECOMING POPULAR IN UNIVERSITIES.

Our investigation further shows that education of this kind should come through universities and colleges, or at least that this seems to be in a great measure the road selected by those looking for higher education in business.

A survey of the whole college field shows that "the number of men and women graduating from college this year is about 66% more than it was a decade ago," so says Mr. H. T. Claus in the Boston Transcript, and he adds: "The state colleges and publicly supported universities are responsible for most of the increase." He also points out another fact, changing the phase of scholarship, by stating that, "*The number of Bachelors of Art is not growing to any great extent, while technical, professional, and practical courses are daily becoming more popular.*" It will also further be noted from his article that "most of the colleges responsible for this condition are either state institutions or technical schools. With very few exceptions the strictly art colleges have not flourished numerically. All of which illustrates just as does the current unanimous demand for manual training and the like, the tendency of the day toward the practical education."

The Committee is of the opinion that while the schools herein described, and the correspondence courses to be mentioned, are of enormous benefit at the present time, they are teaching the subject backwards; for the good work should start in the grade schools, so that a proper foundation be laid there for higher education in these commercial and industrial subjects in the universities. It is the opinion of the Committee that experience of present professors in these subjects teaches that the young men are ill-prepared to take the higher subjects, and therefore, through lack of time, must merely skim the surface of higher commercial education.

## VALUE TO STUDENTS AND PRACTICAL RESULTS.

Educators usually deprecate the idea of measuring results by dollars and cents. Yet it is an economic principle that the earning capacity of individuals indicates the standard of civilization. Therefore we can do no better than to quote some of the results given us from this kind of an education, showing therewith that courses such as outlined herein are of great and practical value.

## STATISTICS OBTAINED BY UNIVERSITY OF ILLINOIS.

A remarkable statement is found in a circular of the University of Illinois, which is as follows:

“Such statistics as are obtainable show that the college and university trained man who enters industrial life quickly passes his competitor without such training and reaches a permanently higher level of income at an earlier period. It has been shown, for example, from the statistics of over 100 firms that the non-college men enter business life at an average age of 18, at \$3 per week; that they reach the rate of \$15 per week at the average age of 26, and that only one-fourth of them ever get much more than this.

“The figures for the men who had a college training, however, showed that they entered business at the average of 22 at wages of \$9 per week; at the average age of 24 they were obtaining \$16 per week; and at the average age of 27, \$22 per week. At that average age they were therefore in advance of the non-college men, and the figures show that 85 per cent. of them were still advancing.

“In short, the would-be business man must follow the course that the prospective lawyers and doctors have been obliged to follow. They must get training in the schools and not in the offices. Of course, this does not mean that all one's knowledge and training can be obtained in the college or university. Experience is necessary.”



## THE RESULTS AT NEW YORK UNIVERSITY.

The preliminary circular for 1912-1913, of the New York School of Commerce, gives, among others, the following:

“The students of the New York University School of Commerce, Accounts and Finance earned during the year 1910 an average salary of \$85.58 per month, or \$1,026.96 for the year. There are 1,150 students in attendance at this School, so the total earning of the student body for the past year amounted to \$1,181,000. While they were earning this amount the students were devoting on an average nine hours a week to class-room attendance at the University, and a like amount of time to preparation for their recitations. \* \* \*

“The final calculation showed that the two hundred and twenty-six students who reported earned \$229,008 during the past year, a yearly average of \$1,026.96 and a monthly average of \$85.58. Five per cent. of these men, all of whom were in the first and second year classes, were not employed during the year, and in the final tabulation their salary was entered as zero, the average being obtained by dividing the grand total amount earned by the total number of the students reporting, including those who were unemployed. \* \* \*

“The students averaged 9.31 hours per week in attendance upon the recitations of the course. In preparation for these recitations they averaged 9.12 hours per week, and in paid employment 42.06 hours per week. This is considered a very high average. Few college students who have their entire time free for study devote a larger proportion of time than this in preparation for their work. It is indicative of the spirit with which the students of the School of Commerce carry on their work, that having been employed an average of more than seven hours per day, they should devote not only more than nine hours per week in attendance upon recitations and lectures, but also the same amount of time in preparation for their lectures. The total amount of time spent altogether in paid employment, and in study, amounted to 60.51 hours per week. Considering the fact

that no sessions of the School are held on Saturday and that that day is a half holiday in most business houses, we may safely assume that the students devoted eleven hours of each working day to their employment and their study. \* \* \*

"The average salary received for 1908 was \$67.25 per month; for 1909 it was \$74.13 per month, a gain of 10%, and for 1910 it was \$85.58 per month, a gain over 1909 of 15½%. It will be noticed that the gain of 1910 over 1909 is 50% greater than that of 1909 over 1908; showing that the greatest gain came in the year when the most of the students were in the School. A comparison of the returns from the different classes confirms this statement. The members of the present First Year Class who entered the School in October, 1910, and who were, therefore, connected with the School but three months out of the period of three years chosen, too short a time for their attendance at the School to have any effect upon their work, received an average of \$62.18 per month for 1908, \$72 for 1909 and \$80.75 for 1910, showing an increase in salary of 28% for 1910 over 1908. This may fairly be taken as the average rate of increase in the lines of employment in which they were engaged. The present Second Year Class, who were in attendance at the University for one full year of the period, averaged \$66.35 monthly for 1908, \$73.55 for 1909 and \$87.55 for 1910, an increase of 32½% for the year 1910 over 1908, of which increase nearly two-thirds occurred in 1910, the year of their attendance at the School."

## THE RESULTS AT DENVER UNIVERSITY.

The University of Denver reports that the result of the school work was very pronounced in its influence on success in the C. P. A. examinations. It reports the following result with its students:

"The students of the School of Commerce of the University of Denver earned during the year preceding enrollment an average salary of \$87.20 per month, and during

the first year at college an average of \$92.70 per month, showing a gain of 6.4%. While sufficient data is not at hand to give the exact figures after the first year in college, it appears that the percentage increases and grows as the students continue their studies, resulting in an increase during the first year out of college of at least 15%.

"The students averaged 10 hours per week in attendance upon class recitation and 14 hours for preparation, together with paid employment of 46 hours per week, making a total of study and employment combined of 70 hours per week, or 12.7 hours per day, figuring the week at 5½ working days. This high average is undoubtedly due to the bracing influence of climate and high altitude.

"None of the students were out of employment during any of the college years. The average age at enrollment is 26.73 years, and 72% were married."

### CORRESPONDENCE COURSES.

Your Committee desires to state that in conducting its investigations into the questions forming the subject-matter of this report, its inquiries were limited to schools of commerce, accounts and finance of the university grade only. While your Committee thoroughly recognizes the valuable contributions to the cause of education in professional accountancy made by other schools, supplying both resident and correspondence courses, some of which are possessed of a high educational value, it must manifestly be apparent that your Committee, of necessity, was compelled to set a limit to the scope of its inquiries. Had it set such a limit at any point below the school of a university grade, it simply would have overwhelmed itself with embarrassment in attempting to make distinctions between institutions and courses, the making of which distinctions were conceived to be neither within the capacity of the members nor within the province or the scope of the Committee's authority or duty.

As a passing thought, however, we might suggest that doubtless correspondence courses have their niche in the world of

activity, and probably as much harm would result from their discontinuance as would come from a cessation of providing proper food. The good correspondence courses are, in the majority of cases, purely devoted to accounting alone and the preparation in short order for C. P. A. examinations. They are entirely lacking in safeguarding entrance requirements in the preparation for a foundation and re-enforcement for such highly specialized studies, the personal contact and exchange of views in the class room, and the resulting discipline which nearly all humanity needs in being driven (if we may use that term) to activity and continued efforts in the pursuing of studies which are usually done at a time when body and mind are partially tired. Real self-taught men are objects of curiosity and shining examples. As such, the Committee could not, for the present, consider correspondence courses, as the American Association of Public Accountants should insist on the most natural and most efficient ways with lasting results for the average cases, *i. e.* broad university training.

## CONCLUSIONS.

Summing up the entire matter, the Committee might state that there is a large interest taken in what might be termed courses in business training; that a considerable number of the leading universities have taken up the matter and are providing as good courses as may be expected; considering the infancy of the movement; that a large number of other universities are thinking of following their example; that the absence of practical men to teach the subject, and the supposed, but non-existent, absence of proper text-books, is retarding the growth in this direction; that accountancy subjects are taught, not singly but in connection with other economic subjects; and that it has therefore, by custom, become merged into the training of business, which, in turn, proves the value of accounting to the business man, and the value of a

business training to the accountant; that the trend seems to be toward aiming to give the business man a college training through the medium of these new branches of standard universities; that accountants, therefore, should be interested in courses of commerce, although all the subjects do not embrace figures and accounts; that there is an absolute lack of uniformity in the names of the schools, the subjects taught, the methods of instruction, the nomenclature and description of courses, subjects and studies, the length of recitations and courses, entrance requirements, requirements for the degree, the name of degree conferred, and the like; that such lack of uniformity is to be regretted and will result in harm to the profession of accountancy if permitted to grow.

From all of the above, the Committee desires to admonish the members of the American Association of Public Accountants, and all other public accountants, that they lend all possible aid to the subject of the education of the business men in schools such as we have had under observation in this report. While we find that almost every such school of any consequence has originally been started or was caused to start by some individual accountant or by a small group of accountants, the relation between the total number of professors at the present time engaged in these schools and the number of practicing accountants engaged as professors therein, is relatively small, showing that only a few of the accountants are really, heart and soul, in this work. They should further consider that there is no hope of elevating their profession nor of figuring on a permanent continuation of the existence of their profession, unless they teach the public through the young business men what their profession stands for, and shoulder the responsibility and see to it that their assistants are properly trained, thus enabling them to render services commensurate with the higher standard at which they are aiming.

## RECOMMENDATIONS.

Your Committee respectfully suggests: that the matters hereinabove referred to constitute a proper subject for a vigorous campaign of guidance and education by the American Association of Public Accountants, through its secretary; that judging from the chaotic condition of vital matters, university authorities would gladly avail themselves of the aid our association can give, and that such aid be prominently proffered; that investigations and inquiries in this connection be continued from year to year; that the growth of, and improvement in the movement be properly recorded; that proper funds be kept available to defray the expenses of the investigation; that the yearly investigation and record of same be assured through proper amendments to the by-laws.

Respectfully submitted,

Educational Committee,

J. B. Geijsbeek, Chairman.

C. H. Nau,

W. H. Rand,

H. M. Temple.

