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RECOMMENDED UNIFORM LAW FOR REGISTRATION OF ARCHITECTS, ENGINEERS AND LAND SURVEYORS

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NOVEMBER, 1920

*Reprinted from *Proceedings*, American Society of Civil Engineers, October, 1920, page 767, and November, 1920, page 850.

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REGISTRATION OF ARCHITECTS, ENGINEERS AND LAND SURVEYORS

INTRODUCTION

NOVEMBER 20, 1920.

Because of widespread and persistent interest in the subject of licensing or registering architects, engineers and surveyors, Engineering Council, at its meeting of October 25, 1918, authorized the creation of a committee to make a thorough study and submit a report. Sixteen engineers from all parts of the country, of long experience in various branches of the profession of engineering, were appointed members of this committee.

After much hard work, the committee presented a report to Engineering Council December 18, 1919. This report was accompanied by a "Recommended Uniform Registration Law to regulate the practice of architecture, engineering and land surveying." Without acting upon the principles involved, or upon the merits of the law drafted by its able Committee, Council gave its Committee's report wide publicity, so that those working in several States on the subject of registration might have the benefit of the Committee's work. In this way Council expected also to obtain criticism and experience to guide it whenever the time for action should arrive.

In December, 1919, a Joint Committee of the American Institute of Architects and Engineering Council was created to consider subjects of interest to both architects and engineers. At a meeting held September 15, 1920, this committee considered the subject of joint registration laws and approved the proposition, laying down certain basic principles which such laws should contain.

Engineering Council at a meeting held October 21, 1920 adopted the report of the License Committee, in which was incorporated a final draft of the recommended uniform law given publicity in December, 1919, made to accord with suggestions elicited during the past year.

ALFRED D. FLINN,
Secretary.

22029

RECOMMENDED UNIFORM LAW FOR REGISTRATION OF ARCHITECTS, ENGINEERS AND LAND SURVEYORS.

OCTOBER, 1920.

Title.—An Act to regulate the practice of the professions of architecture, engineering and land surveying.

[Note: (a) In certain States further amplification of title may be required by law.]

[Note: (b) The brief terms “architecture”, “engineering” and “land surveying” give simpler and clearer understanding of the activities affected by this Act than any definition. Such definitions as have been devised have proven academic, difficult of proper inclusion and exclusion, confusing, laborious and frequently of great length.]

[Note: (c) Laws for the registration of architects and engineers must be either in parallel or in common. Assuming the best interests of each to lie in co-operation, and having in mind economical administration of a law, both are included in this Act. Surveying is a function of engineering, but land surveying deals with land measurements involving property rights.]

The People of the State of.....enact:

Section 1.—In order to safeguard life, health and property, any person practicing or offering to practice as an architect, a professional engineer or a land surveyor in this State shall hereafter be required to submit evidence that he is qualified so to practice, and shall be registered as hereinafter provided, and from and after six months after this Act becomes effective, it shall be unlawful for any person to practice or to offer to practice in this State, as an architect, a professional engineer, hereinafter called engineer, or a land surveyor, except under the provisions of this Act.

[Note: (d) The constitutionality of this law is based on its promoting the public welfare by safeguarding life, health and property.]

Section 2.—Nothing in this Act shall be construed as requiring registration by an individual, firm or corporation for the purpose of practicing architecture or engineering on property owned or leased by said individual, firm or corporation, unless the same involves the public safety or health; nor as requiring registration by any person, who prior to the time of the passage of this Act was engaged in the practice of architecture, engineering or land surveying; provided, however, such person shall not represent himself as, or use the title of, “Registered Architect”, “Registered Professional Engineer” or “Registered Land Surveyor” unless such person is qualified by registration under this Act.

[Note: (e) Obviously no modern agriculturist should be prohibited from laying out and building the ditches or roads on his farm, or planning and building his own barn.]

APPOINTMENT OF THE BOARD.

Section 3.—To carry out the provisions of this Act there is hereby created a State Board of Registration for architects, engineers and land surveyors, hereinafter called the Board, consisting of seven members, who shall be appointed by the Governor within sixty days after this Act becomes effective. Three members shall be registered architects and three members shall be registered engineers and one member shall be a registered land surveyor. Not more than one member of

By
The Council
of 1920

said Board shall be from the same branch of the profession of engineering. The members of the first Board shall be appointed to serve for the following terms: Two members for one year; two members for two years; two members for three years, and one member for four years; said terms ending on the first day ofof the succeeding years. On the expiration of each of said terms, the term of office of each newly appointed or reappointed member of the Board shall be for a period of four years and shall terminate on the first day of Each member shall hold over after the expiration of his term until his successor shall have been duly appointed and qualified. The Governor may remove any member of the Board for misconduct, incompetency or neglect of duty. Vacancies in the membership of the Board, however created, shall be filled by appointment by the Governor for the unexpired term.

[Note: (f) In those States in which there already exists a Department of Education and Registration or other similar department, as in the case of New York, Illinois and Idaho, it is desirable that registration laws should be administered by such State departments with the aid of professional commissions in each profession. Where such State departments do not exist their formation should be encouraged.]

QUALIFICATIONS FOR MEMBERSHIP ON THE BOARD.

Section 4.—Each member of the Board shall be a citizen of the United States and a resident of this State at the time of his appointment. He shall have been engaged in the practice of his profession for at least ten years and shall have been in responsible charge of work for at least five years. He shall be a member in good standing of a recognized society of architects, engineers or land surveyors, and except as provided in Section 5, shall be a registered architect, a registered engineer or a registered land surveyor.

CERTIFICATES, PRIVILEGES AND POWERS OF THE BOARD.

Section 5.—Each member of the Board shall receive a certificate of appointment from the Governor, and before beginning his term of office he shall file with the Secretary of State the constitutional oath of office. Each member of the Board first created shall receive a certificate of registration under this Act from the Governor of the State. The Board or any committee thereof shall be entitled to the services of the Attorney General, in connection with the affairs of the Board, and the Board shall have power to compel the attendance of witnesses, may administer oaths and may take testimony and proofs concerning all matters within its jurisdiction. The Board shall adopt and have an official seal which shall be affixed to all certificates of registration granted; and shall make all by-laws and rules not inconsistent with law needed in performing its duty.

ORGANIZATION AND MEETINGS OF THE BOARD.

Section 6.—The Board shall hold a meeting within thirty days after its members are first appointed, and thereafter shall hold at least two regular meetings each year. Special meetings shall be held at such times as the by-laws of the Board may provide. Notice of all meetings shall be given in such manner as the by-laws may provide. The Board shall elect annually from its members a

chairman, a vice-chairman and a secretary. A quorum of the Board shall consist of not less than four members, of whom two shall be architects and two, engineers.

RECEIPTS AND DISBURSEMENTS.

Section 7.—The secretary of the Board shall receive and account for all moneys derived from the operation of this Act and shall pay them to the State Treasurer, who shall keep such moneys in a separate fund to be known as the “Fund of the Board of Registration for Architects, Engineers and Land Surveyors”, which fund shall be continued from year to year and shall be drawn against only for the purposes of this Act as herein provided.

Each member of the Board shall receive dollars (\$.....) per day for attending sessions of the Board or of its committees, and for the time spent in necessary travel, and, in addition, shall be reimbursed for all necessary traveling, incidental and clerical expenses incurred in carrying out the provisions of this Act. All expenses certified by the Board as properly and necessarily incurred in the discharge of its duties, including authorized compensations, shall be paid out of said fund on the warrant of the auditor of the State issued on requisitions signed by the chairman and the secretary of the Board; provided, however, that at no time after this Act shall have been in effect for one year shall the total of warrants issued exceed the total amount of funds accumulated under this Act. The secretary of the Board shall give a surety bond satisfactory to the State Treasurer conditioned upon the faithful performance of his duties. The premium on said bond shall be regarded as a proper and necessary expense of the Board.

[Note: (g) The per diem allowance of each member of the Board is not expected to be adequate compensation. High-grade professional men are expected to serve as a matter of good citizenship.]

[Note: (h) The administration of the law is made ultimately self-supporting. The Legislature is not expected to appropriate money to accomplish the results contemplated.]

RECORDS AND REPORTS.

Section 8.—The Board shall keep a record of its proceedings and a register of all applicants for registration showing for each, the date of application, name, age, educational and other qualifications, place of business and place of residence, whether or not an examination was required and whether the applicant was rejected, or a certificate of registration granted, and the date of such action. The books and register of the Board shall be *prima facie* evidence of all matters recorded therein. A roster showing the names and places of business and of residence of all registered architects, engineers and land surveyors shall be prepared by the secretary of the Board during the month of of each year; such roster shall be printed out of the funds of the Board as provided in Section 7. On or before the day of of each year the Board shall submit to the Governor a report of its transactions for the preceding year, together with a complete statement of the receipts and expenditures of the Board, certified by the chairman and the secretary, and a copy of the said roster of registered architects, registered engineers and registered land surveyors. A copy of this report shall be filed with the Secretary of State.

APPLICATIONS FOR AND ISSUANCES OF CERTIFICATES.

[Note: (i) The application required should include a complete statement of an applicant's education and a detailed summary of his technical work. The statements made should be under oath, and should be supported by the recommendations of not less than two members of his profession.]

Section 9.—The Board shall, on application therefor on prescribed form, and the payment of a fee of dollars (\$.), issue a certificate of registration as an architect or as an engineer, and on the payment of a fee of dollars (\$.) issue a certificate of registration as a land surveyor:

1.—To any person who submits evidence satisfactory to the Board that he is fully qualified to practice architecture, engineering or land surveying; or

2.—To any person who holds a like unexpired certificate of registration issued to him by proper authority in the District of Columbia, in any State or territory of the United States, or in any Province of Canada, in which the requirements for the registration of architects, engineers or land surveyors are of a standard satisfactory to the Board;

Provided, however, that no person shall be eligible for registration who is under twenty-five years of age, who is not a citizen of the United States or Canada, or who has not made declaration of his intention to become a citizen of the United States, who does not speak and write the English language, who is not of good character and repute, and who has not been actively engaged for six or more years in architectural, engineering or land surveying work of a character satisfactory to the Board. However, each year of teaching, or of study satisfactorily completed, of architecture or engineering in a school of architecture or engineering of standing satisfactory to the Board, shall be considered as equivalent to one year of such active engagement.

[Note: (j) The functions of the Board are largely administrative and judicial. The burden of presenting evidence of qualification is placed upon the applicant. The Board may in doubtful cases give technical examinations; but the clear intent is to utilize other State agencies, as for instance the architectural or engineering schools, to submit as evidence the results of examinations, with recommendations as to competency.]

Unless disqualifying evidence be before the Board, the following facts established in the application shall be regarded as *prima facie* "evidence, satisfactory to the Board", that the applicant is fully qualified to practice architecture, engineering or land surveying:

[Note: (k) When the law goes into effect a large percentage of practicing architects, engineers and land surveyors will be registered to preserve the *status quo*. Long-continued practice, graduation from a technical school of approved standing with subsequent years of practice, or membership in a high-grade technical society, in the absence of disqualifying facts, is accepted as *prima facie* evidence of qualifications, as stated below.]

(a) Ten or more years of active engagement in architectural, engineering or land surveying work;

(b) Graduation, after a course of not less than four years in architecture or engineering, from a school or college approved by the Board as of satisfactory

standing, and an additional four years of active engagements in architectural, engineering or land surveying work;

(c) Full membership in the American Institute of Architects, American Institute of Chemical Engineers, American Society of Civil Engineers, American Institute of Electrical Engineers, American Society of Mechanical Engineers, American Institute of Mining and Metallurgical Engineers, Society of Naval Architects and Marine Engineers; or such other National or State architectural or engineering societies as may be approved by the Board, the requirements for full membership in which are not lower than the requirements for full membership in the professional societies or institutes named above.

Applicants for registration, in cases where the evidence originally presented in the application does not appear to the Board conclusive or warranting the issuance of a certificate, may present further evidence, which may include the results of a required examination, for the consideration of the Board.

[Note: (l) The standard of qualification is set high for two reasons: The public welfare will be better promoted by maturer competency; and the prestige attaching to the term "Registered" will be more significant for the professional men themselves. In requiring the younger, less experienced men to serve somewhat longer as assistants or understudies to older men, no hardship is imposed which will not be compensated by the fuller return in recognition when registration is achieved.]

In determining the qualifications of applicants for registration as architects, a majority vote of the architect members of the Board only shall be required; in determining the qualifications of applicants for registration as engineers, a majority vote of the engineer members of the Board only shall be required; and in determining the qualifications of applicants for registration as land surveyors the affirmative vote of the land surveyor member and of one engineer member of the Board only shall be required.

[Note: (m) The acceptance for registration of architects by the architects on the Board, and of engineers by the engineers on the Board, places the judicial finding of fitness or unfitness in the hands of those best qualified to judge. In administrative matters and in the revocation of certificates, the Board acts as a unit.]

In case the Board denies the issuance of a certificate to an applicant, the registration fee deposited shall be returned by the Board to the applicant.

Certificates of registration shall expire on the last day of the month of December following their issuance or renewal and shall become invalid on that date unless renewed. It shall be the duty of the secretary of the Board to notify by mail every person registered hereunder of the date of the expiration of his certificate and the amount of the fee required for its renewal for one year; such notice shall be mailed at least one month in advance of the date of the expiration of said certificate. Renewal may be effected at any time during the month of December by the payment of a fee of.....dollars (\$.....) for architects and engineers, and.....dollars (\$.....) for land surveyors. The failure on the part of any registrant to renew his certificate annually in the month of December as required above shall not deprive such person of the right of renewal thereafter, but the fee to be paid for the renewal of a certificate after the month of December shall be increased 10% for each month

or fraction of a month that payment for renewal is delayed; provided, however, that the maximum fee for a delayed renewal shall not exceed twice the normal fee.

[Note: (n) The amount of the fee to be paid by a registrant must be established by each State in the light of the number of fees to be expected, and the cost of administration.]

REVOCATIONS AND REISSUANCES OF CERTIFICATES.

Section 10.—The Board shall have the power to revoke the certificate of registration of any architect, engineer or land surveyor registered hereunder who is found guilty of any fraud or deceit in obtaining a certificate of registration or of gross negligence, incompetency or misconduct in the practice of architecture, engineering or land surveying. Any person may prefer charges of such fraud, deceit, negligence, incompetency or misconduct against any architect, engineer or land surveyor registered hereunder; such charges shall be in writing and sworn to by the complainant and submitted to the Board. Such charges, unless dismissed without hearing by the Board as unfounded or trivial, shall be heard and determined by the Board within three months after the date on which they are preferred. A time and place for such hearing shall be fixed by the Board. A copy of the charges, together with a notice of the time and place of hearing, shall be legally served on the accused at least thirty days before the date fixed for the hearing, and in the event that such service cannot be effected thirty days before such hearing, then the date of hearing and determination shall be postponed as may be necessary to permit the carrying out of this condition. At said hearing the accused shall have the right to appear personally and by counsel and to cross-examine witnesses against him and to produce evidence and witnesses in his defense. If after said hearing five or more members of the Board vote in favor of finding the accused guilty of any fraud or deceit in obtaining a certificate, or of gross negligence, incompetency or misconduct in the practice of architecture, engineering or land surveying, the Board shall revoke the certificate of registration of the accused.

The Board may reissue a certificate of registration to any person whose certificate has been revoked, provided five or more members of the Board vote in favor of such reissuance for reasons the Board may deem sufficient.

The Board shall immediately notify the Secretary of State and the clerk of each county, town and city in the State of its findings in the case of the revocation of a certificate of registration or of its reissuance of a revoked certificate of registration.

[Note: (o) Revocation is recognized as a serious procedure in its effect on professional reputation, and the right of hearing and contest is recognized and provided for.]

A new certificate of registration to replace any certificate lost, destroyed or mutilated, may be issued, subject to the rules and regulations of the Board. A charge of one dollar shall be made for such reissuance.

SIGNIFICANCE OF CERTIFICATE—SEALS.

Section 11.—The issuance of a certificate of registration by this Board shall be evidence that the person named therein is entitled to all the rights and priv-

ileges of a registered architect, a registered engineer or a registered land surveyor while the said certificate remains unrevoked or unexpired.

Each registrant hereunder may upon registration obtain a seal of the design authorized by the Board, bearing the registrant's name and the legend "Registered Architect", "Registered Professional Engineer", or "Registered Land Surveyor". Plans, specifications, plats and reports issued by a registrant may be stamped with the said seal during the life of registrant's certificate, but it shall be unlawful for any one to stamp or seal any documents with said seal after the certificate of the registrant named thereon has expired or has been revoked unless said certificate shall have been renewed or reissued.

UNLAWFUL ACTS AND PENALTIES.

Section 12.—Any person who after this Act has been in effect six months is not legally authorized to practice as an architect, an engineer or a land surveyor in this State according to the provisions of this Act and shall so practice, or offer so to practice in this State, except as provided in Section 13 of this Act, and any person presenting or attempting to file as his own the certificate of registration of another, or who shall give false or forged evidence of any kind to the Board, or to any member thereof, in obtaining a certificate of registration, or who shall falsely impersonate any other practitioner, of like or different name, or who shall use or attempt to use an expired or revoked certificate of registration, shall be deemed guilty of a misdemeanor and shall for each such offense of which he is convicted be punished by a fine of not less than one hundred dollars (\$100) nor more than five hundred dollars (\$500), or by imprisonment for three months, or by both fine and imprisonment. However, nothing in this Act shall be construed as excluding any registered architect from the practice of engineering or as excluding any registered engineer from the practice of architecture.

[Note: (*p*) This Act not only gives prestige to the titles "Registered Architect", "Registered Professional Engineer" and "Registered Land Surveyor", but also prohibits in part the practice as principals of persons not registered.]

[Note: (*q*) This Act does not prohibit an architect from designing a bridge, nor an engineer from designing a building. Ethical considerations and professional opinion will confine the scope of each person's practice to the fields in which he is a master.]

EXEMPTIONS.

Section 13.—The following shall be exempted from the provisions of this Act:

1.—Offering to practice in this State as an architect, an engineer or a land surveyor, by any person not a resident of and having no established place of business in this State.

[Note: (*r*) A professional card in a journal of National circulation is an "offer to practice" in any State in the Union. It would be manifestly unfair to compel a professional man to register in every State in which he may in this way, or by letter or otherwise, express his readiness to accept an engagement.]

2.—Practice as an architect, an engineer or a land surveyor in this State by any person not a resident of and having no established place of business in this

State, when this practice does not aggregate more than thirty days in any calendar year; provided, that said person is legally qualified for such professional service in his own State or country.

[Note: (s) It is a distinct advantage to the people of any State to be able to call in for consultation a specialist from any other State. Such practice may be brief, and often of an emergency nature.]

3.—Practice as an architect, an engineer or a land surveyor in this State by any person not a resident of and having no established place of business in this State, or any person resident in this State, but whose arrival in the State is recent; provided, however, such person shall have filed an application for registration as an architect, an engineer, or a land surveyor and shall have paid the fee provided for in Section 9 of this Act. Such exemption shall continue for only such reasonable time as the Board requires in which to consider and grant or deny the said application for registration.

4.—Engaging in architectural, engineering or land surveying work as an employee of a registered architect, a registered engineer or a registered land surveyor, or as an employee of an architect, an engineer or a land surveyor, authorized by Paragraphs 2 and 3 of this Section, provided that said work may not include responsible charge of design or supervision.

5.—Practice of architecture, engineering or land surveying by any person not a resident of and having no established place of business in this State, as a consulting associate of an architect, an engineer or a land surveyor registered under the provisions of this Act; provided the non-resident is qualified for such professional service in his own State or country.

[Note: (t) This includes a reciprocal privilege accorded to non-resident or alien consultants, in order that resident architects, engineers and land surveyors may receive similar privileges of practice in other States and in foreign countries.]

6.—Practice of architecture, engineering or land surveying solely as an officer or as an employee of the United States.

7.—Practice of architecture, engineering or land surveying solely as an employee of this State or any political subdivision thereof, at the time this Act becomes effective and thereafter only until the expiration of the then existing term of office of such employee.

CORPORATIONS OR PARTNERSHIPS.

Section 14.—A corporation or partnership may engage in the practice of architecture, engineering or land surveying in this State, provided the person or persons connected with such corporation or partnership in responsible charge of such practice is or are registered as herein required of architects, engineers and land surveyors, or is or are otherwise authorized to practice. The same exemptions shall apply to corporations and partnerships as apply to individuals under this Act.

PUBLIC WORK.

Section 15.—One year after this Act goes into effect, neither the State nor any county, township, city, town or village nor other political subdivision of the State, shall engage in the construction or maintenance of any public work involving

architecture or engineering for which the plans, specifications and estimates have not been made by, and the construction and maintenance supervised by, a registered architect or a registered engineer; provided, that nothing in this section shall be held to apply to such public work wherein the contemplated expenditure for the completed project does not exceed two thousand dollars (\$2 000).

LAND SURVEYING.

Section 16.—Land Surveying as covered by this Act refers only to surveys for the determination of areas or for the establishment or re-establishment of land boundaries and the subdivision and platting of land. Nothing in this Act shall be construed as prohibiting registered architects or registered engineers from making land surveys where such surveys are essential to architectural or engineering projects.

REPEAL OF CONFLICTING LEGISLATION.

Section 17.—All laws or parts of laws in conflict with the provisions of this Act are hereby repealed.

[Note: (u) The laws of most States contain rules for the construction of statutes which provide that words importing the masculine gender apply also to the feminine gender. In States where such rules of construction do not exist, a section may be incorporated in this Act to include women in all its provisions.]

APPENDIX.

SUPPLEMENTAL PROVISION, SECTION 13—EXEMPTION 8.

The following additional Exemption 8, under Section 13, while not advocated by Engineering Council, has been recommended by the Joint Committee on Co-operation of the American Institute of Architects and Engineering Council. It is suggested for incorporation in the laws of States where such a provision seems necessary or desirable. Its inclusion would permit any person, for example, a contractor, a carpenter, a road master or a manufacturer, to plan and execute work of an architectural or engineering nature, provided that there was no implication involved that such a person is an architect or an engineer.

Section 13.—Exemption 8.—Designing or executing work of an architectural or engineering character by a person not an architect or an engineer; provided that such person does not represent himself as an architect or as an engineer; and provided further that on drawings, specifications or other documents prepared or issued by such person the title Architect or Engineer shall not be used, nor any other title which might imply that such person is an architect or an engineer.

PERSONNEL OF COMMITTEE ON LICENSING OF ENGINEERS.

John W. Alvord, (1) Chicago, Illinois.
 Bion J. Arnold, (1) (4) Chicago, Illinois.
 T. L. Condron, (1) (5) Chairman, Chicago, Illinois.
 Prof. J. H. Dunlap, (1) Iowa City, Iowa.
 Farley Gannett, (1) Harrisburg, Pa.
 Prof. A. M. Greene, Jr., (3) Troy, New York.
 James H. Herron, (2) (3) (5) Cleveland, Ohio.
 John Klorer, (7) New Orleans, Louisiana.
 Richard A. Parker, (2) Denver, Colorado.
 F. T. Rubidge, (2) New York, N. Y.
 Caleb M. Saville, (1) Hartford, Conn.
 A. M. Schoen, (4) Atlanta, Georgia.
 Francis C. Shenhon, (1) Minneapolis, Minn.
 Amos Slater, (2) Seattle, Wash.
 Christopher H. Snyder, (1) San Francisco, Cal.
 J. W. Woermann, (1) St. Louis, Mo.

PERSONNEL OF JOINT COMMITTEE OF AMERICAN INSTITUTE OF
ARCHITECTS AND ENGINEERING COUNCIL.

William P. Bannister, (6) New York, N. Y.
 J. Parke Channing, (2) New York, N. Y.
 John M. Donaldson, (6) Detroit, Michigan.
 Burt L. Fenner, (6) New York, N. Y.
 Otis E. Hovey, (1) New York, N. Y.
 Henry C. Meyer, Jr., (3) New York, N. Y.
 E. J. Russell, (6) St. Louis, Mo.
 Francis C. Shenhon, Chairman, (1) Minneapolis, Minn.

NOTE: Society memberships of the members of the committees are indicated by numbers as follows; the first five societies being those which are members of Engineering Council.

- (1) American Society of Civil Engineers,
- (2) American Institute of Mining and Metallurgical Engineers,
- (3) American Society of Mechanical Engineers,
- (4) American Institute of Electrical Engineers,
- (5) American Society for Testing Materials,
- (6) American Institute of Architects,
- (7) Louisiana Engineering Society.

COMMENTS.

1.—*Omission of Definitions.*—Definitions were not included in the proposed law as explained in note (a) accompanying the same.

2.—*Qualifications of Board Members* including “he shall be a member in good standing of a recognized society of architects or professional engineers.” It should be noted that this requirement applies only to those appointed as members of a “State Board of Registration.” This cannot be deemed class legislation, as the requirement is general and there are numerous societies of architects and of engineers. Members of such a board should be men who have attained recognition among their professional brethren.

3.—*Administration.*—The proposed law has been drawn to meet the usual method of State administration of such laws. In a few States, Departments have been created to function instead of Boards, but the matter of administrative detail must necessarily be modified in each State in accordance with the practice in that State, and therefore this recommended law is intended to be only suggestive so far as the matter of administration is concerned.

4.—*Qualification for Registration.*—Many expressions of approval have been received of the provision that certificates be issued to persons submitting evidence satisfactory to the Board that they are qualified to practice rather than of dependence entirely upon examinations. In the State of Illinois, submission of evidence will be substituted in the place of examinations, following the scheme included in our proposed law.

5.—*Citizenship.*—Criticism of the requirement of the proposed law concerning citizenship has been received, principally from mining engineers, but the Committee was unanimous in December, 1919, in requiring that registration be limited to citizens of the United States or Canada, or to those who have made declaration of their intention to become citizens of the United States and who speak and write the English language. (See comment on exemptions).

6.—*Significance of Certificate.*—The provisions of Sections 11 and 12 make it perfectly clear that separate and distinct certificates will be issued for registration of architects, of engineers, and of land surveyors. Of course, if an applicant could qualify and desired to qualify in each of the three professions, there is nothing to prevent three certificates being issued to such an applicant. It should be borne in mind that while Section 12 provides that a registered architect shall not be excluded from practicing engineering nor a registered engineer excluded from practicing architecture, there is no provision that would permit a registered land surveyor practicing either architecture or engineering. It seems unnecessary to add, as has been suggested, the further provision that a registered architect may not style himself an engineer, and *vice versa*.

7.—*Exemptions.*—In order better to provide for occasional activities of foreign engineers called into consultation or practice in a State, we would recommend that the time limit in Exemption No. 2 be changed from fifteen days to thirty days, and further that an exemption be added providing that non-residents may practice, without registration, as consulting associates. This would make it legal for a consulting engineer to act in the capacity of consultant in association with a resident registered engineer in any locality without the consulting engineer being obliged to secure a certificate of registration in that particular locality.

REPORT OF COMMITTEE ON LICENSING OF ENGINEERS.

The sixteen members of the committee, as appointed by Council, were selected from thirteen States, viz., California, Colorado, Connecticut, Georgia, Illinois, Iowa, Louisiana, Minnesota, Missouri, New York, Ohio, Pennsylvania and Washington, and therefore represent practically all sections of the United States, as well as mechanical, electrical, mining, metallurgical, hydraulic, municipal, sanitary, railway, highway and structural engineering, and also colleges of engineering.

The first work of the committee was to investigate the general subject and to collect, so far as possible, available material bearing upon the subject in hand, including opinions from many engineers as to the need or desirability of legislation, as well as copies of all State laws passed and proposed, having to do with licensing or registering of architects, engineers, and land surveyors.

The preliminary investigation disclosed that very pronounced views were held by engineers throughout the country, both for and against State licensing or registering. The general sentiment two years ago was more opposed to such measures than it is to-day. The older members of the profession did not, as a rule, favor licensing nor did they feel there was need for State regulation of engineering practice, while among the younger men there was a feeling that licensing or registering by the States would add prestige to, and in many ways benefit the profession, as well as individual engineers.

ADVANTAGES AND DISADVANTAGES.

The advantages claimed for State licensing or registering are the same as those presumably gained by the laws regulating the professions of law and medicine, namely, that those who are incompetent and unqualified professionally to practice are unable to obtain licenses or certificates and hence both the public and the profession are protected. On the other hand, those engineers who have already attained to recognized professional standing feel that they not only do not need the benefits claimed for such legislation, but they fear that State licenses or certificates of registration are likely to put the seal of State endorsement on men who do not deserve it and that the public would assume that a licensed or registered engineer was thereby certified by the State as fully qualified, regardless of what might or might not be the requirements demanded before a license or certificate was granted.

However, the question has gone beyond the stage of debate, for already eleven States* have enacted laws licensing or registering engineers, and other States are certain to enact similar laws during the present or coming sessions of their legislatures. In addition to these eleven laws governing engineering practice, there are at least six States that require the licensing or registering of land surveyors and in at least eighteen States† laws have been passed licensing or registering architects. Some of the eleven laws are so drawn as to include both engineers and surveyors and some include architects and engineers and one or two include architects, engineers, and surveyors. Moreover, these laws are not at all uniform, and in several instances are likely to prove seriously embarrassing and annoying

* Colorado, Florida, Idaho, Illinois, Iowa, Louisiana, Michigan, New York, Oregon, Virginia, Wyoming.

† California, Colorado, Florida, Idaho, Illinois, Louisiana, Michigan, Montana, New Jersey, New York, North Carolina, North Dakota, Oregon, Pennsylvania, South Carolina, Utah, Washington, Wisconsin.

to engineers whose activities extend beyond the limits of a single State. Because of the nature of professional engineering work, the practice of an engineer frequently extends over several States and therefore it is vitally important if there are to be State regulations for engineering practice, that these regulations be made uniform so far as possible and that the engineering profession unite in wisely directing such legislation.

ARCHITECTURAL REGISTRATION LAWS.

As stated, laws have been passed in eighteen States for licensing or registering architects and the American Institute of Architects has endorsed and advocated such legislation, considering that both the architects and the general public are benefited thereby. Unfortunately, some of the laws for licensing architects have been so drawn as seriously to interfere with legitimate engineering practice.

In the State of Illinois a law for licensing architects was passed several years ago, the rigid enforcement of which made it necessary for engineers to unite in having a "structural engineers' license law" passed by the legislature. Now there are two laws in force in Illinois, one for architects and the other for structural engineers.

In some States, the laws enacted and proposed are intended to regulate the practice of architecture, while in other States laws have been enacted the purpose of which is simply to protect the term "architect". In Wisconsin and several other States no one may use the title "architect" without first obtaining from the State a certificate of registration as a "registered architect", but anyone not an architect may prepare plans and supervise construction provided he does not style himself an "architect".

DEFINITION OF "ARCHITECTURE" AND "ENGINEERING".

This committee has made a very careful study of definitions of "architect", "architecture", "engineer" and "engineering", but it was found that any definition of "engineering" would be so general as to include too much, or too specific to be sufficiently general, or too voluminous to be suitable to incorporate in a law. Some have endeavored to include in a definition of "engineering practice" all sorts and kinds of construction work, but engineering includes investigations as well as plans and no catalogue can well be prepared sufficiently detailed to include all sorts of engineering activities. Both architecture and engineering are broad terms involving construction and necessarily there can be no sharply drawn distinction. Architects in the broadest sense are engineers even if usually architecture is associated with ideas of artistic or decorative features. Architects are eligible to membership in the American Society of Civil Engineers and several architects are members.

BASIS FOR REGULATION.

The only basis on which the practice of any profession may be subject legally to State regulation is "in order to safeguard life, health and property". The State may not dictate that no one without a particular kind of artistic talent may practice engineering or architecture, but it may legally require that no one shall practice architecture or engineering who is ignorant of the effects of loads and applied forces, or incapable of determining the stresses in structures due to loads

and applied forces, and unable properly to proportion materials in structures safely to sustain such loads and forces.

Land surveying does not involve matters that would ordinarily jeopardize life and health, but property rights are vitally affected by land surveying, and many States have deemed it essential to place restrictions and safeguards about the practice of land surveying. Land surveying is associated with both architectural and engineering practice.

JOINT LAW FOR ARCHITECTS AND ENGINEERS.

This committee has therefore deemed it advisable and to the best interests of all concerned to include in one law provisions for the registration of architects, engineers, and land surveyors. It has recognized that the practices of architecture and engineering overlap in many instances, especially in connection with the larger projects of modern structures, where many branches of the arts and sciences are combined, involving architecture, structural, mechanical, electrical, sanitary, and other lines of engineering.

There are ample reasons why architects alone should judge as to the qualifications of those desiring to practice architecture and why engineers alone should pass upon the qualifications of those desiring to practice engineering. Hence a bill for legislation has been drafted by the Committee along these lines.

In fixing the qualifications for registration in our proposed bill, these have been purposely made high, but they have not been made unnecessarily difficult for reasonably competent men to meet. It is not intended that candidates would ordinarily be subjected to written examinations, but rather the board of registration would pass upon the sufficiency of the professional record of each candidate. Minimum qualifications have been clearly set forth which must be met. In order to enable the board to pass upon candidates fairly, certain qualifications are specified as "*prima facie* evidence of fitness" which (unless other facts derogatory to a candidate are also in evidence) will permit the board to pass the candidate. This so called "*prima facie* evidence" is not required, but if the candidate can present such evidence his application is the more readily passed upon. For instance, a candidate need not be a graduate of a college of architecture or engineering, but if he is, it is to his advantage. Likewise a candidate need not be a full member of one of the National or State technical societies or institutes, but if he has won such full membership it is greatly to his professional advantage.

ABSTRACTS OF STATE REGISTRATION LAWS.

NOTE: Engineering Council does not guarantee the legal accuracy of the following abstracts.

RECOMMENDED UNIFORM REGISTRATION LAW.

Adopted by Engineering Council in October, 1920.

Administration.—Board of Registration, consisting of seven members appointed by the Governor. Three members shall be registered architects; three, registered engineers; and one a registered land surveyor. In determining qualifications of applicants for registration as architects, a majority vote of the architect members of the Board only shall be required; similarly for engineers; for land surveyors, the affirmative vote of the land surveyor member and of one engineer member of the Board shall be required.

Application for Certificate.—Made to Board of Registration.

Definitions.—Not given for architecture and engineering; land surveying as covered by the Act refers only to surveys for the determination of areas or for the establishment or re-establishment of land boundaries and the subdivision and platting of land.

Professional Requirements.—Law covers all those practicing or offering to practice architecture, engineering or land surveying. Experience without degree: At least six years in active engagement of architectural, engineering or land surveying work of a character satisfactory to the Board. Educational allowance: Each year of teaching or of study in a school of architecture or of engineering of standing satisfactory to the Board shall be considered equivalent to one year of active engagement. Society membership: A full member of a National or State architectural or engineering society shall be entitled to registration.

General Requirements.—Citizenship of United States required—or a declaration to become a citizen. Age: At least 25 years. Miscellaneous: Must speak and write the English language, and be of good character and repute.

Examinations.—If the evidence originally presented in the application does not appear to the Board to be conclusive or warranting issuance of a certificate, applicant may present further evidence, which may include results of a required examination. Scope and nature: Not prescribed. Frequency: Not prescribed.

Fees.—For certificate: amount not suggested. For renewal of certificate: Amount not suggested. For replacing certificate lost, destroyed or mutilated: \$1.00.

Expirations and Renewals.—Certificates shall expire on the last day of December following their issuance and shall become invalid on that date unless renewed. Each registrant shall be notified by the Secretary of the Board one month in advance of the expiration of his certificate. Renewal may be effected any time during the month of December by payment of the required fee. For failure to renew certificate within the time provided, registrant shall not be deprived of his right of renewal, but after the month of December the fee shall be increased 10% for each month or fraction of a month that payment for renewal is delayed, provided that the maximum fee shall not exceed twice the normal fee.

Public Work.—One year after the Act goes into effect, neither the State, nor any political subdivision shall engage in public work involving architecture or engineering for which the plans, specifications, and estimates have not been made

by, and the construction and maintenance supervised by, a registered architect or a registered engineer; provided that nothing in this section shall be held to apply when the contemplated expenditure for the completed project does not exceed \$2 000.

Seals.—Each registrant may obtain a seal of the design authorized by the Board bearing the registrant's name and the legend "Registered Architect", or "Registered Professional Engineer" or "Registered Land Surveyor". Plans, specifications, plats, and reports may be stamped with said seal.

Exemptions (See also "Reciprocity").—Any person who prior to the passage of this Act was in professional practice may continue to practice without being registered, provided he does not hold himself out as a registered practitioner nor use the titles "Registered Architect", "Registered Professional Engineer", or "Registered Land Surveyor". The following exemptions are made: Offering to practice by non-residents; employees of registered practitioners, provided that duties do not include responsible charge of design or supervision; employees of the State or any political subdivision are exempted from the time the Act becomes effective only until the then existing terms of their respective offices expire; officers or employees of the Federal government. Corporations or partnerships may engage in the practice of architecture, engineering or land surveying provided the person or persons in charge of design or supervision which constitutes such practices is or are registered, or is or are otherwise authorized to practice. Exemptions for individuals apply to corporations and partnerships. Architects and engineers are not prohibited from making land surveys essential to architectural or engineering projects. Individuals, firms or corporations are not prohibited from practicing on property owned or leased by them.

Reciprocity.—A non-resident practitioner may practice without being registered in the State provided he is legally qualified for such professional service in his own State or country, when this practice does not aggregate more than 30 days in any calendar year. He may also practice as a consulting associate of a resident registered practitioner. He may be granted a certificate if he holds a like unexpired certificate from another State or territory of the United States or from any Province of Canada, in which requirements for registration are of a standard satisfactory to the Board. A new resident may practice, provided he has filed application for registration and has paid the required fee, for such reasonable time as the Board requires in which to consider and grant or deny his application.

Revocation of Certificate.—The Board may revoke a certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence, and to examine and cross-examine witnesses.

Penalties.—A person who after this Act has been in effect six months is not legally authorized to practice and shall so practice or otherwise violate its provisions, shall be deemed guilty of a misdemeanor and shall for each offense of which he is convicted be punished by a fine of not less than \$100 nor more than \$500, or by imprisonment for three months, or by both fine and imprisonment.

COLORADO LAW FOR LICENSING OF ENGINEERS.

Effective July 9th, 1919.

Practitioners at the time the law became effective were allowed one year within which to obtain licenses without examination.

Administration.—Board of five engineers appointed by the Governor; State Engineer is *ex-officio* a member of the Board and its Secretary.

Application for Examination.—Made to State Engineer, Secretary, State Board of Engineer Examiners, Denver, Colo. In not less than 60 nor more than 120 days, the application shall be either approved or denied.

Definition of Engineer.—An Engineer within the meaning of this Act, is a person engaged in the practice of the profession of engineering in any of its branches, except military engineering.

Professional Requirements.—Law covers all engineers. Experience without degree: At least six years in employ or under supervision, direction and tuition of one or more practicing engineers, of which two years must have been in active responsible charge of work—actual supervision and direction requiring the exercise of initiative, judgment and independent decision, as principal or assistant. Educational allowance: Each complete year as a student in an engineering school of recognized reputation is considered as one year of practice. Society membership: No provision.

General Requirements.—Citizenship of United States required. Age: More than 25 years. Miscellaneous: Must be of good moral character.

Examinations.—Required of all applicants, except those in practice at the time the law becomes effective. Scope and nature: Examinations are to be conducted in such manner as the Board may deem best suited to determine the fitness of candidates. Each candidate shall be examined in that branch of engineering in which he is proficient as set forth in his application. The Board may summon any licensed engineer to assist in preparing for and in conducting examinations. Frequency: Not prescribed.

Fees.—For examination: \$10.00. For license certificate: \$5.00. For renewal of certificate: \$5.00 annually.

Expirations and Renewals.—Certificates expire December 31st, each year. If not renewed by March 1st of the succeeding year, they are cancelled. Any person once licensed may be granted a new license without examination at any time upon payment of annual fee.

Significance of Certificate.—The Board has power to limit any license to the practice of surveying according to the qualifications shown by the applicant upon examination. Public Work: No provision. Private Work: No maps, plans, designs, reports, statements or filings to be certified or approved by an engineer shall be accepted or filed by any State official unless the certificate of approval is executed by and bears the seal of a person duly licensed.

Seals.—Every licensed engineer shall have a seal, which must contain his name, place of business, and the words, "Licensed Engineer, State of Colorado", with which he shall stamp all drawings, specifications and reports issued by him for use in the State.

Exemptions (See also "Reciprocity").—Employees of licensed practitioners: Draftsmen or other assistants of licensed engineers are not prevented from acting under instruction, control, or supervision of their employers. Superintendents of construction, paid by the owner, may act if under the control and direction of a licensed engineer. Rights, privileges and duties of architects are not limited by the provisions of this Act. All military engineers are exempt.

Reciprocity.—No provisions.

Revocation of Certificate.—The Board may revoke a certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence and to examine and cross-examine witnesses.

Penalties.—Any person who is not lawfully authorized to practice and shall so practice or otherwise violate the provisions of this Act shall be deemed guilty of a misdemeanor, and, upon conviction thereof, shall be punished by a fine of not more than \$500 or by imprisonment in the county jail for not more than 6 months, or by both fine and imprisonment.

Legislative Information.—Senate Bill No. 339, approved April 9th, 1919. Architects are licensed under an Act approved April 26th, 1909, and in force October 25th, 1909.

FLORIDA LAW FOR THE REGISTRATION OF PROFESSIONAL ENGINEERS.

Effective May, 1917.

Practitioners at the time the law became effective were allowed seven months within which to register without examination.

Administration.—Board of five members appointed by the Governor, three civil engineers, one mining or electrical engineer, and one mechanical engineer or naval architect. Each member of the Board must be a member of a recognized engineering society.

Application for Examination.—Made to Secretary, State Board of Engineering Examiners, 215 East Bay Street, Jacksonville, Fla.

Definition of Engineering.—The practice of professional engineering embraces the design and the supervision of the construction of public and private utilities, such as railroads, bridges, highways, roads, canals, harbors, river improvements, lighthouses, wet docks, dry docks, ships, barges, dredges, cranes, floating docks and other floating property, the design and the supervision of the construction of steam engines, turbines, internal combustion engines and other mechanical structures, electrical machinery and apparatus, and of works for the development, transmission or application of power, the design and the supervision of mining operations and of processes and apparatus for carrying out such operations, and the design and the supervision of the construction of municipal works, irrigation works, water supply works, sewerage works, drainage works, industrial works, sanitary works, hydraulic works, and structural works, and other public or private utilities or works which require for their design or the supervision of their construction such experience and technical knowledge as are required in this Act for admission to examination.

Professional Requirements.—Law covers all those who practice professional engineering, other than military engineering. The Board has ruled that submission of plans for work is the equivalent of practicing engineering. Experience without degree: At least six years in engineering work, one of which shall have been in charge as principal or assistant. Educational allowance: A graduate from an engineering school of recognized good reputation must have at least four years of experience, during one of which he shall have been in charge as principal or assistant. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: More than 21 years. Miscellaneous: Must be of good character.

Examinations.—Required of all applicants except those holding certificates from other States. Scope and nature: Prescribed by the Board, examinations may be either oral or partly oral and partly written. (The Board has ruled that examination may consist of applicant's sworn statement of professional education and experience in responsible charge of engineering work. If this statement is not complete or qualifying, the Board may summon applicant to appear for further examination, and investigate his record of professional service). Frequency: Determined by the Board.

Fees.—For examination: \$15.00. For certificate of registration: \$10.00 additional. For registration without examination: \$25.00. For renewal of certificate: \$5.00 annually.

Expirations and Renewals.—Certificates to be renewed before date to be fixed by the Board. (The Board has ruled that if a registered engineer shall leave the State and fail to renew his certificate for one or more years, he shall, upon his return, have his certificate renewed upon payment of renewal fee for the current year).

Public Work.—A person acting as a public officer employed by the State, a county, or a municipality is exempted from the provisions of this Act on work the estimated cost of which is \$1 000 or less. Every map, plan, and drawing required by law to be certified or approved by a professional engineer shall be certified or approved by a regularly registered engineer and shall bear the date and number of his certificate.

Seals.—No provision. (The Board has adopted a seal for the use of registered engineers which contains the registrant's name, his certificate number, and the words "Registered Engineer, State of Florida").

Exemptions (See also "Reciprocity").—Employees of registered practitioners: An assistant to a registered engineer is not required to register. (The Board has ruled that an assistant is not exempt when he is in responsible charge of work). The execution as a contractor of work designed by a professional engineer or the supervision of such work as a foreman or superintendent for the contractor is not deemed to be the practice of professional engineering. Employees of the Federal Government are exempt; State and municipal employees must register. The Act applies to every corporation, domestic or foreign, engaged in professional engineering within the State, except that certificates are to be held by its officers or employees instead of by the corporation. The Act does not apply to architects registered in the State. All military engineers are exempt.

Reciprocity.—A non-resident practitioner may be granted a certificate without examination upon payment of a \$25.00 fee and presentation to the Board of satisfactory evidence that he holds a certificate in another State, territory, or country where requirements are not lower than in the State. A new resident, provided he has applied for certificate and has paid the required fee, may practice for such reasonable time (6 months prescribed by the rules of the Board) as is necessary for registration.

Revocation of Certificate.—The Board may revoke a certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence and to examine and cross-examine witnesses.

Penalties.—Any person who is not legally authorized to practice and shall so practice or otherwise violate the provisions of this Act shall be guilty of a misdemeanor, and upon conviction thereof shall be punished according to law, and in addition his certificate of registration shall be automatically revoked.

Legislative Information.—Chapter 7404 (No. 146), Acts of 1917. Architects are covered by a separate law.

IDAHO LAW FOR REGISTRATION OF CIVIL ENGINEERS.

Effective May 1st, 1919.

Practitioners at the time the law became effective were allowed one year within which to register without examination.

Administration.—Department of Law Enforcement. Seven registered civil engineers, designated by the Commissioner of Law Enforcement, shall guide him in the administration of the law.

Application for Certificate of Registration.—Made to the Department of Law Enforcement, Boise, Idaho, in writing under oath in such form and accompanied by such proof of applicant's fitness to practice as the Department may from time to time prescribe. Must be accompanied by an unmounted photograph taken within a year.

Definition of Engineering.—Civil Engineering, within the meaning of the Act, is the practice of any branch of the profession of engineering other than mining, metallurgical and military. Said profession embraces the design and supervision of the construction of all public or private utilities except those in connection with mining operations exclusively, and other works which require experience, and the same technical knowledge as engineering schools of recognized reputation prescribe for graduation. The requirements of the University of the State of Idaho for the degree of Civil Engineer are adopted as the standard.

Professional Requirements.—Law covers all those who practice or offer to practice civil engineering. Experience without degree: At least six years of actual engagement in engineering work as assistant or otherwise. Educational allowance: Graduation from a school of engineering of recognized reputation is accepted in lieu of practical experience. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: More than 21 years. Miscellaneous: Must be of good character.

Examinations.—Required of all applicants except those from other States. If a candidate fails on the first examination, he may, after an interval of not less than six months nor more than one year, have a second examination without additional fee. Scope and nature: To be prescribed by the Department. Frequency: Semi-annually in State Capitol, at Boise, beginning at 9 A. M. the second Tuesday of March and September. Application must be received 10 days before the date of the examination.

Fees.—For residents: \$10.00. For non-residents: \$25.00. For renewal: \$2.00 annually.

Expirations and Renewals.—Certificates must be renewed July first each year, or Department shall cancel.

Significance of Certificate.—No map, plan, or drawing required by law to be certified or approved by a civil engineer shall be accepted or filed by State, county, or municipal authority, unless the certification or approval is executed by a person duly registered in accordance with the provisions of this Act.

Seals.—No provision.

Exemptions (See also "Reciprocity").—The following exemptions are made: Employees of registered practitioners when acting as assistants; engineers working for the United States Government; non-resident engineers entering the State for consultation, collecting information, or giving expert testimony in court; mining, metallurgical and military engineers.

Reciprocity.—A non-resident practitioner may be granted a certificate without examination if licensed or registered in another State where the minimum requirements are not less than in the State. A resident of a State which does not provide for registering or licensing may, upon presentation of satisfactory evidence that he is qualified as prescribed in the law and has practiced for an additional period of not less than 4 years immediately preceding his application, be granted a certificate of registration without examination. (The Department has ruled that an applicant must have obtained a grade of 70% in the examination in his own State, and must submit to a practical examination as to his fitness for licensure at a regular examination.)

Revocation of Certificate.—The Department may revoke a certificate for cause only after a hearing at which the accused has the opportunity of appearing and being heard.

Penalties.—Any person who unlawfully practices or otherwise violates the provisions of the Act shall be deemed guilty of a misdemeanor. Any person who attempts to obtain a certificate by fraud or by forged evidence, or to practice under such a certificate shall be deemed guilty of a felony.

Legislative Information.—Chapter 64, Session Laws, 1919, approved March 14th, 1919. Expiration of Certificate and Renewal Fee, Chapter 138 (S. B. No. 187), approved March 18th, 1919. Registration of Architects covered by Chapter 8, Session Laws, 1919, Sections 10-21. Registration of Surveyors covered by Chapter 93, Sections 1402-1410.

ILLINOIS LAW FOR REGISTRATION OF STRUCTURAL ENGINEERS.

Effective January 1st, 1920.

Licenses or certificates of registration issued under a previous law shall be effective for the period for which issued.

Administration.—Director of Registration and Education. Professional features administered by committee of five structural engineers appointed from time to time by the Director.

Application for Certificate.—Upon prescribed blanks to Department of Registration and Education, Springfield, Ill.

Definition of Structural Engineer.—A person shall be regarded as practicing structural engineering within the meaning of the Act who is engaged in the

designing or supervising of the construction, enlargement, or alteration of structures, or any part thereof, for others, to be constructed by persons other than himself. Structures within the meaning of the Act are all structures, having as essential features, foundations, columns, girders, trusses, arches and beams, with or without other parts, and in which safe design and construction require that loads and stresses must be computed and the size and strength of parts determined by mathematical calculations based upon scientific principles and engineering data. A person shall also be regarded as practicing structural engineering within the meaning of the Act who is engaged as a principal in the designing and supervision of the construction of structures or of the structural part of edifices designed solely for the generation of electricity; or for the hoisting, cleaning, sizing or storing of coal, cement, sand, gravel or similar materials; elevators; manufacturing plants; docks; bridges; blast furnaces; rolling mills; gas producers and reservoirs; smelters; dams; reservoirs; water-works; sanitary works as applied to the purification of water; plants for waste and sewage disposal; roundhouses for locomotives; railroad shops; pumping or power stations for drainage districts; or power houses, even though such structures may come within the definition of "buildings" as defined in any Act in force in the State relating to the regulation of the practice of architecture.

Professional Requirements.—Law covers all persons practicing or attempting to practice structural engineering. Experience without degree: Not less than six years in Illinois or in another State or territory, or in a foreign country or province, within ten years immediately preceding application. Must have been in responsible charge as principal or assistant for at least two years. Educational allowance: Every applicant who shall have graduated from a school of structural engineering approved by the Department, requiring a course of not less than four school years of at least 30 weeks, shall be credited with two years upon the required six-year period. The Department may credit not to exceed two years to an applicant who has pursued the course, but who has not graduated. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: At least 21 years. Miscellaneous: Must be of good moral character and temperate habits.

Examinations.—Required of all who cannot fulfill conditions stated under "Reciprocity", "Exemptions" and "Professional Requirements". Scope and nature: Written and oral tests; shall embrace subjects normally taught in schools of structural engineering. (The Department has prescribed that examinations shall occupy three days and shall cover theoretical and applied mechanics, definitions, general engineering knowledge, stress analysis, static and moving loads, design and construction in reinforced concrete, steel, wood, masonry and foundations.) Frequency: Determined by the Department.

Fees.—For examination for certificate: \$10.00. For certificate of registration: \$5.00. For examination to determine preliminary education: \$5.00. For restoration of an expired certificate: \$5.00. For renewal of certificate: \$1.00 annually. For certificate to those who hold a like certificate from another State or country: \$15.00.

Expirations and Renewals.—Each registered structural engineer must renew his certificate annually before July 1st. Every certificate not renewed expires August 1st. An expired certificate may be renewed only upon payment of the restoration fee. Any registered structural engineer who retires from active practice for not more than five years may renew his certificate upon payment of all lapsed renewal fees.

Significance of Certificate.—Public work: No provision. Private work: Must be registered to engage in private work.

Seals.—Every registered structural engineer shall have a seal, which shall contain his name, place of business, and the words, "Registered Structural Engineer, State of Illinois". Seal obtained prior to July 1st, 1919, may bear the words "Licensed Structural Engineer". All plans, drawings, and specifications prepared by or under the supervision of a registered engineer must be stamped with his seal.

Exemptions (See also "Reciprocity").—The following exemptions are made: Present practitioners who can prove that on July 5th, 1915, they were actually engaged in the practice of structural engineering and did not apply by January 5th, 1916, for a license without examination, as then required by law, shall be entitled to examination without regard to number of years they have practiced (any license or certificate of registration heretofore issued shall, during the unexpired period for which it was issued, serve the same purpose as the certificate provided for by the Act); employees of registered practitioners: draftsmen, students, clerks of work, superintendents and other employees of registered structural engineers when acting under the immediate personal supervision of their employers; superintendents of construction in the pay of the owner when acting under the immediate personal supervision of the registered structural engineer who prepared the drawings and specifications; any person, mechanic or builder, when making plans or specifications for, or supervising construction, enlargement or alteration of, any structure or building to be constructed by himself, or his employees, and for his own use.

It is lawful for a corporation to prepare drawings, plans and specifications for buildings and structures, which are constructed, erected, built, or their construction supervised by the corporation, if the chief executive officer or managing agent of the corporation in the State is a registered structural engineer. One or more registered structural engineers may lawfully enter into partnership with one or more registered architects. Persons registered to practice structural engineering are exempt from the operation of any Act relating to the regulation of the practice of architecture.

Reciprocity.—A non-resident practitioner, who is a structural engineer, registered or licensed under the laws of another State or territory, or of a foreign country or province, may, without examination, upon payment of fee, be granted a certificate of registration, provided that requirements for registration or licensing in the particular State, territory, country or province were substantially equal to the requirements then in force in this State.

Revocation of Certificate.—Certificates may be revoked for cause only after public hearing at which the accused may produce witnesses and be heard.

Penalties.—Violation of the provisions of this Act constitutes a misdemeanor, punishable upon conviction by a fine of not less than \$25 nor more than \$200.

Legislative Information.—The Act must be known and cited as “The Illinois Structural Engineering Act”. Approved June 24th, 1919. See also “An Act in relation to the civil administration of the State government, and to repeal certain acts therein named”, approved March 7th, 1917, in force July 1st, 1917, which repeals “An Act to provide for the licensing of structural engineers” approved and in force July 5th, 1915.

IOWA LAW FOR REGISTRATION OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

Effective July 4th, 1919.

Practitioners at the time the law became effective were allowed six months within which to register without examination.

Administration.—Board of five members, appointed by the Governor, no two from the same branch of the profession. Each member of the Board shall be a member of a State or National engineering society.

Application for Examination.—Made to the State Board of Engineering Examiners, Des Moines, Iowa.

Definitions.—Professional Engineering means the practice of any branch of the profession other than military engineering. The practice of said profession embraces the design and the supervision of the construction of public and private utilities, such as railroads, bridges, canals, harbors, river improvements, light-houses, wet docks, dry docks, ships, barges, dredges, cranes, floating docks and other floating property, the design and the supervision of the construction of steam engines, turbines, internal combustion engines and other mechanical structures, electrical machinery and apparatus, and of works for the development, transmission or application of power; and the design and the supervision of the construction of municipal works, irrigation works, water supply works, sewage works, drainage works, industrial works, sanitary works, hydraulic works, structural works and other public and private utilities or works which require for their design or the supervision of their construction such experience and technical knowledge as are required by this Act. Land Surveying is surveying having to do with the boundaries or areas of tracts of land. The surveying of lands for the purpose of sub-dividing or determining boundary lines where no contest is involved shall not be deemed to be the practice of land surveying within the meaning of the Act.

Professional Requirements.—Law covers all those who practice professional engineering or land surveying. Experience without degree: At least six years in the practice of engineering or land surveying, one year of which shall have been in charge as assistant. Educational allowance: Each year at an engineering school of recognized standing is counted equivalent to one year in practice. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: More than 25 years. Miscellaneous: Must be of good character.

Examinations.—Required of all applicants except those from other States. Scope and nature: To be prescribed by the Board. Frequency: To be given at a stated or called meeting of the Board.

Fees.—For examination: \$15.00. For certificate of registration: \$10.00 additional. For reinstatement of certificate that has been revoked: \$10.00. For certificate without examination: \$25.00 (to practitioners when law became effective). For certificate without examination: \$10.00 (to person registered in another State having standards that are not lower than those of Iowa).

Expirations and Renewals.—No provision.

Private Work.—Must be registered to engage in the private practice of engineering or land surveying. Registered land surveyors may administer oaths to their assistants and to witnesses produced for examination of facts connected with land surveys.

Seals.—The Board shall provide each candidate who has qualified for registration with a seal with which he shall stamp all plans, specifications, and reports issued by him.

Exemptions (See also "Reciprocity").—The following are exempt: Employees of registered practitioners; the execution as a contractor of work designed by a professional engineer, or the supervision of the construction of such work as a foreman or superintendent for such contractor is not deemed to be the practice of professional engineering; employees of the Federal Government; any full-time employee of any corporation while doing work for that corporation, except in the case of corporations offering their services to the public as professional engineers or land surveyors.

Corporations engaged in designing and building works for public or private interests not their own are deemed to practice professional engineering. With respect to such corporations all principal designing or constructing engineers shall hold certificates of registration. This Act does not apply to corporations engaged solely in building said works. A certificate of registration as a professional engineer does not carry with it the right to practice land surveying unless it is specifically permitted by said certificate, which permission shall be granted by the Board without an additional fee in the case of any applicant duly qualified. The construction, improving or extending of private drains, or drainage works, private irrigation works, private water supply works, or other works of a private nature, is not deemed to be the practice of engineering.

Reciprocity.—A non-resident practitioner may be granted a certificate without examination upon payment of a \$10.00 fee and presentation to the Board of satisfactory evidence that he holds like certificate in another State where the requirements are not lower than in Iowa. A new resident, provided he has filed application for a certificate and has paid the required fee, may practice for such reasonable time prescribed by the rules of the Board, as is necessary for registration.

Revocation of Certificate.—A certificate is to be considered revoked when no reply is received after two attempts have been made by the Board to communicate with the registrant; any certificate revoked for such cause may be reinstated upon due application and payment of the fee of \$10.00. The Board may revoke a

certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence and to examine and cross-examine witnesses.

Penalties.—Any person who, after the Act has been in effect for one year, is not legally authorized to practice and shall so practice or otherwise violate its provisions shall be deemed guilty of a misdemeanor and shall for each offense of which he is convicted be punished by a fine of not less than \$100 nor more than \$500, or by imprisonment for 3 months, or by both fine and imprisonment.

Legislative Information.—Chapter 392, Senate File No. 186, Acts of the Thirty-Eighth General Assembly; approved April 25th, 1919; in effect July 4th, 1919.

LOUISIANA LAW FOR LICENSING CIVIL ENGINEERS AND SURVEYORS.

Effective July 8th, 1920.

Administration.—Board of five practicing civil engineers or surveyors of good standing, appointed by the Governor.

Application for License or Examination.—Made to State Board of Engineering Examiners, Maison Blanche Building Annex, New Orleans, La.

Professional Requirements.—Law covers those who practice civil engineering and land surveying. Experience without degree: No practical experience prescribed. An applicant must present to the Board a diploma from an engineering college or school of good standing, said standing to be determined by the Board, or satisfactory evidence that such diploma has been granted, or must pass a satisfactory examination. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: 21 years. Miscellaneous: Must be of good character.

Examinations.—Required of all who are not graduates of an engineering college or school of good standing. Scope and nature: For surveying, covers plane trigonometry, plane surveying and practical use of instruments; for engineering, covers in addition, physics, including practical problems in design and construction. Frequency: Not prescribed.

Fees.—For examination: \$25.00. For registration by diploma: \$25.00. For registration of holder of license from another State: \$15.00. For issuing license certificate: \$1.00. For renewal of license for engineering: \$3.00 annually. For renewal of license for surveying: \$1.00 annually. For renewal after license has been revoked, for engineers: \$10.00. For renewal after license has been revoked, for surveyors: \$5.00.

Expirations and Renewals.—License must be renewed before February first each year, or in case of absence of holder from the State, within thirty days after his return. If a license is not renewed within the time limit, it shall be revoked, but may be renewed at any time thereafter upon payment of the required fee.

Significance of Certificate.—Public Work: No provision. Private Work: A person must be licensed to engage in private practice of civil engineering or land surveying.

Seals.—Board is authorized to adopt and use an official seal.

Exemptions (See also "Reciprocity").—Temporary permits: Any member of the Board may grant a temporary permit to practice after a satisfactory examina-

tion of any applicant, but such permit shall not continue beyond the next regular meeting of the Board, and shall in no case be granted less than six months after the applicant has been refused a permit by the Board. Civil engineers and surveyors in the employ of the Federal government are exempt. No special provisions for State and municipal employees. Members of companies or corporations must qualify for licenses as individuals. Non-professionals may run levels for terracing rice fields when registered engineers and surveyors are unavailable, but they may not make a practice of such work.

Reciprocity.—Non-resident practitioners are exempted when in actual consultation with registered civil engineers or surveyors of the State, or may be registered upon payment of fee of \$15.00 and presentation of satisfactory evidence of holding a similar certificate in another State, where the requirements are satisfactory to the Board, provided like privilege is granted to applicants from Louisiana in that State.

Revocation of Certificate.—The Board may revoke a certificate when the holder has been convicted of immoral conduct before a competent court.

Penalties.—Any person who shall practice or attempt to practice without having complied with the provisions of the Act shall be fined not less than \$100 nor more than \$500, or shall be imprisoned not less than 30 nor more than 90 days for each offense.

Legislative Information.—Act No. 242 of 1920; Senate Bill No. 26 by Mr. Beale; approved July 8th, 1920. This Act amends and re-enacts Act No. 200 of 1914, and Act No. 308 of 1908.

MICHIGAN LAW FOR REGISTRATION OF ARCHITECTS, ENGINEERS AND SURVEYORS.

Effective August 14th, 1919.

Practitioners at the time the law became effective were required to register by March 1st, 1920.

Administration.—Board of seven examiners appointed by the Governor; two architects and five engineers.

Application for Examination.—Made to State Board of Examiners for the Registration of Architects, Engineers and Surveyors, 80 Griswold St., Detroit, Mich.

Professional Requirements.—Law covers any person who represents himself to be an architect, an engineer, or a surveyor. The Board shall have power to classify applicants as civil, mining, mechanical, electrical, chemical and by other branches. Experience without degree: Not less than six years in practical architectural or engineering work or surveying under the direction or supervision of a registered architect, or a registered engineer, or a registered surveyor, or of an architect, or engineer, or surveyor of equivalent professional standing. Educational allowance: Time as a student of architecture or engineering in a college or school of recognized standing is considered the equivalent of an equal amount of practical experience. Society membership: No provision.

General Requirements.—Citizenship of United States required. Age: Must be of legal age. Miscellaneous: Must be of good moral character.

Examinations.—Required of all who desire to begin the practice of architecture, engineering or surveying as principals or in responsible charge, except those from other States. Scope and nature: Includes English language, and other appropriate subjects. Frequency: Not prescribed.

Fees.—For examination: \$5.00. For certificate of registration: \$15.00 additional. For certificate of registration without examination: \$20.00. For renewal of certificate: \$5.00 every five years.

Expirations and Renewals.—All certificates expire January 1st, 1925, and January 1st of each fifth year thereafter, and are subject to renewal upon application not less than thirty days preceding the date of expiration upon payment of fee.

Significance of Certificate.—Public work: After March 1st, 1920, neither the State, nor any county, township, municipality or village shall engage in the construction or maintenance of any public work of an architectural or engineering character, for which plans, specifications and estimates shall not have been prepared by a registered architect or a registered engineer, and the construction of which is not supervised by such a registered architect or registered engineer, provided that nothing in this section shall be held to apply to items of maintenance, repair or construction wherein the contemplated expenditure for the completed project does not exceed \$2 000. Private work: After March 1st, 1920, no city or village plat, or plat of an addition thereto or of a subdivision thereof, or any plat dividing land into streets, lots or blocks, shall be received for record, which has not been prepared by a registered engineer or a registered surveyor and signed by him as such.

Seals.—No provision.

Exemptions (See also "Reciprocity").—Present practitioner: Any person qualified to use the title "registered architect" before the Act took effect shall be considered as registered under the Act. Any citizen of the State engaged in practice as an engineer or as a surveyor as principal or in responsible charge for not less than two years before the Act went into effect, shall be granted a certificate. Any person, firm or corporation is not prevented from preparing plans and specifications for buildings to be erected by themselves. Employees of railroads or other interstate corporations whose employment is confined to such corporations, need not register. Private work: Nothing in this Act shall prevent any person from doing any of the engineering, architectural or surveying work mentioned herein upon or in connection with the construction of residence buildings, barns or garages and other private buildings.

Reciprocity.—Non-resident practitioners: The Board shall register architects and engineers of other States and of foreign countries when they are recognized as consulting specialists and have had at least 10 years of experience as such, or when they present credentials showing that they have qualified for such work under equivalent laws of their own States or Governments and are still in good standing thereunder, provided that such laws extend similar privileges to registrants under the Act.

Revocation of Certificate.—The Board may revoke a certificate for cause after the accused has been given opportunity for hearing.

Penalties.—Any violation of the provisions of the Act shall be a misdemeanor punishable for the first offense by a fine of not more than \$100, and for a subsequent offense by a fine of not more than \$500, or by imprisonment for not more than one year, or by both fine and imprisonment.

Legislative Information.—Act No. 334, Public Acts of 1919, effective August 14th, 1919. Act No. 120, Public Acts of 1915, relating to Registration of Architects, repealed.

NEW YORK LAW FOR LICENSING
PROFESSIONAL ENGINEERS AND LAND SURVEYORS.

Effective May 14th, 1920.

Present practitioners must obtain licenses within two years.

Administration.—In hands of a board of five licensed engineers appointed by the Regents of the University of the State of New York.

Application for Certificate.—Must be made on prescribed form to Regents of the University of the State of New York, Albany, N. Y.

Definition of Land Surveying.—Land surveying as covered by this Act refers to surveys for the determination of areas or for the establishment or re-establishment of land boundaries and the sub-division and platting of land.

Professional Requirements.—Law covers all those practicing or offering to practice professional engineering or land surveying. Experience without degree: To practice Engineering—six or more years of active professional engineering work, one of which shall have been in responsible charge, of a character satisfactory to the Board; to practice Land Surveying—four or more years of active engagement in land surveying work of a character satisfactory to the Board. Educational allowance: Each two years of study of engineering in a school of engineering of standing satisfactory to the Regents considered as equivalent to one year of active practice. Society membership: No provision.

General Requirements.—Citizenship of United States: Not required to practice Engineering; required to practice Land Surveying—or a declaration to become a citizen. Age: At least 21 years. Miscellaneous: Must be of good character and repute. To practice Land Surveying, must speak and write the English language.

Examinations.—If evidence presented in the application does not appear to the Board to be conclusive or warranting issuance of a certificate, applicant may present further evidence, which may include the result of a required examination. Nature: Not prescribed. Frequency: Not prescribed.

Fees.—For certificate to practice Engineering or Land Surveying: \$25.00. For certificate to practice both Engineering and Land Surveying: \$35.00. If issuance of certificate be denied, fee shall be returned.

Expirations and Renewals.—No provisions.

Public Work.—Two years after the Act takes effect, no county, city, town or village, or other political sub-division shall engage in construction or maintenance of any public work involving professional engineering or land surveying for which plans, specifications and estimates have not been made by, and construction and maintenance supervised by, a licensed engineer or land surveyor, provided that nothing in this section shall be held to apply when the contemplated expenditure for completed project does not exceed \$2 000.

Seals.—Each licensee may obtain a seal of a design authorized by the Board, bearing the licensee's name and the legend "licensed professional engineer" or "licensed land surveyor". Plans, specifications, plats, and reports may be stamped with said seal.

Exemptions (See also "Reciprocity").—The following are exempt: Offering to practice by non-resident; Employees of licensed practitioners, so long as practice does not include responsible charge of design or supervision as principal; employees of the State or any political sub-division are exempted from the time the Act becomes effective only until their respective terms of office expire; officers or employees of the United States. Corporations or partnerships may engage in the practice of engineering or land surveying provided the person or persons connected with such corporation or partnership in charge of design or supervision which constitutes such practice is or are licensed. The same exemptions as apply to individuals apply to corporations and partnerships. Engineers are not prohibited from making land surveys essential to engineering projects.

Reciprocity.—A non-resident practitioner may practice in the State, provided he is legally qualified for such professional service in his own State or country, where the necessary qualifications for which meet the requirements of the Board of Regents; he may be granted a certificate upon payment of the required fee if he holds a like unexpired certificate from another State or territory in the United States in which the requirements for license or registration are of a standard satisfactory to the Board. A new resident, provided he has filed application for license and has paid the required fee, may practice for such reasonable time as the Board requires in which to consider and grant or deny the application.

Revocation of Certificate.—The Regents may revoke a certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence and to examine and cross-examine witnesses.

Penalties.—Any person who, after the Act has been in effect two years, is not legally authorized to practice and shall so practice or otherwise violate its terms, shall be deemed guilty of a misdemeanor and shall for each offense of which he is convicted be punished by a fine of not less than \$100 nor more than \$500, or by imprisonment for three months or by both fine and imprisonment.

Legislative Information.—Law is Article IV-A of Chapter 25, Laws of 1909; approved May 14th, 1920. Introduced in Senate, No. 1104, by Mr. Ferris, March 17th, 1920. Article VII-A, Chapter 25, Laws of 1909, applies to registration of architects.

OREGON LAW FOR THE REGISTRATION OF PROFESSIONAL ENGINEERS.

Effective May 29th, 1919.

Practitioners at the time the law became effective were allowed seven months within which to register.

Administration.—Board of nine members appointed by the Governor—two civil, two mechanical, one electrical, two hydraulic and two mining engineers.

Application for Examination.—Made to Secretary, State Board of Engineering Examiners, Corbett Building, Portland, Ore.

Definition of Engineering.—The practice of professional engineering embraces the design and the supervision of the construction of public and private utilities such as railroads, bridges, highways, roads, canals, harbors, river improvements, lighthouses, wet docks, dry docks, ships, barges, dredges, cranes, floating docks and other floating property, the design and the supervision of the construction of steam engines, turbines, internal combustion engines and other mechanical structures, electrical machinery and apparatus, and of works for the development, transmission or application of power, the design and the supervision of mining operations and of processes and apparatus for carrying out such operations, and the design and the supervision of the construction of municipal works, irrigation works, water supply works, sewerage works, drainage works, industrial works, sanitary works, hydraulic works and structural works and other public or private utilities or works which require for their design or the supervision of their construction such experience and technical knowledge as are required in this Act for admission to examination. The enumeration of any public or private utilities or works shall not be construed as excluding any other public or private utilities or works which require such experience and technical knowledge for their design or the supervision of their construction.

Professional Requirements.—Law covers all those who practice professional engineering, other than military engineering. Experience without degree: At least six years in engineering work, one of which shall have been in charge as principal or assistant. Educational allowance: A graduate from an engineering school of recognized good reputation must have at least two years of experience during one of which he shall have been in charge as principal or assistant. Society membership: No provision.

General Requirements.—Citizenship of United States not required. Age: More than 21 years. Miscellaneous: Must be of good character.

Examinations.—Required of all applicants except those holding certificates from other States. Scope and nature: To be prescribed by the Board; may be either oral or partly oral and partly written. Frequency: To be determined by the Board.

Fees.—For examination: \$10.00. For certificate of registration: \$5.00 additional. For certificate of registration without examination: \$15.00.

Expirations and Renewals.—No provisions.

Significance of Certificate.—Public work: No provision. Private work: After January 1st, 1920, every map, plan and drawing required by law to be certified or approved by a professional engineer shall be certified or approved by a regularly registered engineer and shall bear the date and number of his certificate.

Seals.—No provision.

Exemptions (See also "Reciprocity").—Employees of registered practitioners: An assistant to a registered engineer is not required to register. Contractors and superintendents: Execution as a contractor of work designed by a professional engineer or supervision of such work as a foreman or superintendent is not deemed practice of professional engineering. Employees of the Federal Government are exempt; State and municipal employees must register. Professional engineers in military service may be registered without examination within a year from date of

discharge. The Act does not apply to architects registered in the State. All military engineers are exempt.

Reciprocity.—A non-resident practitioner may be granted a certificate without examination upon payment of a \$15.00 fee and presentation to the Board of satisfactory evidence that he holds a like certificate in another State, territory or country where the requirements are not lower than in Oregon. New residents: Any professional engineer coming from without the State and possessing the qualifications shall be permitted to practice for a period not exceeding three months before making application for examination or for certificate.

Revocation of Certificate.—The Board may revoke a certificate for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence and to examine and cross-examine witnesses.

Penalties.—Any person who is not legally authorized to practice and shall so practice or otherwise violate the provisions of this Act, shall be guilty of a misdemeanor, and upon conviction, shall be subject to a fine of not less than \$25 nor more than \$500, or to imprisonment in the county jail not to exceed six months.

Legislative Information.—Chapter 381, General Laws, 1919; House Bill No. 263; filed in the office of the Secretary of State, March 4th, 1919, to take effect July 1st, 1919. Registration of architects is covered by Chapter 418, General Laws, 1919.

VIRGINIA LAW FOR REGISTRATION OF
PROFESSIONAL ENGINEERS, ARCHITECTS AND LAND SURVEYORS.

Effective June 19th, 1920.

Registration optional; present practitioners are not limited as to time within which to register.

Administration.—Board of three architects, three engineers, and three land surveyors, appointed by the Governor. In determining qualifications of applicants for certification as architects, majority vote of architect members of board, only, is required; similarly for engineers, and for land surveyors.

Application for Examination.—Made to State Board for Examination and Certification of Architects, Professional Engineers and Land Surveyors, Richmond, Va.

Professional Requirements.—Law covers all those practicing professionally one or more branches of engineering, architecture, or land surveying, as certified practitioners. Experience without degree: To practice architecture or engineering—not less than four years of practical experience under the direction or supervision of a certified architect or certified engineer, or architect or engineer of equivalent standing; to practice land surveying—not less than two years of practical experience under the direction or supervision of a certified land surveyor, or land surveyor of equivalent professional standing. Educational allowance: Time spent as a student of architecture, engineering or land surveying in a college or school of recognized standing is considered the equivalent of an equal amount of practical experience. Society membership: No provision.

General Requirements.—Citizenship of United States necessary—or a declaration to become a citizen. Age: At least 21 years. Miscellaneous: Must be of

good character. Registration not compulsory. Law merely protects the terms "certified architect", "certified professional engineer", and "certified land surveyor".

Examinations.—Required of all applicants except those in practice at the time the law becomes effective and those from other States. Scope and nature: To be prescribed by the Board. Frequency: At least once each year at Richmond, Va., and at such other places and times as the Board may designate.

Fees.—For each examination: \$20.00. For certificate without examination: \$5.00 to residents of six years' practice of architecture or engineering or two years' of land surveying at the time the law goes into effect.

Expirations and Renewals.—No provisions.

Significance of Certificate.—Public work: No provision. Private work: Not necessary to have certificate to carry on work, unless designations "certified professional engineer", "certified architect" or "certified land surveyor," are used.

Seals.—No provision.

Exemptions (See also "Reciprocity").—Present practitioners may be granted certificates without examination, upon payment of fee and upon satisfactory evidence, for architects and engineers, of not less than six years, and for land surveyors, of not less than two years, of professional practice. Engineers are not excluded from the practice of architecture, nor architects from the practice of engineering.

Reciprocity.—Non-resident practitioners: Examination may be waived if the applicant is from another State where the qualifications prescribed are equal to those prescribed in Virginia, provided a like privilege is granted to applicants from Virginia in that State.

Revocation of Certificates.—Certificates may be revoked for cause only after a hearing at which the accused has the right to be represented by counsel, to introduce evidence, and to examine and cross-examine witnesses.

Penalties.—After six months from the date the Act becomes effective, the use by any person of the title of "certified professional engineer", "certified architect," or "certified land surveyor" without compliance with the provisions of the Act shall be deemed a misdemeanor, and such person shall be punishable by a fine of not more than \$100.

Legislative Information.—Chapter 328 (S. B. 226), approved March 19th, 1920.

WYOMING LAW FOR THE LICENSING OF SURVEYORS AND ENGINEERS.

Effective February 25th, 1919.

To practitioners holding licenses under a previous law, new licenses shall be issued without examination.

Administration.—Board of three engineers, appointed by the Governor; State Engineer, member and Secretary.

Application for Examination.—Made to State Board of Examining Engineers, Cheyenne, Wyo.

Professional Requirements.—Law covers any person who shall perform any surveying or engineering work relating to drainage, highway, municipal, county or State projects, survey of property lines or rights of way or preparation of applications for permits for use of water, or otherwise relative to the use of water.

Experience without degree: No provision. Educational allowance: No provision. Society membership: No provision.

General Requirements.—Citizenship of United States: No provision. Age: No provision. Miscellaneous: No license shall be issued to any applicant who is incompetent, dishonest, intemperate, or addicted to any habit which would render him an unsafe employee. Each licensee is required to furnish a satisfactory surety bond of \$500.

Examinations.—Required of all applicants except those licensed under previous Acts. Nature: Written examination and investigation by the Board of record, training and experience. Frequency: Not prescribed.

Fees.—For examination: \$10.00; should applicant fail to pass, he may be re-examined within a year without payment of additional fee. For certificate of license without examination: \$5.00.

Expirations and Renewals.—Each license shall be in force only as long as the surety bond shall remain in good standing.

Significance of Certificate.—Public work: All surveying and engineering work done by or under authority of any village, town, city, county or other political subdivision, or the State, shall be performed by or under the direction of a person licensed as provided by the Act, and no town, city or county surveyor or engineer, or surveyor or engineer employed by the State shall be eligible to appointment, re-appointment, election or re-election, until he has secured such license. Private work: Must be licensed to engage in the private practice of engineering or surveying. Every licensed surveyor and engineer is authorized to administer and certify oaths for application for the use of water or for preparation of petitions in connection with the use of water, or when it becomes necessary to take testimony to identify old or lost corners or to perpetuate a corner which is in a perishable condition, or whenever the importance of the survey, makes it desirable to administer oaths to assistants for the faithful performance of their duties, and in administering such oath shall use an impression seal of form prescribed by the Board.

Seals.—Each licensee shall use a seal of the form prescribed by the Board, giving name, place of residence, and license number.

Exemptions (See also "Reciprocity").—Present practitioners holding licenses in grades of "junior" and "senior" engineer by virtue of a previous Act shall be classed as "engineers" and those holding surveyors' licenses, as "surveyors", under provisions of this Act. Upon payment of a \$5.00 fee, the Board shall issue licenses. The Act does not apply to engineers of the United States engaged in the prosecution of Federal engineering work. The holder of an engineer's license is permitted to practice all classes of surveying and engineering.

Reciprocity.—No provision.

Revocation of Certificate.—The Board may revoke any certificate for cause.

Penalties.—Any person not licensed in accordance with the provisions of the Act who shall practice or otherwise violate its provisions shall be deemed guilty of a misdemeanor and upon conviction thereof shall be fined not more than \$200 or imprisoned for not more than six months, or be both fined and imprisoned.

Legislative Information.—Chapter 120; Session Laws, 1919; Senate File No. 48; Approved February 25th, 1919. Repeals Chapters 60 and 69, Compiled Statutes 1910; Chapters 18 and 118, Session Laws, 1917.

CANADIAN LAWS FOR THE REGISTRATION OF PROFESSIONAL ENGINEERS.

The Canadian Laws for the control of the profession of engineering *establish Associations of Professional Engineers* in each Province. For the most part these Associations are autonomous; in some cases, however, before any by-laws passed by the Association can become effective, they must be approved by the Governor-in-Council, *i. e.*, the Cabinet of the Province. The British Columbia Act provides that of the nine councillors, four shall be appointed by the Governor-in-Council.

"Registration" is defined in the British Columbia Act as the admission of an engineer to membership in the Association and the enrolment of his name in the "Register", and "Licensure" as the granting of permission to a non-resident engineer to practice temporarily without being registered. Although the other laws do not define these terms, they make provision for the issuance of both "Certificates of Registration" and "Licenses."

The laws follow in the main the Model Law proposed by the Engineering Institute of Canada, with a consequent degree of uniformity not found in the eleven State laws of this country. Educational attainments are given full recognition; time spent in study being counted equivalent to an equal period of practical experience. All laws contain liberal clauses regarding non-resident practitioners and consultants.

With the exception of Prince Edward Island, Ontario and Saskatchewan, all Provinces have Associations of Engineers established by law.

As a typical example of these laws, appended is an abstract of the "Act to Incorporate the New Brunswick Association of Professional Engineers."

ABSTRACT OF ACT TO INCORPORATE THE NEW BRUNSWICK ASSOCIATION OF PROFESSIONAL ENGINEERS.

Effective April 24, 1920.

NOTE: Engineering Council does not guarantee the legal accuracy of this abstract.

Definition of Engineering.—Professional engineering shall mean and include designing, laying out, and supervising in a professional capacity the construction, enlargement, alteration, improvement, and repair of public utilities, factories, industrial works, railways, bridges, tunnels, highways, roads, canals, harbors, harbor works, wharves, river improvements, light-houses, wet docks, dry docks, dredges, cranes, floating docks, and other similar works, steam engines, turbines, pumps, internal combustion engines, and other similar mechanical structures, air ships and aeroplanes, electrical machinery and apparatus, chemical and metallurgical machinery and works for the development, transmission or application of power, mining operations and apparatus for carrying out such operations, municipal works, irrigation works, water works, water purification plants, sewerage works, sewage disposal works, drainage works, incinerators, hydraulic works, and all other engineering works.

The Association.—Is a body politic and corporate, with perpetual succession and common seal. Membership: All registered professional engineers. Headquarters: City of St. John. Powers: May acquire and hold real estate for the purposes of the Association and may change or dispose of it in whole or in part.

All fees, fines, and penalties receivable and recoverable shall belong to the Association. The Association may pass by-laws regarding the discipline and honor of the profession, and the discipline and practice of the members; the management of its property; the levying and collecting of annual and other fees; the examination and admission of candidates; the filling of vacancies in the Council of the Association and the acceptance of resignations therefrom; and all other purposes pertaining to the management of the Association. All by-laws or amendments thereto shall become effective only after ratification by a two-thirds majority of the votes received from members in good standing. Government: By an Executive Council consisting of President, Vice-President, and such number of elected Councillors not exceeding 15 as may be fixed by the by-laws.

Application for Registration.—Made to Council of Association of Professional Engineers of the Province of New Brunswick.

Requirements for Registration.—Age: At least 23 years. Experience: Six years in some branch of engineering or at least two years as a professor of engineering in a recognized college. A graduate from a recognized college may include time spent in study as experience.

Examinations.—Required of all who cannot submit credentials satisfactory to the Council. Candidate shall submit to examination at his option in theory and practice of engineering in one or more of the recognized branches. Scope and nature: Prescribed by the Council. Frequency: As often and at such places as the Council may direct. Central Examining Board: The Council may establish conjointly with any Council of any other Association a Central Examining Board and may delegate its powers, provided any examination conducted shall be held in at least one place within the Province of New Brunswick.

Registration Without Examination.—Any person who can present to the Council satisfactory proof of qualifications, shall be registered upon payment of required fees. If applicant be a graduate of the University of New Brunswick or other recognized college, he shall not be required to submit to a written examination, but shall submit proof of other necessary qualifications.

Fees.—To be set forth in the by-laws.

Expirations and Renewals.—Renewal fees fall due on January first of each year. If any registered practitioner omits to pay the annual registration fee within six months after it is due, his name shall be erased from the register, but he may have it replaced at any time thereafter upon payment of the required fee.

Seals.—Every person may have a seal containing his name, and the words, "Registered Engineer, Province of New Brunswick", with which he may stamp all official document and plans.

Exemptions (See also "Reciprocity").—Any person residing in the Province of New Brunswick at the date of the passing of this Act, who is at that date and has been for six years previously practising as a professional engineer shall be entitled to be duly registered as a member of the Association without examination, provided that such person shall produce to the Council, within one (1) year of the passing of the Act, satisfactory credentials of having so practised. Assistants working under the direct supervision of professional engineers and not taking responsibility for their work other than to their direct superiors shall not be deemed to be practising as professional engineers when so engaged. Any person

who is employed as a professional engineer by a public service corporation, a private corporation, a public utility, or a Government department, whose business is normally carried on in two or more of the Provinces of Canada, and who is by reason of his employment required to practise as a professional engineer in other Provinces than that of his residence, may so practise in the Province of New Brunswick without holding a non-resident license, or payment of fee, providing such person can on demand of the Council produce satisfactory credentials showing that he is a registered member of an Association of Engineers similarly constituted of some other Province of Canada. Engineers who were practising in the Province of New Brunswick, and who have been accepted for service in the World War in the forces of Great Britain, or any of her Allies, shall on their return to Canada be entitled to all the rights and privileges conferred upon those in practise at the time the Act becomes effective. A Consulting Engineer who is not a resident of Canada, but who is a member of any engineering or technical organization or society of standing recognized by the Council, may obtain a license to practise if he can meet the requirements for registration as set forth above. He may act in an advisory or consultative capacity without a license. Of two or more persons carrying on practise as professional engineers in co-partnership only such members as are registered or licensed under the Act, shall individually assume the function of a professional engineer. A firm as such cannot be deemed to be a member of the Association or be licensed to practise.

Reciprocity.—Any person not residing in the Province of New Brunswick who is a registered member of an Association of Engineers similarly constituted of any other Province of the Dominion of Canada, may obtain from the Registrar a license to practise upon production of evidence of his registry in such other Province, and upon payment of a fee of one dollar. He may practise pending the disposal of his application. Any person who shall come hereafter to reside in the Province of New Brunswick, and who at the time is a duly registered member of an Association of Engineers of some other Province in the Dominion of Canada, with a constitution similar to that of this Association may be registered as a member of this Association without payment of fee for the then current year; provided that he produce to or file with the Council a certificate of membership in good standing in said other Association and an application for transfer of registry endorsed by the Registrar or other proper officer of said other Association.

Suspension for Misconduct.—No registered engineer shall be suspended or expelled from the Association without a hearing at which evidence shall be taken under oath. The Council shall have power to compel witnesses to attend and give testimony. All testimony shall be taken down in writing. The accused, if convicted, may appeal within 30 days to a judge of the Supreme Court, who shall review the evidence and confirm or set aside such suspension or expulsion. Pending appeal, the accused may practise.

Penalties.—Any person who practises or attempts to practise without first complying with the provisions of the Act shall be liable upon summary conviction for the first offense, to a fine of not less than \$100 nor more than \$200 and costs, and on failure to pay to imprisonment for not more than three months, and for any subsequent offense, to a fine of not less than \$200 nor more than \$500 and costs, and on failure to pay to imprisonment for not more than six months.

EVIDENCE OF QUALIFICATION ACCEPTABLE IN LIEU OF WRITTEN
EXAMINATION.

RESOLUTION ADOPTED AT MEETING OF THE COUNCIL OF ENGINEERING EXAMINERS IN
CHICAGO, NOVEMBER 9, 1920

Introduced by T. L. Condon—

Resolved: That it is the sense of this council that the submission of the evidence of qualifications of the applicant for the practice of professional engineering should be considered as the essential part of the examinations and that reciprocal registration certificate should be granted to an applicant who has submitted such satisfactory evidence to the Examining Board of his own State.

Seconded by Mr. C. S. Hammatt of Florida.

Resolution adopted.

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