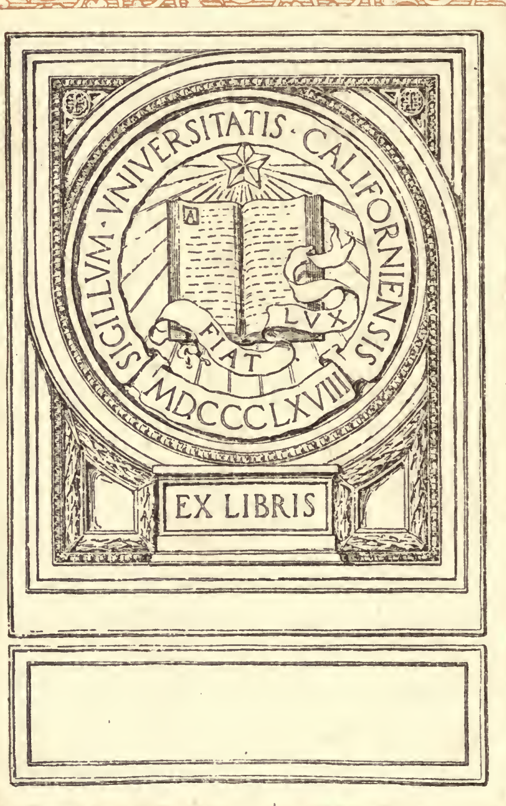
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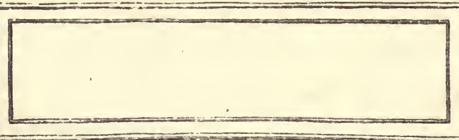

CONTRACTS
IN
ENGINEERING

THE INTERPRETATION AND WRITING OF ENGINEERING-COMMERCIAL AGREEMENTS

AN ELEMENTARY TEXT-BOOK FOR STUDENTS IN ENGINEERING, ENGINEERS, CONTRACTORS AND BUSINESS MEN

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"The law does not consist of particular cases, but of general principles which are illustrated and explained by these cases." — LORD MANSFIELD.

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PREFACE

In view of the prefatory form of Chapter I, extended remarks are not desirable here. There are, however, a few points to which attention is directed.

The author believes that it is better for the engineer to have even a little information than for him to be wholly uninformed upon legal matters. The author has been warned against leading the reader or student to infer that the services of legal counsel might easily be dispensed with. This result he especially disclaims, and he feels, moreover, that a candid scrutiny of his work will show that the aim has been to enable the engineer to cooperate efficiently with lawyers and to appreciate better the need for their services.

Present Aim and Scope of Work. — This book aims especially to familiarize the engineering student with the major principles of common law relating to CONTRACTS, and touches other legal branches only incidentally and so far as will materially assist him to grasp the doctrines of contract law applying to that subject. To many engineers the only justification for this book may lie in an acceptable restatement of the principles underlying successful specification writing. The great importance of this field has been recognized, and fully a third of the book devoted to it. But with the present commercial tendency of engineering, it is believed that the contracts of business demand the modern engineer's attention about equally with those of engineering construction. About one-third of the book, therefore, deals with commercial contracts, while the balance deals with elementary principles common to all contracts, and the interrelations between contracts, torts, agency, and real property.

Reasons for Present Undertaking. — The first reason is a belief that a considerable number of elementary legal principles should be stated in brief compass for class-room work. While of legal treatises there are a plenty, a text suitable for the special requirements of an engineering school does not exist, since this feature of class-room utility precludes the more monumental works on engineering jurisprudence and allied subjects. In the pressure of an engineering course the student often finds that he can ill

afford the larger works, and probably if he does buy them he finds himself lost in attempting their use. This is due to their tremendous array of formidable and intricate propositions, or what seem to be such for want of a simple and brief statement of the spirit of the law which underlies whole groups of cases. Generally he has no one to state the guiding principle for him, — a thing this book especially aims to do.

The writer has found his preparation for the present task in some fourteen years of the study, practice, and teaching of civil engineering. The pursuit of a law course in the Boston Evening Law School, coupled with contemporaneous teaching in Tufts College, has made a combination highly stimulating, and withal, highly laborious. Of its effectiveness, the present work will speak. In 1908 he was asked to give the course in Contracts and Specifications, and in conducting this class, much of the present material was prepared. This experience was of great value, since it indicated the limits of the ordinary student's information upon the subject matter, — it also proved his keen interest in it. The experience also indicated fairly well what could be done in the time generally available for this subject in most engineering schools.

Arrangement as a Textbook. — In outlining the various topics, where too many details or correlated ideas develop, recourse is had to Appendix Notes. The best students as well as non-legally trained teachers will find these Notes equally valuable with the main text; but the average student will be able to get continuity of development without much recourse to them. The free use of bold face type, of numbered section titles, and of italics, makes the book more valuable for reference. A comprehensive index adds to its value for purposes of reference. Illustrations, or more extended remarks upon the principles, have been shown, so far as practicable, in fine print.

For teaching purposes extensive *lists of quiz-questions and problems* (about 600 in number), have been introduced. As these questions are addressed to the salient features of the subjects, their use has been reported as a great help in preparing the lesson, both in time saving and securing concreteness. By using these lists the author has been able to get highly satisfactory recitations from a class of twenty in about thirty minutes time. Each student answered two questions on the blackboard. Then the teacher

corrected and discussed these answers with the class sitting as a "committee of the whole." This plan always held the interest of the students and provoked much valuable discussion of the principles involved.

While no two engineering schools present identical opportunities, yet the book is adaptable to various situations. For example, in the author's experience, with thirty-two one-hour recitations, each presupposing two hours of preparation, there was no difficulty in covering practically the entire book. For schools giving but one term, with one hour per week, or about sixteen recitations, Chapters VI and VIII, on Contracts of Association and Negotiable Paper, respectively, would almost certainly have to be omitted. This would lessen the bulk of the book about twenty-five per cent. Other parts could be shortened by assigning definite questions and problems instead of a fixed amount of text. But if three periods per week are afforded for sixteen weeks the entire book should be covered with considerable thoroughness. Current specifications and contracts might then be studied and time should be taken for practice in trying to better their parts by rewriting them. There might also be time for partially solving practical problems by trying to write a specification to cover a given set of facts, — the laboratory method of studying contracts, as some one has called it. This would be a most valuable field for co-operation with the English Department of the School, for the problems of law, of engineering, and of rhetoric are here inextricably interwoven.

Acknowledgments. — In studying the technical field of engineering contracts and specifications, one must give due recognition to the pioneer labors of the late Professor J. B. Johnson, as well as to those of his learned successor, Mr. John C. Wait. From the little volume prepared by Dr. J. A. L. Waddell in collaboration with Mr. Wait, the author has gleaned valuable and suggestive matter. In preparing the present work, the author is greatly indebted for many valuable suggestions to the Hon. Charles Neal Barney, of Lynn, Mass., and to Professor Samuel C. Earle, of the Department of English in the Engineering School at Tufts College.

Conclusion. — The author hopes his statements of law may not appear dogmatic. He has studied and quoted recognized authorities, though doubtless he has sometimes slightly but unwittingly misinterpreted them. He warns the student that

he may elsewhere find statements apparently in flat contradiction to those made here. Perhaps a more thorough study of the situation will effect a reconciliation; he should also remember that the courts in different States often hold opposite views on a given point, and that in law as well as in medicine, the doctors sometimes disagree. The traditional question as to the patient's fate will not always be answered. It may also be that the author's reasoning from the established principles to their application under modern conditions of engineering practice may sometimes have gone awry. If under the test of practice the engineer or contractor finds the arguments will not stand the strain, the author acknowledges in advance his indebtedness to any such persons who discover and will inform him of the discrepancies.

J. I. T.

Tufts College, Mass., July, 1910.

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CONTRACTS

CHAPTER I

INTRODUCTION

This chapter seeks to show the importance of a thorough knowledge of contracts to those engaged in business and engineering practice. Managerial positions of importance should be properly held by the engineer who has designed the works, keeping clearly in mind the financial sides of construction, operation, and maintenance, as well as by some other person who has had "business" or legal training only. The reasons why the engineer does not more often occupy such positions are points herein dealt with. That there are now many fields calling for engineering-business knowledge, that all business is at bottom principally a matter of contracts, and that there are certain prominent landmarks by which the engineer may more easily find his way through the mazes of current business practice, — these are points herein emphasized. Thereafter we shall proceed to a systematic study of contracts, touching in turn upon the contracts which deal with purely commercial matters, with the construction of engineering works, contracts of association between individuals, and those conveying ownership in property, etc., etc.

1. Importance of Business Study to Engineers. — A recent analysis of the professional work of some 2400 members of the American Society of Civil Engineers, made by its President, showed that nearly 40% were engaged either in manufacturing or contracting, or were consulting engineers. These are fields in which the business element is of prime importance. The basis for this investigation was a representative body of the country's most successful civil engineers. Results equally significant would probably be obtained in an investigation of the mechanical and electrical engineering professions. Is stronger evidence necessary to show the desirability and need of giving instruction in some of the more common business principles in the technical schools which furnish the fundamental training for the practice of engineering?

2. "The civil engineer's frequent isolation on construction work, coupled with frequent changes geographically, have been important factors in preventing him from becoming thoroughly amalgamated with society. The result is that he is frequently the tool of those whose aim it is to control men and to profit by *their* knowledge, and thus he is a servant where he should be a master. Herein is our weak point, due, perhaps, to professional

narrowness. The engineer should assume the initiative where he has often been the follower. He should be a manager and give orders to others who can as well do the work under his direction as could he, were the positions reversed. It should not be considered unprofessional for an engineer to be a capitalist, and when he takes his proper place as promoter and organizer, and shares in the profits of engineering enterprises, he will no longer be taunted with the saying, that, 'An engineer is only good to spend other people's money.'

"He has not reached his proper rank until he can hold the position of manager, as well as that of designer and supervisor of engineering works. A better position will be secured whenever an engineer makes it his business to study men as well as materials, and to use men as he does machinery. But the advancement must be individual, by fitting one's self for managerial duties and 'making good' in their performance." (Extracts from Presidential Address of Onward Bates, Am. Soc. C. E., 1909.)

3. The rapid expansion of industrialism is making its demand for technically trained men more and more felt, and engineers are being chosen for administrative offices in large corporations, and as the directing forces of great enterprises. This tendency must of necessity increase, for in the evolution of corporate life there are frequent changes, and transfers and promotions occur every few months. The employee familiar with the aspects of corporate activity must thereby be benefited. As superintendents and managers of the old school retire, we may confidently expect to see them frequently succeeded by technically trained men who have been found to possess executive ability of high order. Places of the highest responsibility are thus coming to be recognized as properly open to engineers, even when no personal engineering duties are required in them.

4. The study of cost data is coming to be more and more required of the engineer and a store of technical knowledge is by no means all that is needed to make him fully successful in his profession. In order to convince capitalists and official boards of the importance of his recommendations, it is plain that he must talk to such persons in terms that they can readily understand. He must use their language, and that is the language of business. Engineers who have employed their business instincts to advantage in the offices of engineering concerns have been able to rise

to higher positions and to command larger salaries than those who have chosen to confine themselves to more purely professional activities. The aspect of all enterprise is commercial, and graduates of technical schools never reach their maximum of success until they devote their ripened energies to business fields. Furthermore, there are greater opportunities in the business than in the professional departments of engineering.

No remark is more frequently heard among business men than that the engineer does not understand business. This is too frequently true. Nevertheless the engineer is trained in logical deduction and reasoning, is thoroughly grounded in rigid scientific principles, and taught to think consecutively. He should, therefore, obtain results commensurate with those of the business man if he applies his logically trained mind to business and economic problems with the same diligence that he exercises in his purely engineering functions. For even the so-called "business man" frequently has had no systematic instruction in business, but has absorbed his knowledge from the business atmosphere in which he moves. He usually does not know the laws of business but only its usages and customs.

5. Duties of Engineer. — As the engineer develops and gets away from purely technical routine work, he must draw up specifications, make contracts, hire and direct labor, and report on properties. These are within his legitimate field as at present understood, and demand that he should have a knowledge of the general business methods of the community in which he lives, and that he should be able to present his reports in such a way as to be readily understood by business men. He should know something of the elements of contract law, of stocks, bonds, notes, sales, and the law of property in general, of agency, tort (that he may appreciate the general theories upon which the law redresses wrongs), the formation of partnerships, and of corporations, and the general laws relating thereto, and of the powers and functions of the various corporation officials. These are matters of which the general principles can readily be acquired by an engineer trained to study.

6. Argument for Study of Business. — The engineer's scientific training teaches him to deal with the laws of Nature; he should have business training to teach him how to deal with men and money and the laws relating thereto. There are certain laws

and general principles which, if mastered by the student during his college course, would give him a different attitude toward his profession and broaden his horizon. Why then restrict an engineer's education to purely scientific subjects? Why not expand his horizon to enable him to take the position in the community which his technical training prepares him to occupy? It is not expected, nor is it desirable, that the engineer should, by thus expanding his functions, eliminate the lawyer or the financier. But an elementary knowledge of the legal rights, duties, and responsibilities of the business man should, on the other hand, indicate more clearly the necessity for the lawyer and the financier, and above all make it plain when and where their services are needed. In short, a business training should develop in the engineer a new view of his relations to other professional men and place him in a position to engage their services rather than to act as their agent.

7. **Duty of Engineering Schools.** — In justice to the profession, schools of engineering must keep pace with this commercial tendency. That they are striving to do so is shown by the fact that a number of colleges have added to their purely technical courses studies relating to the business and economic aspects of engineering. The point has been well taken that a technical school which does not tell its undergraduates how to do business safely with business men does not fulfill its obligation to them. It may be argued that the curricula of our engineering schools are already overcrowded, and their students overburdened. To this it may be answered that perhaps certain purely scientific studies might well be dropped in favor of more practical ones of this character. It is thought, however, that this may not be necessary, as a fairly extensive course on the principles of business law can be given without overburdening the student. In general, it may be urged that the college is *par excellence* the place for the inculcation of *principles*. If this is true of science, why not of the business side of engineering?

With reference to the student at the end of his college course, a leading editorial writer expresses himself thus: "With the increasing requirements placed upon the engineer, it is seldom that purely technical duties fall to the lot of the recent graduate in engineering. Certain large manufacturing plants do employ pure specialists, but in the engineering world at large, business

training is quite as important as the ability to solve differential equations. The financial aspects of engineering were never more pronounced than to-day."

8. Engineering-Business Fields. — A field obviously suitable for a business man with a technical training, namely, an engineer with some knowledge of business principles, is that of purchasing agent for a corporation, whether it be a railroad, water-works, electric lighting and power plant, or any of the great manufacturing industries. The importance of scientific knowledge in such positions has not been duly recognized. Apparently the directors of many corporations have not been aware that other qualifications than those of the ordinary business man are necessary to secure the highest economy in the purchase of materials, supplies, and machinery. In many cases such purchase has consisted merely of accepting the lowest bid offered. And yet in these days when the press is filled with discussions of how to eliminate wastes, obtain greater economy, and stop leaks generally, the fallacy of such a course is at once apparent. No one who has had extensive opportunity to observe the methods followed by numerous corporations in buying supplies and equipment can doubt that great improvement is possible in the conduct of their purchasing departments. The choice of supplies and new equipment is a matter to be settled upon a scientific basis only, if the greatest economy is to be obtained. But it is also apparent that to make these departments most efficient their technically trained heads must not possess less of business knowledge than the non-technical persons whom they supersede.

9. In a collateral field, an engineer should apparently be well qualified to sell an engineering product, since he best knows wherein it excels and his statement of its purposes and capacity can be relied upon by men who are themselves expert engineers, and who need expert argument. In the employ of the largest manufacturing interests there are many engineering salesmen, agents, domestic and foreign department managers, engineering attorneys, and even corporation presidents; the duties of all of these persons are chiefly commercial yet thoroughly interwoven with the technical elements of the business. Such men must, therefore, have business equipment and training, executive personality, and the administrative faculty, in addition to their engineering knowledge.

10. Again, growing fields in engineering are those of expert business systematizers, organizers, cost accountants, appraisers, etc. Contracting firms and engineering offices engaged in handling private, railroad, government and municipal contracts, and in consulting work have too often failed because the commercial side of their practice — the really vital side — was not sufficiently developed to meet the demands upon it. Men were needed who were distinctly fitted to care for the commercial departments and to be, at the same time, familiar with the technical, or engineering routine — in a word, "Commercial Engineers."

11. Contracts Underlie Engineering Business. — Leading editorial writers for the engineering press have pointed out that with the growth and development of communities the need of structures of diverse and complicated character arises. These structures are for the most part erected by contract work. The old theory was that the plans and specifications of the chief engineer would indicate with sufficient fulness and clearness all requirements, but it has become evident that the contractor as well as the engineer must have a technical training. It is evident too that the contractor must not only appreciate the technicalities of plans, materials, and processes of construction, but also the legal phases of his status, lest through some inadvertence he suffer unreasonable hardship.

It has therefore come about that the excellence in the quality of materials used together with the requirement of a high degree of skill in carrying out modern engineering works of magnitude have tended to cause the engineer to become a contractor. In like manner the contractor has found it necessary to become a skilled engineer. This is as it should be, since technical knowledge and professional skill have become essential not only for the design of work and the elaboration of proper specifications and contracts, but also for the production of materials and the proper handling of them in construction. Probably no better engineering talent or experience is to be found in the country than that engaged by, or connected with, great contracting firms. This statement assumes added significance when we consider that great plants like those bearing the names Westinghouse, Edison, and General Electric are contracting establishments.

12. Present Purpose. — The foregoing discussion of the en-

gineer's relation to commercial enterprises is largely a summary of editorial opinions expressed in the leading engineering journals, and of articles contributed by consulting engineers and specialists. In view of such a consensus of opinion regarding the need of business training for engineers such a textbook as the present one appears amply justified. An endeavor has been made in the present work to supply a practical course showing the contractual basis of engineering work and of business at large. The object has been to provide a textbook suitable in form and subject matter for use in engineering schools. As each rule of law is studied, it is sought by frequent repetition and allusion to drive home the meaning of certain legal theories which lie at the root of our commercial usages and customs, introducing so far as necessary the elementary conceptions from the leading fields of the common law.

13. The development of contract law by no means stops with a consideration of a few of the countless situations arising under construction contracts, but as business is at bottom almost solely a matter of contract, attention is also directed to contracts of sale, of partnership, agency, contracts of carriage, contracts in negotiable paper, etc. It is believed also, that even a hasty study of the incidents and properties of everyday contracts of business will greatly assist the student in understanding and appreciating the peculiarities of engineering contracts. With the latter the engineer will almost certainly have occasion to deal, either in their preparation, or interpretation.

14. In preparing these outlines of contract law, a two-fold purpose has been kept in view: First, to make matter and statement such as would be readily intelligible to the average college student who has no opportunity for extended study of legal principles; second, to present such facts and rules as seem likely to be of most value to him in his future professional and business career. To properly treat of the engineer's duties it is necessary to deal somewhat with the principles of agency, tort, and of real property, since these bear an intimate relation to his work, wholly aside from his rights and obligations arising under contracts generally.

15. Statements herein made are usually in general terms, since the opportunity is lacking to illustrate them by most of their particular applications, and much collateral matter which would

serve to elucidate and amplify the rules stated has of necessity been omitted. The aim throughout has been to quote the best authorities upon the several subjects, and to omit the statement of rules which are equivocal in their application. It is hoped that the result of this effort will be to produce a condensed statement of certain important rules governing the transaction of all business, and that the engineer may safely attempt to apply them to situations encountered in his own experience. It is further hoped that this material will serve as the nucleus of a fund of information which each student may readily enlarge as his tastes and business interests dictate.

In conclusion, to say that " Ignorance of the law excuses no one," is to use a phrase worn to triteness, though probably few laymen recognize the sound philosophy underlying it. Persons of technical training in the natural sciences rarely appreciate the existence of a rigid framework of legal principles upon and around which all the affairs of our complex civilization are built. To destroy or to undermine this framework would plunge society into anarchy. Said in another way, there is a right and legal way of carrying on the affairs of the business world — to contravene it is to invite disaster.

appendix note #16

Chapter II

CONTRACT ESSENTIALS

Engineering contracts must be practicable; they should also be equitable. Ignorance of the legal status of the individuals concerned, i.e., lack of knowledge of what the law will assist them to secure, and of those matters wherein it will refuse its aid, is probably a most potent cause for impracticable contracts. If the engineer is to recognize the legal elements in the situations which arise, he must study systematically the leading elements of the law of contracts. Persons having power to enter into binding contracts, persons not having such power, the varieties of subject matter about which lawful contracts may be made, unlawful contracts and their consequences, the ideals of the common law regarding contracts, and reasons why contracts opposed to them are illegal, methods of enforcing lawful contracts, kinds of "consideration," and what is meant by "meeting of the minds"; — these topics are extensively developed in this chapter.

16. PRACTICABLE and EQUITABLE CONTRACTS. — "Many contracts appear to be drawn *solely* on the assumption that the owner's interests must be most carefully guarded against the contractor's failure to fulfill his agreements properly. Under agreements of this type, the contractor generally takes chances that the overreaching clauses will not be strictly enforced, and that profits lost on unfair clauses can be made up on 'extras.' But if there is close competition with only a small margin of profit at best, the contractor becomes more troublesome over small omissions or errors, and naturally resists as far as possible the exactions he is subjected to when the literal fulfillment of ambiguous conditions, and 'taking the pound of flesh' is insisted upon.

"A just contract is equally valuable to the owner, the contractor, and to the engineer. If it is accurate and free from ambiguity, it cheapens the cost of work by eliminating the necessity for bidding sums to cover every possible contingency and uncertainty. It broadens real competition, and encourages lower estimates. It insures more rapid erection, and acts as a powerful regulator of the mutual understanding and confidence in the fairness of all the parties, — and fairness, like oil to machinery, is necessary to prevent friction." (Bamford, Proc. Am. Soc. C. E. XXXV, p. 1319.)

It is evident that the contract-writing engineer must understand the technical and legal requirements of his subject, or his work will be impracticable. It is believed, moreover, that many inequitable and unjust provisions now current in engineering contracts exist because of an over-zeal on the part of contract-writers to protect the interests of their clients, and because the just objections of the contractor to unfair requirements have not been presented in a candid and impersonal fashion. Contract-writers have been bigoted because ignorant, and unjust through lack of information. To give due consideration to the rights of *all* the parties to the various types of contracts is the present aim. This requires that the strictly legal aspects of the various

topics must first be considered, after which some of their applications to engineering practice may be briefly stated. We are brought then at the outset face to face with the question "What is a contract?"

17. CONTRACT DEFINED. — **A contract** is an agreement between competent parties, enforceable at law, whereby each acquires a right to what is promised by the other. Two persons can promise each other whatever fancy dictates, but unless such promises are enforceable at law, they form no contract; and unless those learned in the law can distinguish certain technical elements in the promises, the law will not compel either party to carry out the terms of his promise.

18. CONTRACT ESSENTIALS. — If all persons were honorable, having made promises they would keep them. But as many are strongly disinclined to live up to their agreements, society has provided legal means for compelling them to do so. In the interests of justice, however, it becomes necessary to carefully weigh the circumstances under which the agreement was entered into to ascertain whether the parties intended it to be of the legal and binding sort; and when such intention is found, to determine whether the contract is of such a nature that it *ought* in reason and justice to be enforced. Thus in the formation of a contract it is universally recognized as essential that there be:

1. Competent Parties.
2. A Lawful Subject Matter.
3. A Proper Consideration.
4. A Genuine Agreement, or Mutual Assent.

These elements will be developed at some length and the student is urged to master their significance at the outset in order that he may follow more intelligently the discussion of numerous practical cases that will be given. After learning something of the doctrines and terminology of contracts in general some characteristic details of engineering contracts may then profitably be discussed.

19. It should always be borne in mind, however, that in the eye of the law engineering contracts are no different from any other business agreements. By the term "engineering contracts"

we are here referring to contracts which directly concern engineering projects, and with which every engineer sooner or later comes in contact.

If the student or engineer thoroughly comprehends a few basic principles common to all contracts, he possesses a point of vantage from which to view the numerous detailed and highly elaborated provisions of important engineering contracts. Knowledge of this character will help him to discern their relative importance, and to give them a sounder and wiser interpretation. We must creep before we run, and numerous cases from other fields are therefore dwelt upon; from these the habit of deductive reasoning may be applied by the student to point the solution of many engineering problems arising under analogous conditions.

20. BASIC POSITION OF CONTRACTS. — Contracts are as old as civilization. They form one of the greatest foundation stones upon which society is erected. It is natural, therefore, to find contracts permeating every phase of our modern society. There are many different types, each peculiarly adapted to the situation in which we find it. Thus there are contracts of sale, of marriage, contracts by which one undertakes to build or make something, to render services, to transport persons or goods, contracts of partnership, etc. Under and through them, however, we shall discern the threads of these legal "elements," the indispensable groundwork of them all.

21. LEGAL RULES. — The common law* abounds in instances where a general statement is made expressing the broad and basic principle, and then the primary rule is immediately qualified, lessened, and pared down, with a view to applying the dogma to the case in point. To one trained in the natural and mathematical sciences, this appears unscientific and haphazard, since the laws of nature are unchangeable. The engineering student must accommodate himself, however, to this method and learn to give the same careful thought to the qualifications of a rule as to the primary rule itself.

* "Common Law."

The great Chief Justice Shaw of Massachusetts, in 1854, thus defined the meaning of these words: "It is one of the great merits and advantages of the common law that instead of a great mass of practical detailed rules established by positive provisions and adapted to the precise circumstances of particular cases which would become obsolete and fail when the practice or course of business to which they apply should cease or change, the common law consists of a few broad and comprehensive principles, founded on reason, natural

22. TECHNICAL TERMS IN LAW. — Every art and craft has its technical terminology and the universality of the custom is abundant proof of its usefulness. To the unreflective person it may appear that the principal object in the invention of this technology has been hopelessly to befog the subject for the unlearned. A closer analysis, however, shows that a single generally-accepted technical term conveys with precision the full import of an idea which a whole paragraph expressed in non-technical language could scarcely contain. It will be observed, also, that the more abstruse and subtle the shades of meaning exhibited by the subject matter, the more elaborate and complex is its technical terminology. In the study of the law many striking examples of this are found, and these remarks are merely intended to put the student early upon his guard, lest he needlessly stumble.

When a technical term is freshly-coined, or when the term differs plainly from any other word in the language, it is so recognized wherever met, and no great difficulty is encountered, save in the expenditure of mental effort in learning its meaning. But when, as in the case of legal phrases, old words, entirely unchanged, are used with a distinct technical meaning, the pitfalls of the student are many times multiplied. Because of this tendency of legal terminology to employ commonly-used words and phrases in a purely legal sense, this opportunity has been taken to emphasize the importance of a familiarity with such terminology. In the discussions of principles that follow, technical terms have been freely employed and explained. It is believed that the value of this plan will be constantly apparent. Examples of the most confusing of such technical terms are: — consideration, fraud, misrepresentation, negligence, prescription, conversion, deed, mistake, etc.

23. (1) COMPETENT PARTIES. — In general it may be said that any one can make a binding contract. The immediate

justice, and enlightened public policy, modified and adapted to the circumstances of all the particular cases which fall within it.

"These general principles of equity and policy are rendered precise, specific and adapted to the particular use by usage, which is of itself proof of their general fitness and practical convenience, but still more by judicial exposition; so that when in the course of judicial proceedings by tribunals of the highest authority, the general rule has been limited, modified, and applied according to the particular cases, such judicial exposition when well settled, and acquiesced in, becomes itself a precedent and forms itself a rule of law for future cases under like circumstances." (See also Appendix Note 1.)

exceptions to this general rule are that infants (persons under twenty-one years of age), married women, lunatics, and drunken persons cannot make binding contracts.*

The contracts of infants are voidable, that is, they may be avoided or declared of no effect if the infant so desires; or he may choose to affirm the contract when he attains his majority. An infant may be charged, however, upon an *implied* (See §§ 68-70 Implied Contracts) contract for the value of necessities of life bought by him, and if he has obtained possession of goods through a voidable contract, he can not deny the legality of the contract on the grounds of his infancy, and still keep the goods.

The disability of married women to enter into binding contracts has been removed in nearly every State by "enabling statutes," so that now married women may contract with practically the same freedom as men, except that in some States they cannot contract with their husbands.

Contracts made with lunatics or drunken persons are held in some States to be binding if made in good faith, while in others they are regarded as absolutely void. If a man is so intoxicated or mentally incompetent that he does not know what he is doing, clearly there can be no real agreement.

It should be observed thus early that the only persons upon whom the terms of a *contract* are *binding* are the *parties actually entering* into *the agreement.* Exceptions to this rule occur in a few peculiar contracts contained in deeds of land, when the contract is said to "run with the land." In these exceptional cases persons other than the original parties to the contract are bound by it.

24. (2) LAWFUL SUBJECT MATTER. — To ascertain if the subject matter of a proposed contract is legal (that is, whether the parties have a legal right to do the thing contemplated) frequently requires a considerable knowledge of legal relationships. Inasmuch as such knowledge is often needed by the engineer in determining the legality of proposed contracts, lawful subject matter will be treated at some length.

The following are some of the more prominent grounds of illegality:

(*a*) That the proposed contract violates some State or Federal statute;

(*b*) That it is contrary to the rules of common law; or

(*c*) That it is forbidden by public policy.

25. (*a*) **Contracts in Violation of Statutes.** — Crimes are for-

*Corporations have limited contractual powers, to be discussed in Ch. VI.

bidden by statute, and by the common law, also; a contract to commit a crime is illegal. A difficult phase of illegality is where statutes exist which bear directly upon the proposed contract, so that all the statutory provisions must be complied with. Contracts failing to comply with such provisions are void.

Legislative Restrictions of this character are imposed upon municipal corporations, counties, school districts, and educational and other Boards charged with public enterprises.

The legislative enactment or constitutional provision which provides for such "legislative restrictions" generally expressly limits the extent of the powers of such corporate bodies, while frequently requiring the observance of specific formalities before valid and binding contracts can be entered into.

Certain provisions which are common in such statutes and ordinances are: that the work shall be advertised and awarded to the lowest bidder; that the work must be authorized by the City Council after public notice and hearings; that a certain proportion of abutting property owners must combine to petition for an improvement; etc.

Any requirement that the Legislature may have incorporated into the authorizing statute, no matter how trifling and unimportant it may appear to the average business man, may, if difficulties arise, be regarded by the Court as an essential "condition precedent." (See § 74.)

To disregard such provisions is to invite serious trouble. After a large expenditure has been made by the contractor he may find that the whole contract is *ultra vires* (i.e., in excess of the real legal powers possessed by the party for whom the contractor is working). The relief in such a case may be nothing short of a special Act of the Legislature, authorizing the contract as made. To obtain relief of this sort, however, is frequently next to impossible.

A pitfall of this sort very easy to fall into is an instance where a municipal corporation has a *statutory* debt limit which can not lawfully be exceeded. The contractor who, unwittingly, enters into a contract to do a paving job or other work of municipal improvement, may discover when the work is in large part done that the debt limit has been exceeded. While there may be complicated and extensive legal expedients which will in a measure rescue him from his predicament, it is evident that the contractor should inform himself as to all legislative restrictions before entering into such a contract. (See § 264.)

The law unsympathizingly says that the two persons contract with each other " at their peril," or " at arm's length." This means that each is bound to satisfy himself in advance as to the legal competency and responsibility of the other party, or else take the consequences of failing to do so.

"The [statutory] restrictions and conditions precedent prevailing in these various States and nations are so numerous, so exacting, so extraordinary that no corporation or well-informed business man will undertake a project of any importance without the advice and counsel of a local attorney. To do so is suicidal to the best interests of the undertaking." (Waddell & Wait, Spec. & Cont. 165.)

As has been indicated above, the list of restrictions is a long one with a probable tendency to lengthen. It is, in fact, so long that we have hardly done more than indicate the direction in which to look for them.

26. Another restriction sometimes of vital importance is the so-called "Lien and Labor" laws. These laws are local statutes primarily designed for the protection of mechanics by giving them "liens" (roughly defined as "first claims") on the finished work for their compensation. These statutes may also contain other provisions as to the kind of labor which shall be employed upon public work, the hours of labor, and even the rate of wages. Evidently a failure to take account of such provisions may cause a contractor to submit a bid far too low, and therefore result in his ruin, or in the failure of the whole enterprise.

27. Contracts in Restraint of Trade compose another class of illegal contracts. The most famous American statute upon this is the Sherman Anti-Trust Act. This applies, however, only to interstate commerce, and no comment need here be made upon it. Brief comment will be made upon other typical aspects of the same principle.

Suppose two gas companies, owning equal and exclusive rights under a municipal franchise, combine and agree to apportion the city between them, for the purpose of avoiding competition and raising prices. Can they enforce such a contract in the courts? No, for this would plainly be in restraint of trade, tending to promote a monopoly, and hence contrary to public policy (121 Ill. 530). In cases of this class the kind of business involved will be especially considered by the court, and if the parties are public service corporations the rights of the public to the benefits of free competition will be strictly upheld. The same principle has been applied where railroad companies had agreed to go into partnership or to pool their earnings, these contracts being held invalid on the ground that thus the public was deprived of the benefits of competition.

28. "Sunday Laws" to the effect that a contract entered into or to be performed on Sunday is void, will sometimes demand attention. No attempt will be made here to cover the extremely numerous and conflicting statutes and decisions made upon this matter in the various States, since in some of them the contract would be held good, but in others wholly bad.

29. Statute of Frauds. — The most famous statutory regulation concerning the making of enforceable contracts is known as the "*Statute of Frauds.*" This is a statute existing in practically all of the States and is copied substantially from an English

statute of that name, enacted in 1677. It was intended to prevent frauds and perjury, and to lessen the risk of mistakes arising from the defective and imperfect recollection of witnesses, by requiring that certain contracts should be *in writing*, or else they should not be allowed to be proved in court. (9 Allen, Mass. 8.)

The Statute of Frauds has very numerous provisions. Those of peculiar interest to the engineer require that contracts relating to the sale of, or pertaining to any interest in or concerning land shall be in writing. (See § 215 Deeds.)

It is also provided that an agreement which by the intention of the parties is not to be performed within one year, or which is impossible of being performed within that time, cannot be enforced unless in writing. (96 U. S. 404.)

Another important provision of the Statute is to the effect that contracts for the sale of "goods, wares, and merchandise" to the amount of $50, by the old statute, shall not be enforceable unless in writing. In some States this amount has been made $30, and again, by the recent Sales Acts adopted by several States, the amount has been increased to $500. There are important exceptions to the last provisions above which will be more fully analyzed in discussing the Statute under Sales, in Chapter VII.

Of course a countless number of the minor contracts of everyday life are made and fully carried out without a scrap of writing. Many of these are "implied" contracts, no words passing between the parties at all; for example, buying a ride upon a street-car. In the absence of writing, if there is any verbal communication whatever, the contracts are known as "oral" agreements. In the preparation of engineering construction contracts in which we are primarily interested, it is not so much the requirements of the Statute of Frauds which puts the instrument into writing as it is common prudence, since the multiplicity of terms and details upon an extensive job could not be safely entrusted to so precarious a thing as the human memory.

30. (*b*) CONTRACTS OPPOSED TO COMMON LAW. — The tenets of the common law are so well defined, and if subject to change at all acquire new aspects by such imperceptible stages of growth, that common law requirements will cause less difficulty to the engineer than statutory prohibitions, for the vagaries of statute-makers are limitless, and no man can prophesy what may be enacted next. Every one is aware that contracts induced by, or based upon, fraud are illegal and unenforceable, though there may be no statutes to that effect in that particular jurisdiction. Other examples of agreements rendered illegal by the rules of the common law are contracts to defraud creditors; the selling of articles upon false representations, or under spurious trade-

marks or labels; fictitious bidding at auctions; and contracts resulting from collusion and fraud between bidders proposing to do work.

31. Contracts to Bind Third Parties. — Mr. J. B. Johnson points out in his *Contracts and Specifications*, that under the heading of contracts contrary to the common law the engineer will be especially concerned with changes made in contracts by the principals (contractor and owner), without the consent of the sureties or bondsmen. It is a well-established practice in engineering contracts for the owner to require a surety bond from each bidder, that in the event of the contract being entered into with any particular bidder, the latter will fully and faithfully perform all its provisions. This custom arose because the engineering contractor was frequently a person of limited means and financial responsibility, and the owner felt the need of outside assurance that the contractor would not quit the job midway, and thus cause the owner great annoyance, delay, and expense to secure its completion.

A surety bond is a contract collateral to the construction contract, and the effect is, untechnically stated, that the bondsman wagers the amount of the bond that the contractor will perform with exactness and completeness all the provisions of the agreement. If the contractor fails to perform fully, the owner may look to the bondsman for indemnification.*

32. Thus where a surety bond is given, a three-cornered situation results: — first, there is a contract between the owner and the contractor concerning the work to be done; second, a contract between the surety and the owner that the contractor will fully perform, etc.; and third, an implied contract between the surety and the contractor that in the event of the surety's having to pay anything, he in turn shall be indemnified by the contractor. Hence as the terms of the construction contract constitute the essence of the second contract, and as, furthermore, the surety enters into the latter contract of his own volition and free consent, it would be entirely wrong and unjust to allow the owner and contractor to so modify these terms without the surety's consent as to place an entirely new obligation upon him. Such a modification of the terms might result in great loss to the surety. The rule is simple enough, that while two persons may contract and

* See Appendix Note. Suretyship.

bind *themselves* as they choose, they cannot by their acts bind a third or independent person against his will. (The law concerning a third party who is an *agent* will be discussed in Chapter IV under Agency.)

This statement of the relations existing between the three parties will make the legal consequences of an alteration in the terms of the original contract clearer to the student. Furthermore, he will more readily grasp the significance of a clause in a contract providing that alteration of subordinate clauses shall not invalidate the contract nor release the sureties.

The possible results of an alteration of the terms of a contract containing no provision therefor may well be briefly summarized as follows: — a material change made in the original contract by the principals annuls both the contract and the bond; if made without the surety's consent it may impose an obligation upon him which he is not willing to assume, and to do this is wrong and unlawful. This is because only the parties to contracts are bound by their terms. The original contract having been destroyed by the material alterations, and the attempted new contract of surety being illegal, the bondsman is released, and the owner is without the protection of the bond.

It may be said in passing, that in the field of engineering contracting the place of the individual bondsman is being more and more taken by Bonding and Surety Companies, with results, in general, more satisfactory to all parties concerned.

33. (*c*). CONTRACTS OPPOSED TO PUBLIC POLICY. — This subdivision presents no clear outline of demarcation from the preceding one, since the doctrines of public policy are somewhat elastic and may rarely appear in statutory law. For clearness, however, it is well to separate it. As a body, its outlines are not sharply defined, and its boundaries are being slowly extended. A learned English judge puts it thus: "Public policy is a quantity that varies with habits, capacities, and opportunities of the public and the usages of trade." Another says, "Wherever any contract conflicts with the morals of the times, and contravenes any of the established interests of society, it is void as against public policy."

There is an illustrative case in 139 Fed. Reporter, 780, where the U. S. War Dep't ordered a Steel Co. to remove a large quantity of slag it had previously dumped into the Monongahela River, at Pittsburg.

Two dredging contractors were asked to bid, and they did so. They

acted in collusion, and tendered, respectively, $1.60 and $1.70 per yard, but agreed between themselves that each was to do half the work if *either* one received the contract. The Steel Co. rejected these bids as being too high, and a subsequent modification of the requirements by the War Dep't caused a bid for $1.25, made by one of the contractors, to be accepted. The work was done and duly paid for. The actual cost was 9c per yard, and the second contractor sued the first for an accounting in accordance with the private agreement between them. The U. S. Court refused to entertain the suit, on the ground that it was a conspiracy to defraud the Steel Co., and was thus illegal and void. The Court remarks: "Viewed from the standpoint of morals, square dealing and commercial integrity, combinations for collusive, misleading biddings, wherever made, cannot be approved."

The right of courts to declare a contract void because contrary to public policy is a very delicate and undefined power and should be exercised only in cases free from doubt; prejudice to the public interest must clearly appear before a court is justified in pronouncing an agreement void upon this account. (65 Vt. 431.)

Contracts bearing upon *Public Policy* form a very extensive category, while the outline just given of the principles governing them is meagre. A few instances where the practice is well settled will assist the engineering student to grasp the general trend of this question, the details of which often engage the keenest study of statesmen and jurists. Plainly included in contracts opposed to public policy are those whose enforcement would be detrimental to the public welfare, such as contracts to obstruct justice, to encourage litigation, or to restrain freedom of trade, as already noted. (See § 27.)

So also are certain provisions in engineering contracts which confer excessive, or highly arbitrary powers upon the engineer, or provisions which bargain away the contractor's legal rights. The public policy element is found in the theory that lawful agreements cannot be made which tend to oust the courts of their proper jurisdiction, since these agreements deprive the parties of their legal right to have their grievances and disputes heard by a properly constituted tribunal, such as a court of law. Agreements, however, which make resort to arbitration a condition precedent (see § 73) before going to law are held valid.*

34. With reference to the functions of the State, contracts which tend to interfere with or control the legislative or executive departments of government, or such as tend to the obstruction or perversion of the administration of law, are all contrary to public policy. An apt illustration is an agreement for compensation for procuring legislation made with a member of the legislative body, it being a palpably bad policy, as Mr. Justice Field has said, to allow the legislator's judgment to be misled, or to substitute other motives for his conduct than the advancement of the public interests. To the same

* See Appendix Note 2.

end, bargains to secure appointment to public office or to divide the receipts of such office with a rival candidate, or for an officer to agree to accept a less compensation than that provided by law, are void and contrary to public policy.

The same is true with reference to contracts looking toward the obstruction of justice. Examples of these are: — agreements to stifle criminal proceedings (as to shield, or to acquiesce in the acts of an embezzler), or to withhold evidence, or agreements to absent one's self from the jurisdiction during a trial so that he cannot be called into court as a witness; contracts to invade another's property rights, to maintain a nuisance, to commit a trespass; contracts to forfeit one's legal rights (for instance, agreements often found on railroad passes to relieve the Railroad Company from damages due to its negligence), — all these and many other kinds of contracts may be void as opposed to public policy. (See Appendix Note 3 for Railroad cases.)

35. In leaving the topic of lawful subject matter, it should be said that it is impossible to completely classify the various subjects upon which lawful contracts may be made. They have, in fact, been grouped and specialized to such an extent as to require treatment separately, as for instance, sales, insurance, negotiable instruments, partnership, landlord and tenant, suretyship, building agreements, master and servant, bailments, carriers, and so forth. Around each of these subjects has grown up a distinct body of rules and doctrines, known as the Law of Sales or Insurance, etc., all presenting marked peculiarities yet forming mighty branches of the same parent trunk, — the Anglo-Saxon system of common law.

36. (3) CONSIDERATION. — Of the four essentials to a contract, consideration is probably the most difficult to analyze satisfactorily. While certain instances of consideration will be easily understood, others may appear obscure. Consideration is the *act* or *forbearance* of one party which is given *in exchange for the act or promise* of the other.

The fundamental idea is that of an exchange. The promise must be bought and the one requisite is that *something* must be given for it in exchange for the obligation assumed. To illustrate, in a contract of insurance the Company promises to pay a certain sum of money under certain conditions, the consideration for the promise being the payment of the premium by the insured.

A common test is, "Does the plaintiff (promisee) suffer a *legal detriment*"? If this can be answered in the affirmative and if the promisor (de-

fendant) requested the thing done or given by the plaintiff, then the consideration is good and will support a binding contract.

In a famous New York case, an uncle promised his nephew $5,000 if he would not drink, swear, nor gamble until he was 21. The nephew lived up to the bargain, but the uncle refused to pay. The court said that the nephew's act in abstaining from doing something which he had a *legal* right to do, constituted a legal detriment, and was a sufficient consideration. Here the exchange was the giving up the *right* to do these things at the uncle's suggestion and request; it was an act for a promise. (124 N. Y. 538.) Other illustrations of an act for a promise are where a landlord gives up possession of the premises in return for a promise to pay the rent; a servant gives time and labor in consideration of wages or salary.

37. Another common type of consideration supporting a binding contract is where there are *mutual promises*, — " a promise for a promise." The engineering contracts in which we are especially interested are generally in this class, and in them the contractor promises to faithfully perform, etc., in return for the owner's promise to pay the stipulated sum when due. Another instance would be where A promises to buy certain goods at a fixed price when made, and B promises to manufacture the goods and to sell them to A at that price.

Where there is an act for a promise, the promise being on one side only, the contract is said to be *unilateral;* when there are mutual promises, it is called *bilateral.* The point of the whole discussion is that a consideration is a prime necessity in the making of a good contract, since an agreement to do or to pay something on one side without compensation on the other is void at law. To use a historical phrase, if the promise made on one side meets no mutual and corresponding support from the other, the first is *nudum pactum*, a " mere naked promise," insufficient to support a good contract.

38. Similarly, it appears that a *gratuitous promise* is not binding at law. This means that where a person promises to do a thing that he is already legally bound to do, such an additional promise can not serve as the consideration of an agreement upon which to base claims of additional compensation.

In a famous case, A's property being on fire he promised the Chief of the Fire Dep't $1,000 if he would do his utmost to extinguish it. The fireman did this and sued A for $1,000. Should he recover?

No. Since the plaintiff was already legally bound to do his utmost to put out the fire his act could not be sufficient consideration for A's promise, which though made under the stress of great excitement was yet, in the eye of the law, merely gratuitous. (55 Wis. 496.) Likewise a promise to pay a debt already due was held not to be a good consideration.

39. In the above class, and of particular interest to engineers are cases where the contractor throws up a job but promises to go

on and complete it if the owner will agree to pay him a certain further amount. The owner may acquiesce in this, but as the contractor is already legally bound by the terms of the original agreement to fully complete the work, his promise to do that which he has already agreed to do cannot make a good consideration for the owner's promise to give him additional pay. As a result, the owner's promise is, in law, purely gratuitous and the contractor can collect nothing under it.

40. But if there is a real hardship involved in carrying out the contract and the parties in good faith wish to get together, two ways out of the difficulty are open. *First*, they may by mutual agreement cancel, annul, abrogate and completely do away with the existence of the old contract, in which case both parties, of course, waive all their rights under it. Then they make an entirely new contract upon better terms for the completion of the work, and the owner's promise would then be a good consideration for the contractor's promise to perform. The point is that the contractor shall not be allowed to bull-doze the owner as often as he sees fit by threatening to quit, extorting each time a new and additional promise for more money from the owner, on his own side only promising that which he is already bound to do, perform the original contract. *Second*, the original agreement is still kept in force, i.e. the contractor does not commit a breach of it nor does the owner in any way waive his rights under it. Then, for the performance of some trifling and nominal matter *outside the original* contract, the owner may agree to pay the contractor the amount which both feel to be justly due him on the first contract. It may be stipulated that this small contract which may be absolutely trivial, shall not be performed until a certain date, or not until the main contract is wholly completed, or some other provision may be inserted to prevent the owner's being tricked out of the second sum. Thus justice could be done and at the same time the necessary principle of law upheld that a promise which forms the consideration of one contract cannot at the same time form the consideration for another.

41. When disputes arise as to facts, if the parties are acting in good faith, *mutual demands* and *mutual compromises* may also serve as good consideration, since it is a settled policy of the law to encourage people to get together and patch up their disputes without bringing them into court.* Unilateral or bilateral *forbearance* likewise serves as good consideration.

Where A agrees for a sum of money to discontinue a suit against B upon a claim which he knows to be bad and unenforceable, the contract is invalid for want of consideration. This is not because having no legal right to sue B in the first place he has given up none, nor is it because there was a benefit to B (the promisee) in having even a groundless suit against him discontinued; but because, as said earlier, it is not a question of benefit or detriment to the promisor A, but of legal *detriment to the promisee* B, which supplies the test.

*This case is not at all similar to that of blanket clauses in a contract making the engineer sole arbitrator. Here two people get together and make an agreement in the present to settle their difficulties "out of Court," — and this is a desirable result. The trouble with the arbitration case is that the parties agree *in advance* that they will surrender a certain right, viz.: that of being heard in Court.

The case further illustrates the necessity for careful reasoning in the application of legal rules to cases apparently simple

42. Kinds of Consideration. — Considerations are classified as "*good*" and as "*valuable*." A good consideration is such as the ties of blood-relationship, or is one founded on natural love and affection, and it is not always effectual. Of this we have little to say, since it is "valuable" considerations with which the engineer mostly deals. It is well stated in a New Jersey case that a valuable consideration is "some forbearance, detriment, loss or responsibility given, suffered, or undertaken by the other party (the promisee) in return for a promise or an act." (34 N. J. Law 54). Thus our whole discussion will be seen to have dealt with "valuable" consideration alone.

43. Adequate Consideration. — When the validity or binding power of a contract is under discussion there is a natural tendency for the layman to consider whether or not a fair price or compensation has been stipulated for the work to be done, or other benefit to be received. The rule of law is fixed that if there is in fact a real consideration, the question of adequacy will not be inquired into by the court. That is to say, if a man wants a thing he is the judge of what it is worth to him and it is not the function of the court to make bargains for individuals, but merely to see that they get the consideration bargained for.

Of course this principle is not to be extended to absurdity, particularly if the consideration on each side is of the same sort or character, and are not then commensurate. Suppose a contract where a man agreed to pay golden eagles for $1-greenbacks. The court would be as likely to suggest a guardianship, or a lunacy commission, as to enforce such a contract. But on a contract to pay a considerable sum for personal services which was plainly far in excess of their true value, the contract was held valid, the court saying that the employer had a right to pay as much more than the services were worth as he pleased. (64 N. Y. 596.) It must not, however, be understood that if the inadequacy of consideration is gross, and the transaction bears palpable evidence of fraud, the court will assist in carrying it out, for then it will refuse aid in its enforcement.

44. IMPOSSIBLE CONSIDERATIONS. — In a contract otherwise good if the consideration is a promise physically impossible of per-

formance, and both parties know it, the contract is bad. It would appear that the parties must either be insane or jesting When the impossibility is known to the promisor only, he must lose, since the reliance placed upon his promise by the promisee is a sufficient detriment to sustain an action for damages. If the impossibility is known to the promisee but not to the one promising it stands to reason that the contract will be void. Otherwise great hardships and impositions would result to the innocent promisor.

45. Closely cognate with the subject of Impossible Considerations, if indeed it is not substantially the same thing under another name, is IMPOSSIBLE PERFORMANCE of contracts. This is a topic of special interest to the engineering contractor since unforeseen conditions of the soil, as striking ledge in excavation where gravel or sand was expected, meeting unmanageable quicksand, or subterranean springs and the occurrence of tempests, floods, earthquakes, or other calamities of nature, may suddenly put such an aspect on the contract that financial ruin stares the contractor in the face if he must indeed carry out the letter of the agreement, or even perhaps seriously attempt to do so.

Does impossibility of performance relieve the contractor from liability in damages for non-performance? The case where the matter was known to be impossible by one or both parties at the time of making the contract has already been discussed. Our interest is especially in those cases where the impossibility arises *subsequent* to the making of the contract, and here the result is held to depend upon the nature of the undertaking and upon the exact terms of the bargain. The rule is severe but just, for if a person promises absolutely and without qualification that a certain thing shall be done within a given time, it being at the time neither impossible nor unlawful, then he is bound absolutely to carry it out. For against all ordinary contingencies he might have made contract provisions to relieve himself from responsibility in the happening of the possible event. In failing to do so he did not exercise ordinary prudence and must, perforce, take the consequences. (53 Ill. 102.) In such cases, performance is not excused by inevitable accident nor other contingency not foreseen nor under the control of the party. (165 N. Y. 247.)

But this rather harsh rule is only applicable where the contract imposes a positive and absolute obligation and is not subject to any qualification or condition, express or implied. It is just here,

probably, that the difficulties will arise, — what is the fair implication from the language actually used? Pursuing this line of thought we come at once upon the topics of " Express " and " Implied " contracts and the rules for the " construction " or interpretation of contracts (discussed at length in § § 68-9-70, which should be carefully perused in this connection).

46. A typical case might arise thus: A contractor agrees to put in the foundations of a structure of a general type and to extend approximately to a specified depth. Upon making the excavation he encounters soil such that to insure the safety of the proposed structure he must modify and enlarge the foundation plan and practically double its cost. Must he do this and still receive only the price originally agreed upon? The contract as at first contemplated, has become impossible of performance. What are the rights of the parties now? The answer to the problem hinges upon the exact language used in the contract. Was there any provision for "extras"? Did the builder agree in such a way as to positively assume all risks as to the subsoil? If the document does show an unqualified assumption of this risk, then he is bound to fully perform even to the extent of putting in the extra foundations. And if he fails to go on with the contract, under this supposition, the owner has a right to sue for non-performance. But suppose, on the other hand, that to induce the making of the contract the owner used language plainly implying that he warranted the condition and quality of the subsoil. Then as this warranty is now broken the contractor can withdraw on the ground of misrepresentation, and the owner can get no damages because of the builder's failing to go on with the work. The owner must pay the fair value, or cost of the work already done. That the whole situation is a rather delicate one, and that the question of what is really implied in addition to what is expressed is frequently subtle though extremely important, will be indicated by these words from a Federal Court: "Where the event which prevents performance is of such a character that it cannot reasonably be supposed to have been in the contemplation of the parties, they will not be bound by general words, which, though large enough to include it, were not [in fact] used with reference to the possibility of the particular contingency which afterwards happens." (102 U. S. 64.)

47. It thus appears that the " rules of construction " (or construing contracts) have an important bearing here. Since the parties have in writing expressed themselves thus and so, will the rules of evidence permit a demonstration of what they *meant* (or really had in mind) by other and extraneous means, as for instance, by the oral testimony of interested persons? . . . . The moral of the whole matter is this: In the preparation of an engineering contract, strive to foresee every reasonably possible contingency which may arise to render its performance impossible. Then in the most precise, comprehensive, and lucid language possible, outline what are intended to be the rights and obligations of the parties in the event of such contingencies arising. Trivial details need not be striven for since if there is a fairly bold outline of what is intended, the

court will, as a matter of judicial interpretation, supply a reasonable and just implication of those consequential details which follow the spirit of this main outline.

48. Proof of Consideration. — Two questions are presented:

(*a*) Was there any consideration at all? The natural place to look for proof is in the terms of the instrument. Yet in a simple, or "parol" contract (one not under seal) most courts hold that the consideration need not be stated if there really is one.

(*b*) Is the statement found in the contract proof of *what* the consideration is? If the consideration is a promise to do something, then the terms as stated will bind the parties. They cannot be controverted. (454 Mo. App. 636.) But where the consideration was stated in the contract to be a certain sum of money, and this had been paid over, parol evidence was allowed to show the *true* agreement, as for instance, that the true amount was greater than the sum stated.

49. SEAL. — Anciently the matter of a seal was of great importance in the making of contracts. Its significance is now greatly lessened, and in some States it has fallen into entire disuse. Contracts under seal are called "specialties" or "bonds," and this was the most solemn form of contract known to the English common law. Its interest in the present connection is that at common law the presence of a seal did away with the necessity for a consideration, thus forming an important exception to the general rule. But in many States the distinction between sealed and unsealed instruments has been abolished. This is too technical a matter to be entered upon here, however, since in practice the local statutes should be ascertained and must then be followed.

50. FAILURE OF CONSIDERATION. — This results from the worthlessness or insufficiency of consideration, originally apparently good.

Examples, property purchased which proves worthless, or has passed out of, or has never come into existence when the contract is executed. In another case a promissory note was given in payment for a patent right which proved to be invalid. The maker of the note was relieved from payment. (148 Mass. 352.) Of the same sort was a case where a ship-load of goods at sea was sold after the vessel was lost, and another where a set of farm-buildings was sold after they had in fact burned down.

There are many other phases of this matter of consideration which cannot be entered upon here. Text-writers in the law have

written whole books upon it. Enough has perhaps been said to allow the engineering student to grasp certain of the main features.

51. (4) AGREEMENT OR MUTUAL ASSENT. — This element means the concurring of two minds in the same opinion, purpose or understanding of a course to be pursued. We are here dealing with the purely *mental* phase of contract-making. The student need apprehend no real difficulty, therefore, in grasping the full significance of the ancient rule, "In contracts there must be a real *meeting of the minds*," which phrase aptly expresses the fundamental principle of contract law.

52. In general, there must be a mutual willingness and assent to enter upon and be bound by the bargain as understood, for it is fundamental that there is no contract unless the parties assent to the *same thing* in the *same sense*. This does not mean that one must read the secret thoughts or intentions of the other, since the rule of law is satisfied if there is a plain request on one side and as plain an assent on the other. This brings us to an extensive subdivision of our topic, viz.: Offer and Acceptance, more fully treated elsewhere. The present purpose is to look at those cases where there is said to be "Unreality of Consent," its importance arising because of the reasonable and just rule that "The consent (or assent) of the contracting parties must be real and genuine." The cases, or causes of unreality of consent are usually classified as arising from Mistake, Misrepresentation. Fraud, and Duress, each of which will be discussed briefly.

53. MISTAKE. — Anson, a famous writer on Contracts, gives this as the technical meaning of the word: — "Where the parties have not meant the same thing; or though meaning the same thing, have formed untrue conclusions as to the subject matter, it is 'mistake.'" A mistake of *expression* may perhaps be corrected or explained by permission of the court, but this must be clearly distinguished from mistake of *intention*, or mistake in understanding, and from mistakes of *omission* where one party fails to get into the contract all the terms agreed upon. In such a case he may fail to bind the other party to fulfillment.

Anson classifies possible instances of mistake as follows: —

(*a*) Mistakes as to the Nature of the Transaction. This, he says, is of very rare occurrence, since men generally know what

they are contracting about, and it will generally arise only through some misrepresentation or deceit by a third person.

In a case where a deed was signed by an illiterate person who was told by an outsider that it was a release for arrears in rent, it was held to be a mistake due to misrepresentation and the deed was void. (56 N. Y. 137.)

This distinguishes the case from fraud where the deceit must be perpetrated by one of the principals to induce the other to enter the contract.

If a person in full possession of his faculties and able to read, signs a paper or note under the belief that it is a contract of a different character, and not having read it he relies upon the representations of another as to its contents, it is generally held that he will still be bound by it if the instrument later comes into the hands of one who purchases it innocently and without notice of the signer's mistake.

54. (*b*) Mistake as to the Person. Since one person contracts with another having in view the character, reputation, and financial responsibility of the other party, it is plain that there is a misunderstanding, and hence no real meeting of the minds, if by mistake, another person is substituted for the one the first party intended and supposed he was making the contract with. For a case to illustrate this, see § 273.

55. (*c*) Mistake as to Subject Matter. Under this topic there are numerous shades of significance indicated by the varying circumstances, and to frame an intelligible and brief rule is not easy. It is said that it must clearly appear that the party, without any fault of his own, made an agreement contrary to his real intention. This must be distinguished from a case where a man forms an erroneous judgment, or errs as to the scope of his own legal powers or authority, since then he will probably find the contract only too binding. He goes into the contract knowing what it is about and though a course of wrong reasoning may have led him to take the step, still he will be bound. But if *without* his own *fault or negligence* he enters into a contract contrary to his real intention, and because of a real misunderstanding of the subject matter, he will *not* be bound. In this class are cases where the parties have agreed upon the subject matter, but unknown to them it has ceased to exist; or where each has *different* articles of the same sort in mind; or where one is aware that an article does not possess certain important qualities and does not inform the other, who, believing that the article *does* possess these qualities, is led to make the bargain. Such might be a case where an

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engineer states plainly that he must have quick-setting cement and is knowingly furnished by the dealer with what proves to be a slow-setting brand. In such cases the contract is not binding.

56. MISREPRESENTATION. — Anson says: "If one of the parties has been led to form untrue conclusions respecting the subject matter by a statement innocently made, or facts innocently withheld by the other, this is misrepresentation." This definition should be kept in mind when considering fraud, since on the face they would appear to be the same. The significance of the differentiation is that misrepresentation invalidates the contract and *no* rights arise under it,* while fraud not only voids the contract but *also* gives an action (i.e., a right to sue) for damages. Anson mentions that in contracts for marine, fire, and life insurance, and in the sale of land, this sort of misrepresentation, i.e., the innocent non-disclosure of material facts, is fatal to the formation of the contract. Without stopping to pursue this matter further, enough has perhaps been said to direct the engineer's attention to a subject which may easily become of considerable importance to him.

57. FRAUD. — Every one has a general notion of what constitutes fraud, but the expounders of law have, in the interests of justice, found it necessary to set up certain rigid and technical standards by which to measure situations. If the technical elements of fraud are not found, then in law no fraud exists, even though there is great wrong from a moral or ethical standpoint. The spirit of the law seems to be that it is better to have a dozen guilty go unpunished rather than that one innocent should be injured.

The essential *elements* which go to make up fraud are: —

(*a*) False representation of a material fact;

(*b*) Made with a knowledge of its falsity, or in reckless disregard as to whether it was true or false;

(*c*) Made with the intention that it should be acted upon by the plaintiff;

(*d*) And being believed by him, the plaintiff was induced to act by it;

(*e*) And he thereby suffered damage.

* The essence of the distinction is that "representation" is regarded as an element of the "meeting of the minds." If there is no "meeting" there is no contract. In fraud the "meeting" is sufficiently consummated but the deceit practiced gives important rights against the deceiver

Though easily stated, the complete identification of all these five elements in a given set of facts is often difficult. In fraud, as in other fields of legal study, cases of all shades of significance will be found. Each of the foregoing five elements may be split into several others for separate study and discussion, and since whole treatises have been written on this subject, their enumeration is all that can be done here. In this connection the student should read carefully the sections on Illegality and Fraud, § 326, etc.

58. DURESS. — Perhaps money is paid, a document is signed, or assent given to a proposition, under such compulsion and coercion that in law the act will be regarded so far involuntary as to invalidate the bargain agreed upon. The consent was "unreal," — there was no "meeting of the minds." This is what is meant by *duress*. To constitute duress there must be some actual or threatened exercise of power possessed (or believed by the constrained party to be possessed), by the party exacting or receiving the payment, over the person or property of the one assenting, from which the latter had no means of immediate relief other than by giving the consent sought.

At common law two kinds of duress were recognized, (*a*) of imprisonment, (*b*) of threats. (*a*) referred to imprisonment of the party, or of one closely related to him, and (*b*) was actual or threatened physical violence to such a party.

These rules of the common law are having their limits extended considerably in the United States, however, at the present time. To be obliged to sign an important paper at the point of a pistol, for instance, may be highly melodramatic in a storybook, but is not likely to happen to the engineer of to-day. It is entirely conceivable, though, that a contractor or the owner could be placed in such circumstances that the coercion to sign or enter upon an agreement might amount to duress.

The Supreme Court of the United States has held that contracts procured by threats of battery to the person, or of destruction of goods and property, or trespass to lands, would constitute duress; but that a mere threat of a lawsuit is not duress where there is no danger of injury, or destruction of property, and there is an opportunity to try the thing out legally, but the party yields merely to avoid litigation. (101 U. S. 465.) The ultimate fact to be determined is whether the party really had a choice and the freedom of exercising his will. It is noteworthy that duress has the same effect as fraud* upon the contract, i.e., it is not neces-

* See also Misrepresentation § 56.

sarily void, but voidable at the option of the party constrained. The injured party may disaffirm the contract, or he may expressly or impliedly ratify it.

59. Undue Influence is a subject closely akin to duress, and merits a word here. The very title suggests why it vitiates the "meeting of the minds." Anson says: "Circumstances may render one of the parties morally incapable of resisting the will of the other, so that his consent is no real expression of intention. This is undue influence." This principle has been chiefly developed in the system of jurisprudence called "equity," and is a way in which courts have guarded persons against those who would take advantage of their improvidence, moral weakness, or of their ignorance and unprotected situation. When from the relative positions of the parties the presumption of undue influence arises the contract cannot stand unless the party claiming the benefit of it can show that it is fair, just and reasonable. Cases where this point has arisen are between guardians and their wards, attorneys and their clients, doctors and their patients, etc. The test is: Was the influence, whether great or small, sufficient to destroy freedom of the will so that the act in question was the result of the domination of the mind of another? If established, the party unduly influenced has the right to rescind and he will not be bound by a subsequent affirmation unless it is clear that the influence or difficulty under which he labored is entirely removed.

Analytical Diagram of Chapter II.—CONTRACT ESSENTIALS

To Constitute a Valid Contract, four elements must be found in the transaction; with them many other matters are involved.

- (1) COMPETENT PARTIES. Any one may contract except:
  - (*a*) Infants.
  - (*b*) Insane, or intoxicated persons.
  - (*c*) Married women (but now generally able to contract),
  - (*d*) Corporations, who may contract under charter restrictions.
- (2) A LAWFUL SUBJECT MATTER ......
  - (*a*) Statutory Restrictions must be avoided, as State laws, city ordinances, Statute of Frauds, etc.
  - (*b*) Must not be opposed to Common Law, nor Tainted with Fraud or Collusion, nor Attempt to bind Third Parties.
  - (*c*) Must not be opposed to Public Policy: ......
    - Encourage litigation;
    - Confer too arbitrary power or
    - Obstruct justice.
- (3) CONSIDERATION ......
  - Mutual, unilateral, and gratuitous promises;
  - Mutual demands, compromises, and forbearances;
  - Adequate and Impossible considerations;
  - Failure of consideration; and Seal.
- (4) AGREEMENT, or "Meeting of the Minds," Considering:
  - (*a*) Mistake:
    - As to the person;
    - As to the subject matter;
    - As to the nature of transaction.
  - (*b*) Misrepresentation:
    - Technical meaning and
    - Effect.
  - (*c*) Fraud, in which there are five important technical elements.

Questions for Study and Review

on

Chapter I and Chapter II

1. Why should the engineer understand the law of contracts?

2. Discuss the importance of studying the elements of business law.

3. What are some of the arguments for the study of business rules by the engineer?

4. Why should even a moderate knowledge of business law be specially valuable to the engineer? Compare his training with that of the " business " man.

5. What are some of the engineer's ordinary business duties?

6. Educationally, what may be said of the study of contract law by engineering students?

7. What are some of the fields open to the engineer familiar with business practice?

8. Explain why the contractor should have a technical training.

9. What is the scope of contract law to be outlined in this book? What is its relation to engineering contracts?

10. Can you detect the wisdom in the rule: Ignorance of the law excuses no one? If so, explain.

11. Enumerate the valuable features in a just and equitable engineering contract.

12. What are the probable reasons for many impracticable contracts?

13. Define " contract."

14. When is a contract enforceable?

15. What are the four essential elements of a binding contract, and how have they become established?

16. In what ways will a knowledge of general contract law specially assist the engineer?

17. Recite upon the antiquity of contracts and their relation to civilization. Name contracts for six different purposes.

18. Epitomize carefully in one sentence the meaning of " common law."

19. What is the form in which legal rules are usually given? Why is this?

20. Recite upon the usefulness of technical terms.

21. Enumerate those who are not "competent parties." What peculiarity can you discern as underlying the whole class?

22. To whom do the terms of a contract apply?

23. State the common grounds of illegality in contracts.

24. State the nature of the legislative restrictions which engineering contracts may encounter.

25. What may be the effect upon the contractor if these are not complied with?

26. What are the duties of the parties before entering upon an important engineering contract? Discuss the maxim, "Ignorance of the law excuses no one," in this connection.

27. What is Wait's advice to engineers and contractors as to meeting statutory requirements? Effect of non-compliance?

28. What is the importance of "Lien and Labor" laws to the contractor? What is their purpose?

29. Recite as far as possible upon contracts in restraint of trade.

30. What is the relation of Sunday laws to our subject?

31. Explain the object and origin of the Statute of Frauds. Tell why it was necessary, and how it accomplishes its purpose.

32. What are the "one-year" and "$50"-rules? Why are engineering contracts in writing?

33. Will a contract coming clearly within the provisions of the Statute be unlawful if it has been fully performed, i.e. is either of the parties subject to a law-suit because of having carried it out?

34. How does the Statute bear upon the making of deeds and leases?

35. What is meant by "oral" contract? Is such a contract binding at law?

36. Which will it generally be harder for the engineer to satisfactorily meet in contract-writing, statutory restrictions or those imposed by the common law? Explain carefully.

37. Cite four examples of contracts opposed to common law.

38. What parties are bound by the terms of a contract? Explain the position of the surety or bondsman in engineering contracts.

39. What contract obligations does the bondsman assume? With whom?

40. Explain how "tinkering" with the construction contract releases the contract of surety. How may this be avoided?

41. What is meant by contracts "opposed to public policy"?

42. By whom is public policy declared? Under what conditions may this be done?

43. Enumerate five examples of contracts opposed to public policy.

44. Can you tell why arbitration clauses in engineering contracts are likely to be regarded as against public policy?

45. Which is the larger group, that of contracts whose subject matter is lawful or unlawful? Name some of the common law branches of contracts.

46. Explain carefully what is meant by "consideration."

47. What is the essential idea underlying a good consideration? Discuss the "legal detriment" rule.

48. Give illustrations of "gratuitous promises." What is their legal effect?

49. Where is the consideration in a bilateral contract? Illustrate.

50. Discuss the gratuitous-promise-rule in connection with the contractor who claims he is losing money and refuses to continue the work.

51. How may hardship be avoided under the above circumstances?

52. Recite upon mutual demands, compromises, or forbearances as consideration.

53. What is the ultimate test for the detection of a good consideration?

54. What kinds of consideration are there? Illustrate. Which have we discussed?

55. Explain carefully the doctrine of "adequate consideration." Does this appear reasonable to you? Why?

56. When will inadequate consideration invalidate the contract?

57. Suppose A and B enter into a contract under which A is to fly to the moon and return within one year from date. Can B recover damages by reason of A's failure to do so? Why?

58. State the rule as to impossible considerations.

59. What is the engineer's special interest in the topic "Impossible Performance"?

60. What is the contractor's position when the impossibility arises subsequently to his entering upon performance?

61. Does such impossibility relieve the contractor from liability for non-performance? Why, or why not?

62. What is the relation of "construction" of contracts and "implied" contracts generally to this discussion?

63. State the case where the contractor is building from a plan showing foundations which are found to be inadequate.

64. How will the prudent contractor have secured himself in such a case?

65. Summarize the practical value of the foregoing analysis of impossible performance to the contract-writing engineer.

66. Is it necessary to state the consideration in a contract? Suppose it is stated, what is the effect?

67. What distinguishes "specialties" and "bonds" from other contracts?

68. What was the connection between seal and consideration at common law?

69. What is the effect of "failure of consideration"? Give illustrations.

70. Define the element "Agreement."

71. What do you understand by "unreality of consent"? Its effect is what?

72. Name the classifications under "Unreality of Consent."

73. What kinds of mistakes are recognized in contract law?

74. Give a case illustrating mistake as to nature of the transaction.

75. Suppose a person negligently signs a paper but later claims mistake as to subject matter. Is he bound? What practical advice could you give in such a matter?

76. Under mistake as to subject matter how can the injured person secure his rights?

77. Suppose the mistake is one of judgment upon admitted facts. Then what?

78. State clearly the differences between "Misrepresentation" and "Fraud."

79. Why must the technical elements of fraud be found in order to establish a suit for damages?

80. Enumerate the essential elements of fraud. What if one is missing?

81. What is meant by "duress"?

82. Cite instances which have been held to be duress. What is the ultimate test for its detection?

83. What effect does duress have upon the contract?

84. Tell what you understand by "undue influence." What is the test question?

Chapter III

DEVELOPMENT OF CONTRACT PRINCIPLES

This chapter will present some developments of the foregoing contract essentials which may be said to clothe the skeleton with life. The bare principles will be amplified and expanded as the needs of society and of the business world have required. It will now be in order to deal somewhat with the classification of express, implied, and conditional contracts. We may then examine into some of the properties or qualities of all such instruments, and consider, for example, what laws must be consulted in determining their powers and effects; what the results of alteration may be; the numerous ways in which the contract may be discharged, and its ties loosened; what the general canons are for the interpretation or "construction" of contracts; what damages may be had for breach, etc. We shall see that all sorts of contingencies may be provided for without hardship; that actions speak as loudly as words; that the essential meeting of the minds is well evidenced by offer and acceptance, and even when the parties have made an express statement, it may yet be most difficult to ascertain just what they really *meant.*

CONTRACTS CLASSIFIED

60. (1) EXPRESS CONTRACTS. — Express contracts arise only through an *offer* and *acceptance.* There is an offer when one person communicates to another the terms upon which he is willing to enter an agreement with the second person. Communication of the acceptance to the offeror (the person making the offer) by the offeree (the person to whom the offer is made) closes the contract, and there exists a binding agreement from that moment. To make such contracts, no particular formalities are necessary. They may be made by letter, orally, by telephone, telegraph, and almost by conduct alone (which would then make it an *implied* contract, see § 68), so close to the line a given set of facts may lie. In a certain sense there is no distinction between an express and an implied contract, since one is as real and binding as the other. What we are now concerned with is how the contract springs into being. The test in either case is, "Was there a real meeting of the minds, and an intention to contract?"

61. HOW MADE. — But one should beware of mere negotiations or counter-proposals intended to be merely preliminary to the real agreement, as when, for example, there is a series of

letters containing proposals, questions, answers, etc. The guiding rule may be briefly stated: In order to make an express contract, there must be a definite offer, and an unqualified, unconditional, and unequivocal acceptance of the offer in all its terms. Failing this, there is not an express contract. But this is not saying that an implied contract may not arise from the transaction.

From the above statements it may be seen that all important contracts relating to engineering or other work should be precise, concise, and in writing, as this is the best form of evidence of the real intention of the parties, and is therefore most likely to save future trouble.

62. An offer is not binding until accepted. But the offer may well dictate the time, place, and terms of acceptance, and may make a compliance with these details a real condition precedent to the formation of any contract at all. In effect, such an offer says, for example, "If you do not reply before such a day, or in a particular way, there shall be no contract even if you accept unconditionally in some other way, or upon the day after." The engineer or contractor should note that published instructions to bidders, where work is to be let, fall plainly under this rule. Much loss and inconvenience has often followed from neglecting to observe it.

63. ACCEPTANCE. — In general, acceptance is complete from the moment the answer is despatched by the acceptor, and in most States it is not even essential to the validity of the contract that the answer ever be received by the proposer. This apparently anomalous doctrine is worked out on the theory that if an offer is sent by mail, for instance, this constitutes the postal department the sender's agent to deliver the offer; and thereby the recipient is tacitly authorized to use the same agency to return his acceptance. Now as the principal is responsible for the acts of his agent, the risk of never receiving the reply rests upon the offeror and not upon the offeree. On this basis, there is a contract existing from the moment the letter is dropped into the mail-box. When there is any difficulty arising through such circumstances, of course the offeror will probably claim no contract was made, and the acceptor must therefore be able to prove by suitable evidence that he did in fact mail the letter. This could be done by having suitable witnesses to the act, or better and simpler, by registering the letter.

The theory just outlined was early dissented from, however, by the Courts of Massachusetts, and so for nearly a century, in that Commonwealth, it has been held that the contract is not complete until the acceptance is received by the offeror.

64. There is no formality required for an acceptance, save that it must be unconditional, and identical in terms with the offer. What constitutes an acceptance will depend upon all the circumstances, since it may sometimes be fairly implied. It is to be noticed, however, that in law, silence (alone) does not give consent. Neither does a mere mental resolution to accept create a valid acceptance; there must be some overt and unequivocal act evidencing the resolution. As previously indicated, an unconditional acceptance cannot be withdrawn, since making it ripens the offer into a binding contract.

65. REVOCATION. — It should be noted, in distinction to the foregoing, that a revocation of an offer is ineffective until actually received by the offeree. This is explained by saying that if I have made an offer to another, he in good faith may suppose I mean it, and act in reliance upon that offer. Thus he may incur extensive obligations by reason of my offer, so that great hardship would result from my withdrawal. The very least I can do is actually to bring home to him the fact that I am no longer backing up the offer. In a word, I may withdraw too late to escape.

66. PUBLIC OFFERS. — An offer may be addressed to the public by an advertisement, circulars, posters, etc. In these cases acceptance will usually be by conduct (as in reward cases) and no notice of acceptance will be given the offeror save notice of the performance.

A public notice is a preliminary to nearly all construction contracts entered into by municipalities, as the law or ordinance usually requires them to advertise for bids to insure competition. It should be observed, however, that this offer to receive bids is no part of the contract, but is merely an offer to consider proposals which interested parties may choose to make. This public announcement may frequently dictate the terms upon which proposals offered it will be considered, as for example, that the proposals must be received before a certain time, that a blank form for bidders must be used, that a certified check must accompany the bid, etc.

67. A public offer to enter into a contract may be revoked in the same way, *provided* no one has acted upon it. This, of course,

is to prevent one from repudiating his just obligations when the acceptor has fully performed the contract, relying upon the public offer. This does not mean that if some one has acted upon the offer, it can never subsequently be withdrawn, but that it cannot be withdrawn with reference to him who has acted in reliance upon it.

68. (2) IMPLIED CONTRACTS. — The subject of implied contracts is an extremely complex one, as there is a vast difference between discovering some last shade of significance in the words really used in an existing contract, and on the other hand, analyzing a set of facts or circumstances and determining whether or not the law will *imply* a contract thereupon, the parties themselves never having mentioned contract at all. The difficulties are also somewhat enhanced by the limitations of all language, for it is true that every expression of intention, no matter how specific, must carry along by implication much more than is actually expressed. The law recognizes this fact, also, for the rule applied in coming at the meaning of any instrument in writing is that all natural meanings and inferences are to be read into the words as used. This general matter is further developed under the topic "*construing,*" or the "construction" of contracts (see § 80, *et seq.*) — i.e., the parties having *said* so and so, just what is the legal effect of their words?

69. As a rough but fairly safe guide for the detection of this type it may be said that there is *an implied contract when,* from all the circumstances, *the parties show a mutual intention to contract.*

Example: Suppose A writes to B, a maker of surveying instruments, asking the price of such and such a transit. Upon being informed, he orders the transit to be sent him. This is plainly an offer and an acceptance. The case for an express contract would be even stronger if A, in his letter ordering the transit, mentioned the price quoted, or said in effect that he would remit the price quoted upon receipt of the instrument. But now suppose A, in his first letter, simply orders a transit that meets certain specifications, but does not mention any price that he is willing to pay. Upon receipt of this order, B ships the transit, with a bill for it. Under these facts, there is an implied contract to pay for the instrument, and B may sue A, if necessary, to recover the price of the transit.

70. Following somewhat from the discussion just given implied contracts, a sound proposition is that the law will not imply a contract which is in any way illegal, as this would be like suicide to any theory of law.

This point might be well illustrated by the following case: Suppose a

foreign corporation built a bridge in another State without having first secured from the proper authorities a license to do business within that State. After having built the bridge, the corporation was not allowed to sue upon its contract (express), nor even to recover the cost of the work under an implied one. It might be argued that as the foreign corporation erected the structure, of which the other party received the benefits, therefore there is an obligation to pay for that benefit, even though the corporation had failed to obtain permission to do business legally in that State. The analysis will be assisted if we recall that only legally competent parties can make binding contracts (§ 23). In this case the corporation is legally incompetent, for the reasons just stated. Now if the law allows an implied contract to be declared as existing between the parties, the essential principle that only competent parties can contract is nullified and set aside.* (See § 264.)

As we proceed, frequent mention will be made of implied contracts and the student is urged to give earnest effort to master their characteristics. Another excellent illustration of an implied contract, combined with a condition precedent, will be found in the passenger case outlined in Appendix Note No. 4.

71. CONDITIONAL CONTRACTS. — The word "conditional" applied to contracts has practically the same meaning as in the common and popular sense, but the importance of certain of the conditions known to contract law, warrants special mention of it here.

A contract is said to be *conditional* if its performance is made dependent upon some future, uncertain event or contingency. If that event does not happen then there is no obligation to perform the contract.

A familiar example is an insurance policy wherein the Company makes its liability "conditioned" upon the happening of a certain event. If the property burns, then, in that event, the promisor's contract is to become effectual and enforceable. Otherwise not.

72. The condition may be either express or implied†, and if implied this will sometimes render the detection of an operative contract a very difficult thing. The test lies in ascertaining the intention of the parties. But if, on the other hand, the parties to a contract have, in plain, unambiguous language, made the happening of an event, or the observance of a certain requirement, the condition upon which the promise is to be performed, the courts will enforce their deliberate act. (103 N. Y. 341.)

In contracts, three sorts of conditions are recognized: *Conditions precedent*, *subsequent*, and *concurrent* or *dependent* conditions. We shall illustrate each in turn.

* A somewhat less harsh result might be worked out in this case in the field of equitable jurisprudence known as Quasi-Contracts. See § 129.

† See Appendix Note 4. "Implied Condition Precedent."

73. A CONDITION PRECEDENT is present when the performance of some promise is made dependent upon the doing of some act, generally by the promisee, or upon the happening of some event after the terms of the contract have been agreed upon. Such a condition must be strictly, literally, and punctually performed, or a valid excuse for noncompliance shown. (2 Peters U. S. 96.) Hence failure to perform such a condition is a breach of the contract and precludes recovery upon the same.* (12 Fed. Rep. 343.)

Conditions precedent are of especial importance to engineers since numerous important ones are frequently inserted in engineering contracts. Thus, it may be provided that the engineer shall estimate, approve, inspect, and determine the amount due and to be paid for work done, in such a way that these things shall be conditions precedent to the contractor's right to demand payment. As there will easily be an opportunity for unfairness here, the courts are loath to enforce such a condition unless it is made plainly one of the terms of the contract. But if it has been so expressed, then the requirements must be strictly observed before the owner can be sued for work done.

Again, it may be specified that the measurements of quantities are to be made thus and so (the contract being for a unit-price, e.g. 50c per cu. yd. of excavation); or " the liability is to be established or ascertained in the manner following," etc.; doing these things are conditions precedent to the right to sue for the value of work done. And it is well settled, also, that no question of ousting the court's jurisdiction enters such an agreement, since it is admitted to be well within the legal rights of the parties to covenant that no right of action shall arise *until* specified things have been done, as that a third party shall pass upon their differences, etc. (17 N. Y. 173.)

74. LANGUAGE TO BE USED. It has been repeatedly stated hitherto, that a highly important factor in determining the effect and validity of a contract is " the intention of the parties." This principle is equally important with respect to condition precedent. Therefore the use of the words " condition precedent " is not necessary to create one. Mr. Wait (Eng. & Arch. Jurisp. Sec. 415) collects authorities and says, " to pay what the engineer shall certify the contractor is entitled to," — or " *when*

* See Appendix Note 5. "Time Element as a Condition Precedent."

and not before the architect shall have certified," — or, " to pay upon his estimate and certificate," — or, " to have the price payable after a certificate of approval shall have been issued by the engineer," — or " to pay upon approval and acceptance by the engineer and owner," — have each been held to be a sufficient expression to constitute a real condition precedent. Similarly, if materials are purchased subject to inspection by the engineer, they need not be accepted or paid for if rejected by him, and this condition may be nearly as well implied as expressed. Reflection will doubtless suggest other instances to the student.

75. CONDITIONS SUBSEQUENT. — A condition precedent specifies something which must happen before the contract becomes operative. A condition *subsequent* is present when it is provided that upon the happening of some event or contingency the obligation of an existing contract shall cease and be discharged, but the term implies some event other than the normal discharge of full performance.

To illustrate, suppose A has made an agreement with S whereby he becomes the owner of a 100 H.P. boiler belonging to S. The express condition is that if he fails to take the boiler away within ten days, he forfeits the title already obtained. A calls for it two weeks later, but delivery is refused. Has he any remedy against S?

76. Another, but less clear-cut, example would be found in a contract provision that if there is a default in performance, the owner shall have the right to complete at the contractor's expense. Here the default is a condition precedent to the owner's right, and a condition subsequent varying substantially the contractor's obligation. Conditions subsequent also occur frequently in conveyances of real estate, where the restrictive clauses are to the effect that if the buyer subsequently does thus and so, then his title is to be forfeited. The courts regard this type of condition (in deeds) as being somewhat opposed to public policy, and hold that such a condition must be very clearly expressed in order to be effective, and even then the result may often be in doubt.

77. DEPENDENT CONDITIONS. — It will frequently happen that the obligation of one promise is conditional upon the due performance of the other, and though each party is bound to be willing and able to do his own part, yet perhaps he is not bound to do it *first*. Where the conditions are mutual in such a sense that each depends upon the other, they are called *dependent, concurrent*, or *mutual conditions*.

Illustration: An owner of land agreed to sell the same and deliver a deed on a certain day when the purchase money was to be paid. Being distrustful of each other, neither party was willing to do his part first. The Court held that the matters of delivering the deed and making payment were concurrent and dependent conditions. The point for the lay reader is that if one party performed the other could be *made* to do so, or else the valuable thing parted

with by either party, as the deed or the money, could be recovered. For if the implied concurrent condition be not met, there is no contract.

78. To carry the point farther, suppose X sells certain well-drilling apparatus to Y for $900. But though the negotiations have resulted in an offer and an acceptance, yet they have not stated how or when the money is to be paid. Y wishes X to take his note for 30 days, but X mistrusts Y's financial responsibility and refuses to deliver unless Y pays in cash. Y wants the plant to use, and sues X for breach of contract for non-delivery. Can he recover?

In the abstract, this is a good illustration of what is meant by concurrent conditions. In the law of Sales, however, this particular sort of a case is taken care of on grounds of business convenience and public policy by the rule that where no time is agreed upon for payment, then it is understood (or implied) to be a cash sale. Hence if Y does not come forward with the cash he cannot win his suit.

79. Summarizing, it will be seen that the principal difference between a condition precedent and a concurrent condition is a matter of time. If the one thing must plainly be done wholly and completely before the other can be done, the condition is precedent; but if the time of performance on both sides is practically the same moment, it is a contract with concurrent conditions. It is hoped these definitions have been made sufficiently clear, hence " conditions " will be pursued no farther here.

CONSTRUCTION, OR INTERPRETATION OF CONTRACTS

80. Attorneys say that probably seventy-five per cent of the litigation in court at the present moment is due to the fact that some one, either a lawyer or a layman, has at some stage of the proceedings failed to state with exactness and clarity just what was intended in a writing, or in an oral declaration. Consequently, whether this has resulted through ignorance, carelessness, or sheer slovenliness of expression, the document or statement must needs be construed, or interpreted by a court of law. In the attempt to systematize whole groups of ambiguous clauses there have been framed so-called " Rules of Construction." The student should note at the outset, however, that they are but a make-shift and a crutch to assist litigants over their difficulties. Obviously the proper thing is to render them unnecessary.

81. The *principal rule* is to ascertain the real intention of the parties. (The central effort in lawsuits over the matter is to establish the true significance of the word "real.") To accomplish this result, the words used must be taken in their ordinary and popular meaning unless they have a special technical significance. If technical terms are used in a writing, these are

properly explained by oral testimony, although by the law of evidence, the terms of a written document cannot be varied by oral testimony. In arriving at a proper interpretation of the parties' meaning, all the given circumstances of time, place, and their relative positions to each other, and even general standing in society, may need to be considered as bearing upon their probable understanding and intelligence. Another important rule is that a document is to be construed *as a whole*, making all the terms effective if it can be done. If this is not possible, those terms inconsistent with the real intention of the parties will be rejected.

82. Important *engineering contracts* with their plans and specifications are frequently voluminous, and often several persons have been engaged in preparing them. Hence it will not be strange if inconsistencies or contradictions of greater or less degree appear, especially as the whole may be assembled in its final form somewhat hurriedly. Suppose there is a direct conflict in the plans or specifications with some part of the contract (i.e. the " general provisions ") and this discrepancy relates to a really important matter. Which shall prevail? Again we must revert to the principle, " The real intention of the parties must prevail." It is plain that if the two inconsistent statements are the only evidence available, there is a deadlock, and each nullifies the other. But there generally will be other evidence of the intention of the parties to which due weight must be given. The conduct of the parties will be a highly important fact, because if they *did* so and so, either before or after signing the contract, this shows in a very practical fashion what they understood or believed it meant.

Suppose in a piece of railroad grading the "contract" stated that the borrow should on no section exceed a certain amount. But on the plan of the located line, there were shown frequent borrows in excess of this amount. As the work proceeds the resident engineer gives all necessary directions for each borrow-pit and the contractor performs the work without making any objection. This will preclude him from demanding a literal interpretation of the language, since there is plenty of evidence that the "real intention" was to make the borrows of whatever amount and location the engineer directed.

83. RELATIVE IMPORTANCE of the PARTS. — With regard to the weight to be given different parts of the document, in case of contradiction, generally the contract (as distinguished from the specifications) is likely to be regarded as the dominant part of the instrument. It is probably true that more care and

diligence will have been exercised in its preparation, its execution with legal formalities by the real parties, instead of by their agents, etc., all tending to the same result. Another reason why the contract is often considered as having more weight than the specifications is that the latter are more frequently changed as the work progresses and new developments arise. Every engineer is very familiar with this fact. It is a general rule, to be noted here, that in case of conflict between written and printed parts, those written will have precedence.

It should be clearly understood, however, that there is *no fixed rule* as to relative weights of the parts, for the only invariable one, in case of disputes, is that the courts must exhaust every legitimate means to ascertain what the real intention of the parties was, and then construe the language of the contract in accordance with it. The "intention" thus found will sufficiently indicate which of two conflicting provisions is to be thrown out.

84. Argument. — The foregoing matter tends to establish this proposition: The whole aim of our study of contracts lies essentially in the accomplishment of two things: First, to make the stipulations in the contract of the necessary completeness, i.e. to cover all present conditions as well as all probable future contingencies, fully delineating the respective rights and duties of the parties thereunder. Second, to couch the intentions in clear and unmistakable language, free from inconsistencies or ambiguities, so that the only meaning which can be put upon the phraseology used is in fact just what the parties intended.

It thus appears that the whole matter of construing a contract is a vital one, and that it has a direct bearing upon the usefulness of the contract. A study of how the courts have passed upon specific contracts in the past forms the best guide to what they would probably decide upon the terms of a given contract. This is the mode of studying law known as the case system.

Illustration: Judicial Interpretation of "Satisfaction." Take, for instance, the provision "the work shall strictly conform to the specifications, and shall be to the satisfaction of the owner." Can the owner arbitrarily put great hardship on the contractor, and cause him either great loss in money or in reputation by refusing to be satisfied, even though the specifications are substantially complied with? No, plainly this would open a way to injustice and fraud which the law will not tolerate. And even though the terms of the original agreement have not been satisfied, — since the contractor was to work until the owner *was satisfied*, — if a reasonable man would say that the owner had refused to be satisfied when he ought reasonably to be so, then at least that part of the contract will be considered to be abrogated and set

aside. And furthermore, the contractor might be allowed to recover upon an implied contract for the fair value of the work done.

85. CUSTOM AND USAGE. — In writing a contract it will frequently happen that by oversight some provisions for obtaining a particular result, or obligation to be assumed if some important event comes to pass, will be omitted. Suppose now the event happens. Are the parties wholly adrift? Is each at the mercy of the other who may take advantage of his unprotected position? No, as the intention of the parties has not been fully expressed (possibly for the reason that they did not themselves know in advance what they wanted), recourse is had to the legal doctrine known as "Custom and Usage."

When we consider that the common law is, in its essence, but the crystallized expression of custom and usage, solidified through centuries of application to the tangled affairs of humanity, and that these usages are based upon justice, reason, and sound public policy, then the wisdom of such a course becomes at once apparent. There is a well-worn rule that in developing the meaning and powers of a contract, there is as much implied as expressed. In other words, it is often necessary to read between the lines, even in a legal document. Since it is further apparent that it is always literally impossible to say in the instrument *everything* that *might* be said, what *is* said must still to a greater or less extent be interpreted in terms of custom and usage. In a word, it is custom and usage that makes the bare and often harsh rules of the common law workable at all.

86. In contract law it is well established that a contract cannot be construed in the light of custom and usage unless such custom be definite, uniform, notorious, and universal, so that it may be safely presumed that the parties contracted with reference to it. This indicates that the plea is not to be resorted to on every slightest pretext, and is not to be treated as a cure-all for every piece of carelessness (or laziness) on the part of contract writers. The weapon selected may prove to be a two-edged sword, by no means easily manipulated to the desired end.

87. It should be obvious that the usage claimed must not be contrary to the express terms used, nor can a usage anywise illegal be claimed. The word "universal," as used above, evidently does not mean that a custom must be even State-wide, but that it must be generally recognized over a considerable area.

The question will thus arise, sometimes, whether the usages of one place or of another shall be followed, in case of ambiguity in the contract. The principle seems to be that if the parties have the same residence, usage of that place controls a contract drawn there, such usage being naturally in their minds. If the contract be made by letter, the usage of the place where the party lives who first referred to it (by implication) will control. If the contract is to be performed in a certain place, it will be construed as referring to the usage of that place. (For an elaborate discussion of Custom and Usage, giving many engineering illustrations, see Wait, Eng. & Arch. Jurisp. Secs. 620-9.)

88. CONFLICT OF LAWS. — In these days it is very common for important engineering contracts to be entered into by citizens of different jurisdictions, or for them to be performed at a place other than the domiciliary State of either party. A perplexing phase of construing the contracts thus made is summed up in the question, " What law governs?" The difficulty arises principally because the States of the Union are independent and sovereign, and the limits of their law-making powers are only found in the constitutional powers granted exclusively to Congress. Thus, while it is true that the common law essentials to forming a valid contract are everywhere the same, yet the enforcement of rights, duties, and privileges under them is a subject about which many conflicting laws have been made. Hence our question. The law books agree that this subject, " Conflict of Laws," is of wide extent, involves many exceedingly difficult questions, is much unsettled and, on the whole, is one of the hardest and least satisfactory of legal subjects to study. A few general rules only will be attempted here. We shall observe, as we proceed, that the question of conflict of laws is but an advanced stage of the discussion of custom and usage. In the one case it is the unwritten law, and in the other it is statutory law that is sought to be applied. Probably less difficulty will be encountered in applying the rules of the common law than when dealing with the statutes.*

89. Lex loci contractus (meaning, law of the place of contracting) is a familiar legal phrase in connection with which the Supreme Court says: " The general rule is that contracts, as to their nature, validity, and interpretation, are to be governed by the law of the place where made, unless the contracting parties clearly

* See Appendix Note 6. "Statutory Regulations Encountered," etc.

appear to have had some other law in view." (129 U. S. 397.) This is plain language from high authority; the difficulty often lies in telling just where a contract *is* made. Where correspondence results in a contract, the rule is that the offer ripens into a contract the moment it is accepted, and hence it is logical to say that the contract is *made where* it is *accepted*. Thus in a case where a contract made with a drummer required ratification by his employer, the contract was deemed to have been made where the ratification was given. (20 Fed. Rep. 357.) (See also Offer and Acceptance § 60.)

If the parties do not designate any place of performance for the contract it is governed by the law of the place where it is made. (84 N. Y. 367.) But this rarely applies to construction contracts, since in them it is carefully stated just where the work is to be carried out, where the parties reside, etc.

90. It has been repeatedly held that the law of the place which the parties *intended* should govern; but as this lops off a very large piece of the general rule of *lex loci contractus*, the cases exhibit many distinctions and jarring decisions at this point. An important exception to this rule should also be noted with reference to contracts for the sale of real estate or immovable property; here the rule is *lex loci rei sitae*, that is, the contract is subject to the law of the place where the land or thing is situated. This last rule is of especial importance, also, in the transfer of land by deed or will. A will is not a contract, however.

91. The question, " What law governs?" takes on a new form when the existence of the contract is not in question but other jurisdictions are involved in carrying it into effect, as when recourse must be had to law to secure its enforcement. The assistance of a court must be sought and given in an orderly and systematic way, by and to all within its jurisdiction, for if its regular procedure for transacting business is not observed, confusion must ensue, and the public welfare suffer. Hence in whatever relates to securing a remedy for a breach of the contract, or to obtaining its enforcement, one must be governed by the *lex fori* (the law of the forum, that is, the place where the remedy is sought to be applied). This *lex fori* regulates every step of legal process, controls the admission of evidence, prescribes the methods by which the contract shall be proved, etc., etc.

The principal point of the discussion may be summarized in the familiar rule: " A contract that is valid and *binding where made is* valid and *binding everywhere;* and if void or illegal where made, it is generally held to be void and illegal everywhere else." (Amer. & Eng. Cyclop. Law.) But the same authority indicates that the opposite result may be reached if the contract is contrary to sound morals, or repugnant to public policy,— as would be expected.

92. ENGINEER ENFORCES CONTRACT. — As a practical phase of construing contracts, it is probably true that in the majority of cases where something is being built, the engineer is the person most called upon to construe and interpret the contract, and particularly the specifications. Therefore it will not be inappropriate to comment upon " Duties of Engineers in Enforcing Contracts." Mr. A. J. Himes, writing in Eng. News, July 17, 1902, handles this topic in a refreshing manner, and his words may well be pondered by the engineering student.

He says, "Some engineers claim it is inadmissible to pry into the contractor's affairs, or to exhibit suspicion of his work, for such treatment will drive any man to crime." Then he adds, "But the engineer who takes such a view of the matter writes himself as unfitted to take responsible charge of work. Such a man would not ask for competitive bids for merchandise, as required in government affairs, as such a course would imply a suspicion that the first merchant consulted was unfair; he would not ask for a receipt for money paid, as that would imply a suspicion that the payee would later deny payment. In short, such a man has too sensitive a nature to do business. He ought to play golf. * * * * It is never dishonorable to ask a man to perform his contract, and no reputable contractor will refuse to do so if it is insisted upon. The production of bills of materials, and receipts of payments of claims that may become liens on the work are ordinary safeguards, and in no sense a persecution nor an insult."

DISCHARGE OF CONTRACTS

93. We have previously considered how and when a valid contract is made, and noted certain of the obligations arising thereunder. Let us now consider how its existence may be terminated, that is, how the contract may be discharged. When it is accomplished, the contractual tie is loosened, the parties are wholly discharged and freed from their liabilities, and are equally deprived of their rights or privileges under the contract. The subject of discharge is a highly important and practical matter for the engineer, for while it appears that the ways in which a contract can be made are relatively few, yet the events which may work a discharge of the contract are at least a dozen in

number, and moreover, some events of the list may be accomplished with the principal parties in interest remaining wholly unaware of the fact. A diagram illustrating the principal headings to be treated under discharge, together with some of their principal subdivisions or related subjects, will be found at the end of this chapter.

94. PERFORMANCE. — Probably the foremost method of discharging a contract is by the parties fully performing its requirements, and this, in fact, is the almost universal purpose for which a contract is ordinarily entered into. Within this heading are embraced all legitimate means of fulfilling the terms of the agreement. As performance may be termed the normal way of discharging the contract, the leading question merely is: "Have the terms been substantially complied with?" The issue of substantial performance is somewhat involved with "severable" or "separable" contracts, with recovery upon a "*quantum meruit*," and also with what is meant by "specific performance," and what happens if it turns out to be a case of "impossible performance." It will be in order, therefore, to correlate in sequence these varying aspects of "performance."

95. SPECIFIC PERFORMANCE. — It is historically true that the doctrines of equitable jurisprudence grew up in the attempt to soften the harshness and asperities of the common law; for the latter was generally unyielding, severe, and made no allowance for the particular mitigating circumstances of a given case. And it is probably true that many times strict moral justice does miscarry through the operation of the common law. The more flexible equity system, often relying more upon the abstract principles of equity and following the dictates of "good conscience," would perhaps have produced quite different results. The historical development of the two parallel branches of jurisprudence known as "law" and "equity" need not now concern us, nor is it to be understood that whenever there is a particular hardship in law relative to the enforcement of contracts, for example, that equity will step in to relieve it. In fact, though law and equity exist concurrently, each occupies a fairly definite field, and in only a few instances do they overlap. The principles of equity jurisprudence are often simply stated in the form of maxims though the intricacies to be followed in the development

of these maxims are far from simple, and will not be ventured upon here, for equity touches engineering contracts but rarely.

96. To get at the title " Specific Performance of Contracts," however, we must examine that maxim which most defines the outlines of equitable powers, viz.: " Equity will not interfere nor take jurisdiction where there is an adequate, complete, and plain remedy at law." Now with reference to contracts, the theory of the common law is, " I may make a contract but I don't have to carry it out, since, if I choose, I may instead pay damages occasioned by my failing to carry it out." This doctrine is well settled, and hence leaves it optional with either party to a contract whether he will carry out the terms, or pay damages for the breach of them.

In contradistinction to the legal theory just set forth stands the equitable one of specific performance. The phrase means the right to have the agreement carried out specifically, that is, to the very letter.

Illustration: Suppose a contractor who is building a bridge finds himself losing money, and decides to quit work, though he is willing to pay legal damages for having failed to perform. If specific performance could be invoked then he would have to carry out the exact terms of the contract, and no excuse would be accepted. It is probable, however, that in nearly all engineering contracts a court of equity would refuse to interfere, but would say, "Damages will make you whole, that is, repair all your losses. Therefore you have an adequate and complete remedy at law, and specific performance will not be granted."

96. There is, however, a certain type of contracts (not generally met in engineering) in which specific performance is usually granted. Instances are contracts for the sale of land, and in respect to the sale of rare or valuable articles which are unique and cannot be otherwise obtained, and in certain cases where damages are of doubtful extent, or impossible to be fully ascertained. The test seems to be, " Was the act to be done, or the thing contracted for of some peculiar and extraordinary value to the party suing?" If it was, the party may get specific performance, otherwise not.

Examples: A contract for the sale of coal tar which was absolutely necessary to the plaintiff's business was ordered to be specifically performed by the court of equity, because the defendant had a local monopoly in this material. An engineer propounds this for another illustrative question: If the owner of exclusive rights, such as Simplex Piles, Hydrex Waterproofing, etc., refused to carry out his agreement to use and apply such patented article, could specific performance be claimed? Or would damages be given on the ground that there are other methods of pile driving or waterproofing which would serve as well?

97. TENDER OF PERFORMANCE. — A contract will sometimes be discharged by a tender of performance. By this is meant the formal and unconditional offer to fulfill his obligation made by one of the parties. In case of money payments, the offer must be absolute and unfettered by any conditions, as for example, the party paying cannot demand a discharge (though it would seem that he should be entitled to at least a receipt), and the tender must be of the entire amount due. (5 Mass. 365.) When there are concurrent acts to be performed neither party can charge the other with a breach of the terms without having tendered performance himself, and then showing that the other party prevented him from performing, or else expressly waived his rights. (55 N. Y. 480.) This may happen in engineering contracts where the owner prevents the contractor from doing the work, as by his failure to secure possession of the site which the contractor must occupy, or getting necessary building permits, etc., etc. The effect is to release the contractor and to render the owner liable in a suit for damages.

98. IMPOSSIBLE PERFORMANCE. — As considerable discussion has already been given this topic in connection with "Impossible Consideration," the student or reader is referred to Secs. 45-6-7, which should be read again in this connection.

99. SUBSTANTIAL PERFORMANCE. — The phrase "substantial performance" raises an issue at times of considerable difficulty, involved in determining the rights of the parties under a contract for building something. The student is cautioned at the outset that the phrase has a distinct technical meaning supplemental to the ordinary significance of the words. We shall now attempt to define the technical meaning, though the *fact* of substantial performance is always established by a construction which the Court judicially places upon the contractor's acts after weighing all the evidence surrounding them. It may well be mentioned here that "substantial performance" is a doctrine borrowed from equity, designed to render fraud or unjust enrichment more difficult.

Most engineering contracts embrace several distinct stages or parts of erection, and the question arises whether in fact all their terms have been fully carried out. Logically, the situation is simple enough, for the contract is either performed, and the contractor entitled to his pay; or it is not performed and he is not

entitled to it. Yet in a large number of cases a rigid adherence to this rule would inflict great injustice. For example, if the contractor has acted honestly, really intending to do his work completely and properly, but has failed in some comparatively unimportant particulars, the owner should not be allowed to receive the benefits of practical completion without paying a fair compensation for the part done. The owner should, however, be allowed to deduct suitable credit for the incompleted part, or for the loss or inconvenience suffered on account of it.

100. The key to the situation, therefore, lies in deciding upon the relative importance of the parts done and undone. While any fair-minded person ought to be able to settle with considerable accuracy whether or not the contract has been substantially performed, yet as the question is often of vital importance to one of the parties, it may require the combined acumen of judge, jury, and counsel to answer the question.

Let us suppose a case where the contractor admits he has not *fully* performed, and possibly he does not even claim substantial performance, yet his work is of great benefit to the owner; can the contractor recoup himself for the detriment he has suffered, i.e. the expense he has been put to? Yes, here again, the law will imply another contract to take the place of the one admittedly broken, by means of which he can recover the amount the work has actually cost him upon proving satisfactorily to the court what that amount is. In legal terminology, he is said to have recovered upon a *quantum meruit*, which is quaintly interpreted to mean " as much as the party deserved." (173 Mass. 1.)

In a case such as we have just been discussing, it appears that the contractor can do either of two things, according to the situation he must face. If he took the contract too low, is losing money, and is in some way prevented from completing a sufficient amount of the work to fairly raise the question of substantial performance, he will be wise to waive the original contract and to sue on *quantum meruit*, provided he feels confident that there is satisfactory proof of what the work has really cost him. But on the other hand, if the contract was favorable to him, he will then be better off financially to claim substantial performance, though he must, of course, stand ready to deduct the value of that part admittedly not done from the total sum.

As said before, the doctrine of substantial performance is an equitable one, and includes compensation (to the owner) for all defects which are not so slight and insignificant as to be safely overlooked. (163 N. Y. 220.)

101. SEVERABLE CONTRACTS. — The issue of " substantial performance " requires us to consider for a moment the

status of "severable" or "separable" contracts. Some contracts from the nature of their subject matter very easily allow the question to be fairly asked whether, though a unit in general appearance, they are still not capable of separation into several constituent parts.

Suppose, for example, that having considerable money which I wish to put into real estate, I contract with X, a builder, for him to build me three houses at $5,000 each. Suppose, however, that after one is completed I decide that I am not fully satisfied with his work, and refuse to allow him to begin the others, but tender him the $5,000 due on the first house. Can he refuse to accept it, and hold me to the agreement by which he was to build all three? If the contract is divisible, in fact, then the consideration is also divisible, and I am acting within my rights.

It seems probable that in such a case the contract would be admitted to be separable in its essence, but the student is warned that there is a considerable diversity of opinion among the Courts upon this point, a type of contract by one held to be entire may by another be held separable and divisible. Thus it is ordinarily held that a building contract (for a single building) is entire and not severable. The contractor undertakes the work as one and not several jobs, even though there are several distinct stages to the work. The point is that until he can show completion of the work he cannot demand payment of the contract price. But, of course, the contract may be so worded that there are in reality distinct and separate pieces of work, with separate considerations therefor, but substantial performance is a condition precedent to the contractor's right to recover.

102. It has been stated by high authority that "the equitable doctrine of substantial performance is intended for the protection and relief of those who have honestly and faithfully endeavored to perform their contracts in all material particulars, so that their right to compensation may not be forfeited by reason of mere technical, inadvertent, or unimportant omissions or defects. It is incumbent upon him who invokes this doctrine, therefore, to present a case where there has been no wilful omission or departure from the terms of the contract." (123 Pa. 19.)

103. SUMMARY of "PERFORMANCE." — If a contract is fully performed, then, as its object has been attained, the contractual rights are discharged and the contract passes out of existence. This may be termed the normal and foremost mode of discharge. Suppose, however, one of the parties is wholly unwilling to carry out his agreement. In a limited class of

cases, "specific performance" will be enforced by a court of equity, when, the performance having been obtained, the contract is discharged as before.

Let us next suppose that events have arisen subsequent to making the contract which make performance a physical impossibility. If the events fall within the category covered by "failure of consideration" there is no discharge because there never was a contract. But we have seen that if the thing to be done subsequently becomes extremely difficult, i.e. only "next to impossible," and if the contract is unconditional in its terms, then it is not discharged until either the thing is done or damages paid for the injury or loss suffered by reason of its not being done. Thus under certain conditions impossibility of performance is a sufficient excuse, the contract is discharged, and the right to damages does not accrue.

104. The issue of "substantial performance" arises when one party claims he has performed with "practical" completeness, and that he is therefore entitled to receive pay, if not for the whole job, at least for the part which he has done, and that this should be at the contract-rate of pay. The other party is contending that as the contract is not severable into parts, it has not been fully performed, and therefore no pay should be given until the whole is completed. If the court finds the equitable doctrine of "substantial performance" applicable, and so awards its judgment, then the contract is discharged. But if the court does not find that the terms of the express contract have been sufficiently complied with to warrant such an award (to receive which would imply a payment of substantially the whole of the contract price), it may still prevent the other party from being unjustly enriched at the contractor's expense by declaring that there is an *implied* contract, and thus allowing recovery upon a *quantum meruit.* In either of the last mentioned cases recovery by the contractor discharges the contract and precludes further action under it.

105. DISCHARGE BY AGREEMENT. — While the contract is still unperformed, either wholly or in part, it may be discharged by agreement and abandoned, since the parties have, in general, the same right to *un*make that they had to make the contract. Such an agreement may be witnessed by acts as well as by words. But there must be a real meeting of the minds for this also, and if there has been partial performance, and the contractor has

expended a considerable sum of money, there must be a substantial consideration for his agreement to waive his rights under the contract; for otherwise, the contract is still in full force and binding upon the other party. It is to be noticed, too, that if some outside party becomes involved in the contract, by reason of which his rights would be greatly prejudiced by an agreement to terminate between the original parties, then they may not be able so to terminate. Generally, where one party chooses to renounce a contract, the other party may agree thereto and waive his rights, as already stated, *or* he may elect to keep the contract in force, and to hold the other party to his obligation. Then, even though he may not be able to make the other party perform, he may yet get damages by reason of the failure to perform.

106. In accord with the above statement that the parties can unmake as well as make their contracts, it is obvious that they may qualify or modify the terms of the old agreement, or substitute another therefor. The new one may express or imply an annulment of the old by exhibiting terms plainly inconsistent with it. And of course, if the parties agree upon it in advance, there may be a special provision in the contract providing a mode of alteration, modification, or for its own discharge. For instance, they may state that unless such and such a condition precedent is brought to pass, or upon the happening of a certain event — a "condition subsequent" (see §§ 71-3), or at the option of the other party, to be manifested in a particular way, etc., then and thereupon, the contract shall terminate, be null and void, and of no effect.

Such provisions are termed "cancellation and abrogation" clauses, because they provide a way of discharging the contract other than by performance. Familiar instances are: Insertion of "strike clauses," in contracts to furnish materials; providing that the contractor shall not be liable as upon a breach, in case of delay by a common carrier when the other terms make "time of the essence" of the contract; etc.

107. Our title seems also to include **DISCHARGE by WAIVER.** The word "waive" is defined as meaning to relinquish or to abandon one's rights or claims. It is apparent, therefore, if the parties mutually waive their *rights*, then the contract is discharged; but let it be distinctly noted that one cannot "waive" his duties or responsibilities. As previously said, to annul or abandon a

contract requires the same consent as did the making of it, and there must be a real meeting of the minds. (115 U. S. 29.) A written contract not yet performed may be rescinded or abandoned by parol (i.e. orally); and also the agreement to rescind may be inferred from the acts and declarations of the parties, but such acts must be clear and unequivocal. (94 Mo. 388.)

In this connection Mr. Wait points out that it will be necessary for the engineer to guard his acts carefully when directing construction work done under contract, lest, as the agent of the owner, he unintentionally "waives" his employer's rights. If such waiver occurs the result may be that the "independent contractor" (see § 172) status may be set aside, and that of "master and servant" substituted. The importance of this distinction will be more fully developed in the next chapter.

The mutual agreements to rescind and waive respective rights are held to be a sufficient consideration to support the new bargain, i.e. the agreement to release one another. Summarizing, it may be said that when the parties agree to rescind and to give up the rights which the contract confers upon them, the contract is "discharged by waiver."

108. ACCORD and SATISFACTION. — When the parties stand in the position of debtor and creditor, a contract is sometimes discharged by "accord and satisfaction," meaning that the creditor agrees to accept some other thing in lieu of that which is contracted for. The agreement upon which the one party is to be satisfied is called an "accord," and when the thing promised has been performed or paid, the whole transaction constitutes an "accord and satisfaction." Space does not permit considering this matter fully here, but it should be noted that an agreement to accept less than the whole sum which is due as a debt cannot be made an accord for the whole amount. (27 Me. 362.) The student will recognize that this sort of a case has already been treated under "Consideration," and that the present difficulty is, as was stated there, one sum of money cannot at the same moment be a consideration for two different contracts.

But the rule just stated does not apply where the amount of the claim is unliquidated and payment is made by way of compromise, or settlement. Nor does it apply where a number of creditors make a "composition" agreement with their debtor, if he carries said agreement into effect. (142 N. Y. 404.)

109. ALTERATIONS. — In discussing engineering contracts the subject of "alterations" is a highly important matter, since changes in both plans and specifications are not uncommon. The obviously practical way of dealing with "alterations" is to make suitable provisions for change in the contract itself, and then to comply with them strictly when changes become necessary. If approached in this way it is held that changes in the contract will not operate to annul the original agreement, unless such was the plain intention of the parties. If changes of any importance are made on the original document, it should be re-dated and re-executed (i.e. signed by both parties), with careful reference made to the changes. (See § 112, also.)

110. QUESTION OF CONSIDERATION. — It has been repeatedly stated that a contract is to be taken as stating the intention of the parties. Conversely, so long as their intentions are lawful the parties are at liberty to express them in the contract, and such intentions can be enforced. Accordingly, it has been held that the parties may properly provide in the contract that changes in the materials or methods shall be allowed "without further consideration."

There seems to be no injustice in this, and upon giving a little thought the student will see that this rule is not incompatible with the argument previously given (see § 39) to the effect that it is impossible for the same consideration to serve as the basis of two independent contracts. In the former case the situation was that the contractor was attempting to force the situation against the will of the owner after the contract was made. In the present case, the parties by mutual consent *before* entering into the bargain agree and specify that under certain conditions contemplated in advance, a change, i.e., a new promise, may be made. And at the same time they further agree that the original consideration shall serve in the second agreement also. It is hoped that the distinction will be apparent.

As a corollary to this principle, it is just and reasonable, therefore, that changes so made must be in harmony with the true intention of the parties, and that inconsistent changes, or such ones as would work great hardship or injustice on either party, will not be allowed.

111. Let us next suppose a case where the language used in the contract does not sufficiently express or imply the waiver of a new consideration, in case changes or alterations are subsequently made. In brief, the situation is that though the contractor may promise to make changes, as, for example, do more costly or a higher grade of work, yet a breach of this promise

cannot be made the cause of a suit for damages unless there is a sufficient *new* consideration.

This new consideration may consist of the addition or deduction of a certain sum from the stipulated price, according as the change called for a greater or less amount of work. If no such consideration exists, then the party to be bound is at liberty to change his mind.

112. DISCHARGE by ALTERATION. — The foregoing discussion has point because of the general principle that a material alteration of a contract operates as a discharge. In this connection the difference between an alteration and a true supplemental contract may need to be observed. If extensive additions are made to the contract they may well be called a supplementary agreement, but if nothing is added and one provision merely supersedes another, it would probably be deemed an alteration. The necessity of a new consideration to support a new promise (if it is really a supplemental contract) has been already shown. (See § 39.)

Sealed Instruments. — The question of discharge now under discussion is somewhat involved with the technical rules regarding seals. It is said that a written contract not required *by law* to be under seal may be modified or altered by either oral or written agreement; that is, the seal is superfluous in such a case. But where the seal *is* required by law, the alterations must also be under seal. With reference to engineering contracts, it is probably a general rule to make them under seal whether or not required by law at the place of their formation. The old theory of the law with respect to the relation between a seal and consideration has been already alluded to (§ 49), and need not be further treated here save to say again that the ancient distinction between sealed and unsealed instruments has been largely abolished.

113. SUPPLEMENTAL CONTRACTS. — In connection with "Alterations," Mr. Wait offers a very helpful suggestion to the effect that it is good practice when material alterations or additions to a contract are to be made, or serious omissions are to be supplied, that these should be plainly treated in a supplemental contract formally executed by the parties. The effect upon the original contract will then be clear and unmistakable. To the same end, though securing it in a less formal manner, are the pro-

visions frequently used in engineering contracts, to the effect that no claims for " extras " shall be made or considered unless they have been authorized and directed in writing by the engineer, etc.

Another way of working out the same result is to consider that the said writing constitutes a very practical " construing " which the parties have themselves put upon the contract. The courts will be bound to give such weight to the interpretation so made as will make it an integral part of the original contract. And this is all that is sought for in any event.

114. " EXTRAS. — As a phase of " Alterations " the topic of " extras " merits careful study and painstaking attention from every engineer concerned with contract work, whether in drafting the instrument or erecting the structure. Mr. Wait well says, " Extras are the contractor's aim and the owner's fear." The term is used to mean additional work which was not foreseen or contemplated when the contract was executed, or which though highly necessary to the main scheme of construction was overlooked and not provided for in drafting the contract.

115. When the need for extra work arises, in the majority of cases the contractor will be the only person in position to perform it, either because he is so occupying the site as to prevent another contractor from working — if another were available — or else because there is in fact no other one within reach of the owner, etc. The effect is that the contractor controls the situation because the extra work must be done, and he is the only one who can possibly do it, — therefore he sets his own price upon his labor. That it is often exorbitant to the last degree is an undoubted fact which illustrates a common attribute of human nature. Indeed, it is credibly stated that many contractors compete sharply for work, bidding only the real cost, anticipating that the extras at handsome prices will afford them a good profit on the whole job. For this reason it is common to find the most drastic provisions inserted in the contract looking to the avoidance of extras. It seems only common fairness, however, to provide and to insist that extras must be ordered in writing, and that a monthly account and claim for the same must be turned in, etc.

116. It is ordinarily provided that all the work shall be erected in accordance with the contract drawings and specifications, and also in accordance with such further drawings, details,

instructions, directions and explanations as may from time to time be ordered by the engineer. It will be seen at once that these provisions are usually necessary, since it cannot possibly be told in advance just what details will need elaboration and further explanation, even if it is true that the major details are wholly formulated on the contract plans, — which is frequently not the case.

Upon receiving these additional plans or instructions the contractor may fairly and in good faith ask if the required work is not plainly in excess of that first contemplated. It is also apparent that even with abundant good faith on both sides there may yet be honest differences of opinion. To make the engineer sole referee in such a case, with power to decide arbitrarily and summarily as to what constitutes an " extra " is to invite friction. But if it is provided that upon receiving such further plans and descriptions the contractor is of opinion that they are extras, and that he shall before proceeding with such work give the engineer notice in writing to this effect, and upon being requested to proceed by the engineer shall do so, if then they fail of an agreement as to whether it is extra work, recourse shall be had to arbitration,— such a plan it seems, might be a preventive of trouble. This suggestion is taken from the best English practice. (Bamford, Proc. Am. Soc. C. E., XXXV, 1328.)

117. ARGUMENT FOR DEFINITENESS. — What has been said heretofore gives point to the statement that engineering specifications should state with all possible exactness and detail the precise limitations of the work to be done, as for example, what depth of foundations is really in contemplation; what the minimum output of power for an electrical machine must be, etc., etc. When the work is carefully delimited there can be no reasonable question as to what is covered by the contract, and, therefore, what may justly be claimed to be extras. Failure to do this causes endless controversies between owner and contractor as to what is or is not additional work, since the natural tendency of the contractor to pare down the scope of the original contract may always be noted.

118. Mr. Wait observes that extra work is one of the chief sources of litigation between owners and contractors. It is usually because the work to be done was not properly described; or it may happen through the pride of the designer or engineer

who is not willing to admit that he overlooked the cost of certain important items of labor or materials required; or because mistakes were made in alignment or grade in staking out the work; or an inspector erred in his judgment, etc., etc.

Since the engineer should be actuated by at least an ordinary sense of decency and justice toward the contractor who may undertake the work, Mr. Wait recommends that provisions for extra or additional work should be drawn with extreme care, and only after the specifications have been prepared, revised, and reviewed, and after the engineer is satisfied that he has fully described *all* the work contemplated by the contract.

119. PRACTICAL SUGGESTIONS on EXTRAS and PAYMENTS. — The following is a satisfactory way of providing for extras, and for their payments, — matters which easily assume such troublesome proportions in lump-sum contracts:

"The contractor, when authorized by the engineer, shall vary by altering, adding to, or deducting from the contract requirements. Such authorization is to be sufficiently proven by any writing or drawing signed by the engineer, or by any subsequent written approval of work by him, but no variation shall be made without such authorization, nor will compensation be allowed unless in accordance with such authorization." (Bamford, Proc. Am. Soc. C. E., XXXV, p. 1334.)

120. As the *price* to be paid for such extras is a highly important matter, an arrangement for its determination may be made in any one of four different ways:

A. — Price of extras to be fixed by estimate and acceptance of a *Lump Sum*, and in case an agreement upon the amount due cannot be reached by the engineer and contractor then recourse is to be had to arbitration. (The student will see that this is a supplemental contract, see § 113.)

The operation of this scheme will be facilitated if the owner pays a sum which he concedes to be a fair price as the work progresses, and which it is agreed the contractor may accept without waiving his rights to the full price, thus leaving only the difference, or balance, to be adjusted by arbitration.

B. — Price of extras to be determined by *Unit Prices*, agreed upon when the extra work is undertaken.

This plan would appear to be unnecessary of adoption unless the extras were of a different class of work than was covered by the original contract, or unless the contract was to do a perfectly definite *amount* of work at the first-named unit prices, when, of course, the parties might make a new agreement for any new work (even of the same sort) in excess of the original amount. In such a case, the right to have arbitration of unsettled points might still be retained.

C. — Price of extras to be fixed by *Net Cost*.

In this case it is well to specify just what items shall be counted in and

what omitted in determining the net cost, else it is easy to foresee difficulty ahead. Proof may be required that the work cost more than the usual prices for such work, etc. And finally, this plan requires that it shall be carefully stated just what percentage of the total net cost shall be allowed the contractor as his profit.

D. — Price of extras fixed by *Cost plus a Lump Sum.*

Here a bonus may be introduced if the cost falls below a certain sum; otherwise there is no particular inducement to the contractor to keep costs as low as possible. The manner of determining the costs would, of course, have to be regulated as before, under C.

121. DISCHARGE BY PAYMENT. — In a sense parallel with discharge by performance, is discharge by payment of the amount agreed upon in the contract. That this does discharge the contract is almost too obvious to need comment here. It may be noted, however, that the payment may be a true performance, as being the identical thing contemplated by the contract; or payment may indirectly result in performance, as where it is accepted as a substitute for performance, as, for example, being accepted in satisfaction of a breach of the contract. What will in fact constitute a payment, as, for instance, whether the acceptance of a promissory note is payment or not, is a development of the law of Negotiable Instruments, not desirable to be made at this point.

122. BREACH IN GENERAL. — That a person who fails to carry out the terms of his agreement is guilty of a "breach," and that the other party thereby becomes entitled to a suit for damages sustained by reason of the breach, is common knowledge. That such a breach may or may not discharge the contract, is perhaps not so well known. We shall be repaid, therefore, for looking into this matter further.

A breach occurs:

(1) When a party renounces his liability and refuses to perform;

(2) When by his acts he renders performance impossible;

(3) When he merely *fails* to perform what he agreed to do.

It should be noted here that if the injured party elects not to regard the happening as a substantial breach, but chooses to continue the contract in force, then there is no discharge arising by the mere act, or failure to act, of which the other party has been guilty. There are, therefore, two questions presented: (*a*) What

constitutes failure of the promisor to perform? and (*b*) When does it discharge the promisee?

123. In answer to question (*a*) only, it appears that there must be a substantial breach of a vital part of the agreement, and this, it will be seen, depends upon the true interpretation of the contract as a whole.* As previously indicated, the parties can make any lawful intention absolutely essential, even if the detail dwelt upon and magnified is apparently a minor one; for if they but clearly evidence their intention by the language used, the courts are bound to give it effect, since it is not their function to make new agreements for the parties. Our question, in fact, develops several complexities, which cannot be pursued here, such as introducing the distinction between "entire" and "separable," or "severable," contracts, and becomes involved in the question of "substantial" performance, wherein, as we have seen, a failure in minor details does not discharge the contract.

What has just been said will illustrate once more the need for the contract-writing engineer to look ahead, to study and think out carefully what he means and intends, both under existing conditions and possible future ones, and then to express the whole situation in grammatical and rhetorical form which is unassailable.

124. BREACH BY CONTRACTOR'S SUSPENDING WORK. — (See Bamford, Proc. Am. Soc. C. E., XXXV.) A contingency which strikes at the very root of the construction contract, is a breach arising through a suspension of work by the contractor. It is, perhaps, the one thing above all others which the owner is desirous shall not happen. Moreover, a suspension will ordinarily only happen in the event of serious difficulties arising, and the interests involved on both sides are usually large financially. Hence it behooves the contract-writer to introduce only thoroughly well-considered provisions when contemplating the event of a possible suspension of the work by the contractor. He should use very especial care to see that his provisions are entirely unambiguous, and that the wording is free from uncertainties.

125. In writing the contract, therefore, it will be well to define first what degree of suspension (e.g. for a certain specified time) is allowable and excusable. Then the engineer should be directed to give suitable notice to the contractor when he con-

* See Appendix Note 7. "Breach by Abandonment."

siders the work to be in a state of suspension, calling attention to the act or default on the contractor's part upon which the notice is based. It is then proper to specify just what the contractor's rights shall be in regard to removing any of his plant from the site after the notice has been given.

In extensive building operations it seems not uncommon to provide that the owner shall have a lien upon the plant and tools for the next thirty days, unless said owner within that time enters upon and takes possession of the plant with a view to continuing the work upon his own behalf, charging the cost of doing the same against any moneys which may still be due the contractor under the terms of the original agreement.

126. Following this, there may be a clause dealing with the owner's rights when he enters upon the site for the purpose of completing the work, after breach by suspension on the part of the contractor. The student will probably observe that if the contractor unjustifiably suspends work this amounts to a substantial breach of the written or " express " contract, and that save in so far as he can recover on a *quantum meruit* (roughly, an implied contract) for the work already done, he need not be considered as to the balance of the contract. This is because he has broken the written contract in a substantial way, therefore it is discharged, and hence as no contract now exists, he has no rights under it. Yet even though the real kernel of the matter may be stated as above, trouble may be avoided by stipulating in advance just what the owner's rights shall be when he makes such entry, and this will be particularly true when it will be advantageous (as it usually is), for the owner to make use of some, at least, of the contractor's plant. It is usually provided, therefore, that all materials delivered upon the site which are intended for the work shall become the property of the owner, and that he shall have a lien upon the plant until the work is completed. Any other persons or contractor whom the owner sees fit to employ to complete the work may be put into possession of the site by him, and the first contractor forthwith excluded, save for the purpose of measuring the work previously performed by him.

127. In fairness to both parties, it may be provided that if the cost of completion by the new contractors be less than the original contract price, then the balance due may be paid to the first contractor, but that if the cost of completion should prove greater than the contract price, then the first contractor shall be bound to pay all excess.

The above suggestions are taken from the best English practice. Such provisions do not offer the contractor much inducement to abandon or seriously suspend the work, as he is practically bound to see it through anyhow. The advantage is that by such provisions the owner has an opportunity to control the situation more thoroughly if he has to deal with a seriously non-energetic contractor. (See also Appendix Note 7. "Breach by Abandonment.")

128. REMEDIES FOR BREACH. — We have studied at some length the phases of discharge by breach, and the practical engineer and student may now naturally ask, "But if the contract is discharged, what can be done about it, — what are my rights in such a case?" It is well settled that when a contract is discharged by breach the injured person has three distinct rights:

(1) To be exonerated from further performance. This applies to either party.

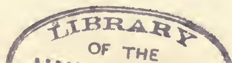
For example, let us suppose a contractor was to be paid periodically at different stages of the work on a house, so much when the foundation was done, another sum when the frame was up and boarded in, another when plastered, etc. It is evident that he should not be obliged to proceed to shingle and plaster the house if the stipulated sum was not forthcoming when the house was boarded in.

(2) The injured person may sue on *quantum meruit.* (See §§ 100-129.) It is quite apparent that he should be entitled to sue for the value of work already done. It is evident that this rule refers to breach on the part of the owner.

129. This action of *quantum meruit* probably deserves a further word in passing. Though it is roughly defined as an action upon an implied contract, it is more accurately classified as a "quasi-contract." That is to say, a quasi-contract is an obligation *similar* to a contract but which has not arisen in the regular manner, and is said to spring from the lawful and voluntary acts of the parties *in the absence of any agreement.* The root-idea is that there shall be no unjust enrichment on the part of one party at the expense of the other. So in the case just put, the contract was for the whole house with provision for payment at stated periods. This contract has been broken, hence the parties now stand in a quasi-contractual relation, since they have not carried out what was intended. The distinction between quasi-contract and a simple implied one, therefore, is that in an implied contract there never was any *expression* of terms to make a contract, while a quasi-contract may not inaptly be called the shattered remains of an express contract. The express contract has been broken, but not wiped out of existence. What is left of the obligation is called a quasi-contract.

(3) The third available remedy is for the injured party to sue for damages sustained by reason of the breach. (Anson, Contracts, p. 308.) It was shown in § 122 that whether or not the breach was sufficient to discharge the contract, yet it always gave rise to an action for damages. This is a subject, therefore, which we shall next consider.

130. DAMAGES. — The general rule for determining the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amount of damages recoverable is that the amount shall be the equivalent of, or a compensation for, the loss or injury suffered. (112 Mass. 497.) If no loss has occurred the plaintiff is only entitled to "nominal damages," e.g., one cent. In general, damages are given only as compensation, and not as punishment. It is only actual and direct loss, and such consequential injuries as are sustained as the natural and direct results of the defendant's violation of his contract. Remote damages, meaning those rising indirectly, cannot be recovered.* In one case where a contractor was not allowed to carry out a bargain the damages were held to be the profits he would have made on the job. But generally such profits are too conjectural, and subject to too many contingencies to admit of proof in court. And profits contingent upon speculations are not generally recoverable. (110 U. S. 338.)

131. For the purposes of engineering contract-writing, damages are of two sorts, *liquidated* and *unliquidated*. By liquidated damages is meant the sum agreed upon in advance by the parties as compensation for a breach; by unliquidated damages are meant sums such as a jury would award when the case is presented to them upon its own merits. Formerly it was not uncommon to provide that if, for instance, the work was not completed at such a date, a certain sum was agreed upon as a *penalty* to be paid by the contractor. There is a difference between a *penalty* and liquidated damages, however. In effect the difference is that the amount which can be recovered in a suit under a penalty clause is not the sum named as such, but only the actual damages sustained; whereas liquidated damages are assessed at the sum agreed upon by the parties. To be enforceable, liquidated damages must be commensurate with the injuries suffered, and this is a general rule of law. Such a stipulation is good when the damages cannot be ascertained.† This point is illustrated by the peculiarity of engineering work where all parts ought to progress at a fixed rate of speed, and it might be impossible to determine just what loss was suffered by reason of a failure of some one to live up to his contract as to time of delivering materials, etc., etc.

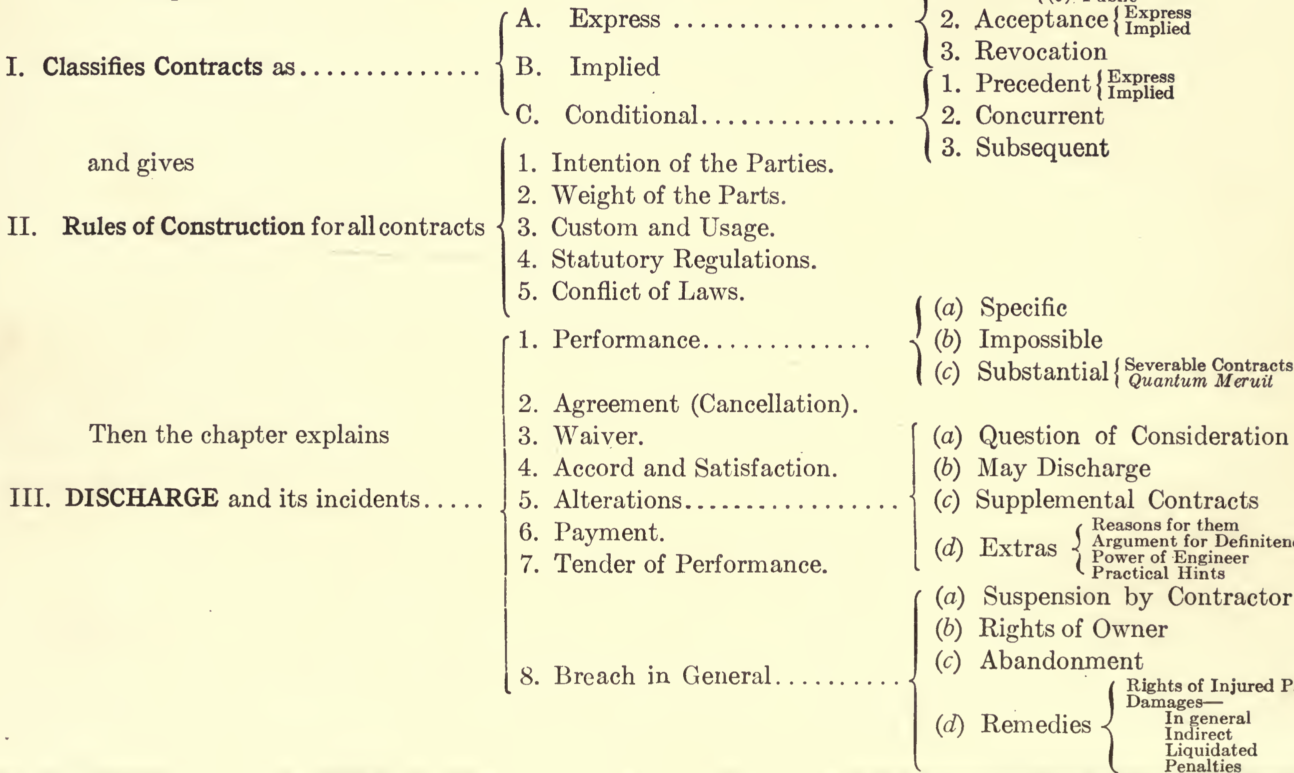
To evade the provision for liquidated damages, the contractor must show that the sums stipulated are unreasonable or exor-

* See Appendix Note 8. "Indirect Damages."

† See Appendix Note 9. "Liquidated Damages."

bitant. Encountering difficult construction, the happening of casualties beyond contractor's control, such as delay by high water, meeting harder and tougher rock, etc., will not relieve from a provision for liquidated damages.

Diagram of Chapter III.—DEVELOPMENT OF CONTRACT PRINCIPLES



This chapter:

- I. **Classifies Contracts** as
  - A. Express
    - 1. Offer
      - (a) Private
      - (b) Public
    - 2. Acceptance
      - Express
      - Implied
    - 3. Revocation
  - B. Implied
  - C. Conditional
    - 1. Precedent
      - Express
      - Implied
    - 2. Concurrent
    - 3. Subsequent

and gives

- II. **Rules of Construction** for all contracts
  - 1. Intention of the Parties.
  - 2. Weight of the Parts.
  - 3. Custom and Usage.
  - 4. Statutory Regulations.
  - 5. Conflict of Laws.

Then the chapter explains

- III. **DISCHARGE** and its incidents
  - 1. Performance
    - (a) Specific
    - (b) Impossible
    - (c) Substantial
      - Severable Contracts
      - *Quantum Meruit*
  - 2. Agreement (Cancellation).
  - 3. Waiver.
  - 4. Accord and Satisfaction.
  - 5. Alterations
    - (a) Question of Consideration
    - (b) May Discharge
    - (c) Supplemental Contracts
    - (d) Extras
      - Reasons for them
      - Argument for Definiteness
      - Power of Engineer
      - Practical Hints
  - 6. Payment.
  - 7. Tender of Performance.
  - 8. Breach in General
    - (a) Suspension by Contractor
    - (b) Rights of Owner
    - (c) Abandonment
    - (d) Remedies
      - Rights of Injured Party
      - Damages—
        - In general
        - Indirect
        - Liquidated
        - Penalties

Questions for Study and Review

Chapter III

1. How must an express contract be formed? Becomes a binding obligation when?

2. When is a revocation operative?

3. What is the effect of failure to observe the explicit terms of an offer?

4. Tell how and when acceptance is completed.

5. Cite examples of public offers. How is acceptance made? What is the status of a bid tendered?

6. What formality is required in making an acceptance?

7. Can an acceptance be withdrawn? Why?

8. What makes the subject of implied contracts a difficult one?

9. What can you say as to the necessary limitations on the language?

10. Explain the necessity for rules for " construing " contracts.

11. How will you detect the presence of an implied contract? Give an illustration of such a contract.

12. When will the law not imply a contract though the facts might seem to warrant it?

13. What is a conditional contract? Give an example.

14. What can you say as to express and implied conditions?

15. How are conditions introduced into contracts, and what sorts are there?

16. Explain meaning and effect of " condition precedent."

17. Suppose a valid condition precedent is not observed. What happens?

18. Cite three of the commonest conditions precedent found in engineering contracts.

19. What language should be used in creating a condition precedent? Suppose no mention is made of the condition?

20. What is the object of a " condition subsequent "? They commonly occur where?

21. Distinguish between conditions precedent and concurrent.

22. " Rules of Construction," — what are they?

23. What is the foremost rule of construction?

24. How will you construe a contract exhibiting marked inconsistencies?

25. How will the acts of the parties affect the interpretation?

26. Recite upon the relative importance, or weight, of the parts of a contract.

27. What is the aim of our study of contracts? How accomplished?

28. " Work to be to the satisfaction of the owner," — what is meant?

29. What is the relation of " custom and usage " to engineering contract-writing? Tell how it becomes important.

30. What is the rule as to necessary implications? Why necessary?

31. Can a usage be claimed? Under what circumstances? What relation does usage have to express terms?

32. Why is conflict of laws important for the engineer? How does the conflict arise? What about the size and scope of the subject?

33. Explain " Lex loci contractus," and apply it to correspondence.

34. How does " intention of parties " bear upon the foregoing?

35. What law governs contracts pertaining to real estate?

36. Does the rule as to " lex fori " seem reasonable to you? Why?

37. What is the rule connecting the place of making with the validity of a contract?

38. Explain meaning of " discharge of a contract." Leading mode is what?

39. What is the question of substantial performance? Illustrate.

40. What do you understand by " specific performance "? Granted by whom?

42. Is " specific performance " applicable to engineering contracts? Explain why or why not.

43. What is the origin and position of the system of jurisprudence known as " equity "?

44. What is the legal theory of damages with respect to the performance of a contract?

45. Under what conditions may specific performance be granted?

46. Explain how tender of performance will be a condition precedent to a right to sue. Its effect is what?

47. When is " substantial " performance (the issue) raised? What is the object of the doctrine?

48. Who determines whether or not there has been substantial performance?

49. Explain "quantum meruit" in this connection.

50. Illustrate what is meant by "entire" and by "separable" contracts.

51. Summarize upon the various phases of "performance."

52. Discuss substantial performance in relation to discharge.

53. Explain discharge by agreement. What are the requisites? When can it not be done?

54. Suppose new matter is inserted into the contract, — what happens?

55. Illustrate what is meant by "cancellation and abrogation" clauses.

56. Explain carefully "discharge by waiver." Why important to the engineer?

57. What is meant by discharge by "accord and satisfaction"?

58. How should alterations be provided for? What part does the intention of the parties play here?

59. What is the relation of consideration to the matter of alterations? Discuss.

60. "Changes may be made without further consideration," — comment upon this.

61. When is a discharge effected by an alteration?

62. What is the bearing of the question of a seal upon alterations?

63. What does Wait say as to supplemental contracts?

64. What about letters ordering "extras"? How do they construe the contract?

65. What is the meaning of "extras"? Explain their importance.

66. What is a fair and common provision regarding them?

67. Suppose additional drawings, or details are to be furnished, —how should the situation then be handled?

68. Why should specifications carefully delimit the work? What is the contractor's natural position in the matter?

69. How do controversies over extras most frequently arise? Avoided how?

70. Explain a practical way of providing for extras and of payment for them.

71. Name three other ways of providing for extras and their payment.

72. Recite upon discharge by payment.

73. What is meant by " breach "? What is its effect?

74. Under what circumstances does a breach occur?

75. What are the questions presented under a breach?

76. How will the question whether there has been a substantial breach be answered, — and by whom?

77. If suspension of work by the contractor is being considered, how should the contract deal with the matter?

78. What points are usually covered when dealing with such suspension?

79. What rights has the injured person when a contract is discharged by breach?

80. Explain as carefully as possible the meaning of " quasi-contract."

81. What is the root idea in " quantum meruit?"

82. Distinguish between a quasi-contract and an implied contract.

83. What is the general principle upon which damages are awarded?

84. Can you distinguish between direct and indirect damages?

85. Tell the difference between liquidated and unliquidated damages.

86. Distinguish between liquidated damages and penalties. Tell why the former are more likely to be recognized in an engineering contract.

87. Does difficult construction relieve against liquidated damages? Why?

Chapter IV

AGENCY, TORT, AND INDEPENDENT CONTRACTOR

The engineer must often act as the representative or agent of his employer. He enters upon this capacity by virtue of a contract, either express or implied, and when the relation is properly established, he can bind his employer upon contracts made in the latter's behalf; hence the law of Contract is thoroughly interwoven with the law of Agency. We shall see how the agency may be set up, what some of the duties are which the principal owes his agent, and vice versa, as well as what obligations the agent owes third persons.

The rights possessed by reason of one's membership in a civilized community will then be examined, and their distinctions from contract rights noted. As the above mentioned "natural" rights will be met at every turn, it behooves the engineer to recognize the elements of Fraud, Negligence, Nuisance, and Trespass, to be well-cognizant of the sources of his liability in this respect, and to thoroughly understand the status and obligations of the "Independent Contractor."

AGENCY

132. DEFINITION AND PARTIES TO THE RELATION. — Agency is the relation between two or more persons, created by a contract, express or implied, by which one (the agent) undertakes with more or less discretionary power to represent another (the principal) in the transaction of certain lawful acts or business. Agency is a subject of some complexity, and only a few of its prominent elements will be discussed here.

At common law, every person who is competent to act in his own right, and for himself, may act by an agent. But a principal cannot confer authority upon an agent to do for him that which he could not do for himself, were he present and acting. As to who may be principal, the same rules of competency apply as in contracts, but any one with a sound mind and sufficient understanding may act as an agent. In general, whatever a person may do for himself he may do by an agent. But this does not apply in extremely personal things such as making a will, or contracting a marriage.

133. The agency relation is a contractual one. It exists by agreement, there must be a "meeting of the minds," and the intention of the parties must find expression either in words or action. Since no one can become the agent of another save by

the latter's will and intention (express or implied), an agent cannot by performing an act create for himself authority to do so, nor can authority be *proved* by general reputation to that effect, nor by his own statement that he is an agent, except that he may testify upon this point in Court, like any other witness.

Suppose you are a contractor engaged in construction, and some one comes upon the work, saying, "I am a new inspector sent here by the owners." Then he gives you orders which materially change the specifications, and, though you comply, you discover later that he had no authority to give such orders. In this case you have no redress against the owners for the additional expense caused you. It was incumbent upon you to ascertain whether such person was in fact the owner's agent and you must take the consequences of your neglect to do so.

134. CREATION OF AGENCY. — When an agency is created by an express instrument, such a formal authority is called a *power of attorney*, and the agent is then called an *attorney in fact*. An agency will frequently be considered to exist when circumstance of ordinary usage would necessarily *imply* an agency.

Suppose a firm regularly paid bills contracted by its chief clerk, for instance, but later disclaimed a bill from the same sellers incurred by the same clerk, claiming they had given him no authority to buy for them. The firm would be bound, in such a case, upon an "agency by implication."

But in the absence of substantial ratification, as in the above case, authority cannot be inferred from ordinary business or family relations.

To illustrate: The president of a corporation has no power to enter into contracts in behalf of the corporation by virtue of his office merely, unless he has general or special authority given him.

Again, suppose a contractor is working for a board or committee, and that its members visit the work, give directions, order changes or new work which can only be authorized by the board as a whole. If the contractor obeys such orders he is likely to lose the price of the unauthorized work. But if such acts are *subsequently ratified* (see § 142), authorized, and adopted by the board, then the contractor is in a safe position.

But even then the contractor must beware that the board does not exceed its authority, for if it attempts to make a contract which is *ultra vires* (see § 249) and void, he will be a loser as before.

No one need deal with an agent unless he so chooses, but if he does he is bound to ascertain the extent of the agent's authority "at his peril," that is, take the consequences of his failing to do so.

135. SCOPE OF AUTHORITY. — A principal is bound to give his orders in clear terms, and is responsible for any ambiguity in them. For if two meanings were possible and the wrong one was taken by the agent and acted upon by him, this binds the principal. To the same effect, it is clear that an engineer who is the owner's agent to supervise construction, etc., has his powers strictly confined to those conferred in the contract. But it is a

well-defined and logical principle that an express authority to do a certain thing carries with it an *implied* authority to do all those things which are necessary to the full achievement of the thing expressly mentioned.

Of course the difficulty arises in determining whether or not a certain unmentioned thing was logically necessary to accomplish the stipulated result. Thus the way to avoid this difficulty in engineering contracts is to specify in great detail just what the engineer's duties shall be, but even then, the question may still arise with reference to something not mentioned.

Thus, unless specially authorized, an engineer may not promise extra compensation for work or materials comprised in the contract; nor add new terms to the specifications; nor deviate from a specified mode of measuring quantities, even though in his opinion some other method is far better and fairer. (Compare with § 440.)

136. DELEGATED POWERS. — Another important practical matter relates to the delegation of authority by one agent to another, sometimes called a sub-agent. It is in theory held that the trust committed to an agent is exclusively personal, and cannot be passed on by him to another, without express authority for doing so. But this rule is modified by the usages of the trade or profession. (Consult §§ 85-7.)

137. Let us look at the case of an engineer who may be an agent (for special purposes), of the Chief Engineer, who, in turn, is the agent of the Railway Company which employs him. From necessity the rule against delegation does not apply when the object of the agency cannot be attained without it. Thus, the Chief Engineer cannot be held to perform in person all the mechanical or clerical work required to accomplish the tasks he is charged with. This would include drafting, measuring, figuring, driving stakes, inspecting work and making estimates, and even the general verification of all data. It is reasonably held that so long as the Chief maintains a constant and careful *supervision* over the acts and operations of his assistants, knows what work they do, and how they do it, and insists that all doubtful and disputed questions shall be referred to him, this is all that was contemplated in the contract of his employment.

138, Yet there is a higher class of duties, properly called *judicial acts*, which the Chief cannot delegate to his assistants. Examples are: — Determination of the proper methods of procedure; the proper classifications of materials; the passing upon

the sufficiency of work done; and whether the work has been adequately completed, etc.

When the engineer is a public officer, as a City Engineer, having duties specifically required of him by law, these he cannot delegate. He can, however, employ assistants and can ratify and adopt their acts to a very great extent. There is, perhaps, a nice distinction between this and the "public" acts just mentioned.

139. AGENCY BY IMPLICATION. — The circumstances under which an agency may arise by implication are practically numberless. The general principle is that where a first person has "held out" a second person as (i.e. represented him to be) his agent, and has permitted the second person to act as such agent, then the principal will not be allowed to deny that the agent was in fact authorized. If by acts and conduct the principal has led others *reasonably to assume* such second person to be his agent and duly authorized to act for him, and a third person has relied upon the apparent authority of the agent to his prejudice, the same result is reached. This is because, from the view-point of equity, one must act in good faith so as not to mislead others. Thus if one stands by and permits another to make a contract for him, without denying the apparent authority, he is in law prevented ("estopped") from denying that the other did have authority. (See also § 249-[4].)

Suppose you are the purchasing agent for a corporation, and you are informed that the Chief Engineer will need 5,000 bags of cement. A cement salesman comes in while you are in conference with the General Manager, and in his presence, you order the cement off-hand. The Manager makes no objection, but finding that the market price of cement has dropped considerably before the cement is to be delivered, he attempts to withdraw from the bargain on the ground that he never expressly authorized you to buy *any* cement, that is, your act was unauthorized. By the rule just given, the Company will be held to your agreement with the cement salesman.

When an agency arises by implication it is limited to the reasonable and natural requirements of the case, or to the performance of those acts which might have been done by the principal.

140. RATIFICATION is a prominent agency doctrine about which the engineer needs to know. By ratification is meant the giving of sanction and validity to the previously unauthorized act of one who has assumed to act for another. This assumption may consist (*a*) in exercising the power of an agency not yet created, or (*b*) in exceeding the scope of an authority which has

been actually conferred. The act done must have been alleged to be *in the name of the principal.* The principal may ratify (1) by expressly adopting the act as his own, as by an oral confirmation, or (2) he may so conduct himself toward the assumed agent that the law will imply a ratification, as for example, where the principal accepts the benefits accruing from the agent's acts, but disavows his authority to do them.

141. As to *who may ratify*, it is said that any one who can appoint an agent for the purpose of doing the act, can ratify the act which is alleged to have been done for him, after the event has happened. From this it follows that a principal cannot ratify an act done for him which he could not lawfully do for himself. The student will observe that if this were not so, here would be found a cloak for all sorts of rascalities.

142. Essentials to Ratification. — (*a*) The pretended agent must have assumed to act for some one else, for if the act was done in his own name, and on his own authority, it cannot be ratified. (51 Ill. 504.) This is because only the parties to a contract are bound by its terms. (See § 23.)

(*b*) The person for whom the agent assumes to act must be identified by him as some particular person, though he need not designate the principal by name. The second contracting party must understand that some one other than the ostensible agent is interested in the contract, and that the unknown third party will be bound upon it if the terms are ratified by him.

(*c*) The ratification must have been made upon full knowledge of the material facts, or in voluntary and willful ignorance of them. That is, an agent will not be allowed to indulge in fraud or sharp practice at his principal's expense.

143. A matter closely resembling "ratification," and often arising in sales where privacy is desired, is the doctrine of UNDISCLOSED PRINCIPAL. The rule is that for acts done in his own name without disclosing his principal, the agent is primarily liable; but if he is in fact acting for a principal, such principal may be bound upon the contract *if the party dealt with* (upon discovering this) elects within a reasonable time to have it so. This is true even though the credit was given to the agent under a misapprehension as to his true character. (Mechem on Agency, and 48 Conn. 314.)

Let us look at a practical case: Suppose you are the locating engineer

for the X. Y. R.R. Co., and before your survey line reaches a town you observe that a certain town-lot occupies a strategic position for your Company. To forestall difficulties and delay (or perhaps your competitors) you quietly agree to buy this lot in your own name, without advising the seller of your official position. This is later made known to him. Can he hold you or the Company for the price? By the rule just given, either the principal or agent can be held, at the seller's election.

But this case presents certain other factors which may vary the result substantially. In the first place, being a sale of land, the Statute of Frauds (see § 299) requires the contract to be in writing; in the second place, deeds of land are nearly everywhere required to be under seal; and third, in interpreting sealed instruments, only parties named in such contracts are bound thereby. As a result, therefore, you only could be held by the seller. But had the sale been about anything other than real estate, the rule as to undisclosed principal would have applied without exception.

144. The doctrine of Undisclosed Principal benefits a person who deals with another when the second person *is* an agent, though this fact is unknown to the first party. It gives the first person additional rights since by it he has a choice of the persons whom he will hold upon the contract. It is distinct from the whole idea of "ratification" since *its* effect is to wholly relieve the agent of his responsibility for the contract which he has made.

It is to be borne in mind that ordinarily a leading purpose of an agency is to allow the agent to make contracts on behalf of the principal, and which bind him, if the agent was acting within the scope of his authority. They are truly the contracts of the principal, and the agent is merely a tool or mouthpiece. In making such contracts, the agent relieves himself of responsibility by making the contract in his principal's name, signing it "M. N., *by* A. B., Agent." (See also § 364.)

The discussion of undisclosed principal, it will be seen, deals solely with the case where the agent makes no mention of his principal, nor indicates that there is one. Hence if the principal *is* to be held we run counter to the rule "Only the parties [named in] to a contract are bound by it." (§ 23.) Thus the agency rule of undisclosed principal is an exception to the broad rule of contracts just stated.

145. ASSIGNMENT OF CONTRACTS. — Because of its apparent similarity to the topic "undisclosed principal," assignment of contracts may easily cause the student some difficulty. We are very familiar with the rule that only parties to a contract are bound by it. Since every person contracts with reference to the responsibility, character, etc., of the other party, there would be no safety in contract if the other party could, at his pleasure, substitute another in his place. Also, this would plainly defeat the requisite "meeting of the minds." (See § 18, [4].) By *assignment* is meant the transfer of one's rights or duties under a

contract to an outsider not a party to it. The essential part of the rule is brief: — An assignment cannot be made without the consent of the other party to the contract. (Exception: Negotiable Instruments.) Strictly speaking, what happens in an assignment is that the original contract is cancelled by agreement (consent) and a new one is substituted in its place.

In general, benefits under a contract can be assigned, while liabilities cannot. Another sort of possible assignment of non-personal duties is treated under "Delegation of Authority" (§§ 136-7). With assignments for the benefit of creditors we have nothing to do, as this forms an important part of the law relative to bankrupt estates.

146. SUMMARY OF AGENT'S AUTHORITY. — Mechem, a well-known writer on Agency, summarizes the agent's authority, thus: It consists (1) of the powers directly and intentionally conferred by the voluntary act of the principal;

(2) of those incidental powers which are reasonably necessary to carry into effect the main powers conferred, unless they are known to be prohibited;

(3) of those powers which custom and usage have added to the main powers, and which the parties are deemed to have had in contemplation at the time of creating the agency, and which are not known to have been forbidden;

(4) of all such other powers as the principal has by his direct act, negligent omission, or acquiescence, caused or permitted persons dealing with the agent reasonably to believe that the principal had conferred;

(5) of all those powers whose exercise by the agent the principal has subsequently, with full knowledge of the facts, ratified and confirmed. (Mechem on Agency, § 282.)

147. DUTIES OF AGENT. — Having studied somewhat the extent of the agent's power or authority, we will now consider briefly some of his duties. The agent is the representative of his principal, and it is his duty to act with loyalty, fidelity, and candor, free from all antagonistic interests which might prejudice the claims of the principal to his unbiased services. (11 Mich. 222.)

In a case where the agent or clerk of a warehouseman secretly secured a lease of the premises which he knew his employer desired to renew, he was held to have secured the same for his principal, and was compelled to make it over. (59 Calif. 119.)

Similarly, an agent who was employed to settle a claim was not allowed to buy it in at a discount, and then enforce it against his principal for the

full amount, for it was held that the benefit of the discount secured must inure to the principal. (59 Vt. 569.)

The foregoing tends to show that a purchasing agent has no right to buy on his own account when the market is low, and then to resell higher to his employer unless the principal is fully aware of the whole transaction.

148. An agent must account for all money received in the course of his agency, and should he mingle it with his own and the whole be stolen, he must make good the whole amount. But if without his fault or negligence the principal's money be lost, he will not be responsible.

It is an agent's *duty to notify* his principal fully and promptly upon all matters pertaining to the latter's interests. This rule should be emphasized because notice given to an agent is held to be notice given the principal. This is frequently an element of highest importance in damage suits for negligence.

149. Instructions to an Agent. — It is the agent's plain duty to obey the wishes and instructions of his principal if they are reasonable and legal. The agent is liable for losses caused by his disobedience. (104 Mass. 152.) *Secret* instructions from the principal contrary to the agent's *apparent* authority cannot be availed of as a defense by the principal against persons who have dealt with the agent in accordance with his apparent authority.

In cases of sudden emergency or accident, the agent may overstep his instructions if prudence and a sound discretion would warrant his so doing. As to his duty in carrying out his agency, considerable is said under the topic " Negligence " (§ § 164-6), which may be advisedly read in this connection.

150. AGENT'S LIABILITIES TO THIRD PERSONS. — The agent's liability to third persons arises: —

(1) from the fact that he has contracted so as to bind himself (instead of his principal); or

(2) because he has failed to exercise a proper regard for the rights and privileges of others while in the prosecution of his agency. That is, he has committed a "tort." (See § 156.) One does not cease to be responsible for his wrongful acts (torts) merely because he happens to be acting as an agent for another, for under these circumstances both principal and agent may be liable in a suit for damages.

151. If an agent makes known to the other party all the facts

as to the scope of his authority, it is the other's duty to satisfy himself as to their truth. If the agent expressly misrepresents his authority, he will be liable for the results of it. (104 Mass. 336.) When an agent conceals the fact of his agency, and acts as though he were the principal, he binds himself, only (42 Ill. 238). (But see § 143-4, " Undisclosed Principal.") It is reasonable that if an agent would avoid responsibility he must declare the fact of his agency plainly and openly, and not leave it to others to discover. (39 Vt. 260.)

152. ENGINEER AS AGENT. — As an agent of the owner, an engineer has certain duties to perform, since the law implies a promise from agents that they will exercise competent skill, proper care and diligence in the service which they undertake to perform. This duty to adhere faithfully to specifications, or to instructions, is a primary one, and the agent is responsible for any losses occasioned by a non-fulfillment of his duties, either in exceeding, violating, or disregarding instructions.

153. If an engineer assumes the responsibilities of an agent, what care and skill are required of him? If a person offers his services to the community, or to an individual, for employment in any professional capacity (as a surveyor, or engineer, for instance), he impliedly warrants in his contract of employment that he possesses that reasonable degree of skill, learning, and experience ordinarily possessed by those who profess the same art or calling. He also agrees that he will use reasonable and ordinary care and diligence in the application of his skill and knowledge to accomplish the purposes of the contract. But he does not warrant that he will exercise extraordinary care and diligence, nor that he possesses uncommon skill.

It is to be noticed that neither absolute accuracy nor success is to be taken as the test for the skill or capacity of one in a professional line, since an engineer does not warrant the absolute perfection of his plans nor structure without an express stipulation to that effect, any more than a doctor guarantees a cure. He is chargeable with errors and their effects only when such could not have arisen save through want of reasonable skill and diligence on his part. As a practical matter (for the comfort of the engineer), the person who asserts the want of skill in the engineer must prove it (generally a difficult thing to do).

The foregoing presents but a few aspects of the highly important subject of Agency, and their treatment is extremely brief. The student is urged to form the habit of drawing upon his own imagination or experience for illustrations of the numerous prop-

ositions that have been laid down since it is only thus that they become significant. Want of space has here prevented the insertion of much illustrative material.

TORTS

154. RELATION OF COMMON AND STATUTE LAW. — It has been explained (§ 21, Footnote) that the common law is a set of principles established by society for the regulation of men's conduct in their relations to one another. The common law is thus directly descended from those customs which have grown up representing the notions of justice and propriety developed in the human race (especially the Anglo-Saxon branch of it), finally crystalizing into what we familiarly speak of as "law." The common law is to a very large extent unwritten, that is to say, it is not formulated and then promulgated by legislative enactment. A leading reason for this is that it would be impossible to foretell and provide for the countless and varied situations in which civilization places individuals. As it is not, for the most part, found on the statute books, the common law is effective through the application of certain well-defined principles, or rules, merely. These rules are of necessity extremely general in their terms, and are called into play when the judges believe them to be applicable to the particular case in hand. Thus "studying law" consists largely in a study of these general rules and principles, their analysis, elucidation, and application in the different situations which have arisen in times past, and have been passed upon (adjudicated) by the courts.

155. Speaking generally, any or all of the rules of the common law may be enacted into statutes by the appropriate legislative body, if the rules are susceptible of sufficiently exact formulation. Then, of course, the terms of the statute will take precedence over the common law rules. Such enactments have taken place to a greater or less degree in all the States, and by this method many difficulties and inconsistencies of the common law have been remedied. It will be seen, therefore, that where there is a question as to one's legal rights, and the case is doubtful, the only safe way is to ascertain the statute, if there is one; if there is no statute on the subject, the common law doctrines will *always* apply. It should be noted, however, that since the common law furnishes the technical terminology of the statute law, the old

common law doctrines must be called into play to interpret the statutes upon the same subjects.

156. CONTRACT AND TORT DISTINGUISHED. — We have heretofore studied the doctrines underlying the legal rights arising under a contract. The characteristic feature of every contract is that the rights arise because of a "meeting of the minds," i.e. an agreement. Torts, in distinction, do not arise by reason of an agreement made with any one, but because one's *natural rights*, as they are called, have been violated. These natural rights are common to every member of society, and are possessed by reason of such membership. It is fundamental in our society that every man has a right to live and to do as he pleases, to accumulate property, and to protect it; but he must do all these things with a reasonable regard to the rights of others, since they too have the same privileges. In brief, a TORT is a private, civil (as distinguished from criminal) injury to a person, causing damage to his health, body, reputation, or property.

For examples: — Society admits that I have a right to my personal safety and freedom; to the society of my family; the right to protect my reputation; the right to be immune from damage by fraud, i.e. a right not to be cheated; and in general, I have rights of possession in things which belong to me. *Any unjustifiable infringement by another upon any of these rights constitutes a tort.*

157. Compensation for tort is by the infliction of a penalty or judgment in money, called damages, providing, of course, actual loss or damage can be shown by the plaintiff. To secure the benefit of the laws protecting these rights a great amount of legal work is done. As these rights lie close to the field of most human efforts, the variety of tort cases which may arise is almost infinite. However, only a few of the leading heads can be touched upon here, and these will be selected with reference to the duties of the engineer and his liability in tort.

158. KINDS OF TORT. — Perhaps the leading phases of tort are instances where one's personal liberty or security are involved, though here the cases will shade off gradually into the realm of criminal law, foreign to our present purposes; the protection of one's rights in his reputation, enforced by actions of "Slander and Libel"; and torts with reference to rights in

property, often extremely important. It is a point of significance that *intent* is not the keynote in torts as it is in criminal law; and that the word " malice " has its popular meaning so far extended as to cover acts done in total disregard of the rights of others.

159. PROXIMATE CAUSE. — It is a fundamental proposition, in torts, that " Every man is presumed to have known and to have *intended* the natural and reasonable consequences of his own acts." An inevitable corollary is: " Every man is responsible for all the consequences that could have been foreseen by an ordinarily prudent and careful person as likely to follow from his acts." To the same effect is:

" A person is responsible only for those consequences which result immediately (i.e. directly, not necessarily immediate in point of time), from his own acts." In legal phrase, a person is responsible for results of which he is not the remote but " proximate " cause.

In an old Massachusetts case, there were wholesale druggists who sold antimony instead of a manganese preparation named on the label which the package bore. After passing through several hands it came to the consumer who made a very unusual use of it, such that the supposed manganese mixture exploded violently, doing great damage. The consumer sued the wholesalers who had misnamed the substance, saying the accident was their direct fault.

But the Court held that the use made of the stuff was so *unusual* that no person could be required to foresee such a use, or so to understand his responsibility as to be able to guard against such effects. In other words, though the act of the wholesalers was the direct cause, yet it was *too remote* to render them liable for the chance effects of their acts.

It is said that proximate cause is not to be determined by time or distance, but by succession of events; the question is whether there was any *intermediate* self-operating cause disconnected with the primary cause which produced the injury. If there was no intermediate cause the act of negligence (for example) must be considered to be the proximate cause of all the consequences arising therefrom.

160. JUSTIFICATION IN TORT. — A man may escape the legal effects of his acts which would otherwise be torts, in several ways, some of which are as follows: —

(1) He will be justified by reason of leave or license given him by the injured party. Thus, if a person gives another *permission* to pass and repass over his land, then the latter cannot be sued as a trespasser.

(2) Justification by legal authority. Thus, a sheriff may, for due cause, take possession of my person, or of my goods. Were it not for the justification which the law affords him, he would have committed a serious tort against me.

(3) Public policy justifies entry for the abatement of a nuisance, when to enter upon the land otherwise would be a trespass. It is the same if I enter to recover my property upon the land of another; or enter for the purpose of doing business with him.

(4) Self-defense is a justification for the use of force which would otherwise be an assault. It should be said, however, that a too severe repulse may be construed to be an assault on the part of him who was first attacked.

(5) Inevitable accident nullifies the theory of tort. We have seen that liability arises for those acts leading to results which could reasonably have been foreseen. It follows that there is an excuse if the result was in the nature of an unavoidable accident which could not have been foreseen. One is not entitled to remuneration for any injury which comes to him through any of the ordinary accidents of life, not imputable to negligence nor to the violation of law.

(6) An act of the injured party may have so contributed to the injury that he has himself principally to blame. Thus "contributory negligence" is a favorite defense in all sorts of accident cases, and if it can be successfully maintained, nullifies the tort action.

161. DISCHARGE OF TORT. — There are various ways in which the legal right to sue for damages in tort may be discharged, or lost. As it is a matter essentially personal, it is wholly within the control of the parties. Hence they may discharge the tort: —

(1) By agreement. Here the essentials of contract law must be observed.

(2) By accord and satisfaction. The parties do not wait to go to law, but the wrongdoer settles with the injured party for the injury suffered, and here, again, the elements of a contract must appear.

(3) By a judgment rendered by a court of competent jurisdiction. Having once obtained a favorable judgment, the plaintiff cannot again go to the Court with the same set of facts and ask for another judgment.

(4) By death of either party the tort was discharged at common law. But by statute many torts now survive the death of either party. Examples are: assault, false imprisonment, damages to the person (accident cases), etc.

(5) By bankruptcy of the wrongdoer. But if a judgment has been rendered against a defendant for fraud, or for willful or malicious injuries to the person or property of another, then his subsequent discharge in bankruptcy will *not* discharge his obligation to pay that judgment.

(6) By Statute of Limitations. The plaintiff will lose the right to sue for a tort if he waits for six years (or whatever period the particular statute requires) before beginning.

SPECIFIC TORTS

162. TRESPASS. — An incident in the ownership of real estate is the right to enjoy the sole possession of it. Thus every invasion of property, be it ever so slight, constitutes a trespass because the possession has been interfered with.

Suppose a contractor when working on a street, deposits earth and rubbish upon an adjoining lot, and thereby damages choice shrubs, etc. He will be liable to the lot-owner for a trespass.

In a construction case, it was held to be the duty of the contractor to ascertain the right of the city to rest an embankment upon abutting premises without the consent of the owner, for this was a trespass.

When a contract provided that waste earth should be deposited "where ordered by the engineer," the contractor did so but recovered damages from the employer because the contractor was found liable to the lot-owner since he had committed a trespass in making such disposition.

Another situation similar to a trespass, though not so called, is worthy of special attention from the engineer. A deep excavation is made close up to a property line and causes a part of the adjoining land to move or slide toward the hole. The law says the right to lateral support of one man's land by that of adjacent owners is an incident of its ownership, so it follows that any interference with that right is a wrong — a tort — and damages will accrue therefor. (See § 210, Lateral Support.)

163. NUISANCE. — A nuisance instead of being a direct injury to property, like a trespass, is an unlawful act done upon other property which causes injury or annoyance to a person in the *enjoyment* of his property. This unwarranted violation of another's personal right is a tort of which the law will take notice.

Examples: — Deposition of noxious vapours or materials upon the land of another; polluting a water-supply; letting water accumulate and stagnate

near another's premises; making unreasonable and discordant noises at unseasonable times, etc.

To protect the private rights of numerous persons (collectively, the public), the law regulates the inspection of the sanitary conditions of lodging-houses, hospitals, factories, mines, cemeteries, etc., and will prevent the pursuit of any offensive business in certain districts. (111 U. S. 756.) It is to be observed that these instances may frequently be torts against the community, instead of individuals, hence the subject would be more largely developed if we were discussing public nuisances — an important class by themselves.

164. NEGLIGENCE. — "Negligence is the failure to observe for the protection of the interests of another person that degree of care, precaution and vigilance which the circumstances justly demand." Twelve jurors chosen haphazard from the community often determine whether "negligence" was present in a given set of facts or not. They are frequently persons lacking exact knowledge or severe mental training. It is not surprising, therefore, that there have been wide variations in fixing the practical interpretation of the word. However, we can at least direct our minds toward the tort, "Negligence," and learn the spirit of the thing which is to be avoided.

So far as it is possible to define it, the definition is, as we have seen, couched in general and even vague terms. It may be practically put in the form of a test-question: — "Did the person, in view of all the circumstances, use due diligence and care to act as an ordinarily prudent and careful person would have acted under the same circumstances?" If he failed to do all this, then there is negligence, and liability in tort accrues.

The leading uncertainties, of course, are, what is "due diligence" under the particular facts of the case, and also, what degree of skill and intelligence, mental alertness, foresight and caution is to be presupposed in that fictitious personality, — "the ordinarily prudent and careful person."

To the student of the exact sciences, the attempt to analyze this situation may seem hopeless. The law books are crowded with cases upon it, because all accident cases are based upon the want of "due care" on the part of one person, and "negligence" in another. Hence its importance to engineering students, as future men of affairs.

165. ENGINEER'S DUTY AS TO NEGLIGENCE. — When a person accepts an engagement to work, he agrees that he has the requisite skill and knowledge to do that work. He agrees that he will use reasonable care and diligence in their application, that he will exercise his best judgment, and that he will be honest. He will be personally liable if an injury results from his negligence or failure to perform any of these conditions. It is immaterial how high his standing may be, if he has skill and does not apply it he is guilty of negligence, and liable to those who suffer through it. And if he does not possess the skill, he will also be liable to his employer as upon a breach of contract, for it was a part of his contract of employment that he did have the ordinary amount of skill possessed by those in the same profession.

In one case it was held that one who represented himself to be a builder with long and wide experience, could be dismissed for incompetence, and his employer might recover from him any damage sustained by reason of his deceit, as well as tort for negligence. It has also been held that engineers and architects are responsible for defective and insufficient plans, and will be responsible for neglecting to see that the structure is at least reasonably well built.

It has been said that failure to use skill is negligence, but if the methods adopted are not in accordance with the established practice in that profession, but are positively bad and injurious, then the case is not one of negligence, but of want of skill.

166. Where damages have been sustained by the owner by reason of his engineer's negligence, he may set off such sum against the wages due the engineer. This will also be true when an engineer is called upon in his professional capacity to make investigations, inspections, or estimates, and either through want of skill or negligence upon his part, the report or estimate is incorrect. He will be responsible to his employer for unnecessary expenses or injury occasioned in this way. And an engineer in the usual construction job, where he inspects or directs the inspection, is responsible for his failure to give such care and attention as would detect any important variation from the plans and specifications.

167. SOURCES OF LIABILITY. — In leaving this subject of torts, it may be said that there are at least three different ways in which liability may arise which are of especial interest to engineers. They are:—

(*a*) By act of the party, — i.e. by direct commission.

(*b*) By consent, that is, by ratification (see §§ 141-2) or acquiescence.

(*c*) By command, that is, by acting through an agent.

(*d*) By instrumentalities. This is important for engineers and contractors especially. Perhaps the typical illustrative case is water stored in a reservoir, or impounded behind a dam, which breaks away, causing great damage. It is the contractor's failure to act which is responsible for the damage, though the damage arose through an instrumentality in his custody, namely, the potential destructive power of the stored water. In such cases the contractor is bound to keep control of the water, or take the consequences in damage suits; he is said to keep custody at his peril. A close analogy is found in the keeping of an extremely fierce dog. So long as the owner keeps it chained up, and away from people, no one can complain. But if it breaks loose he must settle for the damage it does.

168. The storage and handling of dynamite and other explosives falls within this category, also. So does the damage done in boiler explosions, and injuries done through the presence of stray currents of electricity. Cases of electrical damage are where water pipes adjacent to electric power stations are damaged by electrolysis*, or where a workman or other person is seriously shocked, not through contributory negligence, but by reason of defective insulation or faulty construction.

Tort of Water Companies. — With reference to the liability of Water Companies for fire losses arising through insufficient water supply or pressure at street mains, hydrants, etc., it is generally held that the Company is not liable, since the contract they make with private customers or municipalities is not one of *insurance*, but merely to *supply water* in a businesslike and non-negligent fashion. There is sound policy in this view, since the Water Companies do not, nor are they permitted to, charge *insurance rates*, but merely a reasonable compensation for services rendered.†

169. RELATION OF TORTS TO AGENCY. — The law of torts enters into every legal relationship. Let us consider an illustration of its relation to the law of agency. Take the agency principle: " One who can legally act for himself can do the same act through

*See Appendix Note 10. " Electrolysis."

† There is a very thorough article on this topic in *Municipal Engineering*, August, 1909, p. 97, discussing the variations in rulings of the Courts in various States, and citing probably several hundred cases. Also *Eng. Rec.* Vol. 59, pp. 233 and 288.

an agent," and put it beside the tort doctrine: "A principal is liable for *all* the acts of his agent when they are done within the scope of his employment." Who then is liable if an agent commits a tort? Is he personally liable, or will the doctrine called *respondeat superior* (meaning that the principal is responsible for the acts of his agent) govern the case?

A railroad making a grade crossing improvement employs its own laborers in charge of an engineer, who is grossly negligent in providing suitable red lights, or other danger signals at night. Some one falls into the trench and is seriously injured. Who is liable for the damages?

The rule is that the *agent* is not liable to the injured person for failing to do his duty. Hence the railroad must settle, but it can sue the engineer for his negligence, since it is a breach of his contract of employment, as already noted. (See § 165.)

It has been shown that negligence is a tort. (§ 164.) Therefore if the person injured is to recover any damages it is because he has a right to pass this locality in safety. He whose negligence renders the place unsafe is guilty of a tort. In this particular case the same act of negligence is also a breach of the contract between the engineer and the Company.

170. When an agent commits a tort plainly within the scope of his employment, even by the direct orders of his principal, he thereby renders his employer liable, but he does not himself escape for that reason. His duty to do the right or to refrain from doing the wrong is no less than that of any other individual simply because he is some one's agent.

171. TEST QUESTIONS. — The real test for ascertaining responsibility in torts, whether principal and agent, either or both, are bound, is: — "Was the agent acting in the way ordinary persons would have acted in carrying out that particular line or piece of business?" "Was he acting in a way which the principal could have foreseen when he employed him as his agent?" "Does his contract of employment necessarily imply all that the agent in fact did?" If these questions can be answered in the affirmative, then the principal *is* liable for his agent's acts. If the circumstances fall outside the rules just given, and the act is a tort, then the agent is liable, but the principal is not. The greatest difficulties in applying the test questions will probably be on the question of "scope of employment." (§§ 146-9.) The student may also be still further confused by the fact that a case may easily fall within the ordinary powers of *an* agent but not within the powers of *the* particular agent involved.

CONTRACT PRINCIPLES INVOLVING TORTS AND AGENCY

172. INDEPENDENT CONTRACTOR. — An important subject which the engineer needs to understand thoroughly is that of Independent Contractor. The principle may be briefly stated thus: —

Where one contracts with another who exercises an independent calling, trade, or profession, by which the second person is to do certain work for the first, — and the second person is not subject to the other's control as to the manner of performance, but only as to results to be obtained, — then the second person is said to be an "*independent contractor,*" for whose torts (see § 156) and those of his servants the employer is not liable.

It will appear at a glance that this is the status of the person ordinarily known as "the contractor" in engineering circles. The fact that there is such a legal relationship, distinct and separate from that of agency (see §§ 132 to 153) is the *raison d'etre* for this whole text-book, and for the courses in "Contracts and Specifications" given in engineering schools. It is also the fundamental reason why "contracts and specifications" are necessary in engineering construction.

173. We have seen that in a pure agency, the principal has complete control and direction of the work in all its details. It is also true that by dealing with an "independent" contractor owners seek to avoid all the liabilities, risks, and responsibilities involved in carrying out their undertakings. In fact the principal complexities of engineering contract-writing (see Chapter IX) arise through a failure to appreciate and observe clearly the logical distinctions between the status of an agent and of an independent contractor. For if a contract-writer seeks on the one hand to create the status of independent contractor with all its inherent advantages for the owner, and by jealously-drawn and minute provisions for the control and direction of the work, seeks also to secure for his employer all the advantages following upon the relation of "master and servant," or simple agency, then his path will be an arduous one and strewn with many practical difficulties.

174. Mr. Wait points out that the *spirit* of nearly every engineering contract* is not to make the contractor an agent, nor a servant, but *par excellence* to make him an "independent con-

* See Appendix Note 16. "Types of Contracts."

tractor," and subject to all the liabilities of such. He further cautions engineers to beware of taking too great control of the contractor's work even when the specifications are most zealously drawn. Otherwise it is easy for the relationship of independent contractor to be changed, waived, modified, or altogether dispensed with by the *acts* of the parties. Then, if difficulties arose, the law might say, "Now we see the relation of master and servant, merely, and the ordinary rules of agency will apply." Hence it may be seen that the path of him who writes specifications (§§ 448 *et seq.*) is always narrow, often rough, and frequently obscure.

175. To add to the perplexities, it is the general rule of law, aside from engineering (which of course forms no exception), that the test-question is, "Who has *control* of the work?" If it is the contractor himself who handles all the administrative details of management, it will be well. But yet, in important specifications we frequently see minute provisions for the duties and privileges of the engineer governing the conduct and control of the work. In nautical phrase, such specification writers are sailing extremely close to a lee shore. A more extensive discussion of the problems met in contract-writing will be found in Chapter IX.*

176. IMPORTANCE OF DOCTRINE TO ENGINEERS. — We have sought to show, heretofore, that the spirit of the whole body of Agency law is found in the classic maxim, "*Qui facit per alium facit per se*," meaning, "He who acts by another acts himself." This proposition has a wide scope and often furnishes the solution to complicated questions of agency. Instances are common where accidents have happened through *some one's* negligence, as on construction work done by a contractor. The latter would perhaps be only too glad to lay the responsibility on the owner, or his agents, while the owner in turn will try to show that the tort arose through the "independent" contractor. The independent contractor doctrine is evidently sound and just, and is thoroughly established. The engineer who tries to write the contract and its specifications so as to stand upon both sides of the high fence dividing servants from contractors (as already noted, see § 174), is the man who is in an awkward position.

* See Wait, Eng. & Arch. Jurisp., Arts. 651-58, incl. for an elaborate treatment of Independent Contractor.

177. EXCEPTIONS TO THE RULE. — On a preceding page the basic rule was laid down that for the torts of an independent contractor the principal is not liable. Though this is true, yet an engineer should know that the rule has important qualifications. Suppose Y, a contractor, is employed by X, a landowner, to construct a sewer across Z's adjacent land, though X has no right whatever so to cross Z's land. Can X excuse himself from damages on the contractor doctrine? Plainly not. Thus exception (1): If X employs Y, a contractor, to do that which damages Z, X is liable. It appears that Y *may* be liable too, if the act was a tort in itself, as previously stated.

Again, suppose Z is a maker of transits. His shop is near X's land; in the shop an extremely delicate dividing-engine is mounted on a masonry pier carried to bed rock. X engages in building operations on his lot, and is obliged to use heavy charges of explosive in the same ledge which carries Z's pier, injuring the pier and the dividing-engine seriously. Can X shield himself behind the contractor doing the work, when Z sues him for damages? No, this would clearly be inequitable. Hence, exception (2): If X employs Y to produce a given result, and the only means thereto are necessarily injurious to a third person, X is then liable.

Further, suppose you are a surveyor with wide experience and high reputation, by reason of which Z brings you work which is to have your personal attention. To avoid delay through press of business, you turn the work over to Y who is a skilful surveyor, but of lesser reputation. You release all control of the work, and merely look to him for results. Through a gross blunder, an important line is wrongly established, your client suffers serious loss and thereupon sues you for damages. Are you shielded by Y? This illustrates exception (3) that "If X is under a duty to Z and employs Y to perform it, X is liable for Y's failure." (Mechem, Agency, Secs. 747-8.)

178. WAIT, ON INDEMNITY AND INSURANCE CLAUSES. — The foregoing gives point to the remarks of Mr. Wait under "Indemnity Clauses," showing certain present-day tendencies producing great hardships to the contractor.

"It has been the practice to make him liable for injuries to persons and property resulting from his operations in the erection of structures; also to make him liable for acts of negligence of himself and employees. Ordinarily the indemnity should be limited to the willful, negligent, and malicious acts of the contractor. He should *not* be liable to the owner for personal or

property damages of other persons which are the natural results of the undertaking, and could not have been avoided, even with the exercise of due care by the contractor."

"Under the general clause making the contractor liable for the misconduct of himself and employees, engineers and their employers have undertaken to shift upon him damages and injuries of every kind and from whatever cause. In one case a municipality endeavored to hold a contractor responsible to a mill-owner for diverting water from a stream into the intercepting sewer being built. The damage was not in any way caused by negligence or misconduct of the contractor, but resulted necessarily from the undertaking. It was held that the city, only, was liable."

This case will be seen to fall under exception (1) on the preceding page. "The modern tendency seeks to make the contractor an insurer against all possible risks arising during construction, and also to make him assume responsibility for the results of erection, completion, and operation of the works undertaken. If it *is* the intention of the parties to have the construction contract one of insurance also (or indemnity) it should be made very clear to the contractor that this is desired, when he in turn may add the necessary premium rates to the regular price of the work. And it is not to be expected that such premiums will be small."*

He further says that the questions as to what creates the relation of master and servant, and what is necessary to establish the status of independent contractor, are often difficult to determine. "There is irreconcilable conflict in the decisions, and no general rule can be laid down. Each case must be decided upon its own peculiar facts. This is certain, however, that the responsibility grows out of, is measured by, begins and ends with, the *control* of the parties doing the injury. If it is the owner's duty to control them in what they do, he is responsible for their neglect; but if this is not so they are not his servants. An exception is where by subsequently adopting and sanctioning these acts, he renders himself legally a participator in them." "The one who stands in the relationship of master to the wrongdoer is liable,— he who had selected him as servant, from the knowledge and belief in his care and skill, he who could remove him for misconduct, and the one whose orders he was bound to receive and obey, — this is the person who should be responsible."

179. Relation to Contract-Writing. — "In drafting an engineering contract great care must be taken to leave the mode and manner of performing the work, the hours and the days

* Waddell & Wait, Spec. and Cont., p. 159.

that the work shall be carried on, the means by which it is to be executed, and the persons by whom it is to be done, to the contractor. If by the terms of the contract the owner or employer retains the power to select and discharge the workmen, and can *control* them in the discharge of their duties, can hold them responsible and direct them as to the mode and manner in which they perform their duties, they may justly be regarded as agents and servants of the owner or company, and he (it) is responsible for their misconduct and negligence. (126 N. Y. 105.)

"The fact that a contractor is paid by the job does not make him an independent contractor if he is at all times subject to the control of the owner and works in the manner the employer directs, and employs such men as the owner directs. (68 N. W. Rep. 46.) When one undertook to complete a job that had been abandoned by another contractor, and was to receive the cost of labor and materials furnished, plus ten per cent additional, he was held to be an independent contractor and not a servant.

"The character and difficulty of engineering works render it desirable that the owner should retain a general direction and supervision of the work, and the courts have permitted this to a greater extent, probably, than in any other business." (Wait, Eng. & Arch. Jurisp. Secs. 652-9.)

Analytical Diagram of Chapter IV.—AGENCY, TORTS, AND INDEPENDENT CONTRACTOR

This chapter states a few principles of:

AGENCY (I)
- 1. Definition.
- 2. Creation
  - *a.* Power of Attorney.
  - *b.* Implication (Holding Out).
  - *c.* Ratification
    - (*a*) Essentials
    - (*b*) Undisclosed Principal
    - (*c*) Assignment of Contracts
- 3. Scope of Authority.
- 4. Delegated Powers.
- 5. Duties of Agent (Instructions).
- 6. Liability of Agent to Third Persons.
- 7. Engineer as Agent.

and of **TORTS** (II)
- 8. Relation of Common Law and Statutes.
- 9. Distinguished from Contracts.
- 10. Definition of Tort.
- 11. Torts enumerated.
- 12. Tort Principles
  - *a.* Presumed Consequences
  - *b.* Responsibility for Acts
  - *c.* Proximate Cause
- 13. Justification
  - (1) By License
  - (2) By Legal Authority
  - (3) By Public Policy
  - (4) Self-defense
  - (5) By Inevitable Accident
  - (6) By Act of Injured Party
- 14. Discharge
  - *a.* Agreement
  - *b.* Accord and Satisfaction
  - *c.* Judgment
  - *d.* Statute of Limitations, etc.
- 15. Specific Torts
  - *a.* Trespass
  - *b.* Nuisance
  - *c.* Negligence
    - Test Questions
    - Engineer's Duty
- 16. Sources of Liability
  - *a.* Act of the Party
  - *b.* Consent, or Command
  - *c.* Instrumentalities
    - Electrolysis
    - Stored Water
    - Explosives
- 17. Relation to Agency
  - *a.* *Respondeat Superior*
  - *b.* Scope of Authority

and shows their interrelations with Contracts in the subject of **INDEPENDENT CONTRACTOR** (III)
- 18. Definition.
- 19. Identified with Engineering Contracts.
- 20. Control of Work
  - *a.* Specification Writing
  - *b.* Waiver of Owner's Rights by Engineer
- 21. Importance of Doctrine to Engineers.
- 22. Exceptions to Rule of Liability
  - (1) Damages Another
  - (2) Means Necessarily Injurious
  - (3) Delegation of Duty to Another
- 23. Relation to Engineering Contract-Writing.

Questions, Chapter IV

AGENCY, TORT, AND INDEPENDENT CONTRACTOR

1. Define the relation of agency. Who may be an agent? Agency proved how?

2. Distinguish between " attorney in fact " and agency by implication.

3. Define " implied authority " of an agent. What is the test?

4. What burden is on him who deals with an agent? Agency created how?

5. What is the rule as to delegation of authority? How modified in engineering work? Why?

6. How can you tell whether or not authority may be delegated?

7. In agency what is the doctrine of liability by " holding out "?

8. What defines the extent of an implied agency?

9. Define ratification. When may an act be ratified?

10. Who cannot ratify? Why is this? Illustrate.

11. What are the essentials of ratification? Why must some ostensible principal be specified?

12. Outline the doctrine of " undisclosed principal." What is its object?

13. Explain assignment of contracts. Why are safeguards required to restrict it?

14. What is the fundamental rule as to assignments? Effect of an assignment?

15. What is the first test question as to scope of an agent's authority?

16. What is meant by incidental powers? What is the part played by custom and usage?

17. When may powers not expressly given nor conferred by custom and usage be implied against the principal?

18. What quality of service does an agent owe his principal? Illustrate.

19. What are the agent's duties as to handling money and giving notices relative to his agency?

20. What is the rule as to instructions, secret or otherwise?

21. When is an agent responsible to third persons?

22. Suppose an agent misrepresents the extent of his authority,— what result?

23. How may an agent ALWAYS *relieve himself of responsibility?*

24. Name some of the duties which an engineer performs as an agent.

25. When a professional man contracts for employment, what does he warrant to be true?

26. With what errors and results is he chargeable?

27. What does he NOT *warrant in such a contract of employment?*

28. State briefly your conception of the common law; of the "unwritten" law.

29. What is the relation between common law and statutes? Their relative weights, and the applicability of each?

30. Distinguish between torts and contracts. What are the "natural rights"?

31. What is meant by "proximate cause"? Give an original illustration.

32. Explain "justification" in tort.

33. Illustrate the rule that inevitable accident may serve as a justification.

34. Recite upon contributory negligence.

35. Name the three leading ways in which a tort may be discharged.

36. Explain meaning and effect of the Statute of Limitations.

37. Define trespass. Is there more than one kind? If so, illustrate.

38. What is a nuisance? What is the basis of the tort?

39. Define negligence. Who determines its existence in a given case?

40. What are the test questions for the detection of negligence?

41. What are some of the engineer's duties as to negligence?

42. What are the principal sources of liability in tort?

43. Give an original illustration of a tort arising through instrumentalities.

44. Summarize the statements in reference to electrolysis.

45. For what torts is a water company liable? What reasons for your answer?

46. Explain carefully what is meant by "respondeat superior."

47. What are an agent's responsibilities with reference to torts?

48. How will you tell whether the principal or agent, or both, are liable in tort?

49. What is embraced in the phrase "Scope of employment"?

50. What is an " independent contractor "?

51. Explain the relation of independent contractor doctrines to this text and to this course.

52. Wherein are the principal difficulties in engineering contract-writing? How do they arise?

53. What is the difference between the responsibilities of a servant or an agent, and of an independent contractor?

54. What is the aim of all engineering contracts? Give reasons for your answer.

55. How may an engineer inadvertently waive the rights of his employer when dealing with a contractor? With what results?

56. What is the test for determining whether one is an independent contractor, or a servant?

57. What one principle underlies the whole body of agency law?

58. Give an instance where an employer will be liable for the acts of an independent contractor.

59. Suppose a contractor employs methods necessarily injurious to a third person. Who must settle for the damage done? Why?

60. State the third exception to rule of liability of independent contractor.

61. Summarize Mr. Wait's remarks under "Indemnity Clauses."

62. What can you say about treating a construction contract as one of insurance?

63. Is one who works " by the job " an independent contractor? Discuss the general aspects of such a situation.

64. How is the independent contractor doctrine regarded in engineering jurisprudence? Why is this?

General Review Questions and Problems on Chapters I-IV

1. A is the purchasing agent for the city of M. and in his own name makes a contract with X for a car-load of sewer pipe, X being unaware that A is such an agent. Upon learning of the agency he (X) concludes he should have charged more. Can A enforce the contract? Why? Is this a case of undisclosed principal?

2. A is the agent of S and has extensive dealings with X in this capacity. A is discharged by S but continues to deal with X as though he were still S's agent. What are the rights of the parties under such a contract?

3. P is the owner of several plants for the making of concrete blocks and A is placed in charge of one, with instructions to hire 30 men only. He does in fact hire 33. Who should pay the wages of these three workmen? Why?

4. (a) *A was paid in advance for high carbon steel of a specified quality, which he was to ship to B as soon as it could be made. Upon receiving the metal B tested it and found that it was not up to specifications. Therefore he refused to accept and sued for a return of the purchase price. Should he recover?* (b) *Suppose the metal to have been shipped by sea, by the S. S. Line named by buyer, but that the vessel was wrecked, and the cargo lost. In case B sues for a return of his money, should he win? What facts must he establish?*

5. Suppose that the charter of a city provided that all contracts relating to the construction or repair of streets should be made by the Board of Public Works only. A, who owns an asphalt repair plant, is engaged by the City Engineer to patch numerous street surfaces.

(a) *Can A recover as per the agreement made with the Engineer? Why?*

(b) *Suppose A has spent a large sum in doing the work, do you think he can recoup himself in any way? If so, how?*

6. Enumerate the essential elements of fraud, and tell why each must be found to establish a suit for damages.

7. Name the classifications under " Unreality of Consent " as affecting contracts, and indicate briefly the circumstances where each arises.

8. When will inadequate consideration invalidate a contract? Illustrate. What is the position of the courts in this matter?

9. A agreed to plaster B's house, but before completing the job the house was completely burned. What are A's rights? Discuss briefly.

10. A pays B $800 for a narrow-gage dinkey engine in the belief that it is standard gage, which alone is suited to his purpose.

(a) *Can A recover the money, and if so, upon what grounds?*

(b) Suppose B had intentionally concealed the fact of gage. What result?

(c) Suppose B had innocently failed to state the gage, assuming that " of course " A knew. How do the parties stand?

11. Cite four examples of contracts opposed to the common law, and discuss briefly and in a general way the topic of " Illegality."

12. (a) A agreed to pay $1,000 for a patent which B was about to take out, but B died before it was perfected. Can B's estate force A to pay the $1,000? Give your reasons in answering.

(b) Suppose A had paid the money in anticipation, but B died as above. Can A recover the money? State carefully why or why not.

13. Give an illustration of technical misrepresentation in making a contract. Tell its exact effect upon the contract.

14. Name the four essentials to a valid contract, and recite as far as possible upon the topic " consideration."

15. " Qui facit per alium facit per se,"—Translate, and recite upon it.

16. When a contract is made with an agent, what precautions must be taken?

17. What is meant by a " void contract "? Explain " voidable."

18. An important witness in a lawsuit is offered $500 to stay away during the trial, and does so by leaving the State. Later he seeks to enforce the contract against the attorney who made him the offer. Can he recover? Give reasons.

19. When is an express contract completed? Is the rule of universal application?

20. A contracting company has built a large dam with the understanding that a manufacturing company will buy it and the water-privilege upon completion of dam. The price is to be $10,000, but after completion, though before any papers are passed, the dam is carried away by a phenomenal freshet. Builders sue Mfg. Co. for $10,000. Can they recover? Why?

21. What is an acceptance, when necessary, and how made?

*22. In your contractual relations with * * * * College, state what the consideration is on both sides.*

23. An offeree writes, in respect to a previous offer, " I accept your terms, but ——— etc." Is there a contract made? Why?

24. A contractor agrees to build a wall of reinforced concrete, as per plan, furnishing all materials. Later he refuses to furnish steel rods enough, because of their high price. Upon your objection, he finally agrees to finish up as per contract if you will give him $50 for the last rods, which you say you will do. Upon completion he sues you for the extra $50. Can he recover? Why?

*25. Into what class of contracts will your relationship to * * * College fall? In this contract, point out the offer, and state the facts that constitute the acceptance. Analyze the situation and show the facts, acts, or implications which go to make up the mutual promises or consideration.*

26. A contractor, wishing to secure a large paving contract, offers to pay his competitors $100 each if they will refrain from bidding, which they do. Later they sue him upon this agreement. Can they recover? Why, or why not?

27. Tell what you understand by "mutual promises."

28. What is meant by "liquidated damages"?

29. What is the object of the abrogation or cancellation clause in a contract?

30. "Lex loci rei sitae," — Explain carefully.

31. State the gist of a proper payment clause in an engineering contract.

32. In what way may alterations be made in a contract?

33. What is the status of a contract made with an unauthorized agent?

34. What constitutes an "express" contract?

35. What is meant by "damages" under a contract? When are they recoverable, and by whom?

36. What is meant by a gratuitous promise? Illustrate.

37. A writes to B offering to sell him 50 barrels of tar for waterproofing at $2.50 per barrel. On the same day, but in ignorance of this offer, B writes A saying he is in the market for 50 barrels tar, and that he is willing to pay $2.50 per barrel for it. Without further steps, is there a binding contract between them? Was there an offer and acceptance, and a genuine "meeting of the minds"?

38. A mails a letter to M accepting an offer from him, but a few hours later, finding that the contract will not be advantageous to him, A sends a telegram withdrawing and declining the offer. Can A be held to the contract? Look at this in connection with the Massachusetts rule that the acceptance must be received by offeror to be binding, and note that the telegram is received before the letter. (b) *Consider the case as occurring outside of Massachusetts.*

39. A makes an offer and in it states that an acceptance is to be mailed but that it shall not be binding until it is received. Is such a condition binding? Does this appear to be a valid condition precedent, and if so, what is its effect? (*130 Mass. 173.*)

40. A offers to sell a certain piece of land for $1,000. B makes a counter offer to purchase for $750, but A declines this. Later B changes his mind and concludes to accept A's offer to sell for $1,000, but now this is declined by A. Has B any right against A by which he can make A accept?

41. Define "Negligence."

42. How does liability for torts arise?

43. What objects are sought in developing the "Independent Contractor" doctrine?

44. What is the fundamental maxim of the law of agency?

45. Define "proximate cause." Where and when is the rule applied?

46. What is "Ratification"?

47. What law governs a contract?

48. What are dominant and servient estates?

49. How may a contract be discharged?

50. What is the difference between express and implied contracts?

51. What is meant by "condition precedent"? Its relation to the contract?

52. A and B have the boundary line between their lots surveyed and marked. They acquiesce in the line. Five years later A finds that by a mistake the line was located so that his lot is five feet too narrow. Can he have the line changed?

53. A contract provided for erecting an apartment house 180 feet high for $50,000. The structure was completed, but while $10,000 were still due on it, a statute was found forbidding the erection of any building over 150 feet high. Thereupon the owner refused to pay the balance. What were the contractor's rights?

54. What are the leading grounds of illegality to be avoided in making engineering contracts?

55. Explain carefully how custom is a source of law. Can you tell why this is true?

56. Discuss adjudication of former cases as a source of law. Why is this practice useful and necessary?

57. What is a statute? By whom made?

58. Explain what is meant by delegation of authority? When permissible?

59. Is contracts a common-law or statutory subject? Give your reasons.

60. Suppose you are authorized to say that a building contract is properly performed. Can you bind the owner by adding certain terms to the contract and getting them performed by the contractor? Tell what principles are involved.

61. (a) *Suppose a traveling salesman is employed to visit the trade in outlying districts, and hires a team to transport himself from place to place. Is the firm chargeable with the livery bill? Why, or why not?*

(b) State carefully the principles involved here, tell what sort of contracts were made, if there were any.

62. Discuss the phrase, " The unwritten law."

63. How is an agency created? Who may be a principal, and who an agent?

64. " Time is of the essence of every engineering contract," —explain carefully the meaning of this phrase.

65. A Steamship Co. enters into an agreement with X & Co., coal dealers, for supplying them with coal for its vessels during the year. They receive coal from January 1 to August 1 of that year, when the S. S. Co. sells its vessel and refuses to take any more coal.

(a) Can X & Co. make them take the coal for the rest of the year?

(b) Can X & Co. recover damages, and stop delivering?

66. Suppose you are running a surveying office, and while working on Broadway a runaway horse knocks over your transit, causing $50 damage. It appears that your instrument-man was negligently at a distance from the transit at the time of the accident, and was otherwise engaged on his own matters; that the horse was hitched to an ordinary drop-weight used by grocers' men; that he was frightened by a particularly noisy automobile driven with recklessness by A, the chauffeur of P. What are the remedies of the respective persons?

67. J sued a R.R. Co. for injuries sustained by reason of a defective bridge. A R.R. Supervisor had heard of the defect, a mere rumor, but negligently omitted to either verify the rumor or report to the company. Can J recover damages? Reasons?

68. Give the leading rules as to responsibility in tort. Illustrate what is meant by " instrumentalities."

69. S was awarded damages from a gas company for injuries due to an explosion due to a gas-leak. The gas company in turn sues an Electric Railway Company claiming the leak was due to electrolytic action upon their pipes by stray currents from the railway. Should they recover?

70. Referring to contracts, what is meant by " waiver "? " Breach," — tell what it is, the questions presented, and its effect.

71. P owned and wished to dispose of an automobile in which there was a serious defect. He instructed his chauffeur to sell the machine, and after carefully explaining the defect told him to point it out to the purchaser. The chauffeur sold to T, not only omitting to disclose the defect but representing that the machine was perfect and in first-class condition. Can T do anything about the matter? What, and why?

72. (a) A writes to the Universal Cement Co. saying he will take 100 barrels of their cement at $2.50 barrel. Is there a contract? Why?

(*b*) *Suppose that previous to this the Universal Co. had quoted him with price $2.70 per barrel. Is there a contract now? Why?*

73. A offers by letter to sell a hoisting-engine (second-hand) to B for $400. B replies that he will give A $400 for the engine if he will first put it into thorough repair. Was there a contract? If not, why?

74. X telegraphs to Y to ship him a 100 k-w generator at once. Later in the same day he telegraphs withdrawing the order, but the second telegram is so delayed in transmission that the dynamo has been forwarded. Can Y make X take and pay for the machine? Give your reasons.

75. A, who is a lumber dealer, contracts to deliver a cargo of lumber on board a certain vessel within ten days. He began the delivery but a sudden heavy frost made it impossible to navigate the canal by which the lumber came from the mills to the shipping point. For this reason the cargo was delayed 20 days. Does this delay render A liable in a suit for damages sustained by reason of it? Give your reasons fully.

76. C gives a bond for $5,000 as a guarantee that B will faithfully perform a contract. Later B and the owner agree upon a more expensive design and change the plans without consulting C. Finally B fails to fulfill his contract. Will C be held liable? Discuss the situation.

Chapter V

REAL PROPERTY

This chapter defines the general term "Realty," its subdivisions into Land and Water, and the degrees of ownership which a person may have in each, including a brief discussion of the rights in subterranean and surface water, water courses, and in "fixtures" to land.

Then the nature of the various "estates" in land is sketched, — as fee simple, life estates, easements, etc. An outline is given of the methods by which title to land may be acquired, — as by prescription, adverse possession, deed dedication, and eminent domain, — and the contractual elements underlying the acquisition of title are emphasized, when they exist.

The underlying purpose has been to select topics important to the engineer substantively, and which will assist him to more fully understand his relation to the law of Real Property when he is a party to a contract which has reference to it. Thus Deed Descriptions, their interpretation, and the Duties of the Surveyor in relation thereto are carefully considered, as well as the privileges of municipalities as to their water supplies and sewage disposal, the practical burden imposed by the rule of "Lateral Support," etc., etc.

An engineer's duties frequently cause him to deal with the property of others, hence familiarity with a few definitions and principles pertaining to property may assist the student or engineer better to appreciate the significance of his acts. It may also stimulate his interest to a further inquiry into the law of a subject so fundamental to society, since ownership in land is obviously the source of all wealth.

180. LAND. — At the outset it is to be noticed that property is of two general classes:

(*a*) Real estate, real property, or realty, all comprised under the general head, " Land "; and

(*b*) Everything which is not land is, in general terms, personal property, personalty, or a chattel.

This is but a very broad classification, however, and various other intermediate property rights exist between these two, but they cannot be discussed here. Speaking generally, " land " includes the surface of the earth, with all above and beneath it. When one is the owner of land he owns everything from the center of the earth to the highest heavens, unless other estates have been created lying above or below his. Thus, one might possess land and reserve the right to till its surface, selling the

coal beneath it to another person, and the right to the petroleum, or gas underlying the coal, to still a third person.

181. MATERIALS OF CONSTRUCTION. — By an apparent anomaly, everything fixed or firmly attached to the soil is "land," — as houses, structures, fences, trees, foundations, etc., etc. But things which are capable of being moved, or carried away, are personalty, or chattels. Thus building materials, — as stone, sand, lumber unattached to the soil or to any structure,— are personalty, though they become realty when built into something. Again, while a growing tree or other product of the soil is realty, when it is cut down or detached from the soil it is personalty. Ice cut from ponds or rivers, and soil dug up to be used elsewhere, are personalty, and this is also true of minerals and metals, which are realty while they remain imbedded in the earth. And so, too, coal, oil, petroleum, percolating waters, and natural gas, while in the earth are realty, but when released or brought to the surface they become personalty.

The distinction between realty and personalty is far from being an academic one, however, since the whole body of law with reference to each of the two is radically different.

182. TRADE FIXTURES. — To be a "fixture" the article must be annexed to the land (or building, etc.), and the manner of doing it must be taken into account. So must the relations of the parties affixing be considered with reference to the parties owning the estate, the use of that part of the building where it was annexed, and the *intention* of the parties doing it. This rule shows why many cases hold that if an article cannot be removed without injury to the remaining estate, this shows the intention of the parties better than anything else. The rule also shows why there should be more indulgence between landlord and tenant than between grantor and grantee. (See § 216.) Therefore if a tenant erects expensive structures for carrying on his business which cannot be removed without injury to the premises, yet that is no reason for supposing that he intended to *give* them to his landlord. If a machine, for example, is fixed to the realty in order to be stable for its ordinary uses, and is securely fastened for that purpose only, then it is personalty notwithstanding such fixation.

This subject of "Fixtures" has provoked much litigation. Suppose a man bought a tract of land upon which was erected

a steam saw-mill, among other things. No specific mention is made of the mill in the deed which conveys the land. The seller, before delivering possession of the land, removes and carries away the boiler and engines, though they may in fact have formed the principal part of the subject matter of the transaction. The seller claims the right to remove this machinery, saying they were trade fixtures. The buyer claims otherwise, because of the general rule that anything attached, or built into, or upon, the ground is realty. Thus the ownership of several thousand dollars' worth of property will hinge upon the proper definition of "realty."

183. WATER. — Though it is a species of real property, water is not in general the subject of such exclusive ownership as is land. We shall now proceed to discuss several illustrations of this fact.

Persons who own land along a stream — abutting on it — do at common law respectively own the land beneath the stream, to the center-line or "thread" thereof. (There is an exception to this if the stream is navigable, or the tide ebbs and flows in it.) But even though the land and the water are inseparable, in such a case, such owners can only make such use of the water as will serve to gratify their ordinary wants, since the owners of land below them have equal rights to have the water in the stream come to *their* lands substantially undiminished in quantity, and not materially altered as to quality.

184. Such parties as we have just been discussing are called "riparian owners." A considerable body of law deals with riparian rights and ownership, which will be of especial importance to the civil engineer and others interested in hydraulic power developments, and in boundaries on or near water. Mr. Wait, in his work "Operations Preliminary to Construction, etc.," has made an elaborate compilation of cases dealing with the ownership, use, appropriation, obstruction of streams, etc., to which the reader is referred. Only a few cases which seem of particular interest to engineers will be mentioned here.

185. OWNERSHIP IN SUBTERRANEAN WATERS. — There are two classifications:

(*a*) Percolating waters; and (*b*) those having a definite channel.

Percolating waters are held to be the property of him in whose

land they are. Hence one may intercept the natural percolation on his own land, even though it destroys his neighbor's well or spring. It has been argued that this is so because the purchaser of land buys in ignorance of the hidden currents of water which may be flowing to or from the land; hence he cannot be supposed to have bargained for any right to a secret flow in another's land. Thus, for example, a city was held not liable for damage done through the building of a sewer by it in a street, though this cut off the flow in a spring upon the land of an abutter.

Definite Channel. — With reference to water flowing in a definite underground channel, it has been held that in order to be accounted such, the channel should be ascertainable by persons of ordinary intelligence and attainments, without recourse to digging, or to the testimony of scientists, or experts in geology. When so found, the owner of the land under which such a stream flows may tap it and make a reasonable use of the water, as may riparian owners generally.

186. Pollution of Underground Waters comes under the fundamental rule of torts (see § 156) that one must not use even his own property so as to injure his neighbor. Therefore if he permits the percolation of poisoned or contaminated water from his land to that of another, he will be liable for the damages done. At his peril, he must keep such deleterious materials upon his own land. Familiar examples are: Oil-tank seepage, leakage of gas-liquors, manufacturing, or chemical wastes, etc., etc.

Though briefly stated, the logical development of the principles just given will furnish the solution to many practical questions.

187. OWNERSHIP IN SURFACE WATERS. — Waters which have no well-defined channel or banks are known as "surface waters." Natural depressions in the land through which surface waters from adjacent lands frequently flow are not water courses. Surface waters include those which are diffused over the surface and are derived from rains or melting snows, or drainage from the uplands, making wet, springy, or boggy grounds. But it will be considered a water course if from time immemorial the water from rain and melting snows has accumulated in large quantities on the slopes of hills or mountains, and has at regular intervals [seasons] descended in clearly marked gullies or ravines, carving a distinct channel which shows unmistakable evidence of the erosion of water. (Amer. & Eng. Ency. Law.)

Numerous cases have defined what, in that particular instance, constituted a water course. Probably enough has been said, however, to indicate that the distinction between a water course and surface water is sometimes important. It is suggested that one with the trained intelligence of a civil engineer should generally be able to determine the fact when a case arises.

188. The surface water belongs to him who possesses the land upon which it lies, or over which it passes. Hence he may do with it as he sees fit.

An interesting question arises with reference to the flow of surface water before it reaches one's land. Can it be prevented from coming upon the land? In most of the Eastern States the common law rule is followed to the effect that a lower owner may, at his pleasure, repel or divert surface water from coming upon his land.

From this it would appear that if B, owning lower land, finds it a benefit to have the surface water come to him from A's upper land, yet B has no redress if A diverts it before it reaches the upper land, thus depriving B of the benefits he would derive from the water.

There is, therefore, a prominent distinction between the quality of ownership which may be had in surface waters, and in water courses. In the first, the ownership is exclusive; in the second it is strongly qualified.

189. SURFACE DRAINAGE INTO WATER COURSES. — One may drain water from his own land into ditches, and thus perhaps increase the flow and accelerate the current discharging upon a lower owner. But if the ditching is of a reasonable and proper sort, is for the purpose of improving the upper land and not intended primarily to injure the lower owner, there can be no claim for damages. (81 N. Y. 86.) But as it is universally held that the upper owner has no right to collect surface water into ditch, drain, canal, or other artificial reservoir and then discharge it in a volume upon the lower lands, it will be seen that the upper owner's rights lie somewhere between these two limits. To determine them in a particular instance will be " a question of fact " for a jury.

190. Rights of Municipalities. — The control of surface waters is often a matter of some moment to municipalities. At common law (in the absence of statutory or constitutional provisions), a city incurs no liability to abutting owners by varying the disposal of surface waters in skilfully carrying out duly authorized municipal improvements.

In Minnesota it has been held that the city is not liable for

failing to provide sewers to carry away surface water naturally coming upon a citizen's lot. And in Massachusetts it has been held that a city incurred no liability, even if it prevented water from a flooded house-lot from coming into its sewers, though the excess of water was a direct consequence of changes of street grade in the vicinity. (136 Mass. 119.) New York decisions are to the same effect, and probably many others. As the different jurisdictions exhibit a variety of views in dealing with surface waters affected by act of a municipality, cases contrary to those just given may doubtless be found.

It may seem remarkable to the student that a private person can be injured as above indicated, and yet have no redress. The reason is probably to be found in public policy, — the greatest good for the greatest number benefited by the municipal improvements,— for a municipal corporation, as a great aggregation of persons, should have more extensive privileges than a mere private individual. In cases of this class the element of negligence in performing the work is a prominent factor which may give results opposite to those given above. The existence of modifying statutes on the matter is likely, and has been already noted.* (See § 265, Liability of Municipal Corporation in Tort.)

Railroads are also often involved with questions of surface water, because of their extensive embankments upon low lands. They have much less extensive privileges than municipalities in this respect, and are dealt with merely as private individuals. If they cause damage by varying the flow of surface waters they are responsible for it; but this rule like every other principle of the common law, is susceptible of frequent changes by specific statutes.

191. WATER COURSES. — As has been said, the owner of land on a natural stream has a right to have the water come to him substantially unimpaired as to quality and undiminished in quantity. If the waters are fouled by the operation of factories, mills, or works, the operators are liable in damage suits, or subject to an injunction from the injured riparian owners.

Streams flowing through populous districts with extensive manufacturing interests will ordinarily have their waters considerably polluted, and it is not meant that the purity shall be absolute, since this rarely exists even in a state of nature. How-

*See Appendix Note 11, "Approp. of Munic. Water Supp."

ever, any pollution of a stream that renders it unfit for the usual and proper uses hitherto obtaining, is a nuisance. It can be abated at law, and damages had. What is an "unreasonable" pollution is always a question of fact for a jury, and therefore no rules concerning it can be given here.

192. Sewage Disposal Into Streams is important to the engineer professionally, since sewage disposal is an engineering specialty. From a sanitary view-point it is a vital matter to the community generally. Mr. E. B. Goodell, in Water Supply Paper No. 103, of the U. S. Geol. Survey, reviews the "Laws forbidding the Pollution of Inland Waters" in a comprehensive manner. He says (p. 21), in referring to municipalities: "As riparian owners they have the same rights and are subject to the same restrictions in the use of water flowing over their lands as private owners. That is to say, they may deposit sewage in the water if it causes no injury to property below them. And if a statute authorizes the construction of a system of sewers to discharge into a specified stream, even then there must be no nuisance. If it were otherwise, that is, if the lower owners had no redress, the constitutional provision against taking private property for public uses without just compensation would be violated."

Mr. Goodell notes that there is beginning to be considerable activity in this matter among the law-makers throughout the country. The legislation all tends to prevent stream-pollution, particularly in the populous districts, though its effect upon the public health has only begun to be popularly realized in comparatively recent years.

Disposal Into Streams After Purification. — In Eng. Rec. Vol. 51, No. 5, there is a brief editorial reviewing a decision of the Supreme Court of Massachusetts in a suit brought against the City of Worcester, based upon its alleged carelessness in purifying its sewage. (See also, 72 N. E. Rep. 326.) The decision points out that since the benefits of sewage purification are not alone confined to the residents of the city doing it, but that it also benefits a population lying outside its limits, the State has determined that it is no more than fair that those receiving such benefit should contribute to the expense. The decision also decides that a city cannot be held for small nuisances which it may create after it has exhausted all reasonable steps to purify its sewage.

193. Obstructions. — If a city or town negligently constructs

or maintains a bridge or culvert across a river, causing the water to flow back and injure the land of a private person, it is liable in tort. The same is true if it empties a common sewer upon such land to the owner's injury. These results are reached not necessarily because of negligence, but in the first case, at least, because of injury to another's property rights outside the limits of the public work.

194. Mill Privileges. — A few old Massachusetts cases will be given without comment. A owns a mill, and B owning land below him builds a dam which sets the water back to the serious interference with A's wheel. A has a right of action against B. (9 Mass. 316.) Or if C above A builds a dam for irrigating his land, and uses practically all the water for that purpose, he will be liable to A. (13 Mass. 420.) But such injuries must be real, and not theoretical. (9 Pick. 59.) (See also § 208.)

ESTATES IN LAND

195. DEGREES OF OWNERSHIP. — Before attempting to show any of the relations between the law of contracts and of real property, it will be necessary to make a short statement outlining the degrees of ownership in real property known as "estates." Having learned the meaning of a few prominent technical terms pertaining to the subject we may then talk intelligently about the situations wherein they arise.

"Estate" is a word with a distinct technical meaning, and signifies the degree, quality, nature, and extent of one's interest or ownership in land.

The term should not be confused with the use of the word in "real estate," where it is equivalent to "land," or "land and buildings," and designates a physical substance. "Estate" is the name of the "incorporeal" *right* in the land.

196. FEE SIMPLE. — When a person is absolute owner of land, — in legal phrase, "the possessor of all legal rights, titles, and interests therein," he is said to be the holder of the *fee simple*, or to use the shorter term, the holder of the *fee*. (A study of the origin of this word would take us far back into English feudal history, foreign to our present purpose.) To hold a fee means, therefore, that no other person whatsoever owns a paramount interest in the land, though various lesser estates in it may be existent. And if the present owner in fee is not dispossessed by

action of law, and he fails to make any other disposition of the land during his lifetime, it will descend to his heirs.

We have said that the holder of the fee is the *absolute* owner of the land. The word absolute cannot be compared. It will appear, therefore, that the "fee" is the paramount title to real property known to the law. One who succeeds to the title of a holder in fee, thus becomes, in turn, the absolute owner.

197. LESSER ESTATES. — The common law recognizes estates less than fee. A familiar example is a landlord renting his real estate (be it for a greater or less time) which creates an "estate for years," (or "at will") as the case may be. Another common case is an "estate for life," perhaps most commonly created in wills. By "life estate" is meant that a certain interest of a desired degree or quantity is conferred upon some one, to be possessed and enjoyed by that person during his lifetime, and to terminate with his death. A "life-tenant," therefore, has no power to give away or to sell his interest so as to make the term depend upon any life but his own. But he may withdraw his rights, and make over the estate in favor of the "remainder-man" as the person is called who is to succeed to the fee after him. A widow's "dower" is precisely this sort of an estate.

From the foregoing it may be seen that the holder in fee can convey away any lawful estate of a lesser degree and still retain the fee, since the whole is greater than any of its parts. And it is equally obvious that if a person possessed of the fee does convey a lesser estate, the person taking the lesser estate does not succeed to the fee, — a distinction sometimes lost sight of. This distinction becomes important when the significance of "reservations" and "exceptions" in deeds of lands is under discussion.

198. EASEMENTS. — Another estate less than fee (sometimes very small indeed) but about which much is heard is called an "easement." An easement is the right or privilege to use the land of another person without giving him any compensation therefor. It is a right possessed by the owner of one piece of land to use the land of another for a special purpose, only.

For example, suppose I own a tract of land abutting on a highway, but sell the rear half of my lot to another person who owns no land contiguous to the piece I sold him. Here the law will imply an "easement of access," and whether I mentioned it or not in my deed to him, he would have a "right of way" to go out and in across my lot to his, and this he may do even against my consent, and still not be a trespasser. It is only proper to say, however,

that in such a case most fair-minded persons would have *granted* this right of way in the deed.

199. Speaking generally, an easement can only pertain or attach to *land*, — it is distinctively a part of the law of real property. In the case last put, the buyer's would be termed the *dominant* and mine the *servient* estate, and two such estates are necessary for the existence of every private easement. Further, this easement of access would be said to be *appurtenant* to the lot I sold, and perhaps this will sufficiently explain this term, so frequently found in deeds. There is a great variety of easements, such as the right to the use of a drain; to use an alley for specific purposes; the right to take ice from a pond; to have access to an ice-house; to have free access to light and air, with reference to buildings upon a particular site, etc., etc.

200. Party Wall. — When engaged in architectural work and building construction, the engineer will need to understand the easements relative to a "party wall." This term refers to a wall, erected on the line between two adjoining owners, for the use of both parties, and resting partly upon the land of each. It is frequently built by one owner in advance of the needs of the other, and unless there are statutes providing that the expense of construction shall be borne jointly, numerous cases have held that if only one owner wishes to use the wall, he must bear the expense of construction. In such a case, the soil of each owner and the part of the wall belonging to him is burdened with an easement (or "servitude") in favor of the other owner, to the end that it may afford a support for the wall and building of the other person.

201. If an easement is not appurtenant to some piece of land, and this is sometimes the case, it is called an "easement *in gross*." A typical illustration of an easement in gross is found in the public use, as a highway, of strips from the land of two adjoining owners, when such strips of land have not been acquired by deed, dedication nor eminent domain, but remain the property of the original owners. In such an instance the public is said to have an easement of passing and repassing in those particular pieces of land. This practice is common in many parts of the country, and may give the surveyor trouble when he is called upon to locate the boundaries of a piece of land adjacent to a highway. He will avoid trouble on this score if he ascertains from the

records (1) whether the original owners gave or "dedicated" the strips of land for the highway when it was laid out; or (2) whether the public acquired an easement by long-continued use (see §§ 204-7) of the strips in question (in which case, the *land* in the street still belongs to the adjacent owners, one-half to each); or (3) whether the land for the highway was acquired by purchase on the part of the town or county, or "taken" by eminent domain. (See § 235.) In the first case, the land in the street *belongs* to the public or there may be an easement, merely, according to the language used; in the second case, the public has an easement in the land, only, and if the street were to be abandoned, the strips of land would revert to the abutting owners; in the third case there may be a fee taken or the eminent domain may refer to an easement, merely.

202. Creation and Extinguishment of Easements. — It is held that an easement can only be created by a deed (see § 214) or by prescription, or operation of law. (See §§ 198, 204-7.) They may be destroyed, or extinguished in a variety of ways, however. Thus, when the estate to which it is appurtenant ceases to exist, the easement is destroyed. The same is true if there is a "merger of estates," meaning that the same person comes to own both the dominant and servient estates. An abandonment has the same effect, but to be effective, this must be more than a mere temporary cessation in using the easement. If the easement was created by prescription, when the purpose for which it was created ceases to exist, then the easement passes out of existence, also. An old Massachusetts case holds, moreover, that whether an easement is acquired by a known grant or by prescription, it may be extinguished, renounced, or modified by a *parol license* granted by the owner of the dominant estate, and executed and carried into effect by the owner of the servient estate. (68 Mass. 302.)

From the foregoing it will be seen that a person who owns land subject to an easement has had a slice, as it were, taken out of his fee simple. His ownership is something less than that major title so named.

MODES OF ACQUIRING TITLE IN LAND

203. The title to land may be transferred in various ways and three general modes of passing the title will be briefly considered, as follows:

(*a*) By an act of a Party, — as Prescription, and Adverse Possession;

(*b*) By Deeds, — which are formal contracts;

(*c*) By Operation of Law, — as Accretion, Eminent Domain, and Dedication.

204. ESTATES BY PRESCRIPTION, AND ADVERSE POSSESSION. — A topic often closely allied to easements is "title by prescription." But before discussing this topic mention must be again made to the Statute of Limitations (see § 161-[6]), which if applied to real estate refers to a period of twenty years (or thereabouts, in most jurisdictions).

By the older common law, one who had a right of action (i.e. grounds for a lawsuit) against another person, could not lose it by the lapse of time. It will be easily appreciated that these facts offered a rich field to imposters who could thus dig up some hoary claim aged a century or two, when of course everybody who knew enough about the matter to be a witness was long dead. There was another positive and great disadvantage in allowing the courts to be hampered by a mass of ancient troubles, when present current business demanded all their attention. Hence as far back as the time of King James I. there was passed this "Statute of Limitations of Actions, and for Avoiding Suits at Law." The fundamental proposition as it now concerns us, is that if a person possessing the fee in land abandons it for a long enough period, he loses his title. Though perhaps the incomer is a mere squatter only, yet if he holds the land continuously, openly, etc., and claims to hold under a right adverse to that of the owner, and this condition exists for twenty years (or any other statutory period) then the squatter becomes absolute owner of the fee by operation of the legal doctrine termed "Adverse Possession."

Suppose, for example, that A conveyed to B by deed a lot of land described as "fronting 30 feet on X. Street." The land was not measured, but A described it as extending to a certain stone, which was in fact five feet from the true corner, and lay beyond it. B fenced the land as far as the stone, including the extra five feet, and occupied it for twelve years, believing all the land belonged to him.

Then B sells his lot to C, and the deed of sale follows the same description as that in the deed which he received from A. C

then occupies the whole premises for ten years. X, who is the owner originally adjoining A's land, was in fact owner of the five-foot strip all the time.

Assuming that B can pass on to C as much title as he himself possessed, can X now dispossess C?

It is evident that neither B nor C held the land for twenty years; therefore the question is whether they can add together, or " tack " their terms to make up the statutory period. Massachusetts formerly held this could not be done, unless there was blood relationship, as by descent, between B and C. Numerous other States, however, have followed the spirit of the law, which is to quiet titles, and to cut off the rights of those dilatory in enforcing them, and have allowed two such terms to be " tacked." Massachusetts, in 1903, fell into line, only requiring that the land against which adverse possession was to run should be *continuously occupied* as a part of a larger estate.

205. It is commonly stated that to allow title by adverse possession to be gained, it must be open, " notorious," avowedly contrary to the rights or claims of some other person, and must be important enough to give notice to such persons that a claim of right is intended thereby, etc., etc. While it is thus very easy to recite what shall constitute adverse possession, it is a far harder matter to prove, or disprove, its existence in the manner required by law.

206. The important legal principle underlying adverse possession is often lost sight of by surveyors. They are called upon to locate the boundaries of a piece of land as described in a deed, and often entirely neglectful of the rights gained by long-continued use and possession, and the " running of the Statute of Limitations " (§ 204), they engender bitter animosities between neighbors by assuming that the mathematical basis of the art of surveying furnishes the only clue to determining the legal boundaries.*

The essential principle seems to be that if every person who owns land in fee (" seised," in legal phrase) does not assert his title and occupy the land in a manner sufficiently unequivocal during a period of twenty years, then his title may evaporate, if

*See a valuable article by G. L. Teeple and L. S. Smith, reprinted from *Wisconsin Engineer*, December, 1909, in *Engineering-Contracting*, February 2, 1910, on Significance of Adverse Possession to the Surveyor.

the word is allowable. The superior title has been lost through the holder's negligence in failing to assert it effectively within a reasonable time. In popular language, his claim is outlawed.

"By the long and undisturbed possession of real property, a person may acquire a title to it, or a right of ownership superior in law to that of another who may be able to prove an antecedent, and at one time a greater title. This superior title has been lost by the negligence of the person holding it failing to assert it effectively within a reasonable time, as by resuming possession to which he was entitled, or asserting his right by suit in the proper court." (115 U. S. 620.)

207. Having now explained at some length the spirit of the law beneath adverse possession, the way is prepared for the brief statement that *acquisition of title by prescription* means almost the same thing. In fact, title by adverse possession refers to the land itself; while title by prescription applies to some *right in land,* as for example, easements. Long and undisturbed possession of a right in land (one which is properly an incident of its ownership) may give rise to an easement by prescription; of this there are countless cases in the law books. If the party who is even slightly injured in his property rights acquiesces in them long enough, and suffers it to continue without objection, the Statute of Limitations will cause him to lose his right to apply for a legal remedy. The effect is that a prescriptive easement will have been obtained against him.

208. Easements Obtained by Prescription. — It has been already hinted that in certain instances easements might be gained by prescription (see § 207) and the importance of the topic will warrant further mention of some of them here. Thus, with reference to easements in water, it has long been held that the prescriptive right to flow lands by setting water back with a dam may be acquired without compensation, if the water is so set back for twenty years without objection from the injured land-owner. (28 Pick. 141.) And if a mill-pond has not always been maintained at its maximum level because of a leaky dam, gates, etc., then if the dam is made tight but its crest is not raised, no one can claim damages because the water is made higher than it was wont to be. (2 Allen 242.)

The student may reason that if the other land-owners enjoyed the low-water stage for a long enough time, they would acquire a prescriptive *right* to have it remain at that stage. But this is erroneous, since there is a plain distinction between seizing upon and actively using a right in another's land in derogation of the real owner's privileges, and on the other hand, *passively* acquiescing in a benefit which incidentally comes to one's land by reason of the failure of an adjacent owner to fully assert the rights which *he* possesses.

209. With reference to the *disposal of surface waters*, we have seen (§ 189) that an upper owner may by ditching drain his land into the natural channels even though the amount so thrown upon lower lands is materially increased; but it cannot rightfully be drained so as to pass over lands other than those accustomed to receive it. This does not mean, however, that the upper owner cannot gain a prescriptive right to a new channel over the lower land if its owner refrains from objecting long enough. (See § 240.) Neither can a *city* construct sewers so as to collect water from a large area, reverse its direction, and then discharge it upon private premises to the injury of the owner, — but the possibility of such a right being acquired by prescription has already been sufficiently noted. Along the same line, it has been held that if a Railway Company builds its road-bed in such a way as to throw surface water upon adjoining lands, it will be liable for damages. Nor has one person the right to erect his house in such fashion that the roof water will discharge upon neighboring land in an injurious or unusual manner, etc., etc. There are many easements which may be acquired by prescription, but it is unnecessary further to extend the list of examples.

210. LATERAL SUPPORT. — Another matter closely resembling an easement is the right of "lateral support." It is of extreme importance to every engineer who begins construction by delving in the ground, because it is a physical fact that all land, save the hardest rocks, is dependent upon the adjoining soil to a greater or less extent for lateral support. That is to say, every portion of the soil is supported and held in its place by the soil surrounding it. Thus, if you remove the surface of Lot B from beside Lot A, Lot A will tend to slide into the hole thus made.

It is usual to say that the right to have the land in Lot A supported in its natural position by the land in Lot B is an easement* incident to the ownership of Lot A. To a certain extent, therefore, the owner of Lot B cannot do as he pleases with his own land. It is held to be immaterial whether or not the excavation is conducted with due care. If it causes the adjoining property to cave-in or to settle, this is a tort (see § 156), and he who digs is responsible therefor.

*By an old Massachusetts case it is argued rather sharply that the right of lateral support is not a technical easement for various reasons, which are summarized in Appendix Note 12, Lateral Support.

211. Fortunately for the engineer the law draws a line and says the right of lateral support relates *only* to the land in its *natural* condition. It does *not* relate to buildings or structures upon the land. Nevertheless, the path of the contractor who puts down modern, deep, skyscraper foundations close to the footings of another high building, — the usual city problem, — is an arduous one, though there is a clew to his labyrinth of troubles. If he fails to go down deep enough for a proper foundation for his own building he will be liable to his own client for negligence, or breach of his warranty and undertaking to construct properly. And if he does go to the required depth the next lot-owner may come upon him for damages sustained in the settlement or worse accident that has befallen *his* building.

212. It appears, however, that the rule as to "natural condition" does come to his rescue considerably. For since the right relates to the support of the soil in its natural condition only, it seems that if he takes all reasonable precautions for bracing up the next lot, and places sheeting, piling, shoring, etc., such as would have been sufficient to support the land alone, he has met the requirements of the rule. Then he may notify the next owner and put the further burden of supporting the added load due to the building upon him. And this is a burden justly imposed upon said owner, it would seem.

But there are difficulties even in case the next owner comes in and shores up his building at his own expense. The contractor will probably have valuable plant tied-up, there will be the fuss and inconvenience of having another gang of men about, not to mention a separate quantity of materials to encumber premises probably greatly encumbered already. The average contractor would doubtless prefer to go ahead and do all the protective work at one time. Then he could properly charge the next owner for the extra work done to support the *building* over and above what would have been required to support the soil alone, were it unloaded. Practically, trouble would arise in determining how much of the bracing was necessary for the soil, and how much for the building.

Probably the best way would be to make an agreement with the next owner defining what was to be paid for by him, and then have his engineer, or representative pass upon the sufficiency and character of the protective work as put in. But if the contractor foolishly pushes ahead with such shoring and bracing as *he* thinks sufficient, and neglects to consult the next owner, then if the building does settle unduly, the contractor will be liable for negligence. This would probably extend to making good a whole side of the building, in case it falls.

213. Vertical Support. — When minerals, such as coal, are dug from beneath a surface estate, enough material must be left to keep the surface *in situ*, — the surface has an easement for vertical support. The result is similar when one person owns the lower rooms of a building and another the upper stories. The upper owner has a right to support from the division walls of the lower part.

DEEDS

214. Probably the everyday mode of transferring title in land is by a contract of sale. Numerous non-contractual methods are elsewhere discussed at length. (See §§ 204-7, and §§ 232-35.) A deed expresses the intention of the parties as to the quality and quantity of ownership that shall pass, and may as well be used to create an easement or some of the lesser estates as for a fee simple. (See § 196.) In fact a proper study of deeds involves several broad fields of law, and the business of "conveyancing" should be only in the hands of persons well skilled in it. Somewhat less learning is requisite, however, for the proper understanding of these documents for transferring title. Every person should be familiar with their broader principles, since society is made up of but two classes, landlords and tenants. It is peculiarly fitting that the engineer should be well-cognizant of deeds since aside from the acquisition of land by purchase, he is most frequently called upon to interpret them in making boundary surveys.

215. ESSENTIALS OF A DEED. — To be valid and binding, a deed of land must contain the essential elements of a contract. The following must also be true: There must be:

(1) a sufficient writing;

(2) proper parties;

(3) a thing to be "granted," or conveyed;

(4) a sufficient consideration; and

(5) a proper and sufficient execution of the instrument, i.e., it must be signed, sealed, attested, and acknowledged;

(6) a good delivery and acceptance, — the mere writing alone is not operative unless coupled with delivery by one party and acceptance by the other. This is true of all contracts, also.

The title is not perfected in the recipient of the deed (save as between the parties) until the deed is engrossed upon the Registry of Deeds for the county in which the land lies.

Deeds as a class of documents are of ancient origin, and their common language, critically read, shows many allusions to feudal times. Much of the terminology, though it is highly archaic, is retained in modern days because it is historically certain just what those terms mean. If they be dropped, or radical innovations made in the phraseology the result might be thrown entirely in doubt. It is natural, therefore, that if a person has parted with his money to acquire a particular degree of title, he does not wish to have *his* title experimented with by seriously modifying the old forms of legal expression, hoary and musty though they may be. Law stationers also commonly

carry blank deeds with all the formal parts printed thereon, — which would tend to the same result.

216. PARTS OF A DEED. — Technically, there are numerous component parts to a deed, but those most interesting to engineers are probably as follows:

(*a*) The PREMISES, containing the names of the parties (grantor and grantee), the consideration, and a description of the property conveyed;

(*b*) The HABENDUM, which points out the kind or quality of estate conveyed, — whether fee, life estate, or otherwise;

(*c*) The REDDENDUM, which contains the " reservations " (i.e. phrases defining what parts of the property described are *not* conveyed to the grantee), if there are any; and

(*d*) The COVENANTS, including that of *Warranty*, if it is a " warranty " deed.

As a deed is *par excellence* a contract, the parties may insert such warranties as they see fit. The usual COVENANTS OF WARRANTY are:

1. That the grantor really owns the land he is in the act of conveying, and that hence he has a perfect right to convey it (also called warranty of seisin);

2. Warranty against Encumbrances, — that there are no unsatisfied mortgages, easements, or other burdens upon the land (save as specifically mentioned);

3. Warranty of Quiet Enjoyment;

4. Warranty of Title, — that the grantor warrants (and secures both as to himself and his heirs), and will defend the title he is conferring against all legal claims made by other persons.

217. WARRANTY and QUIT CLAIM DEEDS. — The presence of this group of covenants forms the distinguishing feature between a warranty deed, which is the best possible deed (if the grantor is financially responsible), and a " quit claim " deed, often of doubtful value. Quit Claim Deeds make none of these valuable promises (covenants) but merely say that the person making it steps down and out, as it were, and the buyer takes the seller's rights for whatever they are worth to him, — which may be much or little. Frauds are often perpetrated in this way by persons having no interest in a piece of land, and possessing no shade of ownership whatever. They give a quit claim deed to some guileless individual and forthwith depart with the price. Need-

less to say, the misguided person has purchased nothing but some experience.

This is not to say, however, that a quit claim deed may not be a perfectly legitimate one to give, under certain circumstances. Indeed it is not uncommon for a grantor to give such a deed when there is some slight technical imperfection in his title, but which does not practically impair his title to any noticeable extent. In such a case, the grantor may justly feel unwilling to assume the severe obligations imposed by a " full warranty " deed.

Again, there are persons temperamentally opposed to taking any sort of a risk, whatever, and even though they may hold a perfect title, yet they are unwilling to " warrant " anything, and therefore, will only permit themselves to give a quit claim deed. It should be noticed, however, that a quit claim assuredly passes whatever title its maker had, and therefore, if he holds a fee, he will pass a fee. Thus the quit claim deed will be as satisfactory as any other under the proper circumstances.

218. EXAMINATION OF TITLES. — For the reasons indicated above prudent persons contemplating the purchase of land employ a lawyer to examine into the legal sufficiency of the title they are about to acquire — a precaution which often saves disastrous moves. This work is known as making an " abstract of the title " and consists in examining and noting the original conveyance, dating as far back as possible, then scrutinizing carefully each successive step in the chain of title down to the present holder. Thus a number of circumstances or events may make a break in the chain, or " cloud " the title, as for example, finding unsatisfied mortgages recorded against the land, or parts of it; finding that all the required legal steps were not taken in case the land has been partitioned among heirs by order of a Probate Court; finding that the sale of it was not valid in every particular, in case the land has been sold on an execution for debt ; finding that there are outstanding tax-titles, etc., etc.

219. DEED DESCRIPTIONS. The purpose of the description is to furnish the means of identifying the property which the other clauses in the deed are designed to convey. Hence deeds are practically void and ineffectual for uncertainty if they purport to convey land but do not contain *any* description or designation of it, or if the

description is so uncertain that it can not be told what property was intended.

To engineers, this part of the deed is of most immediate interest. An engineer should be able to write an adequate and conclusive description of land he is called upon to survey (which is a thing many so-called conveyancers miserably fail to do). He should also be able to perform satisfactorily the more usual problem, namely, to decipher what is really meant and intended in a description of land of which he is called upon to locate and mark the legal boundaries.

To do this adequately one needs an intelligent conception of what the parties *could* do, and what they probably *meant*, or *thought* they were doing, both as a matter of common sense and of law, together with a well-informed mind as to the limitations involved, both legal and physical. In fact this argument is the whole justification for presenting these outlines of the law of real property to the engineering student. For since the lawyer has to measure particular instances by broad principles or rules, a person technically trained in the sciences may well have his attention drawn to the same leading doctrines and principles so far as they relate to his professional work. "An ounce of prevention *is* worth a pound of cure."

For a practical example of a deed description, and cognate matters, the student is referred to Breed & Hosmer's Principles and Practice of Surveying, Arts. 149 to 154, including a discussion of the judicial functions of the surveyor, rerunning old surveys from deeds, etc.

220. RULES OF "CONSTRUCTION." — As in other branches of the common law, rules have grown up, — necessitated by the unskilfulness of those who have undertaken to make legal descriptions of land, — directing the interpretation that is to be put upon the language used. These rules are based upon the soundest public policy and tend to give fixity and permanency in the ownership and possession of land. If this institution of private ownership in land is allowed to be wantonly or whimsically disturbed the very foundations of our civilized society will quake and tremble.

In standard works on surveying, notably Johnson's Theory and Practice of Surveying, at Arts. 193-4, there is a cogent discussion of this matter with rules for procedure, a few of which may be mentioned here. Thus: "The law presumes the deed to have been drawn with an honest intent to convey property." The description must therefore be construed, if possible, in such a way as to make it effectual rather than void. To the same effect, "In ambiguity due to the language used, the grantee is

to receive the benefit of the doubt," — a principle we have already met. But if the parties have shown by their acts a mutual agreement or acquiescence in a certain interpretation of the description, this meaning will hold and bind the parties.

221. Monuments. — See also (same reference) Arts. 302-3 on The Value of Existing Monuments and Significance of Possession, and Arts. 159-60 on Monuments, Their Significance and Authority. The ground is so well covered that it is needless to traverse it here. It is a legal principle of broad application that such descriptions must be construed in the light of what was known to be in the minds of the parties at the time it was written, and with reference to the monuments or facts then existing. It is well settled in Massachusetts that if for a boundary a deed refers to a monument not in existence, and the parties later erect such monument intending to conform to the deed, such monument will govern even though not conforming to the line described in the deed.

222. A much-quoted rule when angles, distances, or areas are in conflict, is, " The monuments control," — but it is to be applied with intelligence and not blindly. Its basis is sound, however, and is due to the insight of the judges who saw that two persons bargaining over the sale of land, having familiarized themselves with its boundaries (supposedly),would be more likely to express clearly what they meant when describing the boundaries by objects (monuments) than would a stranger to the transaction, as for example, a surveyor. The surveyor, too, might be unskillful enough to record a distance as 100 rods when in fact it was 101 rods. Hence it was in the interests of peace in the body politic to let monuments control, instead of measured distances, since the principal parties in interest determined the former, while a stranger measured the latter.

223. What Quantity Passes? — When there is an ambiguity or uncertainty as to the quantity of land conveyed, a rule of construction is necessary. A principle consistent with the foregoing is that if the lot is described by *known* monuments or other *certain* descriptions, then the statement of quantity will be rejected.

Thus if the angles and distances in a deed correctly enclose 18 acres while the description ends with the words "Containing 24 acres," only 18 acres can be taken, if the landmarks or monuments can be positively identified. But if on the other hand the quantity was said to be 30 acres while in fact the monuments gave the area as 40 acres, the whole 40 acres would be taken by the grantee, if the grantor had the right to convey the whole.

224. GRANT INCLUDES WHAT? — Of practical impor-

tance to the surveyor, engineer and man of affairs is the question "What does a grant include?" Land in its legal significance includes not only the soil, and everything that is firmly attached to it, as buildings, trees, fences, etc., but also all those incorporeal rights, such as easements, which are properly appurtenant to it. All these things, therefore, pass in a deed, unless the contrary is expressly shown. In general, ownership in land extends indefinitely both upward and downward in a vertical plane, yet the land can of course be separated into estates horizontally if it is so desired. The description in the deed must of course determine what is conveyed, but otherwise everything above and below the surface passes with it.

Nowadays, the stringing of *wires* over land is becoming important. This constitutes a trespass if done without the license of the owner, and if he does not remonstrate during the statutory period an easement so to use the air may be acquired by prescription.

This principle has been held not to apply, however, in the case of a company maintaining poles and wires in a public street. No prescription can be gained against the public, in this case.

225. — Trees On or Near Boundaries. — Neighboring owners of land often dispute about a tree on or near the property line. Where the line passes through the trunk, the tree belongs to both owners in common, and while each may do as he likes with his own, he cannot use nor destroy it if by so doing he injures his neighbor's part also. If the tree were blown down by a storm, each is entitled to half the wood.

Where the tree is *near* the line, its roots penetrate into, and the branches overhang the next lot, it has been held that the owner of the trunk owns the overhanging fruit, and he may gather it if he can do so while standing on his own land. The fruit is still his after falling to the ground though he would be a trespasser if he went upon the other land to get it. The adjoining owner has the right to cut off the branches which overhang his land if they constitute even the slightest nuisance.

226. DUTIES OF THE SURVEYOR. — In making a boundary survey it is by no means the surveyor's sole duty to trace out the mathematical description of the land from a deed, though many young surveyors are of that impression. The problem of retracing old boundary lines is not always, nor even perhaps usually, to show where they *ought* to have been in the light of documentary evidence contained in deeds, but to determine where the lines actually *were*, whether right or wrong. The doctrine of title by Adverse Possession (see §§ 204-7, *et seq.*) is of prime importance here.* It is hoped that enough has been said in this connection to allow the surveyor to form an intelligent

*For the student or engineer who desires more fully to inform himself, see an elaborate discussion of Adverse Possession, setting forth its various phases in different States, its relation to the surveyor's art, etc., referred to in footnote to § 206.

opinion whether, in a given case, the services of a surveyor, or those of an attorney and a court of law are required, with the surveyor's assistance as an expert witness. In addition to the references already given (§§ 219-21), there is a digest of valuable matter upon this point, together with the rules for a resurvey, in Pence & Ketchum's Surveying Manual, p. 159.

227. Apparently anomalous situations arise under the above rules as to monuments. With the ordinary stone monument, distinctive in shape, position, and markings, the surveyor is very familiar, and it may not seem to strain the point to call the center of a stone wall (which may be several feet thick) also a monument. The foundation of a house, or a pile of stones, or a stake, post, or a certain blazed tree, also seems proper enough for monuments, but one would hardly guess at first that "another man's land" is frequently a monument. Yet such is the case in law, though nothing whatever marks the position of such "other man's land."

Thus a description beginning at a point that can be conclusively located, and running thence a fixed distance "to the land of J. S.," carries all the land between the starting point and said J. S.'s line, though the measured distance falls rods short of it.

228. When abutters own to the middle of a highway, — a common situation where the public has only an easement (see § 201) to pass over the land, — there is a case requiring "construing."

Thus, "Beginning on a highway, at such and such a point, thence along the same," — means along the center line. Similarly when the "call" begins as above, and then *leaves* the highway, and especially when it runs *to* the highway, — these words carry title to the center-line of the road, unless there is strong language to prevent.

229. The reason for the apparent examples of *unreasonableness* just noted is that the policy of the law is to discourage future trouble about these little strips, or fringes of land (probably overlooked in the description), by passing them over to him who buys the major portion, and to whom (if to any one) they will be of most benefit. This is better than to leave them as trouble breeders in the hands of the grantors. But in view of the foregoing it is not to be supposed that the parties cannot control the disposition of these strips and remnants. They assuredly can accomplish any desired (lawful) result if they use appropriate language, but it must be carefully chosen.*

*There is an extensive and valuable article on "Law of Boundary Surveys," by William E. Kern, in *Eng. News*, August 28, 1902. The surveyor should get much important information from it.

230. Street Boundaries. — It has been held in Massachusetts that when land bounded by a way, either public or private, is granted or conveyed the law presumes it to have been the intention of the grantor to convey to the center of the way *if* his land extends that far. Hence a deed bounded by an alley or a way carries the fee to the middle and an easement or right of way over the other half, if the grantor owned that far.

231. Water Boundaries. — A class of cases too large to be treated here deals with boundaries on water, including streams, ponds, and the sea. These become especially important when the water is unstable in its position, radically changing its channel, cutting away from one owner and depositing material upon another's shores (see § 232 Accretion), or causing the formation of islands in the stream, etc.

It is also important to determine what is meant by "Bounded on the bank," or "along the bank," or a description which runs "to the bank," or in fact what a "bank" legally is. For a brief statement upon these points also, the student is referred to Art. 195 of Johnson's Surveying.

TITLE BY OPERATION OF LAW

232. ACCRETION. — We have seen that in general when anything is firmly attached to land it becomes a part of the realty, and title in the thing passes to the owner of the land. *Title by accretion* means the acquiring of title to foreign soil through the co-operation of the forces of Nature. Leading examples of this are deposits of earth, mud, or silt, upon the slack-water sides of bends in river-channels, on estuaries, and on the sea shore. In many American rivers this is a very extensive and striking phenomenon. The material thus added to one's land is called ALLUVION. The rule has just been given which determines the ownership of this "made" land.

A highly interesting and not impossible case arises if we suppose that a riparian owner, A, loses his entire lot by erosion, and the river just reaches the land of B, owning in the rear of A's lot. Then suppose the river freakishly "makes" again a large part of A's lot, or at least deposits other materials in the place of it. Now, who owns along the river shore? Has the river wiped out A's title, made B a riparian owner, and in addition presented him with nearly the whole of A's lot?

When several owners are bounded by a river shore, and land is made in front of them, the Massachusetts rule (which seems most equitable) is that each owner shall be given such propor-

tional part of the *new* frontage as he had of the *old* before the making.

233. DEDICATION. — The owner of a large tract of land so located that it will be more valuable in building-lots than otherwise, frequently "plats" this land. He lays it out into as many lots as seems to him expedient, and simultaneously plans suitable streets for convenient access to the lots. Upon filing the "plat" at the Registry of Deeds, he usually writes upon it language "dedicating" said streets to the public use. Hence a dedication is an appropriation of the land to some public use, made by the owner, and accepted for such use by, or on behalf of, the public. The effect is as though the owner had deeded the land to the public, but the formality of dedication is employed instead, because "the public" would not be a sufficient grantee under the rule requiring "sufficient parties" to a deed (which is a contract).

234. Dedications are of two sorts, statutory, wherein all the steps are prescribed and must be substantially followed to make the dedication effective; and common law dedication, which is much less formal. Here the main features are an appropriation by the owner, and an acceptance of the benefits conferred by the public. This mode of acquiring title will therefore be of prime importance to the surveyor in determining whether, in a given case, the lot or tract surveyed extends to the middle of the street. (See § 201).

235. EMINENT DOMAIN. — The right of eminent domain is the lawful authority which exists in every sovereignty to control and regulate rights of a public nature, and to *appropriate* and control *individual property* for the public benefit, as the public safety, necessity, convenience, or welfare may demand. It is but a practical application of the ethical dogma "The greatest good for the greatest number."

This attribute of sovereignty is also generally conferred upon railroads and other public service corporations, upon the theory (manifestly sound) that such corporations are a direct benefit to the public.

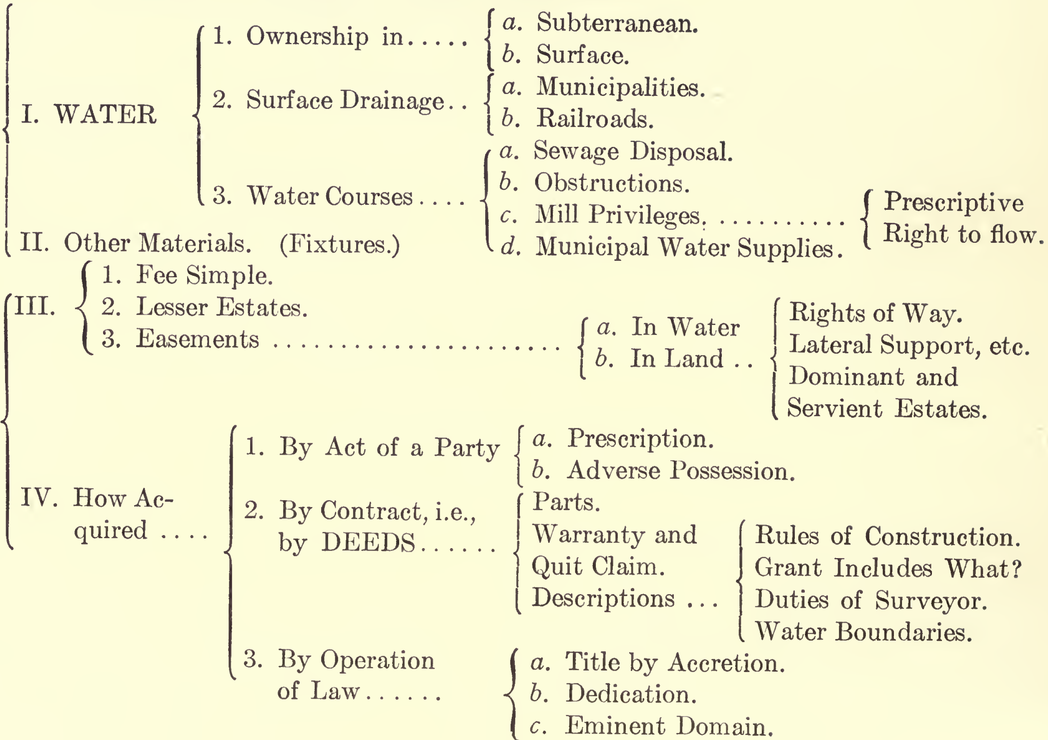
This principle of eminent domain, therefore, provides against an individual who is opposed to progress and refuses to sell land for a railroad right-of-way, for example. Suppose he owns land that is strategically important for the railroad, and seeing a chance to make his fortune, will sell only at an exorbitant price. Thus the largest communities might be seriously hampered,

and subjected to inconvenience and loss through the cupidity of a single grasping individual.

236. The procedure for obviating such a difficulty is substantially as follows: The railroad deposits a bond (though all jurisdictions do not require it) for an adequate amount in a court of competent jurisdiction, and then enters upon the land. The value of the land is assessed by a jury, just as any other jury-issue is tried, and the damages sustained by the owner (i.e. the market value of the land taken, plus the incidental injury to his other property) are paid to him either by the railroad company directly, or out of their bond. In the latter case, if there is any excess, the balance is returned to the Company. The whole business is frequently known as "*condemnation proceedings*."

237. Eminent domain may be exercised by a corporation only when expressly authorized by the sovereignty. It is an inherent power in the Federal Government, and in that of the States also, and it may by them be *delegated to municipal corporations*. In this category, therefore, are "takings" of sources of public water supply, places for municipal sewer outlets, for public parks, boulevards, etc., etc. The Constitution provides that no person shall be deprived of his property without due process of law. Taking it by eminent domain *is* taking it by due process of law.

Diagram of Chapter V.—REAL PROPERTY



Questions for Study and Review on

Chapter V

1. What are the two broad classifications in property?

2. Define " land " and tell what it includes.

3. What is the rule as to articles attached to the soil? Why is the distinction between realty and personalty important?

4. Define a " trade fixture." What is the rule as to its ownership?

5. What is the noteworthy feature as to one's ownership of water?

6. What rights have riparian owners to the water in streams?

7. Classify subterranean waters. What rights has the landowner therein?

8. Explain " definite channel." Discuss pollution of underground waters.

9. Distinguish carefully between " watercourses " and surface water.

10. What are one's rights in surface waters?

11. What are the rights of drainage into watercourses?

12. How may control of surface waters become important to a municipality, and what common-law powers does a city have?

13. Recite upon stream pollution by manufacturing wastes, etc.

14. In general, what are a city's rights of sewage disposal into a stream?

15. What may a riparian owner do when his land is overflowed because of an obstruction in the stream?

16. What facts are brought out under the topic " Mill Privileges "?

17. Explain carefully the word " estate." Distinguish it from real estate.

18. What is the significance of " fee simple "? What is meant by " paramount title"?

19. Name three estates less than fee, and tell how they arise.

20. What do you understand by an easement? Give examples.

22. " Dominant " and " servient " estates, — give meaning and use of these terms.

23. Explain the easements relating to a party wall.

24. What is an easement " in gross "? What is your especial interest in highway easements?

25. Recite upon the creation and extinction of easements.

26. In quantity, what is the relation between a fee and an easement?

27. Name the modes of acquiring title in land.

28. Explain " title by prescription," and tell the relation of the Statute of Limitations to it.

29. What situations does the Statute of Limitations provide for?

30. Outline the doctrine of " adverse possession." Does it seem fair to you?

31. Cite an illustrative case where adverse possession might become important to the surveyor.

32. Recite upon the rule as to continuous occupation.

33. Explain the difference between title by prescription and by adverse possession.

34. What about the prescriptive right to flow lands?

35. How does prescription relate to the modes of disposal of surface water?

36. Analyze carefully the easement of lateral support.

37. How is lateral support related to the average contractor?

38. How may the situation be handled in putting down " skyscraper " foundations?

39. When is the easement of vertical support important?

40. What is a " deed "? For what are deeds used?

41. Why should an engineer understand deeds?

42. Name the five essentials of a deed.

43. Why is their language often archaic?

44. Name the principal parts of a deed.

45. What are the usual covenants of warranty? What is the deed called which contains them?

46. State carefully the use and misuse of quit claim deeds.

47. What is meant by getting an " abstract of title "? Why is it done, and by whom?

48. State clearly the relation of deed descriptions to the surveyor's work.

49. Why are rules of construction necessary for interpreting deeds?

50. Mention some of the leading rules of construction.

51. " The monuments control," — discuss the meaning and importance of this rule.

52. What quantity of land passes by a deed containing a faulty description of land?

53. The grant includes what? Rule as to trees?

54. What things may be designated as monuments?

55. What points must be carefully noted in interpreting a description of land bounded by a highway? What is the policy of the law in relation to such cases?

56. Recite upon water boundaries. What are the principal questions involved?

57. What is meant by "title by accretion"? When is it important?

58. Why, how, and for what purpose is land "dedicated"?

59. What is the theory and usefulness of "eminent domain"?

60. The Court gave the following instructions to the jury, "When a monument is mentioned in a deed and there is no such monument on the ground, and the parties by consent at the time, or soon after, erect and place a monument, intending it as and for the monument described, it will be deemed afterwards as if it had been standing at the time, and it must govern, although neither courses nor distances, nor computed contents correspond with such boundaries." Were these instructions correct?

61. In a deed a portion of the description is as follows: "Thence Northerly by said Railroad Company's land about 416 2-3 feet to the road near the Arch Bridge, so-called, thence Southwesterly by said road about 433 feet to stone wall, thence Southerly by said wall." The wall began on the side line of the street. Does the description carry the land to the center of the road which crosses the Arch Bridge?

Chapter VI

CONTRACTS OF ASSOCIATION

An undertaking is too large to be handled by individuals; they do not desire a partnership; perhaps thousands are willing to risk something in it, — is the status of this aggregation of persons and capital the same as that of an individual, or has the corporate entity absorbed the personalities of those who compose it? Under CORPORATIONS it will be shown that the law of contracts permeates the very essence of corporate life, since the corporation rests upon contracts with the State, with its members, and mutually between the members.

The engineer's understanding of a corporation's powers can only be based upon an intelligent conception of the above contracts. He deals with a corporation "at his peril," — to what points must scrutiny be directed? He buys stock in a corporation, — what are the privileges, immunities, and liabilities thereby accruing to him?

But if a corporation is not desired there is a more ancient type of association known as a PARTNERSHIP. This, too, is pre-eminently a "contract" subject, since the partners' mutual and public relations rest wholly upon the contract between themselves, whether it be express or implied. Can the partner bind his associates? What are the liabilities of each, and how may they be terminated? How and when may a partnership be dissolved? These and many other incidental problems will be touched upon in outlining the principles upon which these associations rest. Since an engineer frequently has to deal with a partnership, or joins forces with a colleague and forms one, or may become interested in corporations in various ways, knowledge of these principles will be valuable.

CORPORATIONS

At first glance corporation law may hardly seem to be a contract subject, yet the *contractual powers* of corporations should interest the engineer. In outlining these powers it will be necessary to show certain important characteristics of corporations. This being done, many questions of contract will have been covered incidentally. It is worth while for the engineering student to familiarize himself with the elements of corporation law, in view of the vast amount of business done to-day by this type of organization. Moreover, the great constructive operations upon which engineers are being more and more engaged, can only be undertaken by aggregations of capital in corporate form.

238. DEFINITION. — A corporation is a collection of individuals united by authority of law under a special name, with the capacity of perpetual succession and of acting in many respects as an individual. It is regarded as a distinct legal entity,

existing only in contemplation of law, and by virtue of the operation of statutory law. It has an existence separate and distinct from that of the members who compose it. This "distinct entity" theory is fundamental to a proper notion of corporations, is constantly alluded to, and furnishes the key to many situations.

It has been frequently held that where one man has come into possession of all the stock, yet this does not allow him to convey away the legal title to the corporation's property in his *own* name. The title must be transferred *in the name of* the corporation.

The distinct entity doctrine is also shown in the residence, or domicile, of a corporation, which is that of the State in which it was incorporated, irrespective of the stockholders' residence.

In a famous case, English corporations were required to be registered, under a British regulation. It was argued that as the bulk of the stock was held outside of England, therefore it was not an English corporation and so not amenable to the British law. But this view was set aside, and it was held to be an English corporation.

239. KINDS. — All corporations have much in common though there are numerous types and classifications. According to their *object*, they are *eleemosynary*, or those created to carry out some charitable object; *religious*, which term is self-explanatory; and *civil*, embracing all others. With civil corporations we shall principally deal. Further subdivisions are public, or municipal, and private civil corporations; *public*, for the purposes of government and management of public affairs, like the organization of cities and villages; and *private*, such as manufacturing, banking, and railroad corporations, etc., etc. Private corporations may again be divided into stock and non-stock corporations.

240. CORPORATIONS and PARTNERSHIPS COMPARED. — It is very helpful to study the two leading forms of associations, corporations and partnerships, by frequently contrasting features similar though quite distinct; otherwise many elusive characteristics of both subjects are hard to properly comprehend. Let us consider their leading differences at once.

There are three conspicuous differences:

(1) In a partnership the doctrine of *delectus personalis** is highly important.

This is because a partner is selected for his personal qualifications, and his interest in the business is not transferable except by consent of all the other partners. And if a partner dies the partnership necessarily comes to an end.

But in a corporation the conditions are just the reverse. Shares in it are

**Literally*, "the choice of persons," meaning the right of a partner to determine what persons shall be introduced into the partnership as new members.

freely transferable without regard to the wishes or consent of other stockholders, and the death of a shareholder has no effect on the corporation. The opening definition pointed out that in a corporation there was the capacity for perpetual succession.

(2) Any partner has the legal power to act as agent for the others. Within the scope of the business, he may bind them absolutely by his action. But in a corporation, no shareholder has any power whatever to bind the others, since the whole authority rests with the board of Directors.

(3) In a partnership, each partner is liable for *all* the firm debts. In a corporation the liability of the stockholder (aside from statutes) is to pay money only up to the par value of the stock subscribed for by him. This feature has contributed largely to the growth of corporations in recent years. Many partnerships have been incorporated with very few changes.

Morawetz, a leading authority on corporations, adds to the foregoing: —

(*a*) While both are formed by the mutual agreement of those who compose them, the *partnership* relation may be established by any persons, at any time, and is *dependent only upon the laws of contract and of agency;* but a corporation cannot lawfully be formed without the authority of the Legislature.

(*b*) At law, the members of a firm are always treated as individuals, and the firm, as such, is not recognized (e.g. a deed of real estate owned by a firm must be signed by the members individually, as the deed is not effective if signed in the firm name). But a corporation is considered as one person ("distinct entity") and its constituent parts are disregarded. A partner cannot sue another *at law,* while a corporation may be sued by one of its members.

(*c*) *Partnership* is *a relation of special trust and confidence* personally, and the act or contract of one partner is the act of all; while in a corporation the business is managed by agents, selected by a majority vote, and the personal element is very small.

241. OTHER FORMS of ASSOCIATION. — On the line between distinct corporations and strict partnerships, are joint-stock companies. They possess many of the characteristics of both forms of association. There are also unincorporated societies of numberless sorts; syndicates formed for the consummation of some particular purpose; building and loan associations, which

may or may not be incorporated; fraternal, benevolent, and protective associations, etc. Leading ear-marks for identifying which are really corporations are: Do they have the right of continuous succession, under a special name, without being subject to dissolution or change of identity by death of members? Can they take and grant property, sue and be sued in the corporate name, etc., etc.?

THE CORPORATION

242. ESSENTIALS. — Certain things are essential in creating a valid and legal corporation.

First, there must be a *grant of authority*, or *charter* from the State. The general repository of the power to create corporations is in the State Legislatures, except so far as it may be controlled by restrictions in the Federal or State Constitutions. Congress has a very limited power in this respect.

Second, the grant of power, or *charter, must be accepted** by the corporators, constituting an agreement or *contract* with the State.

Third, there must be an agreement between the stockholders and the corporation.

243. THEORY of CORPORATE POWERS. — All the above points immediately involve the doctrines of contract. Early in the last century (1810) in the famous Dartmouth College case, the United States Supreme Court established the fact that the *charter* is *a contract* between the State and a corporation, within the meaning of the Constitutional provision that no State shall pass a law impairing the obligation of an existing contract. This meant, practically, that no State could pass a law altering or taking away any of the rights or privileges previously granted to a corporation. As this would effectually prevent the public from reforming grave abuses of corporate power, should they arise, nearly every State subsequently passed statutes that no charter should thereafter be granted except subject to being altered or repealed by the Legislature. This is law to-day.

This doctrine that the charter is a contract is worked out as

*Acceptance of Charter: If a special act has been passed by the Legislature it is regarded as an offer, open until formally accepted by an act of the individual corporators; or until the acceptance could be fairly implied from their acts *as* a corporation. And like every other offer to contract, the person who accepts must fulfill the letter of the offer exactly. In the case of the corporation, if the terms of the offer (Act of Legislature) are not strictly complied with there is no corporation formed.

follows: The corporators allege that benefits will flow to the public as a result of their incorporation, and these form the consideration for the rights, benefits, immunities, and privileges which the State confers upon them by its act of incorporation. It will be readily admitted, in the case of some of the great public-service corporations, that this contract theory is sound, but in the case of the so-called " predatory " variety it is not so easily seen.

244. PROMOTION. — Generally some individual conceives the idea of having his associates become incorporated. He takes the lead in booming the enterprise, securing charter members, selling stock on prospectus, etc., and doing everything in his power to float the scheme. Such an individual is called a " promoter."

An engineer may legitimately and properly act as a promoter when the scheme rests upon a sound engineering project about which he possesses special and intimate knowledge. If the scheme is really good and intrinsically meritorious, then the berth of a successful promoter is likely to be a highly comfortable one, since he not infrequently acquires a sizable block of stock for his services.

Promoter's Responsibilities. First, is the corporation liable upon contracts made by the promoter? It is to be remembered that frequently his activities are greatest before the corporation actually exists. It is generally held that promoters are *personally liable* on contracts made by them unless exempt by the terms of the contract; or unless the corporation expressly or impliedly adopts (see §§ 140 and 146 [5]) them after its organization, as by accepting their benefits.

It seems that the law does not prohibit the circulation of a prospectus of very roseate hue, but it must contain no positive misstatement of facts. If such a statement is made by a promoter, he will be liable for fraud; and if made after incorporation, the company will be liable on the same grounds for the tort of its agent. (See § 169.) In case a subscription is thus obtained, the subscriber can repudiate the contract and compel the corporation to return the money paid.

245. Subscription. — Under the statutes of some States, it is required that the capital stock shall be subscribed and paid for either wholly or in part before the charter can be issued; but, speaking generally, these are not necessary prerequisites to corporate existence. Also, some of the States require that the " articles " or certificate of incorporation shall show the amount of the capital stock, the amount actually paid in, and give the names and residences of all the stockholders, with the amount of stock subscribed by each.

A practical question is, "What is the effect of non-compliance with such statutory requirements?" The penalties are: —

First: They afford a basis for an action to be brought by the State looking to the forfeiture of the charter.

Second: They sometimes result in rendering the incorporators liable as co-partners, on the ground that as they have failed to comply with the law, they are not entitled to the privileges and exemptions of the corporate form which compliance would have conferred upon them.

Third: Some statutes impose a penalty on the directors and officers by making them liable for all debts contracted before the statutory requirements have been complied with.

With reference to the party subscribing, it is held that when the corporation is actually in existence, the contract for subscription may be either expressed or implied, and is binding to the same extent as any other contract from the moment it is entered into.

246. INCORPORATION. — Corporations were formerly chartered by special acts of the Legislature. The multiplicity of modern business affairs which can best be transacted by an organization in this form has led to the "corporation habit," if it may be so expressed.* Since a corporation possesses certain extensive advantages which a partnership does not have, great numbers of corporations, chartered for widely varying purposes, have sprung up. This has led to the enactment of general statutes in all the States specifying in great detail the steps necessary to form a corporation.

For lines of business not mentioned in the statute, a special act of the Legislature will be necessary.

While it is a very simple matter, relatively speaking, to form a corporation, every detail specified in the statute must be complied with, or else no incorporation is accomplished. For this reason, the services of a competent attorney to attend to these details will be essential, or grave difficulties are likely to be promptly encountered.

247. The usual proceeding under a statute is that the persons who propose to form a corporation, or a specified number thereof, sign and acknowledge an instrument called the *articles of association,* giving the name of the corporation, its object, principal place of business, amount of its capital stock, the number of shares, etc., which is duly filed with the proper State officer, as

*See Appendix Note 22. "Advantages in Corporate Form."

Secretary of State, or Commissioner of Corporations. When all the statutory provisions have been complied with the charter is granted as a matter of course by the proper State official. The Legislature, freed from considering these multitudinous special instances, is thus enabled to take up other legislative work.

248. CONSTRUING THE CHARTER and IMPLIED POWERS. — The charter of a corporation serves a two-fold purpose — it operates as a law conferring upon the corporators the right or franchise to act in a corporate capacity; and it also contains the terms of the fundamental agreement among the corporators. Hence it is to be construed as any other written instrument would be, the leading object being to discover the *intention of the parties.*

Thus, those who have become members of a corporation have proved an intent to prosecute the business expressly set forth in the charter, and they do not intend to enter into any other speculation. This is an important principle upon which rest the rights of minority stockholders, when a radical departure, or innovation in the corporate affairs is attempted by the majority, such as changing the kind of business, absorbing another company, etc. (See also § 249.)

It is clear also that the intention of the Legislature is to enable the corporators so to act as to carry out the business for which the corporation is formed. From which it follows that every act of a corporation which is not affirmatively authorized by its charter is in excess of its corporate powers as conferred by the State, and is also a departure from the primary agreement between the original members of the company. In pursuing this line of reasoning, the Supreme Court of the United States has said: "It remains true that the measure of the powers of a corporation is to be found in its charter; but it is equally true that what is fairly *implied* is as much granted as what is expressed, and that the enumeration of these powers implies the exclusion of all others."

As the foregoing paragraphs indicate, a large body of corporation law deals with this doctrine of *implied powers.* The principle already outlined is: A corporation has no power to enter into a contract that is not expressly or impliedly authorized by its charter; but any contract that is reasonably necessary for carrying out the powers *expressly* conferred is *impliedly* authorized. A contract is said to be *ultra vires* and therefore void if it is *beyond the power* as measured by the charter to make such contract.

A list of powers generally considered to be implied is: to sell

and to purchase such real and personal property as the corporate purposes require; to borrow money whenever the nature of the business renders it expedient or necessary; to issue bonds for any purpose for which a debt could be contracted; to make and endorse negotiable paper, if that is a usual or proper means of accomplishing the purposes for which the corporation was created.

Common Law Powers of a Corporation. As hinted elsewhere, statutes are generally framed from the timber furnished by the common law. This is as true of corporations as of any other branch. Thus a corporation enjoys certain powers almost irrespective of statutes, though in fact the following powers have been quite generally inserted in the statutes.

(1) The right to the use of the corporate name;
(2) The right to perpetual succession;
(3) The right to acquire, hold, possess, and dispose of corporate property;
(4) The right to appoint corporate officers and agents;
(5) The right to establish by-laws for the government of the corporation, its officers, and members.
(6) The right to sue and be sued.

The doctrine of *ultra vires* also occupies a prominent position in the body of corporation law, since the line between legitimate contracts made under implied powers, and those which go a step further and can with certainty be said to *exceed* the powers, is often a very hard line to draw.

249. ULTRA VIRES. **Ancient Doctrine.** — If a corporation makes a contract which is unauthorized by, or in violation of, its charter, or entirely outside the scope of its express powers (whether given by charter or statute), the contract is void upon the ground of incompetency. (See § 23.) This is because of a total want of power to enter into the contract; hence it is absolutely void from the start. Such a contract can never be made good by ratification, nor can it ripen into an implied contract by reason of having been performed, since the law will not *imply validity* on an unlawful contract. (See § 70, and Thompson on Corporations, § 5968.)

"The reasons a corporation is not liable upon an *ultra vires* contract are found: —

(*a*) in the interests of the public that the corporation shall not transcend the powers granted;

(*b*) the interests of the stockholders that the capital stock shall not be risked in enterprises not contemplated in the charter, and therefore not authorized by the stockholder in subscribing for the stock;

(*c*) the fact that the charter which contains the granted powers is a public statute, of which all parties are bound to take notice and be governed thereby." (11 Allen 65, and 131 U. S. 37.)

Modern View. — Except in "quasi-public-private corporations," the public has no direct interest whatever in the nature of

the powers vested in them. Corporations are now chiefly organized under general statutes, and not by special act of Legislature, and thus the charters are not promulgated publicly, and it may be difficult to consult them. To require a stranger to fully inform himself upon the contents of such charters would place an unreasonable hardship upon him.

In modern times, frequently a great number of purposes are enumerated in the articles of incorporation, and thus the corporation will have almost unlimited scope along business lines. This removes the objection mentioned above, that capital shall not be subjected to risks not contemplated in the charter.

Practical Status of Ultra Vires. — The engineer or business man will wish to know what weight the doctrine has relative to corporate contracts, existing, prospective, or fully executed and past. Numerous cases seem to establish the following propositions:

(1) Courts seldom recognize the claim that a contract, otherwise unobjectionable, is void because beyond the chartered powers of the corporation, if to allow the claim of *ultra vires* (when set up as a defense) would defeat justice, or shield one in wrongdoing.

(2) The doctrine of *ultra vires* is not usually applied when it is claimed as a defense by a person who has received a benefit through the unlawful act which is said to be *ultra vires.*

(3) If the act complained of is an abuse of power merely, then the State alone, acting through its Attorney General, can act.

(4) The doctrine of " estoppel " is applied in the case of *completed contracts*, to the effect that the claim of *ultra vires* shall not be allowed. This is held to dispose of the theory that persons dealing with a corporation are bound to take notice of their charter powers.

The doctrine of "estoppel" here referred to means that where one by his words or conduct willfully causes another to believe in the existence of a certain state of facts, and induces him to act on that belief so as to alter his previous position, the first person is precluded (i.e. "estopped") from averring against the second person, that a different state of things did exist at the time. To paraphrase the point, one does not have the right to "blow hot, and then cold," even in law, — a principle which has wide application.

Thus, in applying the doctrine of "*estoppel*," the courts hold (*a*) that if there has been no express violation of law, the corporation is estopped by its own contract or conduct from setting

up as a defense, that it was not in its power to make such contract, when sued for the enforcement of it.

(*b*) that where a private corporation enters upon a contract in excess of its granted powers and has *received the benefits* of the contract which the other parties acted upon, the corporation is estopped to repudiate the contract on the ground that it is *ultra vires*. And repeatedly, the courts have held

(*c*) that where a contract with a corporation, — the making of which is beyond the chartered powers, has been *fully executed* by both parties to the contract, neither of them can assert its invalidity as a cause of action against the other.

250. Things which a corporation can *not* do are: to bind itself by an accommodation note or bill; to enter into a contract of partnership; and in general, to subscribe for, purchase, or hold stock in another corporation, except that it may take such stock in good faith as security for a previous debt, and hold the same temporarily. Of course the charter may expressly authorize these things, in which case the rule will not apply. It cannot, in some jurisdictions, purchase any of its own stock, either for the purpose of selling, holding, or retiring it, though it may take its own stock in payment of a debt due it.

251. TRANSACTION of BUSINESS. — The business of the corporation is transacted by a Board of Directors, or managers, and such other officers and agents as may be necessary, all of whom may bind the corporation by acts done within the scope of their authority. The Directors have the power to bind the corporation by any act or contract within the powers conferred by the charter except that they cannot effect any great and radical change in the organization of the body without the consent of the stockholders.

The distinct entity theory is illustrated by the fact that stockholders have the same right to contract with the corporation as if they were strangers. But an officer, as such, cannot contract with himself on behalf of the corporation, or convey to himself in his individual capacity unless he acts under the immediate direction of a superior officer.

252. The officers of a corporation, being entrusted with its affairs, and custody of the funds of all the stockholders, stand in a fiduciary relation toward it and them. Their position is practically that of trustees, charged with the care of the corporate funds, and they are required to exercise an even greater care than

they would of their own, and are personally responsible for any misapplication of such funds, or loss through their negligence.

The underlying reason for this is in the application of the equitable doctrines of trusts (a large and important branch of jurisprudence which cannot be entered upon here, see § 95). Thus it is that the directors of a corporation cannot directly or indirectly derive a personal advantage or profit from their position which is not enjoyed in common by all the stockholders. Secret profits made by them in transaction of company business belong to the company.

253. LIABILITY in TORT. — A private corporation is liable to outside persons for the torts of its servants and agents committed in the course of their employment, to the same extent that a natural person would be, as a principal. This, it will be perceived, is the reason for the liability of railroad corporations in practically all of their damage-suits.

254. DISSOLUTION. — We may mention briefly the ways in which a corporation is dissolved, or its existence is ended. If the charter specifies that it shall exist for a limited time only, when the time elapses, the corporation *ipso facto* expires. This arrangement is not generally made, nowadays. The corporation also may be dissolved by an act of the Legislature repealing its charter, under the State's reserved right to repeal; by surrender of its charter with the consent of the State; by forfeiture of its charter by reason of mis-use, or of non-use. The commonest method is by surrender.

If the project has been voluntarily abandoned, or if it becomes impossible to go on with it for any reason whatever, it is the company's duty to its creditors to call in whatever capital may be necessary to settle up its affairs; and in such a case every shareholder when called upon by the corporate officers will be liable to contribute his proportionate amount up to the full price of his shares. (See § 257.)

THE STOCKHOLDER

255. STOCK and CAPITAL. — The capital of a corporation is the fund with which it conducts its business, and embraces all its property, both real and personal. The *capital stock* is the amount of capital prescribed by its charter to be subscribed, or contributed at the outset, and remains unvaried unless changed according to the terms of the charter, or by an act of the Legislature. In theory, the aggregated funds of the corporators form the capital, or capital stock of the corporation. To the community

at large, the capital stock announces the extent of the means contributed, and thus enables every one to form an opinion of the credit to which the corporation is entitled. The amount of capital stock will depend upon the probable amount of money required to achieve the end for which the corporation was created. If a statute requires a specified amount of the capital stock to be paid in, before the corporation can do any business, there is thus given additional information as to its resources.

256. CONTRACT of MEMBERSHIP. — The stockholders are bound together by a contract, set forth in the charter (or in the articles of incorporation, if created under general laws). But this is not an ordinary common law contract, since it is illegal to enter into it in the absence of an enabling act, or a charter — a reason why the corporation must be formed strictly in accordance with statutory requirements. (See §§ 246 and 240 [a].) Every person who subscribes for shares agrees to associate with the other members upon the terms and conditions indicated in the charter.

Among the things agreed to by him is that he will contribute to the capital stock the amount subscribed for by him, and the corporation may enforce its rights to be so paid. In general, the total stock must have been subscribed before the corporation can proceed against any subscriber.

257. Kinds of Stock. — A *share of stock* is the right to share in the surplus of a corporation and ultimately, upon dissolution, to share in the net assets remaining. A *stock-certificate* is a written acknowledgment by the corporation, of the rights and interests of the stockholder in the corporate property and franchise.

The *common stock* entitles the holder to a pro rata division of the profits, if there are any. Some corporations issue no preferred stock, but only common. The *preferred stock* is limited in its participation in the profits, however, to the amount which it is stipulated that it shall receive. Up to the stipulated amount, the preferred stock takes *all* the dividends, even though there is none remaining for the common stock.

Thus suppose, for example, that a corporation has made an annual net profit upon its capital of 50%, and that there is 7% preferred stock outstanding. In this case, if the directors voted it, 43% would go to the common stock, and only 7% to the preferred.

Where a corporation has both preferred and common stock, the common is much more speculative. It is not to be understood in the case of the 7% preferred, that 7% is guaranteed but rather

that all profits up to that amount will be assigned to it as earned. Whether there shall be any preferred stock or not, and how much, must be determined in advance of the sale of *any* stock of either kind. Then those who choose to buy the common, purchase with full knowledge that its share in the earnings will be deferred.

Full-Paid Stock is stock the par value of which has been paid for either in cash or property. Its owner is not subject to any further liabilities either to the corporation or the creditors (except as noted in § 260 [b]).

Many of the States provide by statute that no corporation shall issue stock except for money paid, labor done, or property actually received, and declare all fictitious increase of stock to be void. Under such circumstances an original issue of stock as fully paid at less than par will be void.

Many cases will be found bearing upon the validity of so-called "*bonus*" or "*promotion*" stock. In regard to its validity and the stockholder's liability the courts differ.

The Court of Massachusetts (followed by New York) says, "When stock is issued, it represents the proportionate interest of the shareholders in the corporate property, — subordinated to the claims of the creditors. The liability of a shareholder to pay for his stock depends upon his contract, express or implied, or upon some statute. In the absence of these grounds of liability, we do not perceive how a person to whom shares have been issued as a gratuity has by accepting them committed any wrong upon the creditors or made himself liable to pay the nominal face value of the shares, as he would be had he made a contract of subscription." (142 Mass. 349.)

Meaning of Non-Assessable Stock. — It is held to be unquestionably within the powers of a corporation to agree with stockholders that stock shall be issued to them at less than par, and when so issued they shall not be subject to any further assessments on the part of the corporation. But this is held not to have the effect of preventing subsequent creditors of the corporation enforcing the payment of balances due them in case of its insolvency.

Extraneous to the matter of issuing non-assessable stock, it is held that the right to levy assessments upon stockholders does not exist after payment by such stockholders for their stock in full, unless the power to do so is conferred either by statute, by the articles of association, or by the unanimous consent of all the stockholders.

258. STOCK WATERING. — If an increase in the capital stock is made when in fact no additional value has been paid in, either in cash, or in money's worth, this is called "stock-watering." Shares are issued as fully paid up, which is not the case, and the difference between the par value and what is actually paid in is "water." Its effect is to decrease the value of the stock already outstanding because each share then represents a smaller claim upon the company's assets, and requires the gross dividend

to be cut into smaller slices. In general, the power to increase capital stock exists only when conferred by the express terms of the incorporating act under which the corporation is organized; in the absence of it the issue is void.

Stock-watering is perhaps never morally legitimate but it may be legalized, as has just been shown. Thus the issuance of watered stock is a favorite device of promoters of companies, organizers, and manipulators. By it they strive to carry out their plans of realizing enormous gains from small investments, or to conceal large and unreasonable profits. For it is evident that if huge profits are made upon 1,000 shares, and that amount is then watered by increasing the shares to 5,000, the extra 4,000 may be voted to the original holders for nothing, whereupon the *seeming* return upon the number of shares outstanding has become very moderate.

259. INCIDENTS of OWNERSHIP. — Stockholders have the right to meet and elect directors; to prescribe by-laws; to inspect the corporate books; and to receive such dividends as shall be lawfully and fully declared by the directors. But there can be no suit for dividends already earned until the directors, acting with sound business discretion, have declared the same. The ownership of shares entitles the owners to participate in the management of the business, to share in the profits, and in the surplus after the payment of corporate debts.

260. Liability of Stockholders. — By the common law stockholders were liable to the full extent of the par value of the capital stock subscribed for by them, and to this fund and to the profits and surplus on hand the creditors were obliged to look. The stockholders' liability for the corporate debts may be discussed under two heads:

(*a*) Unpaid Stock Subscription. "The capital stock of an incorporated company is a fund set apart for the payment of its debts. It is publicly pledged for the security of those who deal with the corporation. Unpaid stock is as much a part of this pledge, and of the assets of the company, as the cash which has been paid in. The stockholders thus become liable for the debts of the corporation to the extent of the unpaid balance on their stock. Where there is a statutory liability, this is intended merely as a secondary security for the creditors in case the assets of the corporation are insufficient to meet its debts." (91 U. S. 60.)

(*b*) Special Statutory Liability. Personal responsibility of stockholders is inconsistent with the conception of corporate liability at common law, and if it exists at all, must rest upon some positive statute. (40 N. J. L. 52.) This liability may, therefore, take a variety of forms. The double liability imposed upon stockholders in National Banks, is a familiar example. In a few States the incorporators are liable as partners if they fail to legally organize as a corporation. In another group of States the stockholders are liable for all debts of the corporation in full; while in another group, they are individually liable for any fraud or misconduct on their parts, etc., etc.

261. The directors will be liable to creditors when *their* wrongful acts have diminished the fund to which the creditors look, as

when they have unlawfully declared an unearned dividend, the effect of which was to cause the insolvency of the Company; or for debts contracted before the statutory requirements as to subscription, publication, etc., have been complied with. Other acts by which they will incur liability in various jurisdictions are: Violation of express statutes; making loans to directors; loss of funds through negligence; embezzlement of officers; permitting an illegal issue of stocks and bonds, etc.

262. RIGHT to TRANSFER STOCK. — A leading distinction between a corporation and a partnership lies in the degree of transferability of their shares. In a corporation, except in so far as it may be restricted by charter, or by an authorized by-law (called the "close corporation by-law"), shareholders have an absolute right to transfer their shares to any one who is capable in law of taking and holding them. This they may do without consulting the wishes of any other shareholder.

When the transfer is made in good faith, the transferee takes the place of the first holder, assumes all his rights, and is subject to all his liabilities, also. The usual mode of transfer is by a written assignment with a power of attorney to transfer the stock on the books of the Company. In accordance with this, the old certificate is cancelled, and a new one issued to the new owner.

Corporations Holding Stock in Other Companies. — The prevailing rule in this country is that unless power is expressly given by statute, or by reserving such right in the charter, corporations have no implied power to subscribe for, purchase, or hold stock in other corporations. But if there is no statutory prohibition in the matter, and a charter is granted which contains this privilege, then of course it can be safely exercised. The organization of subsidiary companies is similarly dealt with; and so is consolidation with other companies.

MUNICIPAL CORPORATIONS

263. Many of the principles discussed under the general head of private corporations also apply to public and municipal corporations. The term "public corporations" includes cities, villages, townships, and counties though the two last are rarely if ever actually incorporated. They are each organized to perform functions of self-government, are created by the State, and in general, they possess only such powers as it confers upon

them. A public corporation, like a private one, is a distinct entity, and represents the unification of a large body of inhabitants into one distinct legal personality. A private corporation rests upon an express or implied contract between the corporators and the State, and a contract between the individuals composing it. There is no such contractual relation in the case of a public corporation, since its chief purpose is to further the ends of local self-government. The central government (the Legislature) has practically unlimited powers over a municipal corporation and may modify, diminish, or enlarge its powers. In the case of the private corporation, its charter rights are extensively protected.

264. CHARTER POWERS. — The distinctive charter powers which may be conferred upon and exercised by a municipal corporation are very numerous, — with not a few of them the engineer may be directly concerned. Thus in the control of *public parks and squares*, a city may, under legislative authority, acquire such lands by eminent domain. (See § 235.) Though as a rule, a city has no power to act outside its territorial limits, yet if it owns and controls such a park, the city's powers in regard to it are the same as if it were owned by a private corporation.

With reference to *wharves* and *docks*, power is usually conferred to control and even to erect such structures. Another similar special power often given the city is the right to control *ferry franchises*, to license them, or operate them in its own behalf.

A considerable body of powers deals with the *public health and safety*. A municipal board of health usually enforces sanitary regulations made by the State, and may promulgate additional local regulations.

The establishment and regulation of *fire departments* falls within the above classification of powers. Thus it is held that a city has authority to establish fire limits within which only fire-resisting materials shall be used for structures; and that it may destroy buildings to prevent the spread of fire (for which it is generally held that the city incurs no liability to the owner, though some States have provided otherwise).

In this connection it is held that a city is not liable for the *negligent acts of its servants* in the fire departments, or other agents or officials, nor for the acts of those persons charged with the enforcement of its sanitary and health regulations. In these cases the city is performing services of a purely public character. There is no element of guaranteeing the safety or satisfaction of the individual served gratuitously, as there would be, if the services were performed under contract by a private corporation for hire.

To explain why the rule against municipal corporations seems so lenient, the great Chief Justice Marshall said: "Money corporations are those which carry on business for themselves, and

they are liable for their torts, while legislative [municipal] corporations established as part of the government are not."

The *water supply* of a city furnishes a field of great engineering and legal importance. It is held that to supply itself with water a city cannot divert the water from a stream if to do so would injure the riparian owners. (65 Pa. 444.) But under a power of eminent domain a city may be so authorized to divert water for public purposes. (4 Gray 500.)

As to the *quality* of the water supply, it has been held in England that a city is not liable for disease contracted by a citizen from the city's impure water supply; but that a private water company would be liable in such a case, since they operate the water-supply system for the purpose of private gain.

With reference to city-owned *gas works*, however, a different position is held, to the effect that for negligence in supplying this commodity, the city would be liable to the same extent as a private company.

A highly important *restriction*, which is quite generally imposed upon municipalities, is the limitation upon its *power to borrow money*. Jurists disagree as to whether the power to borrow at all is an *implied* one, or must necessarily be expressed or sanctioned by legislative authority; but in general, there is an express *limitation* on the *amount* which can be borrowed for any purpose whatever. This amount ranges from 5 to 10% of the assessed valuation of the property within the city limits.

There is an imposing array of cases to the effect that a person, — an engineering contractor, for example, — about to enter into a contract with a municipality, must ascertain at his peril the legal limits of the municipal indebtedness. He must determine for himself whether the proposed contract will cause the limit to be exceeded, for if it does he cannot enforce payment of the debt which may be due him. (See § 23.)

There is an important *exception* to this rule, however, where the debt is incurred through a breach of obligations imposed upon the city by law. Thus, if a city fails to keep its streets or sidewalks in repair, — or do any other acts wherein it may be held accountable for its negligence, — it cannot escape liability on the plea that damages cannot be collected because the city is already up to or over its debt limit. (99 Ill. 329.)

265. LIABILITY of MUNICIPALITY in TORT. — A city is not liable for legislative or discretionary action on the part of its officers resulting in private damage; nor for its neglect to abate nuisances; nor for the destruction of private property within its limits by mob violence, even though statutes make it the city's duty to police its streets.

Streets. — At common law, the city was not liable for damages

due to changing the grade of its streets, though this is now generally changed by statutes and decisions. But if the change of grade is made for other than the common street purposes, — as by a railroad company improving a grade-crossing, for example, — then, at common law, abutting owners have a right to damages for such change.

It is held that the city owes no duty of *lateral support* (see § 210) to owners abutting on a street whose grade it lawfully changes, for this common law obligation between individuals is not applicable to municipalities.

In most States municipal corporations are held liable for injury to persons caused by defective and unsafe streets, sidewalks, and bridges, within their corporate limits. The city is not an insurer of the safety of persons using the streets, but is bound merely to keep them in a condition reasonably safe for travel in the ordinary modes.

The city's agents must have had notice of the defect, however, and the plaintiff must not have been guilty of contributory negligence. In one case, the city negligently allowed ice caused by a broken water main to remain after it had had a reasonable opportunity to remove the same, and it was held liable for injuries resulting therefrom. (118 S. W. Rep. 994.)

Sewers. — With reference to sewers, Dillon, an eminent authority, says:

First, a municipal corporation is *not* liable on account of the insufficiency of the system adopted, except where it has the direct effect of precipitating sewage upon private property;

Second, the city *is* liable for injuries resulting to private property from the negligent execution or construction of the plan of sewerage adopted; or for the negligent failure to keep the same in repair, and free from obstructions. When the sewers of a city have been built at public expense and the property in them is vested in the city, neglect in their construction or repair whereby private property is injured gives a right of action against the city. (110 Mass. 216.)

The maintenance of a free public sewer by a city is an exercise of its police powers, for the public benefit. (See § 264.) Hence a city was not liable for the death of a citizen from illness caused by pollution due to such sewer. (Asheville, S. C. See 64 S. E. Reporter 88.)

PARTNERSHIP

266. Partnerships were known before the legal relationship called a corporation was invented. When an undertaking too large for the personal resources of the projector came up, he invited one or more persons in whom he reposed sufficient confidence to pool their assets with him. Upon the strength of their combined credits and resources, whether of property, money, personal skill, or knowledge, the scheme was undertaken. The resulting status of the individuals was in law known as a partnership. Our present purpose is to present some of the most prominent characteristics of this legal status, or relationship. The discussion will fall under three general heads, viz.: general and limited partnerships, and joint-stock companies.

267. DEFINITION. — A partnership is defined as the relation existing between persons who have agreed to combine their property, labor, or skill, or some or any of them, in lawful commerce or business, sharing the profits, and generally the losses, between them. It is purely a *contract relation*, resting upon an *agreement* either express or implied, and the ordinary rule of competency to contract applies. (See § 23.)

Any person who is capable of contracting may be a partner. Corporations form a notable exception, and for cogent reasons of justice and equity, no corporation can enter into a contract of partnership. A partner is general agent for his firm, while the agent of a corporation is a duly elected officer, possessing the confidence of the stockholders, and by them authorized to do specific acts. If the corporation had a partner, under the rules of partner's agency (see § 277) he would have power to bind the corporation and control its affairs without the assent of the corporation stockholders, and results gravely prejudicial to them might ensue.

268. PARTNERSHIP ARTICLES. — When forming a partnership, if the parties choose to regulate their rights, powers, and duties among themselves by a formal written instrument, it is termed the "partnership articles." Like every other contract, it must be construed (see §§ 80-1) or interpreted, and much matter not expressed in the articles will be implied and enforced by common law rules.

The articles must be construed with reference to the purposes of the partnership; to defeat fraud; and one partner's taking unfair advantage over another. Should the firm continue beyond the term first agreed upon, the same articles will govern, unless new ones are provided. Of course the terms may be modified by mutual agreement, like any other contract.*

Some of the topics usually treated in the articles are: The general nature of the business; time of commencing, and duration

*See Appendix Note 13. "Construing Partnership Articles."

of the relation; the name, or style of the firm; the capital or advances contributed or made by each partner, and his rights, duties, and share of the profits; provision for annual accounts, and for general accounting upon dissolution; restraint upon partners from transacting similar business to compete with the firm; reference to retirement of a partner, or sale of his interest, and the status of his representative in case of death during the term; and so on, according to the desire and intention of the parties.

269. PARTNERSHIP by IMPLICATION. — When there are clear and explicit " articles " it is easy to determine whether a *bona fide* partnership was created. But in the absence of such articles, the detection of a binding *implied* contract (see § 68) of association is frequently very difficult. By the force of circumstances, of which innumerable combinations might arise, it could be found as a matter of law, that a partnership *did* exist even though the parties were entirely unconscious of the fact, and did not intend that relationship; and this too, even though the critical test lies in the intention of the parties.

"Holding Out." — It is not likely that any prudent business man will leave the determination of his relationship to a fellow-trader to mere inference, when the existence of what we may term a *primary* partnership is in question. But where there is a " holding out," another partnership relation springs up with regard to one or more outsiders creating by implication a *secondary* partnership, though perhaps the original one *was* formed by express agreement.

This may happen where a person by declaration or by acts, represents himself as a partner, or suffers himself to be so represented. He then becomes liable to third persons just as if he were in fact a partner, though there are no rights whatever as between himself and the original partnership. A common instance is where a retiring partner is liable on subsequent firm debts because he neglects to give notice of his withdrawal. Or perhaps he does not forbid the use of *his* name by the firm, or the retention of it in the firm name. It may happen in other ways, also, and it is always a question of *fact*, whether the holding out creates the partnership relation.

270. The spirit of the foregoing is also stated thus: "Every one who by words, spoken or written by himself, or by conduct represents himself, or knowingly suffers himself to be represented as a partner in a particular firm, is liable as a partner to any one who in good faith gives credit to the firm on the strength of such representation." Such an individual is said to be "estopped" (see § 249 [4]) to deny that he is in fact a member of the firm, and the resulting quasi-contractual (see § 129) relation is called a "partnership by estoppel."

There is an apparent *exception* to this if after a partner's death the business is continued in the same name, for such use would not of itself make the deceased partner's executors or administrators liable for any partnership debt contracted after his death.

271. PARTNERSHIP TEST. — Even where articles of a more or less definite and extended sort have been prepared, still questions may arise as to whether a partnership really exists. The best test is: If you can find from all the circumstances that the

parties *intended* that they should be mutually principals and agents; that each should have power to bind the other as his agent in affairs pertaining to the trade, — if you can find by express agreement, or by their conduct, that this is what is intended, then you have a partnership; this *is* their intention *prima facie,* when they agree to share profits and losses. This test is applicable through the most widely varying sets of facts. Since partnership rests upon a contractual basis of agreement between private parties, it will be seen that here is but another application of that leading doctrine for construing contracts, viz.: The *intention* of the parties shall prevail. (See § 81.)

All the circumstances of each case must be specially considered. The facts that each person has contributed capital, skill, and labor, shares in the management and in the profits and losses of the business, are all strong *evidence* of intention to form a partnership, and such parties may, by outsiders, be held liable as partners, even though among themselves they have expressly stipulated otherwise.

272. Partnership and Joint Enterprises Distinguished. — In a case where three Railroad Companies and Steamship Lines agreed to carry freight over a certain route and to divide the returns, this was held not to be a partnership, but merely a joint enterprise. Another case shows that an agreement to pay for services or commissions out of a share of the profits did not constitute a partnership; probably because it was not so intended, and the servant or employee was to bear no losses, — only to share in contingent profits.

In another case, A and B contracted that if B should advance $5,000 to carry on a smelting business, A would pay him 10% of the profits. Third parties sued, claiming this was a partnership. The original agreement was that A should have the use of the money for one year. The transaction was held to be merely a loan; A and B were debtor and creditor, but not partners.

Agency. — A person sued as a partner was employed to purchase and forward produce, for which he was to receive a share in the profits. He had no interest in the capital stock of the company, and exercised none of the usual powers of a partner. He was held to be merely an agent.

Profits. — It was formerly held that all persons who shared in the profits of a business incurred the liabilities of partners therein, even if no partnership was contemplated among the parties. It is now held, upon the best authority, that the test is to be found in the *intention* of the parties (see § 271) to enter into the relationship of partners. Although it is usual for partners to share losses, an agreement whereby one is to bear them all is not invalid.

273. FIRM NAME. — A firm name is not essential to the existence of a partnership, but is convenient in the transaction of business, and when one has been adopted all the firm business should be conducted under it. Any name may be adopted embracing the names of some one, part, or all of the partners; or it may be purely fanciful giving no clue to the identity of the partners, as the Eureka Contracting Co., Western Construction

Co., etc. Names which a firm can *not* adopt are those which purport distinctly to be the name of a corporation, or one which has been, and is, used by another firm or company, and which has become associated with and appropriated to their business. In such a case it has become a part of their " good will," and is an asset with a property value. If this property right were not recognized, practically all money spent in advertising would be wasted.

Notice and Firm Name. — B and K were partners under the name of Spring Brook Mill Co. This firm was dissolved by both members selling out, but the incoming purchasers carried on the business under the same name. The plaintiff had contracted with the new firm without knowledge of the dissolution. The Massachusetts court held that if plaintiff had been dealing with the former partnership, even though in ignorance of the identity of its members, yet they had no right to step out without giving notice, and thus shift the responsibility of future contracts upon persons who might not be responsible. Hence the original firm-members were held liable.

The firm name becomes of importance also with reference to the holding of *real estate*, for while a partnership may own and even deal in real estate it cannot hold legal title in the firm name, but must hold jointly in the names of the partners who compose the firm. Therefore when they convey firm realty, all the partners must sign the deed individually. This is another illustration of the difference between a partnership and a corporation, and of the absence of the " distinct entity " theory in partnership. Personal property, however, may be bought and sold in the firm name. This is a practical rule of great usefulness.

274. DISSOLUTION. — Some partnerships are formed to last for a definite period, and others exist " at will " of the persons composing them. They can be dissolved at any time by notice from one partner; by his selling out his interest, and giving notice thereof; or by a partner's bankruptcy. Death of a partner will *ipso facto* terminate a partnership, and the bankruptcy of the firm has the same effect. But if the parties choose to make a positive arrangement covering such matters in their articles of partnership, it can then be provided that the death of a partner, sale of his interest in the firm, or his bankruptcy, shall not dissolve the partnership. It may be truer to say that the firm *is* dissolved by such act, notwithstanding their agreement, and that in

reality a new contract relation, conditionally provided for in the first agreement, automatically enables a new partnership to spring into existence.

There are other causes for which a court of equity will decree a dissolution, namely: Insanity, or other incompetency of a partner; gross misconduct of the business by one partner, when the aggrieved party can get a dissolution, as where the former has sought to withhold from his co-partner the profits of some secret transaction; or where one co-partner has sought to exclude or expel another, or to drive him to a dissolution; or where the business has been a failure, and there is an impossibility of making a profit.

275. But even *upon dissolution* the rights and duties of partners do not immediately come to an end, since it is the duty of some one or all of them to do such acts as are necessary to wind up the business. For the purpose of properly finishing and carrying out business remaining unfinished at the moment of dissolution, any partner may make new or supplementary contracts which will bind the firm. But the subject matter of the last contract must not be entirely new and distinct from the prior business.

A firm manufacturing clothing was dissolved by the death of a partner, yet the surviving partner entered upon new contracts for the purpose of completing a large quantity of unfinished clothing on hand at the partner's death. This was held to be necessary and proper in order to realize a fair value upon the goods, and therefore the estate of the deceased partner was bound by these contracts, made after dissolution.

Upon dissolution, the partners or survivors must give notice of the dissolution, must pay all the *firm debts*, applying the firm property for this purpose and make up the deficit personally, if there is one. (See § 279.) If there is a *surplus*, each has a right to his share in it according to his share in the firm.*

276. KINDS of PARTNERS. — There are various types of partners known as general, special, ostensible, secret, silent, and dormant partners. To define: A *general* partner is one who is liable for all the firm debts, while a *special partner* is one whose liability for the firm debts is limited to a specified amount. An *ostensible* partner is one whose connection with the firm is openly avowed, but a *secret* partner is one whose connection is concealed, or at least, not announced nor made known to the public. A

*See Appendix Note 14, "Final Accounting."

silent partner is one who shares in the profits, is an ostensible partner, yet has no voice in the management. A *dormant* partner combines the characteristics of both a silent and secret partner, and though his character as partner is concealed, he has no voice in the management. When discovered, he is liable as a general partner, in so far as those who know him to be a partner are concerned. The *discussion* which follows pertains almost wholly to the rights and obligations of a *general partner.*

277. PARTNER'S POWERS. — Perhaps the central feature in this whole discussion of partnership is the power of the individual partner, and his attendant liability. Every member of an ordinary partnership is by implication its *general agent* fully accredited to transact the firm business in the ordinary way. By the principles of agency, this means that the other parties composing the firm are individually bound by the acts of said partner when he is acting for the firm within the scope of the authority conferred by the nature of the business carried on.

This implied authority may be restricted by agreement between the partners, but such restrictions upon his authority do not affect the right of third persons to deal with such partner on the firm business, unless such persons have notice of the restrictions. A difficulty is presented here, since no rule can be laid down to determine the question as to whether a certain act is necessary in the transaction of a business, and so within a partner's *implied* authority. Hence each case must be determined by the nature of the business and the customs of persons engaged in it.

278. There are, however, certain things which it is well settled a partner *may*, and others he may *not* do. A partner *has power* to bind his firm by appointing agents, selling chattels, receiving bills of exchange; and in *trading partnerships*, he has the power to borrow money necessary to carry on the firm business, sign notes, endorse negotiable paper in the firm name, and to mortgage and pledge personal property. But he *cannot* bind the firm by making a firm assignment for the benefit of creditors; nor make a guaranty in the firm name; nor make a mortgage, deed, or lease of realty.

In accordance with the foregoing, it is plain that a partner can bind the firm upon simple contracts which are within the scope of the firm business, both as to buying and selling, though he cannot sell *all* the firm property so as to terminate the partnership.

The rest of the firm can only escape liability upon such contracts of buying and selling by giving *previous* notice of their dissent to the party with whom the contract is about to be made. This accords with the principle of agency that a principal may revoke his agent's authority before the intended act is done. Otherwise, the remaining partners will be bound.

Where a partner pledges the firm credit for a purpose apparently not connected with the firm's ordinary business, the firm is not bound unless he is in fact authorized by the other partners; but this does not affect any personal liability incurred by him individually.

Persons who have notice or reason to believe that the thing done in the firm name is for a private purpose, or on the separate account of the person doing it, cannot say that they were misled by his apparent general authority. The simple reason is that his authority exists for the benefit and general purposes of the firm and not for the benefit of its individual members. The commonest case of this, perhaps, is where one partner gives notes of the firm or other firm securities to raise money for private purposes, or to pay his private debts. If the person so lending has notice of the want of authority, he cannot sue the firm for it.

279. PARTNER'S LIABILITY. — Co-extensive with the partner's powers, and possibly of even greater importance, is the partner's liability. This is said to be "joint," unless the articles expressly impose a "several" liability, or unless the partners are made jointly and severally liable by statute, as is quite generally the case. "Joint" and "joint and several" are technical terms of weighty import.

To illustrate: Suppose a firm of three persons incurs a firm debt of $3,000. The creditor can look for satisfaction not alone to the firm property, but also to the individual property of the partners. He may proceed to sue the partners individually without first exhausting the firm assets, should he elect to do so. Now if the liability of the partners was "joint" only, then each would be liable to pay $1,000, and no more. Hence if two had property, and the third had none, the firm being insolvent, the creditor could get only $2,000. But if the liability is "several" as well as joint, the creditor can at his pleasure select any one or more of the partners, and hold him or them for the whole of the firm debt. Suppose one is so chosen and that the other two possess no property. Of course a judgment against the irresponsible partners, if obtained, would be valueless.

A little consideration will show that this joint and several liability is almost the central fact in the partnership status. It also serves to show clearly that the existence or non-existence of a partnership may in a given state of facts spell the financial ruin of an individual.

280. Here also, it appears clearly, is one of the foremost distinctions between a *partnership* and a *corporation*, since the liability of the corporation stockholder is generally limited to the price of his shares. (See § 260.) Therefore he may lose that amount,

and frequently does so because of a lack of adequate capital to prosecute the enterprise; for want of sound business management of the corporate affairs, etc., etc. But when his money is gone, that is the end of his liability.

On the other hand, the partner who is financially responsible, but has dishonest or incompetent associates, is by no means so well off, since each partner in a general partnership is individually liable for the whole amount of the firm debts, whether he is able to pay them or not. (§ 279.) This liability begins when the partnership is actually formed, even though the articles are not executed until later.

Torts. — The firm's liability extends also to *torts* (see § 156) committed by one partner if the firm has authorized such tortious act, or has in any way joined in its commission; or when they have adopted it, either expressly, or retained the benefits thereof; and also if committed by a partner while acting in the ordinary scope of the partnership business and as a part of his employment. This is but another illustration of the principle of agency that a principal (the firm) will be liable for the torts of his agent (the partner). Torts which may be mentioned in this connection are trespass, fraud, and committing a nuisance.

281. Termination of Liability. — The liability of a partner with reference to *future acts* of his co-partners is terminated by the firm's *dissolution* by operation of law, as by the bankruptcy of a partner, or a dissolution by act of the partners, when proper notice thereof has been given to the public and to prior dealers with the firm. Then those who deal subsequently with the firm will have notice that they cannot rely upon the financial responsibility of the retiring partner.

The liability of the partner for the *past acts* and obligations of the firm is terminated by payment or settlement of them by the firm; or by a partner for the firm; or by a release to the firm or to any member thereof; or by a new contract made to supersede the old obligation, assented to by the creditor. It should be added that if a firm passes through *bankruptcy*, and is discharged by the Federal Court, no actions can subsequently be maintained against the partners for previous obligations of the firm, irrespective of the percentage paid upon the claims at liquidation.

It should be carefully observed that a partner is *not released* from prior obligations of the firm, merely by reason of dissolution,

unless by the consent of all the parties in interest; or unless the obligation is assumed by the remaining partners, or disposed of as already suggested.

If a partner is sued for a private debt not connected with the firm business, his interest in the partnership may be reached through an equitable action amounting to an attachment and sale upon execution. Yet the purchaser who buys the partner's interest merely succeeds to the rights of the partner, i.e. to a share in the surplus, if there is one, after the payment of all firm debts. Hence the buyer, in such a case, is likely to get a doubtful bargain unless he is familiar with the condition of that particular firm and feels confident he will recoup himself from the surplus ascertained at the accounting.

282. PARTNER'S INTEREST. — A partner's interest in the firm property simply entitles him to a given proportion of what remains of the assets after all the firm debts are paid. It follows, therefore, that no partner has ownership of an undivided share in the firm property. That is, he could not demand, in a firm of three, that one-third of all the firm property should be separated and set aside as his private or individual property. However, it is law that a sale of firm property by one partner passes the whole title.

283. Partner's Lien is another phase of the partner's interest worthy of notice, since it is frequently very valuable, especially if a partner has associated himself with what proves to be bad company.

Suppose partner A has property but partners B and C have none. B and C are charged with the management of the business and with intent to defraud or injure A, willfully refuse to apply the firm property or assets to the firm debts. A cannot escape liability because of the joint and several rule already alluded to (§ 279). But A has what is called a "partner's lien" or "partner's equity," by which he can at equity force B and C to apply the firm assets to the payment of the firm debts before recourse is had to the partners individually. This right does not affect third persons doing business with the firm, but is merely a protection for a partner against his unrighteous co-partners. Of course, if there is no firm property to apply then this "lien" will not be worth much.

284. Partner's Recompense. — A partner is not entitled to compensation for services rendered the firm (i.e. wages or salary, unless by an express agreement), even though he has been more active than his co-partners in pushing the firm business. But where he has incurred expense or personal liability on behalf of the firm in the usual and ordinary conduct of its business, then he must be reimbursed by the firm.

285. DUTIES. — It is a partner's duty to exercise reasonable skill and diligence when he acts for the firm, and he is liable to his partners for any loss caused by his default in this respect. It is

their duty to exercise the utmost good faith toward each other at all times. On this theory the parties are absolutely free to choose whom they will associate with (called the doctrine of *"delectus personalis,"* see § 240-[1]), since the relationship must of necessity be one of mutual trust and confidence. In accord with this principle, it is a general rule that all profits accruing to one partner by reason of his individual transactions concerning firm interests, or which in any way compete with firm interests, or profits which he is able to make solely because of his connection with the firm, must be accounted for to the firm. A partner cannot buy for himself from the firm, nor from himself for the firm, nor in any way make his and its interests antagonistic. No services will entitle him to compensation, other than by a division of profits; and this is generally held to apply to a surviving partner winding up firm business. (§ 275.) If a partner enters into a rival business, or uses firm money for other purposes, he must account to his co-partners for the profits.

LIMITED OR SPECIAL PARTNERSHIPS

286. A limited partnership is one that is composed of one or more general partners (who are governed by the usual rules as to their powers, duties, and liabilities, see §§ 266-285), and one or more *special* partners who have placed a specific sum in the business and may lose that, but are not liable further.

Limited partnerships were unknown to the common law, and can exist only when authorized by a statute, whose provisions must be strictly complied with. Their chief **object** is to enable capitalists to employ their wealth in trade or other enterprises without taking an active part in the management of the business, and without risking more than the amount originally subscribed. The formalities which must be observed are more like the organizing of a corporation than of an ordinary partnership, but should the statutory requirements not be strictly complied with the special partner may lose his exemptions, and become in fact but a general partner, with the liabilities of such. The creation of limited or special partnerships thus permits the co-operation of men whose chief possessions are integrity and ability with those possessed of ample financial means.

287. Though the right to create such partnerships exists in all the States, it is but little availed of, so prevalent has the "cor-

poration habit" become. Where the enterprise is not sufficiently important to warrant the launching of a corporation, the limited partnership is a most useful form of organization.

In the creation of limited partnerships, the statutes generally require the execution and filing of a *certificate* stating:

(1) The firm name.
(2) The general nature of the business to be transacted.
(3) The names of the partners interested, distinguishing the general from the special, and giving the residences of each.
(4) The amount of cash contributed by each special partner.
(5) Dates of commencing and of terminating the partnership.

288. Another important fact is that the special partner must contribute actual cash, and this must be paid in before the certificate (corresponding to the "articles") is filed. An honest *intention* to pay in the money at or before the time appointed for the commencement of the partnership cannot remedy the defect if the money was not actually paid in when so alleged upon filing the certificate. The object of this provision is to protect the public by providing a fund upon the day the partnership is formed, to be subject thereafter to no contingencies or losses, except those which come from the proper business of the partnership.

Though the general partnership theory is that people deal with a firm solely upon the individual credit of its members, the special partner creates a fund to which third persons can look, which gives credit to the whole aggregation. Thus moneyless persons who possess the requisite skill and knowledge are not prevented from embarking upon profitable ventures. It is perhaps no more than just, also, that as the special partner is not in a position to share in or direct the management, he should have his liability limited to his original stake, the same as though he held shares in a corporation.

The business is generally conducted in the names of the general partners, and the statute may require all the names of the general partners to appear in the firm name or be displayed where the business is conducted.

A **special partner** risks only his contribution. He has no title to the firm assets, and nothing can be taken on execution by his separate creditors. He can buy of the firm and sell to it. He has priority over the other general partners in the distribution of the surplus upon winding up.

289. The NAME of a limited partnership is frequently of prime importance. By statute, it may be provided that the name shall contain the word "Limited"; that it shall *not* contain the words, "& Co."; nor the names of the special partners upon penalty of their becoming general partners. Except as indicated,

nearly all that has been said in reference to general partnerships applies equally to limited partnerships.

JOINT-STOCK COMPANIES

290. A **joint-stock** company is an association partaking of the nature of a partnership and of a corporation. It is formed for purposes of profit, and possesses a common capital contributed by those who compose it. This capital is commonly divided into shares of which each member owns one or more.

The members of a joint-stock company are *liable* as partners, while their shares are freely transferable like shares in a corporation. In a partnership, if a member transfers his interest, *ipso facto* the firm is dissolved, but nothing of the sort happens in a joint-stock company. Because of the intimate relation (see § 285) no one can become a general partner without the consent of the other members; in joint-stock companies consent or assent of the other members is immaterial. If a member retires, however, he must give notice in order to terminate his liability, as in an ordinary partnership. (See § 273.)

291. The *powers* of members are the same as in an ordinary partnership, unless the management of the business is entrusted to officers similar to those of a corporation. Such officers have the ordinary powers of partners, unless there are restrictions which are brought to the notice of persons dealing with the company. The balance of the shareholders have no power to act for the company.

The *liabilities* of members in a joint-stock company locate it definitely as a partnership rather than as a corporation, since in the absence of statutory limitations, the members are liable for the whole amount of the company's indebtedness. As to the relations among themselves, the rights of the partners are the same as in an ordinary partnership.

292. If a joint-stock company is organized under **statutory** provisions, as many are, it approaches closely to being a corporation and is considered to have an existence distinct and apart from the members who compose it. It then has a perpetual existence like a corporation, unless agreed otherwise; it may take and hold property, and enter into contracts in the associate name; the management is in a Board of Directors; and if sued, the members are not liable until the Company's property is wiped

out, the action which it is possible to take against the members being considered supplementary to the liability of the company. This is the status in neither partnership, nor corporation, as we have seen.

Furthermore, in every case, the joint-stock company, even though organized under a statute, owes its existence not to the sovereign power of the State but to the *agreement* among its members.

293. DISSOLUTION. — A joint-stock company may be dissolved by the mutual consent of all the members, or under the circumstances provided for in the articles of association. If organized for a definite term, there must be unanimous consent to dissolution, but a court of equity may dissolve such a company for good cause shown in a suit begun by any of the stockholders for that purpose.

Questions for Study and Review on Chapter VI

CORPORATIONS

1. Why should an engineer know something of corporations?

2. What is a corporation? How regarded in law?

3. Suppose a person becomes sole owner of the stock in a corporation; what is the effect upon the corporation? How must he convey its land?

4. Where is a corporation's domicile? Why is the question important?

5. What kinds of corporations are there? Enumerate those called " civil."

6. Compare methods of acquiring membership in partnerships and in corporations.

7. How does the death of a member affect each type of association?

8. Referring to the agency powers of members compare a partnership and a corporation.

9. With regard to liability for the Company's debts, in which of them would you prefer to be a member? Explain why.

10. The existence of a corporation and of a partnership rests upon certain contracts. Who are the parties to the contracts in each case?

11. Can one stockholder in a corporation sue another? Is it the same with partners? Can you tell why there is a difference?

12. Name other forms of association besides partnership and corporations.

13. What are the test questions for proving the existence of a corporation?

14. What are the three essentials to the formation of a corporation?

15. What was the direct effect of the Dartmouth College case upon all corporation charters subsequently granted? What constitutional question was raised?

16. What is a " promoter "? Is the future corporation liable upon his contracts?

17. What will be the effect if the promoter perpetrates fraud?

18. What is the effect of non-compliance with the statutes in respect to subscriptions, or other requirements?

19. How were corporations formerly chartered? How at the present time? Why?

20. What is the general procedure in forming a corporation?

21. For what does the charter serve? What is the leading " rule of construction"?

22. What is the scope of the doctrine of implied powers?

23. Name some of the common implied powers of a corporation.

24. The common law powers of a corporation necessarily follow its creation as a corporation. Name the principal ones.

25. What is meant by "ultra vires"? Why is an "ultra vires" contract invalid?

26. What limits are now placed upon the doctrine of "ultra vires"?

27. Under what conditions will the claim of "ultra vires" fail of recognition?

28. Explain carefully the meaning of " estoppel." When is it applicable to corporation contracts?

29. What are some of the things a corporation commonly can NOT *do?*

30. How, or by whom does a corporation transact business?

31. What are a director's duties as to the application of corporate funds?

32. Can he contract with himself personally? Why is this?

33. What is the extent of a corporation's liability in tort? Illustrate.

34. How are corporations generally dissolved? Name the other modes.

35. Is there any difference between " capital " and " capital stock "? If so, what?

36. Recite upon the contract of membership between stockholders.

37. State the difference between a share of stock and a stock certificate.

38. Which would you prefer to own, common or preferred stock? Tell why.

39. Explain the terms " full-paid " and " bonus " stock? Is there any difference in the owner's liability for each? If so, what?

40. When may assessments be levied upon stockholders?

41. Explain what you understand by " stock-watering." What is its object and result?

42. In general, what are stockholders' liabilities for corporate debts?

43. Recite upon special statutory liability.

44. When will the directors be personally liable for corporate debts?

45. What are a stockholder's rights to transfer his stock? Any exceptions?

46. What is the rule with reference to holding stock in other companies?

47. Give a definition and state the objects of public corporations.

48. With which of a city's charter powers is the engineer most likely to have to deal?

49. What about fires, city fire departments, and the acts of the city's servants?

50. Recite upon the city's water supply.

51. What is the leading restriction imposed upon municipalities? Can you tell why?

52. How will the city debt limit affect its liability in tort? Or on a contract calling for payments in excess of it?

53. Name some of the torts for which the corporation is not held liable.

54. How is the rule as to lateral support applied to city streets?

55. What is a municipal corporation's liability as to the condition of its streets? What about insurance against accidents?

56. How is it liable with reference to surface water disposition, and streams?

57. What is the extent of its liability in regard to sewers and sewer systems? Cite an illustrative case.

58. A, B, and C are in partnership. Learning that in a corporation there are less individual liabilities, they decide to form one, draw up articles of association, and thereby believe they are a corporation.

X is a partnership creditor; the corporation (if there is one) has not enough property to satisfy the debt to X. (a) Can X collect, and if so, from whom? (b) Suppose A owns private property, but B and C have none. What result then? Give your reasons in both cases.

59. (a) M is a partner in the firm of M., N. & Co., and agrees to sell his interest therein to T in consideration of T's transferring to him 20 shares of United States Steel stock. Is this arrangement legal and binding? Explain why, or why not. (b) Suppose X is a principal creditor of the M. N. Co., which has no partnership

assets, and that M has private property, while N has none. Then in the above case, can X collect from T? If not, then from whom?

60. The A. B. Co. is a corporation, chartered " for the purpose of making, buying, selling, and dealing in brick," etc. Later, finding the brick business poor, the directors decide to purchase a foundry and machine works with the corporate funds, and to embark upon the manufacture of gas engines. The sale is to be on January 1, 1910, but that date is allowed to pass, and on March 1, the Machine Co. sues the Brick Co. for breach of contract. Can they recover? Why, or why not?

61. Suppose a corporation is organized for the purpose of doing railroad construction work by contract. Can it lawfully borrow money with which to speculate on margins in the stock market? Give your reasons.

62. (a) Why are general statutes framed to cover the organization of corporations?

(b) What things can a corporation commonly NOT *do?*

(c) How should a corporation be described when it is a grantor in a deed?

63. (a) What is a share of stock? (b) What is a stock certificate? (c) In order to be a shareholder, which must one own? (d) What is a foreign corporation?

64. (a) How is membership in a non-stock corporation acquired? How in a stock company? (b) How may corporations be dissolved? (c) In what form should corporation contracts be executed?

65. (a) How is membership in a corporation proved? (b) What rights have creditors against the shareholders in a corporation?

66. Explain the functions of directors in a corporation. Are they liable upon the contracts they make in behalf of the corporation, and if so, when? If not, tell why.

PARTNERSHIP

1. Give some of the reasons for forming partnerships.

2. Explain briefly what is meant by a partnership, and state its basis.

3. Who cannot become partners? Why is this?

4. Name the principal matters usually covered in partnership articles.

5. What is the meaning of a "partnership by implication"? Are the obligations under it as binding as in one formed by express agreement?

6. How may one become a partner by a "holding out"?

7. Explain the test for determining the existence of a partnership when there are no partnership articles.

8. What evidence is usually looked to when proof of a partnership is desired? Is this conclusive?

9. Give an original illustration of a joint enterprise. Distinguish it from a partnership.

10. What is the rule as to partnership profits? Discuss "intention."

11. What are the principal remarks made upon firm name? Explain "good will."

12. Outline the case under "Notice and Firm Name." Does it appear reasonable and proper to you?

13. What is the importance of firm name with reference to real estate?

14. What determines the duration of a partnership? What acts will terminate it? Can this effect be provided against, and if so, how?

15. When will equity decree a dissolution?

16. What is meant by "winding-up" a business, and who does it? When?

17. What are the partners' duties upon dissolution?

18. What sorts of partners are there? Name at least four.

19. Explain the standing of the various partners called for in Question 18.

20. Name the most prominent feature of an individual partner's powers.

21. Tell the bearing of this in his relations to outsiders.

22. What things may a partner NOT *do? What* CAN *he do?*

23. What is the extent of a partner's liability for firm debts?

24. Explain "joint and several" liability.

25. Compare a partner's liability and that of a corporation stockholder.

26. What is the liability of a partnership in tort?

27. When is a partner's liability terminated?

28. How may he terminate it with reference (a) to future acts of the firm? (b) As to past obligations?

29. What is the effect of a discharge in bankruptcy upon the firm's debts?

30. What is a partner's interest in a firm (a) as to net proceeds? (b) As to firm property?

31. When would you care to attach a partner's interest, and what would you get by it?

32. Tell what is meant by a " partner's lien." When is it useful?

33. State the rule as to a partner's compensation and reimbursement.

34. What are a partner's duties as to good faith and negligence? Illustrate.

36. What is a limited partnership? Explain the status of a special partner.

37. State the object in forming limited partnerships. Why is it but little done?

38. Suppose statutory requirements are not strictly complied with, — what is the effect upon the special partner?

39. What about " prospective " capital in a limited partnership? What is the object of the rule? Name other statutory requirements.

40. Is this a desirable form of association? Why?

41. What are the leading facts as to the status of a special partner?

42. What is the importance of the name in a limited partnership? Why?

43. Does a joint-stock company most resemble a partnership or a corporation? State the points of resemblance to each.

44. What about liabilities of members and transferability of stock?

45. How is a joint-stock company managed?

46. Does a joint-stock company which has been organized under a statute require a charter? Why?

47. How does such an association come to an end?

48. In a firm of three partners, two object to the signing of a contract, a fact which the other contracting party knows. Nevertheless he signs a contract with the third partner. Is the contract enforceable? Tell why, or why not.

49. Upon forming a firm, A put in $5,000, B, $1,000, and C, his skill. After all the firm creditors have been paid, the firm has lost $1,000, and in addition, A has loaned the firm $1,000. Show how you would adjust the accounts in winding up the business.

Chapter VII

CONTRACTS OF SALE AND TRANSPORTATION

The commercial world is roughly divided into two classes,—buyers and sellers. Their mutual relations rest solely upon contracts. Because of the subject matter's universality, and the multitudinous instances of selling, the law of Sales is by no means easy. The shading between its rules is often subtle, and tracing the title and right to possession is often highly difficult. Yet as a business-man and buyer of commodities, the engineer should appreciate their importance, and will profit by their cognizance.

If the seller selects goods, delivers them to a common carrier, and they are lost before reaching the buyer, who must stand the loss? If the seller in good faith ships goods to a customer whom he subsequently learns is insolvent, must he idly see his consignment enrich the other creditors? Or does the law assist him to protect his own interests? If the goods have changed hands, and the title is unquestionably in the buyer, what rights has the unpaid vendor? And suppose fraud, in any of its numerous forms, enters the transaction,—where do the parties stand?

When goods are placed in the hands of a common carrier, and he agrees to transport them, what are the responsibilities, immunities, and privileges which thereby accrue to him? Must the carrier provide abundant facilities? What if he makes a mis-delivery? Has he any claim upon the goods for his unpaid charges?

These questions, and others equally important, are treated in this chapter. The average business man will find them useful, as well as the engineer and contractor.

SALES

294. DEFINITION. — A sale is the transfer of the property in a thing for a price in money.* As the transaction is a contract, all the rules of contract apply. There must be competent parties, a proper subject matter, the title to which is in the seller, an agreement to transfer the property, and a sufficient consideration, i.e. the payment or agreement to pay a price in money by buyer to seller. The following transactions resemble sales somewhat, but are different.

A *bailment* where one merely keeps possession for another, no title passing; a *consignment*, title remaining in consignor, consignee being an agent, merely; *exchange* or barter; a *lease* (though

* By the Sales Act (a codification of the greater portion of the common law on Sales which has been recently [1910] enacted into statute law by many of the States) it is provided that the price may be paid in any personal property. This was called " barter " at the common law; the ancient and customary definition of a sale was as given above.

where there purports to be a lease which is really a sale with payment by instalments, title to pass on completion of payments, it is generally held to be a sale in fact); a *mortgage;* and a *pledge.*

295. GENERAL CHARACTERISTICS. — Sales are classified as (*a*) *executed*, whe e the title passes instantly, and *in the present* upon formation of the contract of sale; and (*b*) *executory*, where it is agreed that title *shall pass* at some time in the future, upon completion of the subject matter, or upon performance of a condition. The intention of the parties, as in other contracts, will often show whether a given sale is executory or executed.

The rules on *competency* (see § 23) to contract are the same here as in contracts generally, except that where necessaries are sold to an infant, lunatic, or drunken person, he must pay a reasonable price therefor. There must be *mutuality*, also. The parties must have in mind the same thing at the same time, intending to bind themselves by a bargain mutually agreed upon, and the offeree must make his assent known to the offeror.

Thus where a person was to buy a horse if warranted "sound and quiet in harness," the horse was delivered with the warranty that it was "sound and quiet in double harness," it was held that the assent was not mutual.

Generally no formality is required in the contract, as it may be oral, written, or it may be *implied* from the conduct of the parties. All will be equally binding unless the Statute of Frauds (see § 299) requires writing in the particular instance.

296. SALE by NON-OWNER. — Where the goods have been stolen, the thief of course has no title to the goods and cannot pass any. But if the goods are obtained by fraud, the title acquired will vary according to circumstances.

Suppose A gets goods by pretending to be X. He gets no title and can transmit none; but if the party defrauded really intended to pass the title to the person dealt with, though the seller was in some respects deceived, still the fraudulent buyer can pass a good title to an innocent purchaser before the first seller rescinds the contract. The last buyer must act in good faith, and without notice of the defect in the title.

297. Cases where a *non-owner may sell* are:—

A pawn-broker may sell articles unredeemed at the appointed time; a sheriff may pass good title to property upon an execution sale; factors, brokers, and other agents, may give good title, though they possess none personally. But in general, if the seller has no title, or no authority to sell, there is a failure of consideration, and money paid by the buyer may be recovered.

298. GOODS NOT IN EXISTENCE. — Unless the property

intended to be sold is in existence at the time of making the contract, there is no sale, but only an executory contract *to sell*, and some further act or circumstance must occur before the title passes. Neither is there a contract if the subject matter has ceased to be the seller's property.

Thus, in a case where A sold a cargo of corn loaded upon a vessel that had not yet arrived, the master of the vessel, finding there was danger of the grain spoiling, had sold it a month before the agreement between A and B. There was no contract.

What really happens in a contract for the sale of goods not yet in existence is that the parties *agree to sell* and pass title later. The rule preventing such a contract is to a certain extent avoided by saying that an object that is *certain* to come into existence may be made the subject of a present sale, as the unborn young of animals during the period of gestation; the fruits of the soil, etc. Of course if the things have passed *out of existence*, there can be no sale because of impossibility of performance, as in the grain case.

299. STATUTE OF FRAUDS (A. D. 1677) is the name of a general English statute with numerous provisions designed to prevent frauds and perjuries. The Seventeenth Section of the statute applies especially to sales, and is in general force throughout the United States to-day. This Statute provides that in all contracts for the sale of "goods, wares, and merchandise" of more than $50 value (Sales Act makes amount $500 in some States), there shall not be a binding contract unless certain requirements are complied with:

(1) The buyer must receive and actually *accept* part of the goods sold; *or*

(2) He must give something to bind the bargain, *or* in *part payment; or*

(3) There must be some note, or *memorandum in writing* referring to the bargain, made and signed by the party to be charged, or by his duly authorized agent.

300. The Statute is held to apply to executory as well as to executed contracts of sale, but *not* to contracts for work, labor and materials. Though apparently simple, this classification is not easy to work out in every case. The English and the Massachusetts rule, most commonly followed, is that where the parties intend to *transfer* the *title* in a particular chattel, though it is to be the product of the work, labor, and materials of the seller, then the Statute applies, — i.e. the contract to be binding must be made

in accordance with its terms. Thus if a cabinet-maker manufactured a special piece of furniture in large quantities, all being of the same pattern, price, and quality, an order for one of them would be "within the Statute." That is to say, these articles would fall within the category "goods, wares, and merchandise." But if special variations as to workmanship, materials, or otherwise were to be introduced for the buyer so that the thing could be said to be manufactured for *him*, then it is a contract for work and materials, and hence *not* within the Statute.

301. The foregoing distinction may appear academic. The following illustration will show its practical importance, the facts being substantially those of a Massachusetts case.

X, a carriage manufacturer, was the plaintiff. B was a customer who visited the shop and bargained with X for a certain unfinished carriage, specifying and selecting the color of upholstery; the particular trimmings which he desired; just how long he wished each coat of paint and varnish to be dried; and giving X the design of a monogram to be painted upon the carriage, etc.; all of which X promised to comply with, and did so in due course. It is to be noticed that the whole transaction was verbal; there was no writing; B paid no earnest money, nor consideration; and of course he accepted no part of the goods sold.

In due season X notified B that the carriage was ready for inspection, and later, that it was completed. B saw the carriage, was satisfied with it, and asked X to wait a little time for the money. X assented, and while holding the carriage in storage the carriage factory burned, destroying this carriage among others.

Then X sued B for the price of the carriage, claiming that it was B's property, and he was merely storing the same after completion, at B's risk, and demanding to be paid just as though B had taken it away upon completion. B's defense to the suit was: "Statute of Frauds," i.e. "The Statute governs this transaction, and as you have not complied with it there was no enforceable contract of sale between us." Hence X tried to show that the carriage was especially built for B, and so came under the class of contracts for material and labor, where, as we have seen, the provisions of the Statute need not be observed. X's contention was upheld by the Court, as seems just, and the loss of the carriage fell upon B. He had to pay X the full price though he never received the carriage.

302. Where the contract is for the sale of things commonly manufactured and supplied to the general market by the vendor, the contract is one of sale, — though the articles are to be subsequently made, — and not a contract to manufacture.

Thus, suppose an order was received by a manufacturer for 200 steel wheelbarrows, but as he had not that many on hand, he replied that he would make and deliver the same during the season. This would be a contract of sale, and *within* the Statute.

Further it is held that "entire" contracts where the value of the whole exceeds $50, fall within its provisions, as a sale of 100 cords of wood at $1.25 per cord; or where the value (subsequently ascertained), exceeds $50 (or the statutory amount), as where a man sells all the wood a certain lot will produce, and it is found that there is more than $50 worth.

By the common law, when the terms of a sale had been agreed upon, and the bargain struck, if the seller had nothing more to do to the goods, the sale was complete. As we have seen, the Statute of Frauds made something more necessary.

A Common Law Sale Before 1677. In order to make the Statute of Frauds more significant to the student, let us imagine a sale made previous to its enactment. Suppose X bargains with A for A's horse; the terms are agreed upon and the bargain is struck; A says, "The horse is yours." X goes away, leaving the horse with A until a more favorable time for removing him. Then A sells the horse over again to Y who *does* take it away. Now X sues A for the wrongful disposal of X's horse. Plainly he should win, because there was a genuine transaction between X and A.

Next suppose that X had never bought the horse, but that he falsely accuses A with having wrongfully disposed of X's horse. A will of course deny the accusation, and say that X never owned the horse which A sold to Y. Then X brings perjured witnesses, and perhaps succeeds in making out his case against A. It will be seen how disastrous to security in one's property rights the activities of such a band of blackmailers might become. The Statute of Frauds specifies the several kinds of evidence of the sale some of which must now be shown, and says that no other sort will be accepted.

303. SATISFYING THE STATUTE. — **Rule (1). "The buyer must receive and actually accept part of the goods sold."** A person may accept goods to the extent of suffering them to come to or be left at his residence or place of business, and yet not "accept" them as contemplated in the Statute, for it is held that the buyer must *assent* that the goods remain and be taken by him as performance of the contract.

According to the party's interest it may be contended that there was a delivery and acceptance sufficient to satisfy the Statute, thus rendering the contract enforceable, while the buyer might claim he never received the goods. Such was a case in 120 Mass. 290, *viz.*:

Defendant went to plaintiff's store and bargained orally for certain leather. A fortnight later he again went to the store, weighed, examined, and separated this leather from the stock, to be taken away when paid for. Though they waited for the defendant six months, and would not permit him to take away the leather without paying for it, yet when their store burned, destroying the leather, the plaintiff sued the defendant for the price. The plaintiff claimed that the goods belonged to the defendant, and that there had been a "constructive" delivery to him sufficient to satisfy the Statute. But this the Court would not allow. Hence the defendant did not have to pay.

Rule (1) will especially apply if the contract is for goods not ascertained when the contract is made. Upon receipt of such goods the buyer has a reasonable time in which to examine them,*

*The Sales Act, Sec. 48, regulates this with reference to C. O. D. sales, and gives no right to examine unless by special agreement.

but if he deals with them as though he had in fact accepted them by making a resale, for example, this will be an acceptance.

304. Acceptance may be consummated both by *manual transfer* of possession, or by agreement without actual delivery of the goods. Receipt by agreement, or "*constructive delivery*" as it is called, often presents problems not easy of solution, since the goods may:—

(*a*) Remain in the possession of the seller, while he becomes the buyer's bailee, — he merely retains custody of them for the buyer;

(*b*) Be in the possession of a third person as bailee of the seller, and the third person becomes bailee for the buyer, with the consent of the seller; or

(*c*) Be in the possession of the buyer who is holding them as bailee for the seller, and who with the seller's consent, begins to hold them as owner.

The title passes by reason of the agreements between these parties, and the difficult part of the problem is, in a complicated set of facts, to tell just where the title is at a particular moment. Upon the answer, the question of the ownership, or the loss, of much valuable property may depend.

An illustration of the case under (*a*) might be where the parties go to the seller's warehouse, and select the goods, but the seller agrees to keep custody until some time when it is convenient for the buyer to remove them; nevertheless, the title to the goods is in the buyer.

(*b*) Suppose a commission merchant has purchased a car-load of lumber, and, having arrived at the freight yard, it is being held as the merchant's property. Without removing the lumber, the merchant sells it to X, endorses the bill of lading which X takes to the freight-office. The Company then assents to holding the lumber for X until it is convenient for him to unload and release the car.

(*c*) A warehouseman has goods in storage for A with a right to sell such of them on commission as he can. Suppose he buys them himself,—he thus succeeds to absolute title, in addition to their custody.

305. Rule (2). Binding the Bargain, or Part Payment. — "*Earnest Money,*" as it used to be called, is something of value, not forming part of the purchase price, given to mark final assent to the bargain. *Part payment* is the delivery of money or anything of value, offered and accepted as such between the parties, and may be made at the time or subsequently to making the contract of sale. It is analogous to paying something as consideration for keeping an option open.

The *price* may be paid at once, or at some future time agreed upon. The terms (price) may be expressed in the contract, but if

not, the reasonable value of the goods is presumed to have been understood; sometimes certain persons are designated to name the price, — the sale is not complete, and title does not pass until the appraisers have acted (for this is a condition precedent).

306. Rule (3). The Memorandum. — The third provision of the Statute of Frauds requires some memorandum in writing to witness making the contract of sale, unless it is rendered unnecessary by the fulfillment of provisions (1) or (2) just discussed. The wisdom of this rule is apparent, as it prevents disputes when other evidence to the transaction has disappeared.

No especial *form* is required for this memorandum so long as it contains the essential terms of the contract, and is signed by the party to be charged, or his agent. The seller need not sign since the document will naturally be in his possession as the evidence upon which to bring suit, if necessary. The memorandum should state clearly the *names* of the parties, distinguishing the buyer from the seller; the *price*, if any has been agreed upon; a description of the *goods* sold; and also any other *material* terms of the contract.

The *effect of non-compliance* with the Statute is that a Court will not recognize the contract. Of course numberless contracts are made daily, where the Statute is not complied with. So long as the parties live up to their oral or implied agreements, no particular harm is done. The discussion has been given to show what formalities must be observed in case one party is obliged legally to *enforce* his rights against the other.

307. WHEN DOES TITLE PASS? — Generally in a sale of specific goods, the title passes when the parties *intend* it to pass; and unless they declare or show that they intend otherwise, it will be presumed that they intended it to pass when the contract was made. Where the elements of an *executed contract* of sale are present title passes *immediately*, whether possession does or not. The difficulty is in telling whether a contract is an executed one or not.

By referring to § 295 the essential meaning is seen to be that an executory contract of sale takes effect in the future when some condition precedent has been performed.

This is where the seller is bound to do something to the goods for the purpose of putting them into marketable shape. Illustrations: cotton to be ginned and baled; grain to be threshed; or where the seller is to weigh, measure, or test the goods for the purpose of ascertaining the price, or to

find whether they are equal to a specified grade or quality. Then the property does not pass until the specified act is done.

The effect is that where the contract of sale designates a specific chattel, as such and such a pump, or stone-crusher, if the buyer agrees to take the article and to pay the stipulated price, then title passes instantly, no matter where the possession is. This is an *executed* contract of sale.

308. SOMETHING REMAINING TO BE DONE. — As already said, if something remains to be done to put the goods into deliverable condition many difficulties may arise. Frequently a fire or other casualty destroys or damages the property, and it is highly important to know who possesses the title at a particular moment, since the *owner* must bear the loss.

Conditions to Passing Title. — Where by the contract there is a condition precedent to the passage of title, that condition must be fulfilled before the title passes.

Thus, if a motor was to be delivered f.o.b. New York (by the terms of sale), and it was lost in a train-wreck while en route from Pittsburg, the loss, so far as the buyer and seller are concerned, must fall on the seller. It was condition precedent to the passing of title that the pump be delivered in New York.

Similarly, if the contract calls for delivery of a certain part of the goods at stated times, the buyer may repudiate the entire contract if the conditions as to delivery are not carried out. But if the contract is in fact separable, and not entire, the result will be different. If payment is to be made in installments, the last one must be paid before title passes. The delivery of the goods at a specified time and place may, of course, be made a condition precedent to the passage of title. (For a further treatment of the *intention* as affecting the passage of title see Appendix Note No. 21.)

In an old English case, 200 bales of goat skins, 5 dozen to the bale, were to be sold at 57 shillings per dozen. By the usage of the trade, it was the seller's duty to check the count of all the skins in each bale. The skins were destroyed by fire before the counting was done, and it was held that the property had not yet passed. Therefore the loss was on the seller.

In another case, all the bark stacked in a certain place was sold at a price per ton, the cost of weighing being borne jointly by both parties. A part had been weighed, delivered and paid for, when the remainder was damaged by a flood. The Court held that the unweighed residue was the property of the seller, even though the contract was an " entire " one for *all* the bark in the lot.

These are English cases. Some American courts have held differently, saying that where nothing but weighing and measuring remained to be done, the title was in the buyer without waiting for these things to be done by the seller. Probably most American

courts follow the English rule. There is agreement upon this point at least, that where the goods have been delivered to and accepted by the buyer, the title is vested in him.

309. In considering sales made conditionally it should be noticed that the oft-recurring principle of contracts applies, viz.: The *intention of the parties* is to govern. They can *make* the title pass at any chosen time, irrespective of what acts remain to be done to the goods.

310. CONDITIONAL SALES. — There is another class of cases where something *extraneous* to the chattels is to be done or accomplished by the buyer as a condition precedent to the passage of title. Until the condition is fulfilled the title does not pass, even though the goods are in the possession of the buyer.

A contractor bargains for ten cars of cement conditionally upon securing the X. Y. Z. ontract. The ccement manufacturer or dealer wishes to close the trade as he supposes; or to get room in his storehouse; or believing the buyer is sure to get the contract,—ships the cement which arrives before the contract is let. Our contractor does not secure the job, however, but is sued by the cement man for the price of the ten cars. Of course title never came to him, hence he need not pay. This result is easily worked out by applying the elementary rules of contract law. But this does not mean that the contractor can retain possession of the cement, and not pay for it.

311. Sales on Approval. — Another kind of sales upon condition is where the buyer takes possession of the chattel for trial or approval, the condition precedent to title passing being his satisfaction with, or approval of, the particular article. Though this is delivery, it is not acceptance sufficient to pass title irrevocably until the buyer signifies his approval or satisfaction. (That is to say, the title passes to the buyer but is subject to being re-vested in the seller upon the goods being returned to him.) Upon expiration of the time limited for trial or acceptance (if there is a time set, and failing a time limit, then upon the expiration of a reasonable time), the title will pass. What is a reasonable time would, of course, be a question of fact for a jury.

312. SALE of UNAPPROPRIATED GOODS. — Suppose a dealer has twenty concre'e mixers in his warehouse, and you agree with him to buy ten. Though the bill of sale is fully executed still you own no mixers until he has gone to the warehouse and " specifically appropriated " ten machines to your contract. When he has set them aside, tagged them for you, or performed some other unequivocal act of the same nature, then the property (title) in them passes to you. A little thought will show this to be a

useful and necessary rule. The law books say: "Title to *unascertained* goods cannot pass by sale, merely." Of this, more may be said later. (See also Appendix Note 21 [3].)

But where the goods sold are part of a larger bulk of uniform character, such as grain, oil, or coal, it is generally held that property in an undivided part may be so transferred, without appropriation, or separation of the part sold from the main bulk. This, again, is a rule of practical usefulness.

313. The word "*appropriation*" as here used means the selecting, setting apart, or actually putting the goods into such a situation that the buyer may come and take them. The appropriation may in different cases be performed by either the buyer or seller, either of them acting with the assent of the other. Controversies arise only where the selection is to be made by the seller. Where the buyer is to make the selection, the appropriation takes place when he declares his choice. But if the selection rests with the vendor, it may prove difficult to tell at what particular moment the appropriation has vested the title of the commodity in the buyer, as it is the *owner* who must bear the loss in case of destruction, whether he be vendor *or* vendee. Suppose you are a railroad contractor and order, say, a dozen tents from a dealer's stock, and it is his duty to appropriate the same; it may be hard to determine at what precise point you are no longer at liberty to change your mind. An enormous number and variety of cases have arisen in about this same way, and examples will doubtless occur to the student's mind.

314. As before indicated, the parties may by contract, specify at what instant or by what acts title shall be complete. Litigation has arisen because they did *not* so specify, and this has led to the development of the common law rules just discussed. As to articles manufactured *to order*, completion of them according to the contract followed by delivery, or tender of delivery, is such an appropriation as will pass title. This seems just, also. And it is settled that delivery by the seller to a carrier in the manner directed by the buyer is a sufficient appropriation (but see § 315), and should loss occur it falls on the buyer.

315. DELIVERY TO A CARRIER, and JUS DISPONENDI. — Where, by agreement, the title is to pass upon delivery to a carrier as just noted (§ 314), the seller can still maintain his grasp on the goods until he is assured of payment by the buyer, not-

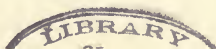
withstanding they have passed out of his possession, and have apparently been specifically appropriated. The seller may do this by acts manifesting his intention, such as making out the bill of lading for the consignment in his own name, — i.e. instead of billing them to the purchaser at their destination, he consigns them to himself or to his agents at that place. Thus the title remains in him in spite of his delivery to the railroad. When a seller makes a delivery to a carrier in this manner, he is said to have reserved the *jus disponendi* (the right of disposing of a thing).

316. Reserving the jus disponendi does, in fact, vary the terms of the contract of sale between the parties, which, it would appear, the seller should strictly carry out. (See Appendix Note 21 [6].) But this rule has grown up in favor of the manufacturer or seller to protect him when dealing with unscrupulous or financially irresponsible persons. Thus the right is a very valuable one for the manufacturing and selling classes, protection of whose interests means protection to the whole commercial community. It will be seen also that this is substantially the status of a C. O. D. transaction, which is generally upon a smaller scale, merely. But the carrier may withhold possession of the property from the buyer until payment of the purchase price ("seller's lien"), and for this the buyer has no redress, in a suit for possession of the goods.

317. STOPPAGE IN TRANSITU. — There is another right which has grown up to protect the seller, similar in its effect to reserving the *jus disponendi* (§ 315) though accomplished in a different fashion. It is called the "right of stoppage *in transitu*," and is that right which an unpaid vendor has, when selling goods *on credit*, to resume possession of them while they are in course of transit, and before they have reached the buyer, — the right to be exercised *only* in case the buyer has become insolvent or bankrupt, which fact comes to the seller's knowledge after he has shipped the goods.

This is a valuable right, since, if it is not exercised in such a case, the goods go into the general assets of the insolvent buyer to the enrichment of his other creditors. The seller, becoming thereby a creditor himself, is only eligible to receive the same proportion of his claim as any other creditor, so that the net proceeds of his sale may, perhaps, be only 30 cents on the dollar.

318. How Exercised. — The seller exercises the right of stoppage by taking possession of the goods himself, or by an agent, or by giving seasonable notice of his claim to the carrier; or to some other person who is in actual possession of the goods, such as the



master of a ship, or a freight agent. The order of interception must be expressed in clear and unequivocal terms. When so expressed, the carrier has no discretion in the matter, but must obey the order of the seller. If any mistakes are made, giving rise to claims for damages, the seller is answerable for them. But if in spite of the seller's orders, the carrier proceeds to deliver the goods, the seller's rights are not affected.

A, in Cleveland, ships goods to B in Philadelphia. After their arrival there, A notifies the railroad not to deliver them to B. Would the carrier be liable in case he made delivery? It is held that he would be liable. But if there had been an agreement between carrier and consignee whereby carrier was to hold possession as consignee's agent, then the carrier would not be liable for delivering, since the transit would have ceased.

Again suppose A, who is the seller, consigns goods to B and sends him the bill of lading. B indorses the bill to C, to secure an advance of money made by C to him, and then B becomes insolvent. Can A stop the goods *in transitu?* In such cases it is held that the seller's right to be paid should be protected in so far as the interests of a *bona fide* indorsee (as C was in this case) are not prejudiced thereby. Thus, it is held that A's right extends only so far as to entitle him to what may remain of the proceeds, after C has been satisfied for his advance.

319. Duration of Right. — When we consider the numerous ways and stages by which merchandise is transmitted about the country, it appears that a question arising in a variety of ways is: How long does this right of stoppage *in transitu* continue? The rule is that the right continues from the time the goods are delivered to a carrier by land or water, for the purpose of transmission to the buyer, until the time when: —

(1) the buyer, or his agent, takes delivery of the goods from the carrier, either before or after their arrival at the appointed destination; *or*

(2) after the goods have arrived at their destination, the carrier notifies the buyer that he is holding them as buyer's bailee; *or*

(3) the carrier wrongfully refuses to deliver the goods to the buyer, *or*

(4) the seller waives his right of stoppage.

320. A complicated set of facts may arise when it will be difficult to say whether the right of stoppage in transitu was exercised too late, or not. As one authority put it: "Goods are deemed to be in transitu not only while they remain in possession of the carrier, whether by land or water, though the carrier is designated by the buyer, but also when they are in any place of deposit connected with the transmission and delivery of them, and until they arrive into the actual or constructive possession of the consignee."

This apparently plain rule is subject to a variation when there is an interruption of the transit, such as delivery of the goods by the original carrier to a warehouseman, or other agent of the buyer, preparatory to for-

warding them through a connecting carrier,—in which case the seller's right is defeated. Whether or not it is defeated will depend upon the intention with which the goods were delivered to this intermediate person; if he took them simply as a forwarder so that the transit could be properly said to be a continuous one, then the right is *not* defeated; but if he took them as the agent of the buyer, so that from that moment the *buyer* was in constructive possession, then the right of stoppage subsequently exercised is ineffectual.

321. Effect of Stoppage. — It is interesting to note that if the right of stoppage *is* exercised the contract of sale is not thereby rescinded, but the seller's lien (§ 322) is at that moment revived. The result is that even if the seller has received part payment for the goods, and has exercised his right of stoppage, yet he does not have to refund the part paid. Instead, it is his privilege to resell the goods. Should any surplus remain, he must turn it over to the first buyer, to whom he may also look, should the sale result in a deficit.

As already indicated (§ 319) this right of stoppage may be defeated by the carrier's making delivery to the buyer when the goods have reached their destination; it will also be defeated by the insolvent buyer's indorsing the bill of lading to an innocent and *bona fide* purchaser, this being one of those rare cases where a person can transmit a better title than he himself possesses.

322. SELLER'S LIEN is another means of assuring a seller of payment for goods. Though *title* has passed to the buyer, and the goods remain in the seller's possession, he is not obliged to surrender custody until paid; he is said to have a **lien** upon the goods for the purchase price. He is especially justified in refusing to deliver if he hears of the insolvency of the buyer before receiving payment. If the price in full is paid or tendered, the seller is *divested* of his lien.

An essential point to be noticed here is that *lien* always *relates to possession.* Hence if the seller parts with the possession he waives his lien unless it is expressly agreed otherwise. In general, a lien is *waived* by the vendor when he sells goods on credit, or if he takes a bill of exchange or other negotiable instrument in conditional payment. If a lien has been waived, it may later be *revived,* if the seller remains in possession until the expiration of the term of credit given; or when the negotiable instrument given in payment has been dishonored; or when the buyer becomes insolvent, even though the term of credit has not expired, nor the note been dishonored. It is held, furthermore, that delivery of a part of the goods will not destroy the lien unless made under such

circumstances as to show an intention to do so. But in any event, the seller will lose his lien when he unconditionally delivers the goods to the buyer.

323. Other Remedies of Unpaid Seller. — When the property has *not* passed and the buyer refuses to accept and pay for the goods when offered, the seller's only remedy is an action of damages for non-performance of the contract of sale, — i.e. non-acceptance. His loss is in the failure to dispose of the goods, but since they remain in his possession, his damages may not be great, and he may, of course, resell to some one else.

If the goods are already in the possession of the *buyer*, though title has *not* passed, the seller may have an action of replevin to regain possession of them, or a tort action of *conversion*, where the damages will be the value of the goods at the time the seller relinquished possession of them. In the case of the buyer's refusal to accept the goods, no special tender of them is necessary, though the plaintiff must prove that he was ready and willing to perform his part of the contract. But a mere notice that the seller is *ready* to deliver is not regarded as sufficient proof of the tender.

The general rule in the United States is that upon refusal of the buyer to accept, the seller may sue for the whole purchase price, notwithstanding the seller retains possession of the goods. In the alternate case where the title *has* passed, the buyer's refusal to pay, after having been put in possession, does not enable the seller to rescind the contract. We have already discussed the remedies which may be had against the goods; but in this case his only recourse is a personal action for the price against the buyer.

324. REMEDIES of the BUYER. — So far we have been discussing the rights and remedies of the seller. Obviously there must be another equally important class of persons; namely, buyers. Perhaps the most common case to give trouble is where the seller fails to deliver the goods when the terms of the contract entitle the buyer to possession.

The breach is on the part of the *seller*, as he fails to transfer the title or deliver the goods, but the purchaser's only right is an action of damages for failure to deliver. If the title has passed, the buyer may either sue for damages for non-delivery, or maintain a tort action called *trover*, and secure damages for being deprived of possession of the goods.

Suppose the contract is for goods upon future delivery, and before that date, the price having risen, the seller wishes to back out of the bargain. In this case the buyer can recover as damages the difference between the contract price and the higher market price. This will put him substantially where he was in the first place, since with the amount he agreed to pay the

seller plus the amount he recovers as damages he can then go into the market and supply himself as well as he could have done in the first place.

325. If no time was fixed for delivery, the buyer should demand the goods before bringing suit; as otherwise his trouble may be wasted by the seller's subsequent offer to deliver. Having demanded the goods the buyer has a *tort action* for *conversion* (or *trover*) of goods rightfully belonging to him, in addition to the foregoing damages for non-delivery.

326. ILLEGALITY and FRAUD. — When a sale is tainted with illegality it is void. Many sales are made illegal by statute, as sales of liquor without a license, of merchandise on Sunday, etc. Other are illegal at common law, as sales of articles for the furtherance of some purpose contrary to good morals, or in violence of public decency, as the selling of obscene books, or instruments for committing crime, sales of goods to the public enemy, sales of public offices, sales of law suits, of lottery tickets, etc. These will infrequently concern the engineer, so the principal discussion will relate to sales void for *fraud*, a highly important element which may enter into almost any business transaction.

327. Remedies of Defrauded Party. — When a person has been induced to enter a contract by the fraud of the other party, he has various options:—

(*a*) of affirming the contract, and suing in a tort action of deceit; *or*

(*b*) If *he* is sued for the price, he may set up the fraud in reduction of the same, as *e.g.* showing that the thing was misrepresented to him and therefore not worth the agreed price; *or*

(*c*) he may rescind the contract within a reasonable time after discovery of the fraud, unless in the meantime the rights of other persons have intervened, and set up this rescission when sued for the price.

If the *buyer* is defrauded, he may recover the price, if it has been paid; and if it is the *seller*, and he has delivered the goods, he may maintain an appropriate action for their possession.

328. Fraud may be practised upon the buyer, or upon the seller, or by both conjointly to execute a fraud upon creditors. Each will be treated briefly. As to the **BUYER,** the rule *caveat emptor* (let the buyer beware) is applied. It means that before making a purchase it is the buyer's duty to assure himself that the goods are what they are represented to be. He must have his

eyes open and cannot wait for the seller to point out defects in the article. If the seller does not point them out yet the buyer cannot necessarily claim afterwards that he has been deceived. If dissatisfied, or suspicious, he may demand a warranty.

If *both* parties are ignorant of a defect, and in fact no deceit is practised on the buyer, it has been held that *caveat emptor* applies equally well. In Massachusetts it is held, however, that where the defect could have been discovered upon a careful examination by the purchaser, he has no redress if he discovers it subsequently, unless the seller is manufacturer of the goods. This principle is embodied in the doctrine covering "latent defects," upon which there are numberless cases.

329. Technical Elements of Fraud. — In an action for fraud or deceit, it should be remembered that there are five points or technical "elements" which must be proved in order to maintain the case. They are: —

(1) The defendent must have made a false representation of *material* facts;

(2) with knowledge of its falsity;

(3) with intent that it should be acted upon.

(4) It must have been believed to be true by the plaintiff; and

(5) have been acted upon by him to his damage.

Thus, it is not every mean imposition or petty swindle in business dealings which will be righted by a court of law. It is often extremely difficult to offer legal proof (proof according to the established rules of evidence), of all the five elements required. While all shades of fraud are commonly practised, the line is drawn as indicated. Observance of these rules may work hardship in individual cases, but they are wholesome rules in the long run since trifling disputes are thus kept out of court.

It is an established principle that if the seller makes an active *effort to deceive*, or conceals something which the buyer was entitled to know, this enables the buyer to avoid the contract. In Massachusetts it is necessary to show the guilty *intention*, for if the seller acted in good faith, the sale will not be avoided. This does not mean, however, that pure falsehoods, or reckless and careless statements of beliefs made as though they were facts within the vendor's knowledge (when he did not *know*), can be excused on the basis of an honest intention.

330. Representation and Warranty Distinguished. — It should be observed, in passing, that there is a clear distinction in degree between a representation and a warranty. A *representation* is any act or statement falling short of a warranty, but which would con-

vey to a man of ordinary intelligence a clear impression of fact sufficient to govern his conduct. A *warranty* is essentially and always a *part of* the contract, while a representation is at best but an inducement to enter upon a contract. This matter shades off still further into what is known as " dealer's talk," meaning that mere general commendation of the article by the seller does not amount to a representation unless it is a positive statement as to what a thing cost, what has been offered for it, what it has sold for, etc.

331. Fraud on Vendor usually arises when the buyer has misrepresented his financial standing, and when he knows that he is actually or practically insolvent at the time he makes the purchase. Here the seller can usually avoid the sale for fraud. But the line seems to be drawn between this point and the situation where the buyer knows that *very likely* he will be unable to pay, yet has no positive intention of not paying, and does not by positive acts or statements tending to hide his financial condition represent that he is responsible. It is held that these latter circumstances will not of themselves avoid the sale. Very close questions might thus arise, for it is certain that with knowledge of these facts the seller would not have parted with his property.

Evidence of Fraud. — It should also be noticed that what the intention of the buyer was in a given transaction may be inferred from his conduct and circumstances during its consummation. This means that as it is extremely difficult, and often impossible to tell what really was in a person's mind (or rather, to prove it in the accepted legal fashion), extrinsic evidence as to what the buyer *did* or *said,* or of the attendant circumstances may be introduced by the testimony of ordinary witnesses. From such testimony the jury will be allowed to *infer* that such and such *was* in the buyer's mind and to find that it was so " *in fact*." It is plain that otherwise vast frauds could go unpunished.

See also second illustration in § 334.

In a case where a buyer represented that a competitor of the vendor's had underbid him, and thus induced a sale at the lower figure, the statement proving to be false, the sale was avoided as fraudulent.

332. Sales to Defraud Creditors. — Sales made with intent on the part of buyer and seller to delay, hinder, or defraud creditors of the seller are clearly and utterly fraudulent. They may be avoided by such creditors, unless another person has in the mean-

time acquired an interest in the thing sold, while acting in good faith and purchasing for value. This rule may apply in respect to creditors existing at the time of the sale and also to those subsequently becoming creditors. Thus, in case of the seller's bankruptcy, sales made within a period of four months preceding the date of bankruptcy are voidable for fraud. Whether or not fraud exists in a given case is a matter of fact for a jury.

333. Interesting and complicated cases arise in this connection, as for instance where the *seller retains possession* of the goods, which fact is in many jurisdictions a fraud in itself where the rights of creditors intervene; in others it is simply a presumption of fraud which may be overcome by proof. As a leading authority puts it:

"The object of legislation on this subject was to put an end to frauds frequently committed by secret bills of sale whereby persons were enabled to keep up the appearance of persons in good circumstances, possessed of property, while the holders of such bills of sale had the power of taking possession to the exclusion of the rest of the creditors." It is because of this principle that chattel-mortgages are required to be registered in the appropriate public place, "with a view to affording creditors and parties interested a true idea of the position in life of the ostensible possessor of the goods," etc.

334. Absolute good faith plays a leading part in these cases, and so does delivery. There must be a fraudulent *intention*, and if creditors seek to set the transaction aside they must show the guilty intention on the part of *both* the parties.

Thus in Massachusetts it is held that where a person has several creditors all of whose claims he can not meet, he may in good faith pay one in full, though the rest get nothing. Plainly this is a very critical transaction.

A sells goods to B by bill of sale, but retains possession of the goods. A creditor of A's gets a judgment upon a suit against him, and attaches these goods which A is holding. Can B claim goods? Massachusetts and many of the States hold that this would constitute a prima facie case of fraud on part of A.

335. WARRANTY. — A warranty is an undertaking made either expressly or impliedly by the seller that certain facts concerning the article are or will be true. He may say, "I warrant the goods," or this may be implied from his actions. It is stronger than a mere representation, since by it the vendor warrants or undertakes *absolutely* that the article sold possesses certain attributes. Should the article fail to possess them, the buyer can sue for breach of warranty. The action on the warranty will be collateral (in addition) to the ordinary action on the *contract* of sale, this secondary part of the agreement being a part of the original contract by consent of the parties. It should be noticed that the

warranty is not a necessary part of the contract, and that there is no less a sale for want of it. A mere representation, though fraudulently made, does not give rise to an action of warranty, but may lead to an action for deceit, as already noted.

336. An express warranty must be given *at the time* of the sale. With regard to quality, no warranty is implied from the mere fact of sale, since *caveat emptor* (see § 328) is the general rule. But there is an implied warranty of title by the act of selling, whereby the seller warrants his ability to sell. A general warranty, as that the goods are sound and perfect in every way, does not extend to facts known to both parties at the time of sale, or such as would have been revealed by the most cursory inspection. But if the defect in the article could only have been discovered by the exercise of peculiar skill or training, the purchaser may rely upon a general warranty, even though he himself possesses that skill.

There is a difference of opinion among the courts upon this point, some holding in effect that one has a legal right to expect others will deal with him in good faith, or to assume to a certain extent, at least, that the other man will not lie to him. This, of course, robs the rule *caveat emptor* of some of its rigor.

337. Implied Warranty. — *Caveat emptor* is considered to apply when an article is inspected by the buyer at the time of making the purchase, i.e. if there is a warranty it must be an express one. When a manufacturer undertakes to fill an order for his product he *impliedly* warrants that the goods furnished will be suitable for the purpose for which the buyer designed them. To the same effect, a bargain and sale of a thing answering a particular description implies a warranty that it does so answer. A New York case seems to go still further, saying that such goods must be marketable or merchantable and of such quality that they could be disposed of, if need be, to persons dealing in such goods. Where goods are sold by description, or for a particular use, *caveat emptor* does not apply, since the burden of inspection, to see if they are fit, is upon the *seller*.

A, who was the proprietor of several ice-houses in New Hampshire, sold 10 carloads of ice to M, a Boston dealer. A did not expressly warrant the quality of the ice, which was to be shipped whenever M's trade called for it. Upon arrival, the ice was found to be poor and not salable. A sued for the purchase price. Could he win?

338. SALES by SAMPLE. — In this case it is necessary that the parties should have reference to the *same sample* in order that there may be mutuality in the contract. When one sells by

sample or undertakes to supply goods in accordance with a sample submitted by the customer, he tacitly agrees that the bulk of the goods shall be equal in quality to the sample. (Sec. 16 of Sales Act adds: There is an implied warranty that the buyer shall have a reasonable opportunity of comparing the bulk with the sample, unless it is a C. O. D. transaction.) In Massachusetts, when existing goods are sold by sample it is only necessary that the article supplied in bulk should correspond with the sample, the seller not warranting either the sample or the whole against latent defects.

339. DELIVERY. — Unless specified otherwise, the presumption is in favor of a cash sale, and that delivering the goods and paying the price are concurrent conditions. (See §§ 367-8.) Delivery may be of three sorts, actual, constructive (see § 304), and "symbolical" where the possession is transferred by passing some symbol of the goods, such as the bill of lading.

When the delivery is of a *greater amount* of goods than was contracted for, or the goods are sent mixed with others, the buyer may reject the amount in excess of the contract; or if he must incur trouble and expense in separating them, he may reject the whole lot upon the ground that the terms of the contract have not been met. If a *less* quantity is delivered, he may also reject them as before; or he may accept, when it is generally held that he must pay at the contract price for those received.

When under the contract of sale the seller is authorized or required to send the goods to the buyer, delivery to a CARRIER for that purpose is *prima facie* deemed a delivery to the buyer, and passes the title, the carrier being deemed to be the agent of the buyer. This will be especially true if the buyer has designated which carrier is to convey them (where there are several), or where some one employed by the buyer (as a teamster) receives them.

340. Unless it is otherwise agreed, the buyer is entitled to a reasonable time and opportunity TO EXAMINE the goods to ascertain whether they are in conformity to the contract; and an offer to deliver, accompanied with a refusal to allow such examination, is not a good delivery.

If the contract is silent upon it the vendor is not obliged to *send* the goods to the buyer, but it is enough if he holds himself in readiness to deliver them when called for. Under such conditions, if nothing more remains to be done by the seller, the title has

passed, and the goods are at the risk of the buyer (compare with § 301).

341. PAYMENT may be arranged in three ways: by paying cash; by giving a promissory note, check, or other negotiable instrument; and by giving credit. If payment is made by check it is conditional upon the buyer having funds in the bank; if he has none, then it is only the semblance of a payment. The person taking it is bound to present the check in due season at the bank (see § 383), and should he fail to do so, and the bank becomes insolvent, he is merely a creditor of the bank, but has no right against the drawer of the check.

With reference to the effect of a promissory note taken in payment, there is a difference of opinion among the courts. Some hold that it is absolute payment, and if not paid when due, suit must be brought on the note, but the original contract of sale has been wiped out by it. Others say that this is but a conditional payment, and upon the note's being dishonored the seller still has his action for the goods, irrespective of the contract in the note.

When the sale is on credit, the *title* to the goods *vests* immediately in the buyer, and the seller is obliged to wait for his money by mutual agreement. (See § 322 in this connection.)

CARRIERS

A subject intimately related to sales is that branch of bailments (see § 294) which pertains to the duties and liabilities of common carriers, and the legal rights of the shipper, since carriage of the chattels is a part of almost every mercantile transaction. The engineer is bound to be largely interested in the transportation of both bulky and heavy articles over great distances, as contractor's plant, machinery, lumber, coal, cement, stone, and structural steel. Hence the following brief treatment.

342. COMMON CARRIERS and THEIR PRIVILEGES.— A common carrier is one who undertakes to carry goods for hire for whomsoever may employ him. This embraces draymen, expressmen, railroad, express, fast freight, and pipe line companies, on land; and bargemen, ferrymen, and steamboat companies on the water. (Steam tow-boats, sleeping-car companies, telegraph, telephone, and private bridge companies are *not* common carriers.) The liabilities of such carriers begin when the goods have been delivered to them or to their proper agents for the purpose of immediate transportation, and are accepted by them for that purpose. But they are not obliged to accept goods of a kind which

they do not profess to carry, nor to undertake to carry by other than the ordinary means and route. Neither are they obliged to accept goods when their facilities are insufficient to handle them, nor in the absence of statute on the matter are they obliged *absolutely* to provide such facilities (see below). They are not obliged to accept dangerous or suspicious goods; nor goods unfit for shipping; nor goods offered them by one not their owner. They are not obliged to carry goods unless the transportation charges are paid in advance. Acceptance of the goods by the carrier may be presumed when they are left in a usual place in accordance with the contract or custom of the carrier to so receive them. If they are deposited with the carier for *future* transportation, the carrier's duties toward the goods will be that of a warehouseman, merely, and his liabilities as a carrier will not arise until the consignor has authorized immediate transportation.

343. FACILITIES. — The rule is that a carrier is bound to provide sufficient facilities and means for transportation for all freight which it is reasonable to expect will be offered; but he is not bound to provide in advance for extraordinary occasions, nor for an unusual influx of business, which in the view of an ordinarily prudent and diligent business management could not reasonably have been expected. It has been said that the amount of business ordinarily done by a railroad company is the only proper measure of its obligation to furnish transportation. Hence if the pressure of traffic is such as the carrier might have reasonably anticipated and provided for, he will not be released from liability to receive goods on the ground of lack of convenience. In some States statutes provide a penalty against any railroad for failure to provide cars upon a written application made by the shipper.

344. DISCRIMINATION. — A Federal Statute prohibits discrimination in favor of or against any shipper, either in respect to charges or facilities. But this leads to a discussion of the Interstate Commerce Act and its allied constitutional entanglements which is foreign to our present purpose. To follow the spirit of the law, the carrier should ship in the order of precedence in which the goods were received, save that he may make an exception in the case of perishable goods; but it is held that he has no right to accept perishable goods for prompt shipment when it will interfere with the proper shipment of goods already on hand.

345. CARRIER'S LIABILITY and " EXCEPTED " RISKS.

—The carrier is held to be an *insurer* of the goods against all losses save those occasioned by "act of God"; by the public enemy; by the fault of the shipper; loss by reason of inherent qualities of the thing shipped, as in the case of extra-perishable articles; or if the loss is occasioned by the exercise of public authority.

Loss by "act of God," is one occasioned by an irresistible disaster resulting directly from natural causes and in no sense attributable to human agencies, such as losses by reason of lightning, tempest, earthquake, flood, and sudden death; while loss by fire not caused by lightning, nor spontaneous combustion, and loss by collision or explosion would not be so included. Even when loss is caused by one of the "excepted" perils, the carrier is liable if such loss could have been avoided by the exercise of ordinary care and diligence.

Under the "Public enemy" is included pirates on the high seas, and bodies of men existing in violation of law, including mobs, and bodies of strikers and rioters. Losses caused by the Confederate forces in the Civil War were all considered as losses due to the public enemy, and the R. R. companies in whose possession the goods were when destroyed, were not liable.

346. Where the *fault of the shipper* causes the loss, plainly he cannot sue the carrier for the results of his own negligence. The carrier's liability *begins* at the time the goods are delivered to him for transportation and *ends* when they are delivered to the consignee or owner, or when they are deposited in a safe warehouse, after there has been a reasonable opportunity for the owner or consignee to remove them.

347. The carrier may by contract limit his liability from that of an insurer of the goods to such an extent that he will be bound only to ordinary diligence; but he cannot stipulate against negligence, fraud, nor misconduct on his own part, nor upon that of his servants, such contracts being against public policy. It is common and proper for a carrier to set reasonable limits to the sum for which he shall be held responsible in case of loss; and he may refuse to take goods of greater value than ordinary, unless a higher rate be paid, as this would be fraudulent on the sender's part. He may also stipulate that he will not be liable for *any* loss unless a claim therefor is presented within a reasonable time.

348. DELIVERY by CARRIER. — The general rule is that carriers are bound to make personal delivery to the consignee, and their liability continues until such time as they have done so. The necessities of modern business allow this delivery to approach the constructive (see §§ 339 and 304) type. Hence if a carrier by water delivers the goods upon a designated or customary wharf and gives notice to the buyer, it is generally held to be enough to relieve the carrier from further liability. As to railroads, there is

a difference in local customs, some holding that the liability ceases when the goods are safely removed from the cars and placed in storage; others hold that in addition to this, notice must be given to the owner and a reasonable time must have elapsed for their removal before the carrier's liability terminates. Express companies, and teamsters generally, are usually bound to make *personal* delivery to the consignee, and failing to deliver to the right person, the carrier becomes liable for loss or damage resulting from such wrongful delivery.

349. The carrier will be *excused* from delivery to the consignee when the goods are demanded by one having a paramount title; or where the consignor has stopped them *in transitu* (see § 317); or where the carrier has lost them through an "excepted peril." (§ 345.)

If a BILL of LADING has been issued, delivery must be made to the holder of it, or to his assignee; if the carrier delivers to a person other than the holder of such bill, he will be liable for wrongful delivery, even though he delivers to the consignee named. This will be especially true if the shipper has expressly directed the carrier to deliver only to the holder of such bill and the carrier does deliver without requiring its production. It will be seen that this rule prevents great frauds, since not a little business is done upon negotiable bills of lading. The instrument passes freely from hand to hand, and delivery of it is held to be *symbolical delivery* of the goods.

350. CONNECTING CARRIERS. — The duties which have been mentioned as binding upon railroad companies also extend to goods properly tendered them by connecting lines. One carrier whose line connects with another cannot refuse to deliver to, or to receive goods offered by such line, or cars of that line carrying freight, according to the proper and usual course of business. When goods are to be sent over several connecting lines, the line upon which loss occurs is held to be liable for it, and the receiving carrier as such cannot be sued for the loss. If the first carrier finds the second unable to take the goods on account of a press of business, and they are lost or destroyed while awaiting transit, the first carrier must bear the loss. This is because so far as the shipper is concerned, the goods are all the time in transit. In America the receiving company is held to be the agent for the other companies, while in England it is just the opposite.

351. CARRIER'S LIEN is the right possessed by the carrier by which he may refuse to deliver goods unless his charges are paid. Upon refusal of payment he has the right to sell the goods for the charges, pay himself from the receipts, and turn the balance over to whoever seems entitled to it. As appeared under "Lien" in a former discussion (see § 322), of course he loses his lien when he parts with the *custody* of the goods. It is generally held that he has a lien for his freight and storage charges on those particular goods, and that this covers all proper charges throughout the whole of a continuous transit over successive lines.

This lien does *not* extend to charges arising under some contract other than that relating to the specific goods. That is, it is not a "general lien" — running against any and all of the goods that are or may come into the possession of the carrier, — for outstanding charges against that shipper. And it is held that the lien does not attach as against the true owner when the goods were delivered for transportation by a wrongdoer. It is plain that if it were otherwise, much injustice might be done.

A railroad cannot have a lien for *demurrage* charges, or for the inconvenience and expense which it may suffer by reason of the consignee's not having unloaded the goods from the cars within a reasonable time. A carrier by water may have a lien for salvage and for incidental expenses; and also for customs duties advanced upon imported goods.

352. In Massachusetts it is held that a carrier's lien is superior to a vendor's right of stoppage *in transitu*. The consignor, being the vendor of the goods, must pay the freight in order to secure his right of stopping the goods, but this superiority of lien exists only with reference to the particular goods whose carriage is in progress, as already noted. Also, in that Commonwealth, it is held that the carrier may hold the consignor for freight, even though he knows the goods have been sold to the consignee; but the consignee is bound to pay the freight, unless it is otherwise agreed. It is also true that goods once delivered to a (common) carrier cannot be taken away, either by shipper or consignee, without paying freight and other reasonable charges.

353. CONCLUSION. — The student will observe that the highly interesting and practical matter of carrying *persons* has not been touched upon. Texts which may assist the student or engineer to pursue this and the foregoing matters further, are Hutchinson on Carriers; and Schouler on Bailments. Browne and Story are other authorities on the same subject.

Diagram of Chapter VII

This chapter defines

SALES

- I. General Characteristics.
- II. Sales by Non-Owner.
- III. Goods not in Existence.
- IV. Proof and Statute of Frauds
  1. Provisions of Statute
  2. Sales "within" Statute
  3. Future Sales
  4. Satisfying Statute
     - (a) Accepting Part
     - (b) Binding the Bargain
     - (c) Memorandum
     - (d) Part Payment
- V. Passage of Title
  1. Something to be done
  2. Sales on Approval
  3. Conditional Sales
  4. Unappropriated Goods
  5. Delivery to Carrier
  6. Intention of Parties
  7. Stoppage *in transitu*
     - (a) Duration of Right
     - (b) Effect of Stoppage
- VI. Remedies of the Parties
  1. Seller's Lien and *Jus disponendi*
  2. Other Remedies of Seller
  3. Remedies of Buyer
- VII. Illegality and Fraud
  1. Technical Elements of Fraud
  2. Remedies of Defrauded Party
  3. *Caveat Emptor*
  4. Representations and Warranty
  5. Fraud on Vendor
  6. Fraud on Creditors
     - (a) Possession
     - (b) Intent retained
- VIII. Warranty
  1. Express
  2. Implied
  3. Sales by Sample
- IX. Delivery
  1. Symbolical
  2. Delivery to Carrier
  3. Right to Examine
- X. Payment.

Questions on Chapter VII

SALES and CARRIERS

1. Give a technical definition of a sale.

2. Distinguish " sale " from " bailment "; from " consignment."

3. Explain the difference between executed and executory sales.

4. What is the Sales Act? Of what importance to us?

5. What elements and formalities are required in sales?

6. Suppose you buy stolen goods. Who now owns them?

7. When may a non-owner pass a good title?

8. What is the rule as to sale of goods not in existence?

9. What was the origin of the Statute of Frauds? Its present importance?

10. What is the point of the seventeenth section? Discuss the Statute as a rule of evidence.

11. State the distinction drawn between a sale and a contract for work, labor, and materials.

12. Narrate concisely the carriage case. What is the point?

13. What is the relation of the Statute to an order given a manufacturer?

14. What was the difference between a common law sale and one made after the Statute was enacted?

16. State Rule (1) under the Statute. Discuss circumstances where it becomes important.

17. What kinds of delivery are there? Explain briefly.

18. Illustrate one case of " constructive " delivery.

19. Recite upon " binding the bargain."

20. What are the requirements for the " memorandum "?

21. What is the effect on a sale of non-compliance with the Statute of Frauds?

22. When does title pass? What is the test?

23. Name some important conditions precedent to passage of title.

24. Under what circumstances does title pass instantly and in the present?

25. Recite upon the case where something remains to be done.

26. Distinguish between the two sorts of conditional sales treated in the text.

27. Recite on passage of title in sales on approval.

28. "Specific appropriation,"—what is meant? When important?

29. What about title to "unascertained" goods?

30. Recite upon "appropriation." Who makes it?

31. What has appropriation to do with loss of the goods?

32. Why have the foregoing rules about passing title been necessary?

33. When goods are manufactured to order when does title pass?

34. What relation does delivery to a carrier have to title passing?

35. Explain carefully "jus disponendi." For whose benefit is the doctrine evoked?

36. Does reserving the "jus dispondendi" vary the contract? If so, how? Why permitted?

37. What is meant by "seller's lien"?

38. Explain stoppage "in transitu." Who does it? When?

39. What is the practical advantage of the right of stoppage? Whom does it benefit?

40. How is right of stoppage exercised?

41. Suppose the carrier delivers in spite of orders to stop in transit,—does the seller lose? Suppose he delivers before getting word from seller?

42. Name two ways, or circumstances, whereby the goods are said to be at the end of their transit.

43. Suppose goods have been removed from cars and stored in freight depot, but buyer has not been notified of their arrival. Are they still in transit?

44. Suppose you ship goods over the X. R. R. via M. & N. R. R. The latter received the goods from you, and has delivered same to X. as its connecting carrier. Are the goods still in transit?

45. What effect does the stoppage in transit have upon the contract of sale? Right endures how long?

46. Suppose a seller has received part payment, and has also exercised right of stoppage. Has he any further privileges?

47. How may right of stoppage be defeated?

48. Explain what is meant by "seller's lien." What is its essential feature?

49. When is the seller's lien said to be waived? How is it lost?

50. Can the seller's lien be revived? If so, how?

51. When the buyer refuses to accept the goods, what can the seller do about it?

52. If a buyer has been put in possession of the goods but refuses to pay for them, what can be done about that?

53. In case one has bought for future delivery on a rising market, and cannot secure delivery of goods when due, what is the remedy?

54. In case just put who really owns the goods, i.e. has title passed or not?

55. Name at least three kinds of sales void for illegality.

56. What rights has the party defrauded in a contract of sale? Give an illustration with assumed facts.

57. Will it make any difference if fraud was on buyer or seller? If so, what?

58. Explain the rule "caveat emptor." Why is it necessary?

59. If a person is suspicious of the quality of goods, what should he do?

60. What is the rule as to "caveat emptor" and latent defects in Massachusetts?

61. Name the technical elements of fraud. Why do these rules exist?

62. What is the bearing of honest intentions upon the question of fraud in Massachusetts?

63. Distinguish between a representation and a warranty.

64. How does fraud on the vendor most commonly arise? What facts will need consideration to prove this fraud?

65. How is fraudulent intent proved?

66. Explain "Sales to defraud creditors."

67. Suppose a seller retains possession of the goods, what is the inference?

68. What can be said about "preference" among the creditors?

69. Does a breach of warranty break and discharge the contract? Explain why, or why not.

70. Is there any difference, in an ordinary sale, with respect to the warranty of quality, and that of title? Explain.

71. What is the effect of a warranty when the article has obvious defects?

72. What about defects ascertainable only through the exercise of peculiar, expert or intimate knowledge of the subject matter?

73. What is the warranty with reference to an article to be made by the seller?

74. How does "caveat emptor" affect sales of goods for a specific purpose, or sales by description?

75. What are the undertakings in sales of goods by sample?

76. What is the general rule as to time of delivery?

77. Define " symbolical " and " constructive " deliveries. When necessary?

78. If upon delivery there is a gross variation in quantity, what can buyer do?

79. In general, how does delivery to carrier affect title?

80. What are the buyer's rights as to examining the goods before accepting?

81. Must the seller send the goods to buyer? When, or when not?

82. How may payment be made?

83. Explain the status of payment by check.

84. Is a promissory note payment of a debt for goods sold? Explain.

85. When does the title vest in a credit sale?

CARRIERS

86. What is a common carrier? Enumerate the kinds.

87. When do the liabilities of a carrier begin?

88. What are carrier's duties as to accepting goods offered him?

89. What is the carrier's duty as to providing facilities? How is his obligation in this respect measured?

90. What is the rule as to discrimination between shippers?

91. Explain the extent of the carrier's liability. State the exceptions.

92. When does fault of the shipper relieve the carrier?

93. When does the carrier's liability cease?

94. What is the rule for contact stipulations as to carrier's own negligence.

95. How may delivery by carrier be made? Is the rule different as to different carriers? Explain.

96. When will the carriers be excused from delivering?

97. What is the rule as to delivery when a negotiable bill of lading has been issued?

98. What are a connecting carrier's duties? What if loss occurs?

99. What is meant by " carrier's lien "? What does it cover?

100. What is the relation of right of stoppage to carrier's lien in Massachusetts?

CHAPTER VIII

NEGOTIABLE PAPER

Competent observers say that at least four-fifths of the interchange of money values is accomplished by means other than manual transmission of the coin. Business is to-day largely carried on through instruments of credit. Are further arguments needed to show that understanding this branch of contracts will be valuable to the engineer or business man?

In this chapter the necessity for rigid rules regulating negotiability will be shown. We shall learn who can make negotiable instruments, what the responsibilities are of one who signs a note, either as principal or agent, and how that signing should be done. What part does a *bona fide* delivery of the instrument play with reference to its validity? What is the effect of fraud? What is the status of the parties to accommodation paper? And what are the peculiar liabilities of the various kinds of indorsers? The characteristics of the ubiquitous bank-check, and of other commercial paper, such as certified checks, bonds, judgment notes, bills of lading, etc., will be briefly alluded to.

354. The law of Negotiable Instruments is a branch of contracts which involves stating many technical rules that everywhere govern business transactions. We have already hinted at certain of its important elements in referring to credit transactions under the subject of Sales. The present treatment deals with the medium of payment when it is not a cash sale, and outlines a few of the most important rights and interrelations among the parties according to the rules of the " law merchant." The " *law merchant* " (i.e. mercantile law) is that body of commercial usages and rules recognized by civilized nations as regulating the rights of persons engaged in trade. Whenever a usage has become general enough to be noticed by the courts it is incorporated into judicial decisions, and thus becomes a part of the law.

Our discussion will state a few prominent rules of the " law merchant " pertaining to promissory notes and checks. Other forms of commercial paper will be briefly mentioned. A reason for attempting the treatment of so great and important a subject in the present brief compass may be found in the language of a great English law Lord, who said, " There are in some cases differences and peculiarities which by the statute law of each country are grafted upon it, and which do not apply in other countries; but the general rules of the law merchant are the same in *all* countries."

355. NEGOTIABLE PAPER is the term applied to that class

of contracts the *title* to which is *transferable* by *indorsement* and delivery, or by delivery alone.* The original purpose of such paper was to permit responsible merchants to transact business in foreign countries without the inconvenience or risk of transporting large sums of money. These expedients grew up with reference to foreign business alone, but their usefulness and general convenience soon led to their incorporation into domestic affairs where the benefits were found to be no less. The natural result is that doubtless by far the greater portion of present-day business transactions are carried on by instruments of credit.

Negotiability is that characteristic of commercial paper which renders its title transferable by indorsement and delivery, or delivery alone, so as to enable the transferee (the one taking it) to sue upon it in his own name.

The element of assignability in a contract differs from that of negotiability since in the former notice must be given to the debtor, and the assignee can take no better title than the assignor had; while a *bona fide* indorsee of negotiable paper has a good title without notice to the debtor, and may even acquire a better title than his indorser had.

Negotiability, therefore, is that property or quality by virtue of which an instrument may circulate from hand to hand as money.

356. ESSENTIALS TO NEGOTIABILITY. — Let us now consider the particular form in which a contract must be put for it to possess negotiability.

1. It must be in writing, signed by the maker or drawer.
2. It must contain an unconditional promise or order† to pay a definite sum of money.
3. It must be payable on demand, or at a fixed or determinable time in the future.
4. It must be payable to order, or to bearer.
5. It must indicate the parties to the contract, or contracts, with certainty, i.e. as principals, or as indorsers.
6. There must be an actual delivery.

Upon each of these rules or elements the law books contain multitudinous cases. They exhibit complicated sets of circumstances wherein the shades of meaning of each word these rules contain have been subjected to the keenest scrutiny and its exact

* The student should refer to the topic "Assignment of Contracts," and note that the rights of an assignee of an ordinary contract, and those of the indorsee of negotiable paper, are very distinct.

† If it is a bill of exchange, or draft.

limitations determined. Thus the labors of court and counsel have reduced the rules to their lowest terms in which they have just been stated. It is believed that an engineer of average intelligence will have no trouble in getting the plain intent and purpose of these rules, — when it comes to an actual hair-splitting question, as to whether or not the rules are met and satisfied, then the services of skilled counsel are necessarily the only recourse.

357. The Rules Discussed. — Rule 1. Seems too obvious to need further discussion.

Rule 2. The meaning may be made clearer by saying that an order upon A, or a promise made by him to pay out of a *particular fund* in his hands is not *unconditional,* since the fund may have become exhausted, in which case A's liability would not attach. The person who holds this promise or order, therefore, cannot be certain of his rights, and this element of uncertainty is what destroys its negotiability.

Many interesting cases have arisen where a " condition " was more or less clearly expressed by the parties on the face of the instrument; many others where the condition was an implied one. For example, in a sale of goods where a promissory note was given (see Sales § 341), there was a failure of consideration,—the goods were worthless or out of existence, etc. Was it implied in the note as a " condition " that its validity should depend upon the proper fulfillment of the contract of sale? The question is submitted as worthy the further study of the student.

The sum payable must be stated with certainty. If words and figures are used, the words will control; but if the words are uncertain or ambiguous, reference may be had to the figures. The following facts or circumstances, it should be noted, do *not* make the sum *uncertain;* (*a*) payable " with interest "; (*b*) by stated installments; (*c*) by installments, with a provision as to default; (*d*) with exchange; (*e*) with costs of collection.

358. Rule 3. " Payable on demand " covers cases where the intention of the parties is so expressed; or the paper says " at sight "; or " on presentation "; and also where *no* time is expressed. A future time is *determinable* when the paper specifies a fixed time after date, or after sight; or, on or before a fixed or determinable future time specified; or, on or at a fixed period after the occurrence of a specified event which is certain to happen, though the time of happening is uncertain, *e.g.* " I promise to pay, six months after my death," etc. But if the instrument is payable upon a *contingency* which may or may *not* happen, it is not

negotiable. (This is not saying that it will not bind the maker, however.)

359. Under Rule 4 the long recognized "words of negotiability" are "to order" or "to bearer." But it does not follow, that these are the only words which can impart this important quality to the paper. The *intention of the parties* enters here, as in all other contracts, and so words equivalent to the above are sufficient, if from them it can be inferred that the person making the instrument intended it to be negotiable. Thus it is held that the word *holder* is synonymous with *bearer*.

A note to "M, or holder" is negotiable; but if "To the bearer, M," the word "bearer" is ineffective. In some States the word *assigns* is as strong as either "order" or "bearer."

360. As to Rule 5 there must be some natural or legal person named or pointed out in the bill or note to whom the money is to be paid, and such person must be in being at the time of issuing the paper. Thus the common law rule would be that a promise to pay "To A *or* B" would not be negotiable by reason of indefiniteness in the payee, since neither party would have full right to enforce it, but by *statute* in most States negotiability *is* given to it. An instrument may be drawn to the holder of an office for the time being, this fact being the only clue to identity, as "Pay to the order of Cashier," or "To Secretary of," "Treasurer," etc.

361. There is a rather curious but useful deviation from the apparent strictness of this rule as to certainty of persons when the instrument is payable to a *fictitious* or *non-existing* person, and such fact was known to the person making it so payable. If the name or word inserted as payee does not purport to be the name of a person, is payable "To Cash," "Bills Receivable," to "Sundries," etc., etc., the paper is treated the same as though it bore the name of a fictitious *person*, and is *payable* to *bearer*.

362. WHO CAN MAKE NEGOTIABLE INSTRUMENTS?—The rule is brief and in accordance with contract doctrines. Any person who can contract generally can make negotiable paper. The ordinary rules as to competency to contract are stretched a little here, in that infants, persons *non compos mentis*, and married women (at common law) can transfer title by indorsement, though they incur no liability as indorsers. (See § 374.)

A CORPORATION may make simple contracts for the ordi-

nary and legitimate transaction of its business, i.e. in matters not *ultra vires*. Hence it is proper for it to make notes and negotiable paper, and sign them by the hand of its proper officer, in which case the duties and obligations of the corporation are the same as those of any natural person. This is also the exact situation with reference to *coupons* attached to corporation bonds; they are negotiable promissory notes of the corporation.

An AGENT, likewise, may make and indorse negotiable paper if he makes it appear clearly in proper form that it is the *act of the principal*, and that he acts simply as agent. Too much care cannot be exercised in this respect, since the technicalities must be strictly adhered to, and one may inadvertently incur heavy financial obligations through omitting to put the two letters *b* and *y* in their proper places. The invariable rule is that the signature *must be in the name of the principal*, the agent's name and capacity plainly appearing in addition thereto. Thus, signing "A. B., *by* C. D." relieves C. D. of responsibility. Also, "A. B., *by his agent*, C. D.," is good; or "C. D., *agent for* A. B.," is safe. But merely, "C. D., Agent," has only the effect of binding C. D. himself, no matter whom he *thought* he was binding.

363. It may be noticed, in passing, that executors, guardians, trustees and other persons in a fiduciary capacity have no power to bind the estates which they represent, even though they issue such negotiable paper in the interest and behalf of such estate. They make themselves personally liable only, even if the instrument expressly describes their representative capacity. In such cases they contract and pay personally but are reimbursed upon filing their accounts in the equity court. This is an application of the ordinary rules of equity to those in trust relationships, and prevents trustees and those charged with the care of estates from gambling for their own enrichment upon the security which such trusts afford.

364. SIGNING. — The general rule is that it will be sufficient if the name of the maker or drawer appears on *any* part of the instrument in such a way as to exhibit an apparent *intent* to enter into a contract obligation. Signing may be by "mark" or by initials, and may be made with pencil, ink, or printed by impress of type or rubber stamp. The matter of *intent* is of great importance, since if signed without intent, as through ignorance of the character of the instrument, it has been held that this is not a

binding signature, because the mind did not accompany it. This is not to be taken to mean, however, that it is ever safe to sign any instrument without satisfying one's self as to its general nature.

365. By Whom. — (1) Where a person signs a bill or note in a *trade* or *assumed name*, he is liable thereon just as if he had signed in his own name.

An illustrative case would be where a person carried on a business under a fictitious name, as The Star Cement Co., etc., the organization being neither a partnership nor a corporation.

(2) Signing the *firm name* by a member is equivalent to signing by all of the persons liable as partners of that firm, acting through him as an agent. This is the common partnership doctrine of general agency (see § 277) and will include active, dormant, and secret partners, as well as partners by implication. Thus, where a retiring partner gives no notice of withdrawal he may become liable upon a paper signed in the firm name subsequent to his retirement.

The engineer's attention should be called to the fact that the partner's power to sign negotiable instruments is much more strongly developed in the case of trading than in professional partnerships,—as to which the engineer would do well to inform himself.

It is but a step to the proposition that it is immaterial by what *hand* the signature is made provided there is an authority so to sign, either express or implied.

In a rather extreme case, an instrument payable to C's order was to be indorsed by him. His wife had full authority to make such indorsements for him. For some reason the wife did not sign, but had her daughter do it. The daughter signed C's name in the wife's presence, and by her direction. This was held to be a good indorsement by C.

366. Joint Signing. — Where a note is signed by two or more persons, it may be a joint note, or a joint *and* several note; it will be ascertained which from the language of the note. As it is quaintly phrased, the intention of the parties "must be found within the four corners of the instrument." If it reads: "*We* promise," it is obviously the joint obligation of the signers as individuals though not as partners, i.e. each is bound to pay half only. If it reads: "I promise to pay," and is signed by two or more persons, the note is joint and several (see § 279); so also if it is "We, *or* either of us," promise, and still more plainly if it is "We jointly and severally promise."

367. Fraud. — When a signature has been induced by fraud the instrument is invalid, and of no effect.

A strong case might be where a person writes his autograph on a blank paper, which paper comes to the hands of a forger. He writes above it a negotiable instrument and then puts it into circulation. The fraud is apparent, and the signer not bound. Where such a case arises, however, it will be necessary for the signer to show that he was not guilty of negligence, —for otherwise he may find it hard to dispose of the suit of one who has purchased the instrument innocently and for value.

In a somewhat similar case where a person signed, he had an opportunity to satisfy himself as to the exact nature of the document and failed to do so. The instrument later came into the hands of an innocent purchaser for value (called also a "holder in due course") and the signer was said to be estopt (prevented or precluded) from denying its validity or claiming that he intended to sign an entirely different sort of an instrument. This again exemplifies the tort doctrine: "Every man is presumed to know and anticipate the natural consequences of his acts, and is answerable therefor."

DATING and **Other Terms.** — The validity and negotiable character of an instrument is not affected by the fact that it is not dated, nor that it is antedated, nor postdated, if such antedating or postdating is not done for a fraudulent or illegal purpose. But since the date usually determines when the instrument is to be paid, the lack of it will render the instrument useless as a circulating medium.

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Neither will the validity and negotiable character be affected if the instrument does not specify the value given, or that any value has been given therefor, though the words "value received" are usually used to indicate that the instrument is founded upon a sufficient consideration. This does not mean, however, that a real consideration can be dispensed with any more than in any other contract.

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The instrument will be equally effective if it does not specify the *place where* it is *drawn*, nor the place where it is *payable;* or if it designates a particular kind of money in which payment is to be made. The presence of a seal, similarly, will have no effect.

368. DELIVERY. — No negotiable instrument becomes operative until it is delivered, by which is meant the actual transfer of possession with *intent* to transfer the title. As with other chattels, delivery may be either actual or constructive, the words being used in the same sense as previously. (§ 304.)

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A promissory note was fully and perfectly drawn and executed, but was left locked in the drawer of the maker from which it was stolen by a thief who subsequently negotiated it. The note was bad because never delivered.

369. Escrow. — A very interesting class of cases arises when there is a "delivery in escrow." There is a delivery to some person other than the one entitled ultimately to receive the instrument. This bailee is to hold it until certain events happen, or certain conditions are complied with, when the instrument is to take immediate effect, even though not yet finally delivered. The test is to ascertain whether the person so holding acts as bailee or agent for maker, subject to his control; or whether, in delivering it to such person, the maker has passed it *beyond* his control in such a way that the other is acting as bailee for the ultimate owner.

Suppose you send a check or note to a bank, directing them to hold it until the title papers to a certain piece of land are presented at the bank, when they are to make payment in your behalf. Plainly the bank acts as your agent, and as such is subject to your control.

In other cases, a person has made notes binding his estate, placed them in envelopes and handed the same to some one with instructions that it should be opened only after the giver's death. Sometimes the qualification is added,—"This is yours if I never call for it," etc. Here it has been held that the receiver is merely the agent of the giver, keeping custody for him.

It is a fundamental rule of agency that death of the principal revokes the agent's authority. Hence as the holder, by the terms of his agency, could not open the envelope to effectuate the delivery until after the death of the maker, the death having occurred, the agency is destroyed and there can be no possible "delivery" in this way. But the line is drawn between this situation and the one where the envelope is handed over in such a way as to allow the giver no further control over it. Then it is a true delivery in escrow,—in a case like the above, the condition precedent to its validity is the death of the maker.

370. MAKER'S LIABILITIES. — The maker's liability upon a negotiable instrument is that of *principal debtor,* and his act in signing the paper is a promise to the payee and to all subsequent holders of the instrument that he will pay it when due, and according to the terms (or tenor) of the paper at the time of signing. No demand need be made upon him to fix his liability, as will be needful in the case of an indorser. His engagement to pay is *absolute* and *unconditional.*

Payment. Suppose A makes a note payable to B's order, and B indorses it in blank to C, from whom it is stolen. At maturity the thief presents it to A who pays. Must he again pay to C? No, if the payment was made in good faith, because a note indorsed in blank is payable to bearer, and hence payment to the thief was according to the tenor of the instrument. Moreover, all danger would have been avoided if B had indorsed in full instead of in blank, for then the paper would show its history, and the maker would be warned if it did not come from proper custody.

371. MAKER'S DISCHARGE. — The maker or primary debtor is discharged from liability on the instrument: —

(1) By the holder's physical destruction of the instrument.

(2) By the holder's voluntary cancellation of the instrument. (Must be apparent on its face.)

(3) By the holder's renouncing his rights. If this occurs the instrument is discharged, except that if it happens before maturity there is no effect as to innocent third persons who purchase it before that date.

(4) By payment in due course, i.e. when due, and according to the terms of the instrument.

(5) By material alterations. This is because the altered instrument is not the same as that by which the maker bound himself.

372. DISHONOR. — When the maker refuses or neglects to pay at maturity the paper is said to be " dishonored." The holder of a note is required to give notice to all indorsers that the note, or paper, has not been paid at maturity. Should the holder fail to do this, the indorser is by the law merchant released from his contract. Hence this notice of dishonor should always be given, though there are certain cases when it will be excused. The effect of such notice is to apprise the last indorser that the holder looks to him for payment. This notice must be given promptly, in order that the indorser may have an opportunity to look to those who are in turn liable to him, in case *he* has to pay.

373. ACCOMMODATION PAPER is a device to supply credit. X wishes to raise money and applies to Y for the use of his name to support X's credit. For this purpose, Y signs a note payable to X's order, or indorses one already in existence, — generally without consideration. Y is liable to a subsequent holder, even though that holder knew there was no actual business transaction between X and Y.

Therefore, an **accommodation party** is one who has signed a note as maker or endorser, without recompense, and for the purpose of lending his name, standing, or credit to some other person. He is liable to all parties who subsequently come upon (indorse) the paper, saving only the party accommodated, between whom and himself there is an *implied* contract (see § 68) that the accommodator shall be repaid for all loss incurred by him, in case he has to pay the instrument. (See Appendix Note 15, Suretyship.)

But the accommodation party does not become liable unless the paper has really been transferred to some one for value. e.g., suppose B signs as accommodation for A, who then makes a gift of the paper to C. It is certain that C cannot sue B.

Considering the question of whether or not C can sue A, it is said that a valuable *consideration* is necessary between the immediate parties to a bill or note, as much as in a simple contract. The want or failure of such consideration may always be shown between the immediate parties to the instrument. Thus, if the note was delivered as a gift to B, he could not sue A upon it, even though there was a strong moral obligation, or natural love and affection prompted A to make the gift. (5 Pick. 391.)

374. INDORSEMENT is a highly important act accomplished by the holder's writing his name upon the back of a negotiable instrument for the purpose of transferring his title thereto. One not a party to the contract may also indorse, for the purpose of strengthening the holders' security. Such an indorser assumes a contingent liability for its future payment. (See § 373.) Indorsement is not complete until the instrument is delivered. The act of indorsement is of two-fold nature, — it consists of two distinct contracts. First, the title to the bill or note is transferred; secondly, the law implies a warrant for the payment of the instrument when due, provided it is duly presented to the maker, not paid by him, and the indorser is duly notified of the failure. This warrant runs for the benefit of any or all subsequent holders of the paper, when they " hold in due course," i.e. have purchased it for value, and in ignorance of its defects, — if there are any.

As in every other contract relation, the *intention of the parties* is of paramount importance. Thus, there are various indorsements known to the law merchant. They are used as circumstances require, and according to the indorser's intention. The different indorsements are named: " In blank"; " In full," or " special "; " without recourse "; " conditional "; and " restrictive." A brief statement of the effect of each will be given.

375. The Indorsements. — Indorsement *in blank* consists simply in writing the name of the owner, or holder (by him), across the back of the paper; its effect is to make the paper payable to the bearer, whoever he may be.

In full, or *special* indorsement, is where the indorser writes " Pay to X or order " over his signature. By it title passes to the person named as indorsee who can only transfer title by another indorsement. " *Without recourse* " passes title to the instrument but is used expressly to avoid one of the secondary effects, viz.: the warranty that the instrument is good, or that the indorser will make it good, in default by the principal or others bound upon it. It is accomplished by using the words " Without Recourse " or their equivalent over the indorser's name. The same thing is also

called a *qualified* indorsement, and is used when for any reason the holder does not wish to be further bound in the matter. A *conditional* indorsement is probably but little used; by it possession passes, but not title until the happening of some condition named as "Pay A. D. or order unless before payment I give you notice otherwise." A *restrictive indorsement* is very common, as where paper is indorsed to an agent "For collection," or "For deposit." The effect is to give custody, but not ownership. Suppose X, doing business in New York, gives you a note payable at the Knickerbocker Trust Co. in that city. You deposit it with the Shawmut Bank in Boston, for collection. The Shawmut does not own the note, but is your agent for collection.

An indorsement must be of the *entire* instrument. If it purports to transfer only a part of the amount payable, it does not operate as a negotiation. If the name of the payee is misspelled, he may indorse the paper in the same form, adding if he thinks fit, his own proper signature.

376. INDORSER'S WARRANTIES. — The customs of the law merchant have made the obligations of an indorser so numerous and important that they should be stated here. It is held that he warrants to his indorsee and to all subsequent holders, and cannot deny the following facts: —

(1) That the paper will be paid when due;

(2) That it is in every respect genuine, and is neither forged, fictitious, nor altered;

(3) That it is a valid obligation, and that the contracts between all prior parties are valid;

(4) That the prior parties were competent to bind themselves;

(5) That he as indorser has a lawful title to the bill or note, and also the right to transfer it. All but the first of these apply to an indorser without recourse; otherwise all apply to every indorser.

377. INDORSER'S DISCHARGE. — A person secondarily liable, as the indorser of a note, may be released or discharged in any of the following ways: —

(1) By discharge given to any prior party by the holder. This is because every one may indorse on the strength of the prior indorsements, — hence if one of them is discharged, the chain is broken.

(2) By a binding agreement between the holder and a *prior*

holder that *he* should not be sued for a definite time. This seriously impairs the rights of all indorsers subsequent to the one so relieved, and hence discharges their obligations.

(3) By the holder's voluntary cancellation of the indorser's name.

(4) By a material alteration. This avoids the instrument as to all parties who were bound upon it at the time of the alteration, because it makes a change in their contract to which they have not assented.

(5) By payment by any other indorser at or after maturity. This discharges all others who indorsed subsequently to him.

378. Purpose of Rules. — A negotiable instrument's stages of progress from hand to hand may be likened to the forging of a chain of credits, link by link. The foregoing rigorous rules have been found to be necessary for preserving integrity and good faith in business dealings. A little thought will show that the only way in which these rules can be followed and made effective is that every man must, before accepting any instrument of credit, scrutinize it and him who transfers it so closely that negligence cannot be imputed to him. This he must do in the light of the transferor's credit and business standing. He must also give due weight to all the facts which have come to his knowledge or bear upon the transaction, since the doctrine of "notice" plays a most conspicuous part in these rules. In practice each individual generally looks no farther back than his indorser; taking the analogy of the chain, he only examines the link next his. But as that link has been made under the same close scrutiny of the link preceding *it*, and so on, back to the maker, the strength of the chain of credit is thus assured, and the negotiable instrument has fully served the purpose of commerce. To allow this, and to insure this, the rules are strict and uncompromising.

379. PRESENTMENT of a bill or note is necessary in order to hold the indorsers, because at maturity demanding payment of the maker is a condition precedent to the indorsers' liability.

What is a sufficient presentation to effectually bind such indorsers depends somewhat upon the particular facts of the case. It is held that: —

(1) It must be made by the holder, or one duly authorized by him;

(2) To the maker of a note, or his authorized agent, such as a

clerk, if made at the place of business; or the wife, if it is to be presented at the maker's residence.

(3) It must be made on the exact date of maturity, unless there is a legal excuse for not doing so; and

(4) At a proper place, i.e. at a particular place if one is named, otherwise at the home or place of business of the maker; and

(5) At a reasonable hour, i.e. the usual banking or business hours.

380. A JUDGMENT NOTE is in form an ordinary note to which is added: —

(1) A power of attorney (see § 134) for the holder, or any attorney, to confess judgment against the maker at maturity;

(2) A waiver of the benefit of homestead exemption from attachment, etc.;

(3) An agreement to pay attorney's fees for such confession.

381. Theory and Benefits. — A judgment note gives the holder great advantage over an ordinary promissory note, especially when time is an important element in collection. The purpose of all legal procedure in serving the writ on a defendant, summoning him to court, and the legal steps by which a final judgment is rendered by the court, is that the defendant shall have a full and fair trial on the merits of his case, with all possible opportunity to defend himself, and to set forth extenuating circumstances. This accords with the spirit of the common law and constitutional provisions.

Now if the future defendant is willing to forego putting this machinery into motion, he may waive these rights by signing a judgment note for his debt. The *judgment* is the kernel of the nut, but as he has already "confessed" it,—settled out of court, as it were,—everything else the court does, such as ordering execution on defendant's property, etc., is merely routine, and can be disposed of in a few hours. If it were necessary to bring suit, serve the writs, conduct the trial, get judgment, and finally to secure execution upon an ordinary note it might take several months. Possibly more than a year would be required in the congested condition common to courts at most commercial centers. If the defendant is in a critical financial condition, with numerous creditors, the advantage of being early upon the grounds is apparent.

382. CHECKS. — Of all commercial paper, probably checks are in most general use, supplying a convenient medium for transmitting funds between banks and bankers and their customers. By the authorities, a *check* is a "draft upon a bank or banking house, ordering the payment of a certain sum of money, absolutely, and upon demand, to a certain person therein named, or to him or order, or to bearer." It is by its face an appropriation of so much money belonging to the drawer which is in the hands of the drawee. The identity of the drawee, whether a bank, individual, partnership, or corporation must be expressed on the

paper with sufficient clearness so that the holder may know upon whom to call for payment.

383. Presentment. — A check must, within a reasonable time, be presented to the party upon whom it is drawn for payment, i.e. to be "cashed." What is a reasonable time depends upon circumstances and the customs of trade. The following rules are safe: If the holder of the check and the banker are in the same town or city, it should be presented not later than during business hours of the next week-day after it is received. If these parties are in different places it must be forwarded on the next business day, or earlier, to the banker's city to be there presented by the owner's agent on the next business day after its receipt.

Checks are paid in the order of their presentment, not in their order of issue, — another reason for diligence in presentment. If a check has been lost it is the duty of the owner or holder to give immediate notice to all the parties interested, so as to prevent payment to any one not entitled to receive it.

384. Protest. — In a technical sense, *protest* means the formal notice executed by a notary that the instrument has been dishonored; as used in business, it includes all steps necessary to charge an indorser. The effect of protest for non-payment, when accompanied by notice to all the parties on the paper, is to make all of them liable to the holder of the paper for its amount, with damages.

When payment has been refused, the holder should take the instrument to a notary whose first duty is to make a formal demand for payment, which being refused, he must so certify. It is customary for the notary to give notice to all persons secondarily liable, though this is held not to be a part of his official duty. Protest must be made upon the day of its dishonor, unless circumstances beyond the holder's control prevent. And the paper must, as a rule, be protested at the place where it was dishonored.

It has already been said that notice is necessary to bind the indorsers. This is a right which they may waive should they see fit. It is accomplished, frequently, by stamping the words "*No Protest*" with their endorsement. The effect is, not that the indorser varies his liability in any way, but that he is willing to be bound without the formalities of protest. Incidentally, there is a saving of notary's fees for protesting.

385. Duty of Bank. — The bank must honor the checks of its depositors to the extent of their funds, though it must have time to make proper entries in its books to ascertain the state of depositors' accounts. It is the bank's duty to satisfy itself that a *bona fide* holder of the check presents it, — and it pays at its peril. Hence if a forged indorsement is the basis of their payment, the bank will be liable to pay the same over again to those rightfully

entitled. A bank is *not bound to pay* unless it is in full funds; neither is the holder bound to accept part payment from them, as he is entitled to the whole. The holder cannot safely part with the check unless for the whole amount. The bank is entitled to possession of the paper since that is its voucher for funds paid out. If a check proves to be bad, i.e. there are no funds to meet it in the bank upon which it is drawn, the duty upon the drawer to make the payment in some other form is by no means discharged, since payment by check is a conditional one.

386. CERTIFIED CHECKS. — A depositor may draw a check against his account, take it to the bank and have it "certified" which is done by a bank officer writing "*Certified*" with his name or initials on its face as a memorandum. The drawer then hands this check to any one to whom he may be indebted, or who wishes to hold some security from him, and the recipient is excused from the rules as to prompt presentment.

The effect is that the bank has assumed an unconditional obligation to pay the amount of the check whenever presented, and has in fact set apart sufficient funds to satisfy it, charging them against the account of him who made the check. This obligation renders the paper as good as bank-notes (currency), whereas in the case of an ordinary check the significance and validity of the transaction by which it changes hands may be marred by the condition that the drawer has no funds (or inadequate ones) to satisfy the check when presented. Thus certification is a great protection to the holder of the check, putting the bank's credit in place of that of the drawer.

For these reasons, most bids for engineering construction are required to be accompanied by certified checks of large denomination, to be returned in case the bid is not accepted, or be forfeited if a contract is not entered into after being awarded, etc., etc.

387. This practice of requiring certified checks of bidders has evidently grown up on the theory that a contractor's fitness to undertake the work in question and his general responsibility are to be measured by the size of his bank account. It has been justly urged that this view is fallacious. A bank would, as a matter of ordinary business, certify a check for a new depositor as quickly as for an old one, the only prerequisite being a deposit at least equal in amount to the face of the certified check. Thus the principal purpose for requiring such checks in engineering work might be largely defeated. The modern and more satisfactory way is to require a performance or fidelity bond of a Bonding and Security Company, who, like all others doing an insurance business, investigate their risks before accepting them. Plainly a bank never does this.

388. BONDS. — A bond is a written contract, under seal, whereby one person binds himself to pay a specific sum of money to another. When expressly negotiable in form, or clearly intended to be so, it is practically equivalent to a promissory note. This is an ordinary bond, and is a promise to pay absolutely. It is much

used by municipal and other corporations for the purpose of raising money on long-time loans, for improvement of plant, etc. The money for meeting the bonds at maturity is commonly set aside from the annual earnings or taxes, and placed in a sinking fund.

Another sort of bond, frequently met with by the engineer, is where the payment is made to depend upon a contingency, which, if the contingency does not happen, the promise in the bond is to be of no effect. Such are the "faithful performance" bonds, so common in contract work, and also "bail-bonds" given by "bondsmen" to secure the personal liberty of a person under arrest in a civil process. (See also §§ 432 and 31.)

389. The **essentials** of any bonds are: Proper parties, seal, signature, delivery and acceptance. The discussion of these elements under promissory notes (see § 356) will apply here also. Corporation bonds are frequently issued with small notes, known as *coupons*, attached, and when they are severed from the bond they are promissory notes for the payments of installments of interest when the coupons mature, i.e. when the interest becomes due. When thus detached these coupons are negotiable by delivery, and the bond need not be produced when the coupons are presented for payment.

390. OTHER MERCANTILE PAPER. — In closing this hasty treatment of the subject, a few definitions of other types of negotiable paper may prove useful.

The word "*bill*," wherever used heretofore, means **"Bill of Exchange."** This is an unconditional written order from one person to another, directing the latter to pay to a specified person a certain sum named therein. The word "Draft" is more commonly used for the same thing.

A **Bank Note** is a promissory note payable to bearer on demand, issued by a bank under authority of law, and used as a circulating medium.

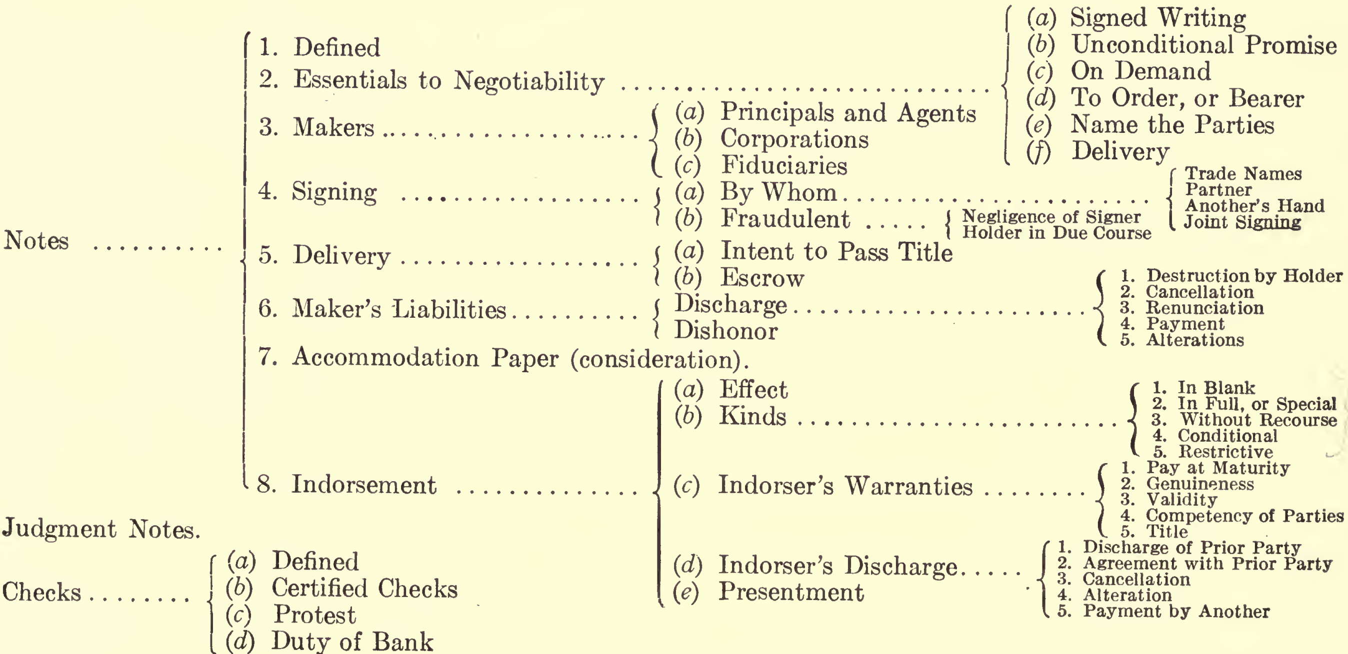
A **Letter of Credit** is a letter of request, whereby one person, usually a merchant or banker, requests some other person to advance money, or to give credit up to a certain amount to a third person named therein, charging it to the writer's account. This is a scheme much used by travelers, who, before leaving the home country, purchase such a letter of a domestic banker who has correspondents abroad. Such an instrument is not negotiable in the usual sense.

A **Bill of Lading** is a written acknowledgment by a carrier that he has received the goods for shipment by land or water. It is

also a contract for such transportation, and a contract to make delivery to the person named in the receipt, or to his order. A bill of lading is not so perfectly negotiable as a promissory note or check, but yet passes freely from hand to hand. Many non-negotiable bills are issued, however.

Should opportunity present, the student is advised to pursue this subject of Negotiable Paper further under the topics: Alterations, Defenses, Rights under Overdue Paper, Holder in Due Course, etc., etc.

Diagram of Chapter VIII.—NEGOTIABLE PAPER



Questions on Chapter VIII

NEGOTIABLE PAPER

1. What is meant by the "law merchant"? How is it established?

2. Explain why the engineer should be familiar with the general rules of the law merchant.

3. What is meant by "negotiable paper"? How is modern business largely done?

4. Distinguish between negotiability and assignability.

5. Enumerate the essentials to negotiability.

6. How have these essentials become recognized?

7. Explain carefully the meaning of rule No. 2.

8. "To pay a definite sum," — elaborate upon this rule.

9. What is meant by "fixed or determinable time"? State the effect of a contingency.

10. "Words of negotiability," — give meaning and importance.

11. Explain meaning of rule No. 5 as to certainty of persons.

12. State carefully who can make negotiable instruments.

13. What are a corporation's powers with reference to issuing negotiable paper?

14. How must an agent sign to relieve himself of responsibility?

15. Why are fiduciaries not allowed to bind their trusts by notes?

16. What is the rule as to effective signing? How made?

17. Suppose signing is in a trade name, — what result?

18. What effect does a partner's signing have?

19. Recite upon joint signing.

20. What is the result if a signature is induced by fraud? Or by mistake?

21. When is it necessary to date a note? Why?

22. What is effect and importance of words "Value received"?

23. What is the essential element of delivery?

24. Explain delivery in escrow. What is the test question?

25. What are the liabilities of one who makes a negotiable instrument?

26. Name four different ways in which the maker may be discharged.

27. Explain carefully the whole matter of "Dishonor."

28. What is the purpose of "accommodation paper"?

29. What is the liability of an accommodation party?

30. What is effect of indorsement? How accomplished?

31. Name the different indorsements.

32. Which is better, indorsement "in full," or "in blank"? Tell why.

33. What is the effect of a restrictive indorsement? Made when?

34. What does an indorser warrant?

35. Under what conditions is the indorser discharged?

36. What is the purpose of the rules governing negotiable paper? How accomplished?

37. Explain presentment of a bill or note. What points must be observed?

38. What is the use of a judgment note? Why or when would you prefer one?

39. What are the rules as to presentment of checks?

40. What is meant by "Protest"? By "No Protest"?

41. What is the bank's duty as to checks?

42. What is the purpose of certified checks? Do they fulfill it?

43. What are bonds used for? By whom?

44. Mention other kinds of mercantile paper.

QUESTIONS FOR GENERAL REVIEW

1. A, about to build, engages an independent contrator, B, to put in foundations requiring considerable blasting in rock. In doing this X's adjacent building is seriously damaged. Has X any action for damages? (a) If so, against whom? State why. (b) Give, if you can, any possible exceptions to your rule.

2. A and B own all the stock in the X corporation, and in their own names execute a deed of real estate belonging to it. (a) Does the title pass? Explain why, or why not. (b) Explain " ultra vires " and tell if it applies here.

3. Enumerate leading statutory restrictions to which engineering contracts must commonly be made to conform. (b) Illustrate what is meant by " gratuitous promises."

4. In law of sales, explain what is meant by " reservation of jus disponendi." When and for whose benefit is the principle applied?

5. A says to B, " I will put in your cellar wall for $250," and B replies, " All right." When work is three-quarters done there is a dispute as to quality of stone for top courses, and A is ordered to quit the job. B refuses to pay for the work done, arguing (a) there was no binding contract, and (b) if there was a contract, it has been breached by reason of A's not doing the work to his satisfaction. Discuss the rights of the parties, naming the principles involved.

6. Illustrate proper and improper delegation of authority, in agency.

7. Explain meaning and quality of estate called " fee simple." (b) Upon what theory or principle does " title by adverse possession " rest?

8. The great majority of lawsuits by contractors arise over excavation, or meeting unexpected difficulties in foundations, or because changes in plans are required. State clearly how you would provide against these troubles.

9. A orders of B a water-wheel of peculiar style not usually kept in stock nor available for general trade. Upon completion, A refuses to accept it. If the contract was not in writing, can B collect? Give your reasoning. The value of the wheel is $800.

10. What do you consider to be the leading principle studied by you under the law of agency? Cite, if possible, an illustrative instance.

11. (a) State leading analogies and differences between partnerships and corporations. (b) What has led to the " corporation habit "?

12. A. B. & Co., makers of high-lift diaphragm pumps place some on 10-days trial in the sewer trenches of X, contractor. He is not satisfied of their fitness within that time, but a week later decides he

does not want them. The A. B. Co. refuses to take them back— and sues him for the price. (*a*) *What type of contract is this?* (*b*) *Must X pay?* (*c*) *When did title pass, if at all?*

13. The area of very valuable city property is in dispute, in a suit to enforce the sale of it. The work of seller's surveyor has error of closure—1:1,000, while a survey by adverse party shows error of 1:18,000. The difference in value by the two surveys is **$2800.** *Argue for the side you believe entitled to win.*

14. Define " proximate cause," stating where, when, with what effect, and under what circumstances the rule is applied.

15. (*a*) *Compare mode of origin of common law, and of statutes.* (*b*) *Which has precedence?* (*c*) *Tell which you prefer to study, giving reasons.*

16. A was agent of the M Fire Insurance Co., and made out a policy on T's building. It was printed in the policy that it should be void if gasolene was kept in the building without written permission in the policy. T represented that it was necessary for him to have a small amount of gasolene about, and to induce him to take the policy, A wrote the desired permission into it, though he had no authority to do so. The building was burned, and the Insurance Company refused to pay on the ground that the policy was avoided by the keeping of gasolene. What rights, if any, has T against A?

17. When parties are negotiating by mail under what circumstances does the mailing of a letter rather than its receipt fix the rights of the parties?

18. What is a principal's liability for the willful torts of his agent?

19. Suppose A draws a check for a large sum on the B bank, payable to C, who does not present it for two years. In the meantime the bank fails and can pay only 50 cents on the dollar. C then sues A for the balance of the face of the check. (*a*) *Can he recover, and if so, how much?*

(*b*) *If bank still were solvent, how much could C recover, if anything?*

20. The stockholders of The Western Contracting Company, a corporation, desire to effect its dissolution. How shall they go about it?

Suppose it had been a partnership, with X, Y, and Z, as partners?

21. In 1880 A and B owned adjoining lots. In 1881 C, by deed, granted to D both these lots. D occupied openly and without interruption one-half of A's lot until 1905, claiming to own both lots. E, in 1884, entered upon A's lot and occupied the other half openly, and under a claim of right, until 1905. The statute of limitations runs for 20 years. Who owned the lots in 1905?

22. A plotted land into houselots and streets. The public used the

streets for twenty years. The streets were never accepted by vote of the town. B was injured by reason of a defect in one of them, and sued the town. Should he recover? Give your reasons.

23. A agreed to build a house for B, for which B was to pay $5,000. After the house was partially built, A said to B, "I wont complete your house for less than $6.000 because the price of lumber and materials has sharply advanced." B promised to pay the $6,000. Can A get the whole sum upon completing the house? Why, or why not?

24. Damages are caused to adjacent lands by the pumping out of underground waters. Can the owner of the land obtain damages from the city which operates the pumping station?

25. A contractor agrees to erect a ten-story office building, at a cost of $500,000. When excavations are made, the contractor finds that the soil will not sustain such a building unless extraordinary foundations are laid, at a cost of $75,000. The contractor refuses to go on with the work, as he says it will ruin him to complete it for the price agreed upon. (a) Has the owner any grounds for a suit against the contractor? (b) What can be done?

26. The city has raised the grade of a street several feet in front of A's house. Can he collect damages? If so, of whom?

27. A firm contracted with a city to lay brick pavements and to receive city bonds in payment. During the progress of the work the city discovers that its debt limit will not permit the issuance of such bonds. It orders the work stopped and the city treasurer asserts that he has no authority to pay for any part of the work. Can the contractor recover?

Chapter IX

ENGINEERING CONTRACT-WRITING

Probably a chief reason why engineering contracts and specifications so often bear bad fruit in contentions, lawsuits, and unsatisfactory work is that their writers did not fully perceive the objects and purposes of them, or did not appreciate the arduous professional and business preparation which an adequate discharge of the task imposes. This chapter seeks to illuminate these points by analyzing and discussing a few of the numerous points covered in modern contracts for important works using actual examples for illustration. It is attempted to show what matters may be properly treated in the "covenants," in the "general clauses," and in the "specifications." There is true economy in good specifications. If the reasons for imperfect specifications are stated, they can be avoided in a measure at least. Danger-signals should be displayed while penalties, liquidated damages, extras, and blanket clauses relating to the engineer's authority are under discussion. There is a rational method of studying specifications by first reducing each and every clause to its lowest terms, and then expressing it over a common denominator of justice and common sense. These and numerous other details are the matters treated in this chapter. It is placed at the end of the book because as was said at the beginning, the complexities of engineering contracts are so great that the engineer can wisely attack the problem of preparing them only after an exacting study of the bulk of the material this book contains.

391. INTRODUCTION. — Hitherto we have studied contracts of varying types, analyzing their essentials and remarking upon their typical differences. The average engineer, however, deals mostly with a special type, — contracts for erecting engineering structures. "Business" contracts he may meet less often, yet studying them has a positive value in familiarizing him with their origin and practical usefulness. It will also assist him to grasp more perfectly and promptly the full scope and significance of an engineering contract.*

Such a preliminary study is in fact necessary for a proper understanding of an important construction contract because such an agreement often establishes the rights of a far greater number of persons than does the average "business" contract; moreover there are defined under it a greater variety of operations to be performed, under conditions much less determinate beforehand. And if this is true as regards *comprehending* engineering contracts when their execution has been or is about to be entered upon,

* See Appendix Note 16. "Types of Engineering Contracts."

with how much greater force does it apply when the engineer is called upon to *compose* and draft such an instrument.

Frequently legal counsel will be employed to frame the more formal part of important construction agreements (commonly but erroneously called *the* contract, or "the legal part") which part is properly designated as the "covenants," or "General Conditions." Then the engineer will be called upon to furnish the part dealing more particularly with the technicalities of engineering practice, — the "specific clauses" or "specifications." The term "contract," properly used, includes specifications and covenants, and there is no clear line of demarcation between them, as many matters inserted in the covenants by some engineers are by others as frequently placed in the specifications.

It will be seen, therefore, that whether the engineer is called upon to furnish the "contract and specifications" in whole or in part, the more thoroughly he grasps the law of contracts generally, the more ably will he work alone in the matter or co-operate with a legal assistant. Having thus sought to show the relation of engineering "contracts and specifications" to our whole subject, let us consider some of their prominent features after which, it is hoped, we may attempt contract writing with an intelligent appreciation of the major problems before us.

392. LANGUAGE TO BE USED. — The idea is common that the contract must be framed in technical legal language if it is to be effective. Perchance there is thought to be some cabalistic mysticism in the uncouth legal terminology often employed, and the potency is supposed to be marred or lost if the forms of these phrases are varied. But a little thought will show this view cannot be true, for the reason that the language used in the contract is naturally taken to be the best evidence of the real intention of the parties, — hence if they intend the ordinary and usual business relations should they not strive to express themselves in the simplest and most business-like English possible?

393. Further, if the document must, unfortunately, be brought into court to receive judicial interpretation, it should be remembered that those who compose the tribunal are every-day individuals, trained in and using all the common idioms of our language, just as did those whose will and intention the contract is supposed to register. As the Court proceeds to sift wheat from chaff in the mass, of verbiage often employed, it will, perforce,

employ the fixed legal rules of evidence and also the more elastic ones of "construction" already discussed at length (see §§ 80-91); but it is obvious that the more simply, explicitly, and correctly the parties have expressed themselves, the shorter and more satisfactory the Court's task will be.

394. In accord with the above, it is evident that specifications, also, should be written in plain language. Verbs should be properly placed with reference to their subjects and objects, and should be completely formed. All matters logically related to one another should be *grouped,* so far as possible, as this allows the spirit of each and every complete sentence composing the correlated paragraphs to be carried in the mind of the reader. If this is done the necessary implications of the language used will (perhaps unconsciously) serve to buttress and reinforce the meaning of those sentences which both follow and precede the given statement. The net result will be clarity and forcefulness. But if cognate matters cannot easily be grouped, if a point has once been set forth at length it may subsequently be re-incorporated in the proper places by reference to the former section. (See §§ 405-6.)

395. LENGTH. — It has been said that though brevity is the soul of wit, this literary criticism should be sparingly applied to specification writing. Here, as elsewhere, true art is to be found in the golden mean of expression. On the one hand mere garrulity and verbiage is to be studiously avoided; on the other, a cardinal tenet is, "Let nothing be taken for granted."

396. Complete specifications for important work must necessarily be very comprehensive, yet it does not follow that they cannot be set forth in language and phraseology easily understood. It is sometimes said that a comma will not be allowed to spoil a contract, but the careless misplacing of one has often cast ambiguity on whole sections of a document. It should be noted, too, that while the author of a literary masterpiece may clothe a unity of thought in a variety of expressions, the task of contract writing must be approached differently. Thus a repetition of the *same* words and phrases wherever they properly arise is a distinct step toward clarity and certainty of meaning, while the attempt to say the same thing a little differently each time is a cause of needless doubt and ambiguity. Almost invariably the law exhibits the tendency in expression to sacrifice brevity for cer-

tainty by piling up synonyms, or modifying words of almost equal significance. This is the reason for the archaic and non-colloquial language and phraseology often exhibited by legal documents.

397. PURPOSE in SPECIFICATION WRITING. — "The specifications and drawings together must give the contractor a clear and complete knowledge of the work he is to perform and the materials he is to furnish, and should contain all the information necessary to permit him to make an accurate estimate in advance, and to carry out the work properly, once it is undertaken. The specification is a general statement of the work to be performed, a description of the materials, the quality required, and the class of workmanship to be performed, with definite limits as to what tests must be made in order to determine compliance with the requirements of the contract, or what defects would be sufficient cause for rejection.

"Specification writing is an art which cannot be acquired successfully without practice and without broad knowledge, practical experience, a careful study of the various materials and methods of construction, and familiarity with their relative costs. As ideas and methods change and improve as a result of experience, so specifications should be changed to keep abreast of the times."* For a further development of these points, see Appendix Note 17, "Objects of Specifications."

398. ENGINEER'S PREPARATION. — A certain degree of preparation is a prerequisite for the successful undertaking of any work, and even with painstaking care mistakes will sometimes occur. Mr. J. A. L. Waddell, the eminent consulting engineer, says:†

"To insure that all requirements have been met, it is evident that the engineer must familiarize himself with every detail of the work in hand. If he does not understand it himself, it is certain he will not get a clear idea of what he wants into the mind of another. And even when the details of a scheme are perfected in the engineer's mind, it is difficult sometimes to make it plain to a contractor."

Errors of judgment are easy to fall into, even by those mentally alert, so that, as Mr. Waddell puts it, "A given proposition may appear to the engineer in his office, prior to commencing work, very different from what he finds in the field after construction has begun. When the engineer discovers he has made a mistake he should not hesitate to acknowledge it, and to set about as best he may, to correct the error. To reduce mistakes to a minimum the engineer must be thoroughly conversant with all contingencies likely to arise in the execution of the work, but yet he should lose no opportunity to check against mathematical errors. He should familiarize himself with the

* Bamford, Proc. Am. Soc. C. E., XXXV, 1323.

† Spec. & Contracts, Waddell & Wait, p. 7.

appliances ordinarily employed, and should so design his work that their use will not be prohibited. And in writing his specifications and in making his plans he should have a clear and complete mental picture of just what he is striving to attain."

399. Then there is the distinctly commercial aspect of the engineer's task. While a considerable part of the covenants (§ 401) deal with matters for which a knowledge of business relations is essential, and the specific clauses dealing with the design and details of construction are the part wherein the engineering education of the writer is most effective, yet it hardly seems fair to have it said that the "contract" calls for legal services in its preparation, while specification writing is wholly and solely within the purview and training of the engineer. A truer view would seem to be that if an engineer is to be a good contract writer he should be thoroughly grounded on business principles (§ 5), and that it is only the subdivisions of specifications dealing with materials and methods which pertain *distinctively* to the engineering field.

400. ENGINEER'S DUTY to PREVENT LAWSUITS. — It is undeniable that lawsuits brought by contractors are often occasioned through the fault of the engineer. Some writers go farther and even blame the dishonesty of certain contractors also upon the engineers. If this indictment is true, it is doubtless because of an overzeal on the engineer's part in striving to protect his client's interests, and not because he deliberately intends to wrong the contractor. In any event, it is certain that lawsuits are the fruit of ill-prepared specifications, and are the inevitable sequence to the employment of the class of contractors which such ill-made specifications breed. (See Appendix Note 18, "True Economy in Good Specifications.")

Therefore the engineer owes a moral duty to his client and to his profession to be thoroughly informed upon both the technical and legal requirements of his task as the writer of an engineering contract and its specifications. (See § 398.) Experience has amply shown that where competent engineers have worked out good specifications in a given line of work, in such cases lawsuits on behalf of contractors are at a minimum.*

401. COVENANTS OR "GENERAL CONDITIONS." — Mr. Wait refers to the contract as being divided into two parts,

* See Appendix Note 19. "Trouble Breeders," and "Political Contracts."

covenants and specifications. He indicates that "covenants" and "general condition clauses" are in fact equivalent, and enumerates* the matters usually treated under covenants: — the contractor's liability; the consideration in the contract; provisions for payment; reference to accident liabilities; the responsibility for negligence; and provisions relative to the default or delay of either party. Here also will be found provisions relative to subletting; reference to liens; and to statutory requirements bearing upon the contract; description of the parties, giving their residence, and if one is a corporation, its domicile and the place of incorporation. There should also be reference to any other instruments, such as ordinances or franchises which are intended to be incorporated (§ 405) and made a part of the contract, including positive reference to the plans and specifications under which the particular work is to go forward. It may be necessary, also, to incorporate the special Acts of Legislature or other public body under and by virtue of which the contract is made and carried out.

402. Mr. Waddell (*ibid.* p. 60) says the dividing line between covenants and specifications is a most difficult one to draw, since every engineer has his own ideas as to what titles should properly appear under each heading. He advocates the view that such clauses as pertain to adherence to the specifications, alteration of plans, damages, extras, payments, responsibility for accidents, inspection, scope of contract, and time of completion are properly placed under *either* heading. He would place all clauses that relate to methods of construction, qualities of materials, character of the work, and the rules limiting the power and functions of the contractor and defining the authority of the engineer under the specifications.

403. Practical Conclusion. — But in any event we may consider the above discussion as in a measure academic, since the important thing to be borne in mind is that so long as provisions of real importance are inserted *anywhere* in the document they will, if not contradictory, inconsistent, or ambiguous, be given their due weight and value by a court of law. We are not now concerned with the task of persuading the contractor to adhere to the contract requirements in every last detail.

Because, however, any large matter may be more thoroughly

* Waddell & Wait, Specs. & Cont., p. 151.

and comprehensively treated if taken up systematically and according to a well-considered plan, the preparation of a contract (see § 398) for a large work will amply justify the expenditure of considerable time, effort, and money to secure the requisite thought and care in the content, arrangement, and sequence of its constituent parts.

404. Contract-writing thus appears to be something of an art, and doubtless its importance to engineers generally can hardly be overestimated, for if the contract is incorrectly drawn there is almost certain to be serious loss and trouble on the part of some one. The severity of the task is thus summarized by Mr. Waddell in his advice to engineering students pursuing this subject: " Remember that you cannot hope to learn to write even approximately correct specifications until after you have had many years of practical experience in engineering work; therefore do not be discouraged if at first you find the task too great for your unavoidably limited experience." While this statement is undoubtedly true as regards the details of sound engineering practice, yet the present book aims to help the novice to avoid in some degree many pitfalls which he might otherwise have encountered.

405. INCORPORATION BY REFERENCE. — It has been already hinted that the covenants and specifications may, in a given case, easily and properly become quite voluminous, yet a principal objective point of the present argument is that bulkiness should not and need not produce ambiguity. (See §§ 392-6.) As it is admittedly proper to make all reasonable efforts to condense and shorten the statements without sacrificing their full import, the importance of the legal doctrine of " Incorporation by Reference " is evident.

" Incorporation by Reference " refers to the legal effect of making an instrument in writing (or of course in print) a part of another by referring to the first document in such a way as to adopt its provisions, thus making them a part of the second document. The usefulness of this scheme is apparent, and while it does not quite fall among the rules considered under " construction of contracts " (§§ 80, *et seq.*) cases are common where other writings (whether directly referred to or not) will, if studied, throw great light on the contract in hand. If, therefore, such other writing is in its meaning and effect incorporated *by direct reference* into it, the result of the interpretation of the present con-

tract will be more simple, certain, and satisfactory. It is a well-established principle that mere reference is effectual (as by using the words " the same is hereby made a part of this contract "). Hence the labor of rewriting all the terms of the first instrument is thereby saved.

Familiar instances are where contracts are entered into by authority of a special Act of Legislature. Complete proof that the party is " competent " is afforded by incorporating the instrument conferring the authority into the contract, as by reference to the appropriate year, chapter and section-number in the statute book.

This is also similar to the practice of incorporating former deed-descriptions into current deeds of land, by reference to the date, place of registry, volume and page number on which a record of the earlier deed may be found.

406. It is of great importance that the document referred to be positively identified. It must also be in actual existence at the time the contract is made. Reference to a contract or writing " to be prepared " at a future time, is ineffective. Where the matter to be incorporated is in some printed form, of which there are numerous copies extant and in circulation, the task will be simple enough. In the absence of such a condition, the safe though laborious way is to incorporate the first document entire. There will, of course, be found all shades of circumstances between these two.

407. PHYSICAL INCORPORATION. — Obviously it is a good and practical way to have the plans, specifications and covenants bound and fastened together as a physical whole, and then in each part refer to the others as " hereto attached." Mr. Wait says, " Frequently specifications and plans are referred to as signed and attached, when in fact they have *not* been signed and attached. In such cases oral evidence may be introduced to show *what* specifications were intended. *If* they can be identified, they are in legal effect incorporated into the contract." It will be noticed that this statement introduces the bothersome legal question of proof by oral evidence, and the necessity for this should be obviated if possible. " Drawings exhibited to a contractor, when a contract is signed, if referred to in the contract so as to be identified [as by number, date, and signatures], become a part of the contract," he says further, but here again oral proof is necessary. Also, it is pointed out that an Act of Congress may be made a part of a contract by reference; and so also, plans, profiles and drawings may become part of an Act of Legislature,

though it is noteworthy that if the Act does not itself refer to them they cannot thereafter be used in construing the Act.

408. In leaving this topic, it is well to note that while contracts and their attendant specifications may amount to hundreds of pages of printed matter in book form, into which sizable books may be incorporated by reference, yet at the other end of the scale they may consist of a not very lengthy letter, or of a mere sketch which describes the materials and methods which are to be employed. (Wait, same reference.) The important fact above all others is that the whole body of contract law will apply to each and every such contract, be its length two or two hundred pages.

PRACTICAL SUGGESTIONS for GENERAL CONDITIONS CLAUSES

409. In 1909 a committee representing six of the leading railroads of the country reported to the American Railway Engineering and Maintenance of Way Association on "Uniform General Contract Forms."* While the task of the committee was "to prepare a brief form of general contract applicable to all classes of railroad work" their report is chiefly confined to outlining recommended components for such a Uniform General Contract Form. That is, they enumerate the matters which it is agreed belong in a contract form designed to have general adaptability for railroad work, and rather carefully group and classify them. This report comes from a body of men familiar with the needs of this important field of construction work. Against them the charge of theorizing upon the subject certainly will not lie, hence it will be advantageous to the student or engineer seeking positive data if this committee is quoted extensively here, and its recommended details rather freely paraphrased.

410. For purposes of study, the necessary components or constituent parts of the contract are by them placed in two grand divisions, with numerous subdivisions. The main divisions are:

(A) A proper agreement form.

(B) A statement of general conditions applicable to all classes of construction operations.

411. (A) is amplified into seven other sub-headings. Thus, a proper agreement form should embody:

* See Bulletin 108, Amer. Ry. Eng. & M. W. Assn., February, 1909.

(1) An introductory or opening clause.

(2) A complete enumeration and description of all parties to the agreement.

(3) A concise description of the subject matter, covering the nature and location of the work to be performed.

(4) A statement of the time when (or under what conditions) the contract becomes operative and the limit, if any, for its duration.

(5) An enumeration of the documents which accompany the contract. (§ 405.)

(6) An exact statement of what is to be paid, i.e. the consideration.

(7) A proper form of attestation [" Attest " is a technical term, signifying the witnessing of a written instrument by a person who formally subscribes to that fact], which should include the act of signing by all the parties to the contract, with seals if required, and witnesses to their signatures. If the contract is required to be recorded, then there must be a sufficient execution and acknowledgment before a notary public.

412. (B) The Statement of General Conditions should cover the general stipulations of the contract [i.e. it should enumerate the matters upon which it is the principal object of the contract to effect a mutual understanding between parties]. There should be distinct reference not only to matters which of necessity must exist, but also to contingencies that would materially affect the contract, and there should be provisions covering the procedure in such events.

413. [Thus far the work of the committee may be supposed to have been relatively easy. We have sought to show, heretofore, that anything which truly represented the " intention of the parties " (§ 81) might be properly embodied into a binding contract (with certain qualifications). It is perhaps needless to say that almost never are the conditions surrounding two contracts precisely alike. Thus if it were attempted to develop a standard form to be used invariably for any given field of work, it would almost certainly become so extremely voluminous as to seriously hamper its usefulness, because in it all sorts of variations and possible emergencies would have to be provided for. In such a standardized form there might be many provisions very nearly duplicating each other, yet be so repugnant that both could not

possibly apply. The ambiguity would then arise as to *which* clause did express the intention of the parties.

It seems that the committee sensed the foregoing difficulties, as they report that they spent much labor in analyzing a large number of contracts in use, besides consulting the available authorities. They found a great variety of groupings of the matters commonly included under "General Conditions," but there was a notable lack of unity in the order of arrangement of these matters in the various contracts studied. In order that a railroad construction contract could be prepared in a systematic way, they therefore suggested that there should be twenty main topics, or headings under which the various "General Conditions" should be grouped, — and this list of twenty topics may be a highly valuable one for the engineer to check off, if he is engaged in writing a contract for almost any sort of construction work. These twenty group headings for "General Conditions" follow, but as each of the twenty is subdivided from five to twenty-five times, the author summarizes and paraphases (for brevity) the most important of them. He also adds comments which may prove helpful to the student.]

414. (1) **Contractor's Understanding.** — [In the expanded form of this heading, the meaning is seen to be that by signing the contract, the contractor warrants that he fully understands the following matters. That is, if he does *not* in fact understand them, yet he has waived his right to claim that he misunderstood them, or to say that he has suffered hardship for lack *of* understanding them. We thus hark back to that essential matter, "The meeting of the minds." (See § 13 [4].) The contractor admits, therefore, that] he understands the plans, specifications, nature and location of the work, that he has in mind any and all matters which are likely to influence the work, understands the quality and quantity of material required, is aware that he is taking the work upon his own responsibility, on the strength of his own judgment and personal information, and that it is his duty to verify estimates.

415. [According to the views of Mr. Wait (*Engineering News*, June 8, 1905), in which doubtless most fair-minded persons will concur, it is unfair to the bidder to require him to assume responsibility for the estimate of quantities, since the engineer usually has weeks or months to verify and check them and should be able to command all necessary data, while the bidder must either spend a lot of time and money to make an estimate for himself (with small chance that he will ever be paid for his trouble), or, if he is unable

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or unwilling to do this, he goes in blindly or bases his estimate upon figures which the engineer expressly disclaims responsibility for. Mr. Wait argues with force and warmth, that this procedure is a shirking of responsibility by the engineer, is unprofessional, unjust, and provocative of lawsuits.

416. The provision that the contractor "understands" all matters likely in any way to influence the contract, seems superfluous. For if the matters which are seriously to influence it are within the control of either party, and they allow them to get beyond their control to affect the contract, they may be liable as on a breach. If the matters are *not* within the control of either party, it does not seem to advance the argument any nor add anything to the contract for the contractor to say that he understands that his work *may* be swept away by a phenomenal freshet, for instance. If the parties contemplate this contingency, they should say so in no vague terms, and proceed to describe the rights of the parties in such an event.]

417. (2) **Scope of Contract.** — The extent of the work or undertaking should be explicitly stated. The contractor is to furnish everything, to use improved appliances, and the prices are to include all expense of whatever sort. It is mutually agreed that the "intention" of the contract is that the work shall be carried out according to the true spirit, meaning, and intent of the plans and specifications.

418. (3) **Duration of Contract.** — The time of commencement and of completion [if desired] must be clearly stated. The time may also be subdivided, and dates fixed for various stages of completion, and directions given for prosecuting the work in order to complete on time. It should be stated that time is an essential element of the contract [if it is so] and that alterations shall [or shall not] extend the time. [See §474-(13)]. If the time is extended, this is not to waive the right to terminate the contract, which right will exist if there is failure to complete on time [or as otherwise provided]. It should be stated what is intended in case the contractor reduces his force, or suspends work, and it may be provided that, if this happens, it shall not be necessary for the Company to wait until the time limit has expired before undertaking to complete for the contractor.

419. (4) **Plans and Specifications.** — The work is to conform to the plans and specifications which are made a part of the contract (by reference [§ 405] or attachment) and are signed for identification. (§ 406.)

There may be a guaranty of the sufficiency of the plans and specifications, or it may be agreed that the contractor is not to take advantage of errors, omissions, and discrepancies in them. [It would seem that these two provisions must be used in the alternative, only, for how can the engineer guarantee the correctness of his work with one breath, and in the next suggest to the contractor that if there are any blunders in his work, then will the contractor please be a gentleman and not try to crowd the engineer! [See also § 454 on Bad Specifications.]

420. The true spirit, meaning and intent of plans and specifications may be amplified by stating here what the full purpose of the work is to be, what conditions it must fulfill, etc., and this will furnish a very practical " rule of construction " (§ 81) to assist all who may be called upon to interpret the contract.

There may be conflict between the plans and specifications, or between the contract and specifications, or between either of them and the engineer's decision. Rules as to which shall have precedence may well be provided. (See § 83.) The power to interpret the plans and specifications is usually reposed with the engineer. If further plans are to be prepared, who is to make them, who shall verify them, and who shall be responsible for errors in them?

421. (5) **Measurement of Quantities.** — It is often provided that the measurements, calculations, and classifications made by the engineer shall be final and conclusive. [But see Appendix Note 4, Implied Condition of Fact.] Preliminary surveys, measurements and estimates are not guaranteed to be correct. (See § 415.) The specifications may provide a way of measuring quantities, and the work must be done in accordance with it. Shall custom and usage (§§ 85-7) control in making measurements, or shall actual quantities be used?

422. (6) **Workmanship and Materials.** — The workmanship and materials must be first class, and of the best kind as specified; but if first class is not specified, then both are to be of the best kind customarily used on such work, and approval of them is to be secured before using them in the work. The contractor is to provide and protect materials and appliances, and to protect work from injury; to make good all defective work (before final acceptance) [see § 474-(15)]; to provide facilities for inspection; and to remove condemned materials from the site. If the contractor

refuses or neglects to replace defective work or materials, Company may do so at his expense. The Company's right to have perfect work is not waived by approving and accepting improper or defective work. It is well to provide that the ownership of materials shall pass to the Company upon being delivered upon the site [or when attached to the soil (see § 181) or incorporated into the structure.]

423. (7) **Conduct of Work or Undertaking.** — It should be stipulated what degree of control of the work and of the workmen is intended. [See the whole topic of "Independent Contractor" (Secs. 172, *et seq.*) in this connection.] The *order* in which the work is to be performed, and the agreement as to the *rate* of *progress* of the work should both be stated. Provision may be made for the Company to increase the forces in case of delay. The contractor agrees that his relation to contiguous work shall be thus and so; that he will not interfere with other contractors; that he will remove all temporary structures, and dispose of waste materials; that he will protect the tracks, and facilitate train movements so far as lies in his power; that he will employ only unobjectionable employees, and will dismiss those who are objectionable to the Company; and will not tolerate the presence or use of liquors on the work. He agrees to have a responsible head-foreman always in charge and present upon the work [see § 474-(7)]; that notices by correspondence suitably addressed shall be binding upon him; that he will submit to the Company's exercising certain powers of direction over his forces; and that he will preserve all reference marks, stakes, grades, and level lines given him in laying out the work.

424. (8) **Changes or Alterations.** — The Company may reserve the right to make changes, alterations, and additions in the work, or to make alterations in the terms of the contract. These alterations may affect the sureties [App. Note 15, §§ 31, 109] and may vary the provisions as to liquidated damages [see Appendix Note No. 9]. If the alterations make the work more difficult, or result in extra work, it would seem that the contractor should be granted an extension of time, or excused for delay upon account of them; but it is not unfair to say that the Company's assent to make alterations is no agreement to pay for extras. If the changes result in reducing the amount of the work, the contractor is to have no claim for anticipated profits, nor shall the said

changes or alterations vitiate the contract. [See § 31.] The power to determine the value of alterations may be vested in the engineer.

425. (9) **Extra Work.** — The contractor should give written notice of claims for extra work in case additions are made, and the value of such additions and alterations shall be determined by the engineer, who also has power to order such extras [see §§ 114-16]. [It seems better if a written order is given authorizing the extra work. In it the price agreed upon should be specifically stated. If the contractor and engineer fail to agree upon the terms, the Company may contract with a third party to do the extra work. The extra work may also be done by " Force and Material Account," which practically amounts to a " cost-plus-a-percentage " plan.] (See Types of Contracts, Appendix Note 16.)

426. (10) **Contractor's Risks and Obligations.** — It is of the essence of the contract that the work shall remain in charge of the contractor until completed and accepted, and the contractor is to assume all risks and damages up to such time of completion and acceptance. [See § 172 *et. seq.*] He shall be responsible for delays and damages to trains, tracks, structures, passengers, and employees of the Company, and for damages to all other persons or property. He is under obligation to serve all notices required by law, and to secure all necessary permits and licenses; to afford protection at crossings; and to do all that is necessary to accomplish the purpose for which the contract is entered into. [See §§ 417 and 420.] The contractor is not to interfere with the Company's agents or employees, nor to deny them entrance or access to the work. He is not to allow ardent spirits to be sold nor given away on the work. If the Company is to lay out the work, he is to furnish assistance, but if he is to stake out the work himself, or is to furnish the plans [or parts of them] he is to be liable for his mistakes [compare with § 165], and must make good to third parties damages suffered by reason of defects in his plans. [These latter provisions hardly seem necessary, since it has already been shown (§ 159) that a person is in general liable for his acts, as well as for his failure to act.] It may be well to add a specific statement covering the contractor's risks and liabilities under " Force and Material Account."

427. [As hinted in numerous places elsewhere, it is very easy to overdo the clauses which load all possible risks and obligations upon the contractor.

If the contract-writer would candidly place himself in the position of the contractor who is bidding upon the terms he proposes, and only insert those conditions which he himself would willingly undertake, it is safe to say that contracting work would be much less a gamble than it is to-day.]

428. (11) **Assignment of Contract.** — Assignment of the contract is usually prohibited [for the reasons given in § 145], and it is commonly provided that sub-contracts shall not be made without the Company's consent. In such a case it will be well to define the sub-contractor's status [that is, whether the Company will recognize and deal directly with him or whether it will only recognize and deal with the principal contractor. See § 485, Subletting.] The contractor may still be required to give personal attention to the work, and not be relieved of the responsibility for its quality, etc., even though it is awarded to an acceptable subcontractor. It is common to provide that there shall be no assignments of moneys until earned [because it tends to make the contractor skimp and be careless with the work if the money to be received for it is assigned away beforehand].

429. (12) **Payments.** — [See also §§ 119, 121, 494.] The method of making payments should be stated clearly. The method of determining the amount to be paid, whether approximate monthly estimates or progress payments [upon completion of various stages] are desired; what percentage of payments due are to be retained (see § 495) [and for what period of time]; how and when final estimate is to be made; and the place of payment designated, all should be clearly stated.

430. The Company may reserve the right to pay claims which the contractor neglects to do, and to deduct them from the amounts due him on the estimates. [As this provision implies a distrust of the contractor's business capacity, and is open to serious abuse unless handled with the greatest circumspection, it is doubtful whether it is a wise one to insert.]

If the basis of payments is a schedule of unit rates, this schedule must appear, and so also must a statement of the bonus, if any is contemplated [together with a careful statement of the conditions under which the bonus may be earned]. It is usual to provide that the contractor shall be paid upon certificate from the engineer. [When so stated it is a condition precedent, etc. See § 74.]

431. (13) **Failure to Comply with Terms of Contract.** — The conditions under which the contract may be cancelled should be

explicitly stated. The reference to forfeiture of contractual rights on the part of the contractor, as by the Company's completing work for him; his bankruptcy; his refusal or neglect to prosecute the work with sufficient force; or his failure to meet bills promptly, — all should be explicit, if such conditions are contemplated.

If the contractor fails to comply with the terms of the contract, it may be provided that his plant and materials can be used by the Company when completing for him, and that the expense so incurred may be charged to the contractor. [See § 493.] If the parties agree to it, there may be a provision for liquidated damages [see App. Note 9], which shall accrue to the Company if the contractor fails to complete within a specified time.

432. (14) **Company's Protection and Security.** — A bond, "conditioned" to secure faithful performance, is usually required of the contractor, and this bond must accompany the bid. It may be stated what type of bond or security is acceptable [that is, whether of a Bonding or Trust Co., or of private bondsmen]. The contractor is required to agree that he will indemnify the Company against all damages and claims [arising through the contractor, or through his work. See exceptions to Independent Contractor Rule, § 176, etc.] He must further agree to protect the Company against all liens for labor and materials [by paying the amounts due, and thus releasing the liens], and to protect them in suits arising over patents used by him in the work. If a certified check or Government bond is the desired security on the "bid-bond," it should be so stated. It is common to provide that the contractor shall keep the property covered by *fire insurance* during the course of erection, and in case of bankruptcy, that title of material shall pass to the Company. [Before inserting the bankruptcy provisions — however, legal counsel should be sought, because the National Bankruptcy Act views assignments of whatever sort with suspicion, and this provision might invite difficulty, rather than avoid it.]

[On titles (15), (16), (17), (18), and (19), the Committee make no suggestions for matter to be inserted, but merely name the groups of provisions which they think should be further expanded. They will be named here, with brief comments by the author.]

433. (15) **Disputes and Arbitration.** — [Disputes will commonly arise, if at all, in determining the proper classification of

work, and whether its quantity, quality, character, skill used in execution, and general sufficiency satisfy the requirements and whether or not work ordered is an "extra" (§ 114) or amounts to an "alteration." (§ 109.) It is common to give extensive powers to the engineer with reference to all these points, as per (20) below, and it is undoubtedly wise to provide a way in which arbitration may be had (see § 487).]

434. (16) **Litigation.** — [The contractor is often made responsible (see No. 10) and answerable for all damage suits or other litigation incurred during the work, and by the contract the Company expressly avoids any responsibility in connection with them. This will be seen to be a blanket clause subject to abuses, and § 178 should be carefully read in this connection.]

435. (17) **Definition of Terms.** — [This is a highly important matter since, by a careful definition of the important terms used in the contract, the parties furnish a pre-eminently practical mode of construing its meaning. [See also § 445-(4).] Typical matters to be defined are illustrated in § 474, (4), of the Charles River Dam Contract, given as EXAMPLE II later in this chapter.]

436. (18) **Property and Right of Entry.** — [The ownership or acquisition of site of the work; the duties of each party in this respect; stipulation that Company or agents may at all times enter, etc., etc., — these and allied matters come under this title. See § 426, §126, etc.]

437. (19) **Transportation.** — [In this clause it is common to state the terms agreed upon relative to the transportation of men and materials to or from the work. It may be provided that the contractor's plant will be transported free over the Company's lines, etc.]

438. (20) **Powers of the Engineer.** — The engineer is usually given power to explain the plans and specifications, to have supervision and direction of the work, and to determine the value of work and materials. [It is most common to give him rather extensive powers of a discretionary sort, since the aim is to facilitate and expedite the work. See §§ 487, 420, 421, 433, 490.]

439. Sometimes it is provided that the engineer shall be sole judge to determine and decide all matters arising out of the contract, and that his decision shall be final and subject to no appeal, or that he may be an arbitrator. (See § 487.) [As shown under Public Policy §§ 33-4, agreements whereby one forfeits his right

to be heard in Court, are void. It is not easy to see, either, how the engineer can be a genuine arbitrator, since the term implies that disputants lay their difficulties before the arbitrator who, being a disinterested party, dispenses justice between them. On engineering work, the engineer represents and is the agent of the Company, and is personally a party to the dispute. Therefore since no one but himself states the Company's case, he should not be expected to invariably assume an impersonal and unbiased standpoint. Generally he has already declared himself as very much interested and biased, so much so, that the contractor is quarrelling with him over that very point. See also § 490.]

440. The engineer may be given authority to order extras, and make alterations and omissions. [Such a clause as this probably means that such orders given by the engineer will bind the Company, but does not of course mean that the engineer can modify, alter, and order extras at his own pleasure, or in fact practically set aside the contract. There is an implied condition in the agreement which the contractor makes giving the engineer this power. See Appendix Note 4A.] It will be well to specify the duties of the engineer's assistants, his duty with reference to lines and levels, and that he may secure the dismissal of objectionable employees of the contractor.

441. In submitting the report on which the above discussion is based, the Committee states that the above and similar subject matter has been before different Committees of their Association for about seven years, but without satisfactory progress, and that the present Committee was engaged upon it for a year. During this year, they claim to have only outlined their subject, and doubt whether they have even succeeded in classifying the various matters under their proper headings. In fact they submitted the report without recommendations, and asked for discussion by the Association's membership in order that they might make further progress toward a Uniform General Contract Form. (See § 461.) They reported having collected, studied, and analyzed a large number of contracts used by various railroads, and to have consulted many authorities. If, therefore, no greater progress was made by this capable body of men actuated by a serious purpose, is stronger evidence needed to prove that the only way such a task can be satisfactorily ended is through a study and mastery of the *principles*, not merely by *collecting examples?* One who tries to

learn by examples only, which, though numerous and carefully stated, yet are wholly unconnected by a statement of the underlying principles, is committed to a task well-nigh hopeless.

442. The above Committee also pointed out that even if they should succeed in producing a uniform contract form, it could only embrace the most general matters or requirements, for all stipulations peculiar to specific types of construction would be excluded, because these are a part of the specifications for that particular class of work. (See § 461.)

443. GENERAL CONDITIONS IN A BUILDING AGREEMENT. — Mr. Bamford* suggests the following practical points for insertion in the General Conditions of a building agreement. They are inserted here because they may prove helpful and suggestive to engineers writing contracts for other classes of work.

444. (1) **Checking Documents.** — The contractor shall study and compare the drawings, specifications, and other information given to him by the engineer. He shall scan the figures, and any discrepancy, inconsistencies, or omissions of statement regarding materials and modes of construction, which he notes shall be reported in writing to the engineer.

[There is a lack of warranty of results on the contractor's part when he undertakes to build according to "plans and specifications" furnished him by the owner. (See § 456.) It appears, therefore, that the above provision does not ask the contractor to warrant *anything* — but merely makes it his duty to check over and verify the data given, in order that he may detect any patent discrepancies. (Compare § 456.).

The practical advantage of such a clause seems to be in slightly relieving the engineer's burden of verifying the data and might secure some mitigation of damages for the owner, in case the contractor sued for damages sustained by him through some error in the data furnished. That is to say, the owner might prove there was a neglect of duty on the contractor's part.]

445. (2) **Materials and Workmanship,** — states whether all new materials are required, or otherwise. The clause defines in detail what is meant when something is said to be of an "approved" style; when samples of proposed materials will be required for approval in advance; and mentions the quality of workmanship which the contract contemplates. [See § 422-(6).]

(3) **Scope of the Contract.** — The exact limits of the contem-

* Proc. Am. Soc. C. E., XXXV, 1348.

plated work are given, and if there are any exceptions which lie within its limits, they should be stated.

(4) **Definitions.** — Certain of the more important technical terms and phrases which occur in the instrument, the units of measurement, what persons are meant by certain titles, etc., etc., all should be defined with particularity. [See § 474 (4).]

446. (5) **Drawings.** — It is stated what existent drawings are incorporated into the contract at the time of its execution, and who is to furnish any additional drawings (if such are required), such as detail, or erection plans. Mention is made of the degree of completeness in detail required on such supplementary drawings, and that if they are to be made by the contractor, they must conform to the engineer's plans and specifications. [See § 419 (4).]

447. (6) **Lines and Levels.** — This clause states who is to furnish the lines and grades, and who shall be responsible for their accuracy. The burden is usually put upon the contractor to maintain them, once they have been given by the engineer.

SPECIFICATIONS

448. The specifications form an integral part of the contract, legally speaking, though engineers habitually speak of the two things as quite distinct. The specifications describe the work and materials in detail, and sometimes indicate the methods to be followed in erection. The " general conditions " or " covenants " contain a statement of the legal rights, and business relations between the contractor and his employer. (See §§ 401, 409, etc.) They enumerate the attendant facts or circumstance under which the contract is to be performed. As the specifications indicate the nature, quality, character and form of the finished work, defining its characteristics both generally and specifically, it is apparent that they are a subject of paramount importance in the engineering field, where work is done so commonly by contract.*

449. There must be a plan for even the simplest structure if the materials are to be economically disposed, and the more complex and extensive the structure the more study must be bestowed upon the plan and its specifications. (See § 397.) The plan alone will not always show sufficiently by its lines and diagrams the forms and purposes of its constituent parts, but it must be supplemented by clear and exact written language to indicate the quality of

* See Appendix Note 18. "True Economy in Good Specifications."

materials that are to be employed, and the modes of execution by which the finished fabric is to be wrought. Thus the engineer's need of a thorough mastery of the subject matter, the ability to analyze the inter-relations and sequence of operations in construction, the necessity for patient and prudent forethought, are all self-evident. (See § 398.)

450. REASONS FOR IMPERFECT SPECIFICATIONS. — In *Engineering News*, April 14, 1904, there are pointed out certain very cogent reasons for imperfections in specifications which may well be quoted here. "A company or corporation wants something done. It employs an engineer whose special knowledge and training seem to fit him for the task of working up the details of the scheme. His ideas of what he wants done are embodied in the drawings and specifications. As the engineer is not infallible, his drawings and specifications will not be an absolutely perfect embodiment of his ideas. This is one source of difficulty. Also, the ideas may be originally defective. This is a second source of difficulty. Again the contractor, who is also human, may with honest intentions construe the English language differently from the author of the specifications. This is a third source of difficulty. Or the contractor may pervert the meaning of the language. This is a fourth source of difficulty."

451. CONTENTS OF SPECIFICATIONS. — Mr. Wait makes the following valuable suggestions: *

"The specifications and plans should definitely describe the site of the structure, and should carefully define the limits and boundaries of the work, and this should apply to depth of foundations as well as to their areas. Much litigation would be avoided if provision was made, either by unit measure, or otherwise, to compensate a contractor for the additional and increased depth which foundations may require to be carried to secure stability. Plans not infrequently show the vertical depths required, while the specifications provide that foundations shall be sunk to such depths as shall be satisfactory to the engineer. It is easy to see that great losses and hardship may thus ensue to the contractor, and that the only logical way is to consider what is shown on the plan as included in the contract; whatever is required outside, or beyond such limits is "extra" work for which additional compensation may be claimed." (See §§ 425, and 114-16.)

452. "The specifications should definitely define the crude stock, the process of manufacture, and the finished materials of construction, not only positively as to the good properties they shall possess, but also negatively, naming defects that they shall not contain. They should provide for shop and field inspection of materials, and every class of work should be described in sufficient detail to enable the builder to erect and complete the structure without further direction or explanation from the engineer or superintendent." (See also § 397.)

It has been said that the contract, plans, and specifications should together form a complete guide-book for the contractor, and for the owner's inspectors, by which the work is to be executed.

* Waddell & Wait, Specs. & Contracts, p. 132-3.

Obviously, if this guide-book is the production of a skilled traveller over the intricate paths of the subject matter, but little additional oral interpretation will be required.

453. IMPRACTICABLE REQUIREMENTS. — It is easy to fall into such errors as that of specifying impracticable sizes of materials, or non-commercial types of construction, uncommon designs, etc. This is particularly likely to happen when clauses are copied from obsolete or badly written specifications. It is said that the practice of "compiling" specification on the "scissors and paste principle," by taking clauses from old or inapplicable specifications, is one that leads an inexperienced writer into error more quickly than any other. For if he has any doubts as to the reliability of the description, they will be more or less discounted in his mind by the fact that that particular clause has been used before, — but he will be likely to disregard the circumstances attending the former use.

454. BAD SPECIFICATIONS. **"Omissions."** — In *Engineering-Contracting,* November 3, 1909, certain specifications from an un-named source are discussed, from which the following is extracted:

> The subject is Sewers. First there is a section which contains a clause, "And anything omitted which is necessary to complete said sewer and sewer inlets, the same shall be considered as appearing in both the plans and specifications."

This is a clause often appearing in specifications, but the wording as given here is one that requires interpretation by the Court, in spite of the fact that another section declares the decision of the engineer on the true intent and meaning of the said specifications shall be final. The two clauses read together mean that if the engineer by reason of incompetency or neglect, or perhaps sheer laziness, omits to put in something that may be required to make a complete job, he can make the contractor do the work and his decision in regard to anything connected with it shall be final.

> A third section further declares: "In case of additions, alterations, or omissions, the engineer shall have the power to stipulate the cost or reduction to be charged or allowed for such changes, and the contractor must have the engineer's written orders covering the above, before such changes, additions, or deductions can be made or allowed."

No Court would hold such a clause valid. Perhaps it is meant that the engineer should decide as to whether *any* cost would be reasonable, but if he goes so far as ordering a man to do some-

thing, and also fixes the amount which is to be paid for it, he is likely to find himself in difficulty.

455. Inconsistency and Ambiguity. — As an illustration of inconsistency and ambiguity in a contract, the following is taken from an actual case:

One clause stipulates the amount of liquidated damages to be $10 for each day's delay in completion after a certain time, but in the preceding clause the time for completing the work is fixed absolutely at 50 days, and nowhere is there a clause relating to extension of time for bad weather or other reasons generally to be considered in construction work. It is obvious that no amount of argument can make these clauses aught but incompatible.

456. Warranties; an Example of Inconsistency in Specifications. — The attitude of the courts is that even if the specifications require the contractor to warrant certain qualifications of the work, as for example, its water-tightness, resistance to winds, waves, floods, etc., still the contractor's undertaking so to build will not be considered as a warranty that the work will fulfill the conditions, where the sizes of parts, materials, or modes of construction, etc., are specified. That is to say, a warranty by a builder as to *results* implies that he shall have something to say about the design. (J. C. Wait, *Eng. News*, June 8, '05.)

457. If it is sought to connect the foregoing with some elementary principle of contract law, it will be probably true to say that in the case just supposed, there was no genuine " meeting of the minds," i.e. no meaning of the same thing in the same sense. (See § 18-[4].) The owner is proposing that the contractor shall build and *also* warrant the fitness of the owner's plans. The contractor assents, in so far as the building is concerned, but the law *implies* for him the reservation that since he did not make the design, he shall not be responsible for its success.

458. Why Poor Specifications Need Interpretation. — Specifications are frequently written by some one more or less unfamiliar with the practical methods of doing the work, or worse than that, they are inherited, and out of date. In such cases interpretation is necessary, and permission should be given in the contract to make a reasonable interpretation. But engineering knowledge alone will not always lead to the proper result, since it has been well stated that a wide experience and knowledge of general business as well as of construction work, coupled with a full knowledge of existing conditions, are necessary for complete success. (See also § 398.)

459. PRACTICAL HINTS ON SPECIFICATIONS. — In *Engineering-Contracting*, of February 3, 1909, there is an article, com-

mended editorially, which gives numerous practical suggestions for Specifications. Though quoted from an English writer, there is nothing in it which could not be applied equally well in American practice. Some of its most important points follow:

(1) **Language Used.** — It is of the utmost importance that the specification should be lucidly written in simple language, the clauses arranged in logical sequence, and the description exact and complete without being verbose. Every item of the work should be allotted a separate clause, for otherwise confusion must ensue. [See §§ 392-5.]

(2) **Brevity.** — As brevity, when consistent with completeness, is the hall-mark of a good specification, it should contain no information which may be clearly shown on the drawings, as this would be a waste of labor besides being confusing, since it obscures the drawing with unnecessary writing, and overloads the specification with identical information.

The degree of detail entered into should be governed very largely by the magnitude and importance of the work, as it is obvious that the detail in the specification for a $250,000 job would be merely a display of misdirected energy if applied to the specification of works costing only one-tenth as much. [See § 395.]

460. (3) **Definiteness.** — A common fault is indefiniteness of description, generally arising because the writer does not have a clear notion of the work or materials which he attempts to describe, or it may be due to obscurity in the language used, or to the misuse of certain words. [See § 398.]

For example, "proper" and "sufficient," though widely used, are here condemned, since it is well argued that the engineer should know what *is* proper and sufficient, and describe it in precise terms. Failing this, he is only opening the way for trouble when it becomes necessary to interpret these words in terms of actual materials and workmanship.

(4) **Uniformity of Treatment.** — It has been observed that inexperienced writers expand into unnecessary verbiage when dealing with matters most familiar to them, but dismiss some equally important point with a brief direction that "the work shall be done to the satisfaction of the engineer." In the latter case it is suggested that a fair implication from the language is that the writer did not himself know just what was wanted. A legitimate use of the phrase is in a general clause referring to the whole work.

A case of this uneven description cited was in a sewerage job evidently

requiring but a moderate amount of cement, yet the detailed tests for Portland cement were set out at great length. None of the tests were in fact applied, and apparently were not intended to be, but the whole description was taken *en bloc* from another specification, presumably with a view to overawing the contractor. [See § 453.]

461. MOVEMENT TOWARD STANDARD CLAUSES. — Mr. William Bamford, in Proc. Am. Soc. C. E., December, 1909, gives the results of considerable study of Building Specifications and Contracts. His effort was to formulate suitable expressions for the relationships which *ought* to exist between the parties to construction contracts, — building agreements in particular. He acknowledges the labors of various committees of architectural societies whose efforts for a number of years past have been toward uniformity or standardization of contract forms, but devotes the bulk of the paper to a form of agreement which has been developed during thirty years of experience and of effort by the Royal Institute of British Architects, during which time many eminent and experienced men have contributed their labors to it. Mr. Bamford has frankly attempted to revise and adapt this English document (last officially approved in 1903), to American conditions and practice, though adhering as closely as possible to the original.

462. He argues, moreover, that while many of its provisions are untried and new in American practice, they have in fact stood the test of time and litigation for over thirty years in Great Britain. Since the systems of jurisprudence of England and of the United States are fundamentally the same, there is much more warrant for the effort to introduce these provisions into American practice than to start independently and attempt develope entirely new ones.

As the purpose above stated makes the treatment of the problem particularly valuable for study by young engineers during the period of their professional education, and as the engineers of the future must be reached through the students of to-day, some of the more prominent features of Mr. Bamford's paper have been summarized herein. The reference to the full text has been already given. There is an abstract of the paper in *Engineering-Contracting,* January 12, 1910.

463. The labors of the Committees from the American Railway Engineering and M. W. Association have already been discussed at length. (See §§ 409 to 442.) It is perhaps probable that the movement for standardization is a laudable one. But the

student and engineer should recognize that from the very nature of things such a movement can never be wholly successful, since the wide variety of situations to be met necessarily limits the field of usefulness for any given type of uniform contract. It should also be recognized that no amount of standardization of forms can supply a lack in knowledge of common contract principles on the part of those who are to use the standard contracts. (See § 441.)

464. SUBDIVISIONS IN SPECIFICATIONS. — All the foregoing matter will serve to show that specification-writing is a subject of some complexity, or that, at least, it involves a great number of details. (See § 396.) This means that the writing of a given specification must be approached in an orderly fashion, and it is most convenient to treat each independent matter by means of a separate clause, of which there are naturally two classes: (*a*) General, referring to the business relations which exist between the parties for this particular piece of work, and (*b*) Specific Clauses, pertaining directly and solely to the construction and materials for the particular piece of work in hand. (See § 448.)

465. The general clauses will contain a description of the work as a whole, touching concisely upon its broader aspects but ignoring the details, and it will be common to find in them the agreement as to times and methods of payment, alterations, liability for accidents, abandonment, time limits, arbitration, subletting the work, etc. (See §§ 401-2-3 on the point that there is no fixed line between general clauses in the " contract " and in the specifications.) The guiding rule seems to be to group under the general clauses all those matters which do not pertain to any single part, but rather to the whole as one unit. (See § 471.)

466. MODE OF STUDYING SPECIFICATIONS. — In studying specifications as such, the tendency will be to accumulate a mass of details, perhaps important in themselves, but lacking the correlation which would arise by being referred, each in turn, to the broad guiding rules or principles upon which successful or adequate specifications depend. It may also be said that a scrutiny of even the longest clauses in existing contracts will generally show a meaning which can for purposes of study be adequately stated in a tenth of the words employed in the formal instrument. It is submitted that until this analysis and condensation is made by the

student or engineer, he cannot judge intelligently whether *his* contract should contain that clause or not.

467. The tendency to accumulate a mass of details may be overcome in great measure by grouping around a simple analytical statement of a central purpose the essence of all clauses studied looking toward the same end. A pursuit of this plan will afford material assistance to the student or engineer when he actually faces the problem of writing a contract and its specifications. In this method of study, it is obvious that nothing can take the place of a free use of note-book and pencil, a careful fixing of the attention on the root-thought which every clause, section, or sentence is to express, and long-continued and laborious practice in making certain and unambiguous expression of that thought.

Here the assistance of an untechnical friend will be of great assistance, for if he, unfamiliar with the subject matter, can understand what you *mean* by what you *say*, it is fairly safe to assume that a person who is familiar with the subject will be able to get your true intent.

The contracts and specifications which follow are left in skeleton form, and merely the headings to which the engineer may wish to allude are given. They are not supposed to be anything like a complete guide, nor even when set out somewhat fully are the clauses intended to be copied. But they *are* intended to represent a mode of study and analysis which if diligently applied by any engineer or student to the contracts and specifications he meets in practice, must assist him to acquire marked facility in preparing such documents.

468. Reasons for Present Method. — Two principal reasons may be cited why it is hoped this skeleton form of treatment will be found useful. They are:

(*a*) The belief that the engineer who is entrusted with the writing of a certain specification will be more familiar with the details of that particular work than any other person whatsoever. Hence, it is probable that he can *never* find *just* what he wants to say in any book, since no two engineering problems are just alike, or call for precisely the same specifications.

(*b*) No form of *expressing* the thought or purpose to be treated under each heading is, in general, attempted here. This is because of the futility of attempting to cover all possible variants in cases that may arise, and because the engineer may justly have very different views upon a specific point than did the engineer whose specification is before him. (See § 453.) Also, the works

on Contracts and Specifications by Messrs. J. B. Johnson and J. C. Wait show just what language was used in a great number of past instances. This book is an attempt to analyze principles rather than to gather together all possible illustrations of those principles. (See § 441.)

469. Conclusions. — Hence the lists of headings given here are not supposed to be at all complete or exhaustive even within the limits they cover. Instead, the purpose is that they may serve as suggestions or memoranda of what frequently *is* covered, and which will, if checked off, assist the engineer to assure himself that he has not overlooked something of importance. Indeed, this list will have entirely served its purpose if in a given case but few of its headings are used, but it does in fact *suggest* to the engineer the things he wants to put into *his* contract.

While it would be possible to extend almost indefinitely a list of topics which specifications might cover, and about which extended remarks and observations might properly be made, many of the points which follow have been previously alluded to in various parts of this book. Further comments will be reserved for statement in connection with the skeleton contracts and specifications which are to follow. These will be found to be but little more than a tabulation of headings taken from what are regarded as high-class specifications. The reasons for this style of treatment have already been given. (See § 468 and Appendix Note 20.)

470. Situation Summarized. — If the engineer is uncertain upon a question of contract law involved in carrying out his intentions, this book purposes to assist him to correctly answer it, or at least to give him an intelligent conception of the precise legal point involved, so that he may successfully co-operate with a lawyer in its solution. If it is a question of standard modes of engineering procedure, obviously this book can be of little assistance, but the engineer must seek information in engineering treatises, or in the publications of experts in that specialty. And finally, if the problem is one of clear expression, his necessity is to sit at the feet of masters of rhetoric and teachers of English.

EXAMPLE I

471. As an example of compact analysis of the General Conditions in a very important specification, the following is selected from *Engineering News*, February 13, 1902, which in turn ex-

tracts them from the contract governing the construction of the New York Rapid Transit Railway.

In brief, it is provided that the contractor shall, in strict conformity with the specifications, construct the railway, " Including therein the stations, side-tracks, switches, cross-overs, terminal yards, and all other appurtenances complete and ready for operation; including also all necessary construction of sewers along or off of the route of the railway, all necessary readjustments of the mains, pipes, tubes, conduits, subways, or other subsurface structures, the support and care, including under-pinning when necessary, of all buildings of whatever nature, monuments, elevated and surface railways, affected by or interfered with during construction and reconstruction of street pavements and surfaces," and that the contractor shall provide a complete equipment for the road according to the specifications.

Provision was also made that the Commission might during construction amplify the plans and specifications; that the acceptance of any part of the work and materials did not relieve the contractor from the obligation to furnish sound materials and good work; that any dispute as to the engineer's valuation of extra work and material was to be submitted to arbitration; the time and mode of payment are specified; and that the contractor should be personally responsible for all accidents to persons and property.

The specification covering " Waterproofing "* is worthy of notice, as it is given in full, and outlines the methods for the highest class of work of this type. It is recommended as a source of information.

EXAMPLE II

472. The contract chosen as the second example was framed to cover a part of the construction of a large work of far-reaching import to two metropolitan communities. It may be assumed, therefore, to represent expensive legal and engineering services under modern conditions.

(In the following illustrative material, there is first stated the *subject* of each clause or paragraph; then allied matters are mentioned which may be treated in the same paragraph. The matter which appears in parentheses is given by way of *illustrating* what has been, or may be treated, as a part of or cognate to the same subject. As brevity and compactness of statement is the one thing especially striven for here, the reader need not expect that every sentence will be completely rounded out, nor that he will not frequently need to supply a missing predicate, or to carry in his mind the " subject understood." Each topic is numbered for convenience of reference, merely.)

It should be noticed, first, that by advertisement or otherwise, certain specific information is given to bidders.

473. CHARLES RIVER BASIN, Boston, Mass.

Points covered in notice " INFORMATION to BIDDERS."

*Same reference.

(1) Title. States what is to be placed upon the sealed bid.

(2) Place. Tells when and where bids will be received.

(3) Signature and Form. Must be signed, and on a specific blank form.

(4) Price. The price of *each* item, both in writing and figures, must be given.

(5) [a] Check. A certified check must accompany bid. (On Bank or Trust Company, of certain place, in specified sum.)

[b] Forfeiture. The check may be forfeited under certain named conditions.

(6) Receipt. Check to be delivered to . . . . who will issue voucher for the deposit.

(7) Bond. In the sum of . . . . will be required for faithful performance.

(8) [a] Execution. Successful bidder is to execute the bond and contract within (15) days from time notice is mailed him that contract is ready for signature.

[b] Forfeiture. Failure to do as above gives owner option to determine that bidder has abandoned contract, and proposal check is to be forfeited to . . . . . (Note: Proposal should contain agreement to this condition upon part of bidder.)

(9) Site. Contains description of test-piles, and wash-borings, with their location, if there are any.

(10) [a] Quantities. Gives an itemized statement of quantities estimated by the engineer.

[b] Statement that all bids will be compared on the basis of this estimate.

(11) Estimates. [a] Disavowal of warranty as to accuracy of quantities stated. [See §§ 415, 416.]

[b] Reservation of right to increase or decrease amounts as deemed necessary by engineer.

(12) Unbalanced Bidding. Warning against contractor's making unbalanced bid. (May lead to rejection.)

(13) Rejection. Right is reserved to reject any or all bids, and to award to party whom owner believes will serve his interests best.

GENERAL PROVISIONS IN CONTRACT

474. 1. Title of Work. (Subject matter of the contract [see § 471], including its location.)

2. Parties. Gives names and description of them. (Reciting Act of Legislature, or other special fact establishing competency of either party.)

3. Scope. States in general terms extent of work to be done. [§ 471.]

4. Definitions. (*a*) Who are meant by "Commission," and "engineer"; explains what is included in "Dam," "Lock," "Basin," "Harbor"; what base is used as "Datum," and what materials shall be classified as "rock" and as "earth."

The aim is to express fully the scope of terms employed. This renders construing them by the Court unnecessary.

(*b*) Also, who is meant and referred to by the words "As directed," "as required," "as permitted," etc. And who has the power to "approve," "accept," "be satisfied," etc., when the work is required to be "acceptable," "approved," "satisfactory," etc.

5. Power of Engineer. Aim is to make engineer's judgment and determination final and conclusive on all questions that may arise under the contract. Also to make such verdict a condition precedent to the contractor's receiving any money under the contract. [See §§ 433, 438, and 490.]

6. Occupancy of Site. (Gives the limits of property that may be occupied by the contractor.)

7. Directions. (Provision that superintendent or foreman of contractor shall always be present on the work, and that orders given him shall be binding upon the contractor, should he be absent from that place.)

8. Lines and Grades. (To be given by engineer, contractor giving assistance, and furnishing materials for the same.)

9. Sanitation. Suitable conveniences must be furnished for laborers.

10. Cleaning-Up. Site to be carefully cleaned up after completion of work.

475. 11. Liquor. (Use of liquor by workmen prohibited.)

12. Ambiguity. Inconsistencies between plans and specifications are to be explained by the engineer, whose interpretation shall be binding upon the contractor. [See § 490.]

13. Time. [*a*] Time of entering upon and of discharging the contract.

[*b*] Statement to the effect that time is "of the essence."

[*c*] Completion by stages at stated times. [See § 418.]

14. Accessibility. Access to be permitted to the work at all times to owners, their agents, or engineers.

15. Defective Work. (Inspection by engineer shall not relieve contractor; he must make his work good any time before its final acceptance if it has been overlooked. See § 422.) Condemned materials to be removed.

16. Ownership. Title of materials annexed to the soil to pass to owner, i.e., other party to contract. [See § 181.]

17. Workmen. Only competent workmen to be employed; to be discharged for cause by engineer.

18. Delay. (If by agreement either party is to secure possession of the site, delay by him in doing so shall not entitle other party to damages, but extend the time.) [See § 492.]

19. Legal Restrictions. Burden is placed on contractor to keep fully informed on State, municipal, or National laws or ordinances (whether existing, or made during existence of the contract), which affect men or materials employed under it. [See § 25 and Appendix Note 6.]

476. 20. Laborers. [*a*] It is stated whether and what preference there is for laborers of any specified residence or nationality.

[*b*] Hours of labor are defined. Farming out of commissary forbidden; laborers to board where they choose.

21. Supervision. [*a*] Personal attention of contractor is required. States under what conditions, if at all, subletting will be permitted; and when subcontract may be terminated by engineer.

[*b*] Contractor to be authorized to pay subcontractor's employees, if latter defaults.

22. Alterations. Changes may be made by the engineer before or after beginning work without claims for damages or loss of profits by the contractor. [See §§ 109 and 424.]

23. Indemnity. Aim is merely to make the contractor "independent." [See § 172, etc.] (Contractor shall take the risk of injury to persons or property on or about the work, and shall save owners harmless in all suits for labor or materials, patent rights, inventions, etc., used on the work.)

24. Abrogation. States what shall constitute abandonment; what the effect of assigning the contract shall be; or that if there is unsatisfactory rate of progress, or violation of contract provisions, contractor may be ordered to quit. [See § 105.]

25. Default and Completion. If contractor defaults, it is provided how completion may be made. (It is generally at the expense of the contractor, the owner using his plant to do so. Money expended in this way shall be deducted from any due the contractor, and if amount is insufficient, contractor shall make it up. [See Appendix Note 7.])

26. Liquidated Damages. The sum to be paid as liquidated damages is stated, and also the conditions under which payment of the same shall become due. [See Appendix Note 9 and § 496.]

27. Extras. States how price of extras is to be determined. (Cost plus 15%; engineer to have access to all accounts; statements for extras must be made before 15th of month.) [§ 116.]

28. Estimates. [*a*] To be made when. (If work has been

done, and materials of certain kinds delivered during the month, then monthly estimate to be made. Payment of estimate is to transfer title in the materials, but this is not allowed to prevent the engineer from rejecting the same, if not good.) 15% of pay to be retained until it amounts to . . . . [See §§ 494-5.]

[*b*] Estimate Excused (if certain amount has not been done since last estimate).

[*c*] Estimates Oftener. (May be made if deemed necessary by engineer, or to assist contractor to better meet payroll.)

[*d*] Final Estimate and Final Payment. (When this shall be made; partial estimates and payments corrected in final.)

29. Payment. Last payment to terminate responsibility of owner. [See § 121 and §§ 494-5.]

30. Waiver. No inspection, orders, measurement, or certificate made by the engineer, nor any payment, acceptance, in whole or in part, nor extension of time, nor taking of possession by the owner, shall operate as a waiver of the conditions of this contract, or of any right to damages herein provided for. And waiver of one breach shall not be waiver of another breach.

31. Remedies. All remedies herein mentioned are to be taken as cumulative, and each in addition to the other, but not in place of it.

477. Next follow the SPECIFICATIONS [General Clauses].

1. [*a*] General Description of the work, giving the salient features of its construction, and the inter-relation of its principal parts.

[*b*] General plan of procedure in erection. (As where materials will come from, be disposed of, etc.)

[*c*] Wrecking and removal of existing structures which are covered in this contract.

[*d*] Reference to place (in contract) where the specific related things will be found which contractor is not required to do.

2. [*a*] Refers to general plans of the work, i.e. incorporates them, identifying them by title, numbers, signatures thereon, and date of making. (States where they may be found.)

[*b*] Detail Plans. (To be furnished later by . . . .)

[Specific Clauses]

3. Gives more specific description of the work.

478. Coffer Dams.

4. Location.

5. [*a*] Gives contractor permission to build stronger and better, or to change design upon approval by engineer.

[*b*] Requiring contractor to assume risk of sufficiency of dams. (In design or execution.) [But see § 456.]

6. Guide Piles. Quality and sizes of timber, spacing, bearing, alignment and replacing of broken or improperly driven ones.

7. Sheet Piles. Quality, and rules for inspection; cutting off splines (modes of fastening) grooves.

8. Metal. Ultimate strength, and quality. Upsetting of ends (may be required) of tie-rods.

9. Earth Filling. Quality of earth required, both inside and outside of dam. Finished grade, or elevation of earth.

10. Sewers. (Sewer outlets or connections.)

11. Removal of existing structures on site of dam. Ownership of materials (or may be re-used).

12. [*a*] Pumping Out. Slips of material provided against. Extra bracing (may be required). Kept free from water, and dam maintained in good condition.

[*b*] Pumping for other contractors paid for extra.

13. Removal of Dam. What may be left in place.

14. Price for dams includes what. (Constructing, maintaining, and removal of same. Also temporary sewers and pumping.)

479. Earth Excavation.

15. Required for what purposes, and structures in or adjacent to dam. Dimensions of excavation, or grade for same.

16. Dredging, where required, and under what conditions it becomes " extra work."

17. [*a*] Extra Earth for filling; where obtained. Final disposition of earth (in dam, or elsewhere), rehandling of earth.

[*b*] Use of hydraulic plant for back-filling.

[*c*] Prevention of washing of materials by current.

[*d*] Settlement of fill to be brought to grade. No frozen material (without permission from engineer).

18. Measurement of Earth. How made.

19. Price of earth excavation includes what. (Pumping, bailing, damming, ramming, grading of surface.)

480. Rock Excavation.

20. [*a*] Where required. Care in blasting. Time of blasting.

[*b*] Storage of caps and explosives separately. Precautions may be ordered by engineer in addition to city ordinances.

[*c*] Disposal of rock. Measurement of excavation.

21. [*a*] Riprap. Sizes and quality of stones required. Diver (may be required). Paid for by ton in place.

[*b*] Price includes what. (Obtaining, transporting, and depositing, and all other incidental expenses thereto.)

481. Foundation Piles.

22. Where required in the work.

23. Kind and quality of timber. Spacing and alignment (or as on plan) satisfactory bearing (or depth). Water-jet, shoes, or steam hammer may be required.

24. Piles tied together before filling. Height of cut-off; sound un-broomed heads required. Vertical and batter piles.

25. Test piles may be required. (Extra.)

26. Piles measured and paid for how.

Sheet Piling.

27. Dimensions and quality of timber. Variety. Drive by water jet (?) How measured. (In place without allowance for waste.)

28. Price includes what. (Furnishing, driving, bracing and incidentals thereto.)

482. Cement.

29. Inspection and tests by engineer. Well known brands. Rejection of inferior brands.

30. [*a*] 30-day supply on hand, allowing 28-day tests.

[*b*] Lots stored separately in dry place.

31. Sand, — clean, sharp, coarse, no pebbles.

32. Broken stone, or gravel, for concrete; sizes, screening; amount of fine materials allowable.

33. Measuring of sand, stone and cement for mortar and concrete.

34. Mortar. Purposes and proportions; mode of mixing.

483. Concrete Masonry.

35. Where used.

36. Quality and proportions of materials.

37. [*a*] Mixing and placing. (In layers, but continuously. Under water; hand or machine mix; Inspection by . . . .; wet or dry.)

[*b*] How in cold weather; sprinkling in dry weather.

38. Bonding to Old Work. (Roughen; clean; mortar or grout coat.)

39. [*a*] Finish of Exposed Surfaces. (Smooth forms, oiling spading; pointing, floating, skim coat; skilled labor.)

[*b*] Granolithic Work. Mode of execution. (As extra?)

40. Expansion Joints. (Where needed, and how formed.)

41. Waterproofing. Where required; type called for.

42. Price includes what. (Measured in place.)

484. Ashlar Masonry. [In general, see Baker's Masonry, specials below.]

43. Uniform Coloring of Stone. Sample to be approved by engineer in writing. Evidence that quarry-supply is sufficient.

Pipes, and Ducts for Electric Conduits.

44. Single or multiple ducts; cross-section what; quality; laying; inspection (just before laying). Kept clear of mortar when laid; use of mandrel and rods.

45. How measured; price includes what.

MISCELLANEOUS CLAUSES

Before taking up the next example of Contract-Writing a few special topics will be considered. These matters are not especially interrelated, and as the possible list is an interminable one, no claim is made here for completeness. The list merely contains certain points where difficulty has been met.

485. Subletting. — "The contractor cannot sublet any portion of the work without previous consent of the city council in writing," — yet why does this old clause persist? ask the editors of *Engineering-Contracting* (November 3, 1909), who then proceed to handle the subject upon its merits:

"The object of the city in letting a contract is to get the work done in accordance with the plans and specifications, and there should be no objections made to subletting. The contractor should be permitted to do the work in *any* manner provided *he* is held strictly accountable. A general clause to the effect that the city council will not recognize any person except the contractor and will hold him throughout to a proper completion of the work will cover all that the clause here referred to is intended to cover.

"Such clauses do not in fact prevent work from being assigned, transferred, conveyed, sublet, or otherwise disposed of, * * * if the contractor deems it to be to his interest to so dispose of any of his right, title, or interest therein to any person, company, or corporation. In fact circumstances sometimes arise in which it is highly desirable that something of this sort be done. What is wanted in specifications is a little less legal verbiage and more good judgment."

486. Arbitration Clauses. — Taken as a whole, the subject of arbitration in reference to engineering contracts is in a rather confused and unsatisfactory condition, though much discussion has been given it. The tendency of such clauses is to contravene the principles of public policy, and they may be regarded as tending to oust the courts of their proper jurisdiction. (See § 33, etc.) This element of public policy involved in arbitration clauses is the precise reason why the courts have refused to carry out some provisions, and why, therefore, the subject is in such an unsettled state. A few suggestions only, such as may assist in avoiding difficulties, will be attempted here.

487. It will be observed that this matter is closely related to

the provisions governing the engineer's authority. Hence greater simplicity and satisfaction may result if the contract-writer first decides carefully, and with due regard to precedent, in just what matters the engineer is to have sole and absolute authority. Next, all matters likely or liable to arise which *may* require arbitration should be systematically considered and enumerated. Finally, the method for choosing the arbitrators, and the mode of making an appeal to them, should be clearly stated.

The traditional position of the engineer has been that of arbitrator between the owner and contractor, and not the representative solely of one party. While theoretically correct, in fact it frequently does not exist, and frankly stated, the engineer is often an active partisan for the owner as against the contractor. However, this is not always because the engineer desires to be unfair, but because the provisions in contracts generally used make it extremely hard, if not impossible, for engineers to be fair if they try to conform strictly to the contract provisions.

488. A useful arbitration clause, taken from English practice, provides that no appeal to an outside arbitrator shall be made during the progress of the work, but that disputes arising out of any matter contained in the contract shall be temporarily decided by the engineer, subject to further settlement at the hands of a referee after the work is done. This tends to prevent any disputed matters from causing any delay in the work.

About the only practical brief suggestion that can be given in reference to arbitration is to the effect that blanket clauses, granting unlimited authority to the engineer as arbitrator, are not likely to be enforced by the courts. Perhaps a sure way to avoid trouble is for the contract-writer to place himself in the position of the contractor, and in all fairness ask if he himself would be willing to acquiesce in the provisions made. In brief, the Golden Rule would be highly applicable, and its use a powerful preventive of lawsuits.

489. It has been well said that the relation finally existing between owner and contractor as a result of the contract is not purely an engineering matter but largely one of business and human nature. The aim of each party to a contract is primarily to get all he can out of it. Where the amount involved is small and the continuance of business relations is desired, — as in the case of retail trade, — the satisfaction of the purchaser is of prime importance. When a railroad has a large amount of work to do, a contractor is interested to give satisfaction in order that he may receive more work. Where the contract is large and the parties thereto will probably have no further business relation, the aim of each is to get all he can and still effect a settlement without a suit.

Between these conflicting interests of the principals the engineer holds a very peculiar position. He is in the employ of one of the parties, but must nevertheless be an impartial arbiter between the two.

490. Engineer's Authority. — It is not unusual to have a condition that the engineer shall have the exclusive right to authoritatively determine the meaning of the contract. Such a provision is often rather unsatisfactory to the contractor for numerous reasons, but unless it could be shown that the engineer had deliberately shown prejudice, or partiality, the provision would probably stand.

From the engineer's view-point, the chief advantage of such a clause is that it supplies a summary means of remedying the faults and supplying the omissions in a badly-drafted specification.

An arrangement suggested as being more likely to satisfy both parties is for the engineer to have final decision as to workmanship and materials, and to provide for an outside arbitrator on all matters relating to payment, extras, contractor's delays, alterations, etc. There seems much to commend this.

491. Opening up Completed Work. — It sometimes happens that work which has been carefully done will be buried up before it has received inspection. The same is also true at times with work that has been deliberately scamped. Thus it is possible for both sides to err in their zeal, and a hardship may be done if in framing the contract provisions it is not recognized as possible that mistakes may be made. For plainly if the work is ordered opened up and proves satisfactory then the contractor should be compensated, not for damages, nor yet as salve for affronted innocence, but just for extra work done. But if there is no provision regarding the matter, it is apt to be just so much more inducement to tricky contractors to bury their work as hastily as possible. Contract-writers recognize the question as one of some perplexity. It has been suggested that perhaps the fairest method is to prescribe that if the work upon being opened up is found satisfactory, the labor required shall be charged as an extra. But if it is found not to be in accordance with specifications, then the cost of so opening shall be borne by the contractor, together with the requirement that he shall make good the defective work.

492. Extension of Time. — An extension of time, equal to the time the contractor may be delayed for certain specified causes, is often granted. The following are reasons often enumerated, though it may rarely be that any one of them will actually happen: "Act of God"; exceptionally inclement weather, suspension by order of the engineer pending litigation (threatened or actual)

with adjacent owners; delay due to the interference of other contractors; or by the construction of duly authorized extras; strikes of workmen, when not caused by the fault or collusion of the contractor; or if the contractor shall not seasonably receive written instructions when he has duly applied to engineer for them, etc.

493. Termination of Contract by the Contractor. — Mr. Bamford (Proc. Am. Soc. C. E., Vol. XXXV, p 1343), remarks that few American contracts contain any provision for terminating a contract under any conditions whatever. In fact, he says, most contracts are filled with clauses designed to bind the contractor hand and foot so that no matter what happens, he is certain to remain a party to the contract. He suggests that the great unfairness of such provisions can only be accounted for by supposing them to be inherited from times when work and conditions were totally different from those existing to-day.

He submits a clause fair to both parties, in which it is provided that the contractor may quit upon non-payment by the owner of the stipulated amounts when due, after giving notice in writing to the owner of said non-payment. The contractor should have the same privilege if the owner should become bankrupt, or if the work be stopped more than a certain length of time by order of the engineer or owner, or by decree of a court of law. In the event of any of these contingencies the contractor is entitled (and it should be so provided), to recover the full value for all work done up to that time, and for all materials furnished on account of that work. He is entitled to be compensated for any damages sustained by him either by purchase of equipment, or otherwise, suffered on account of this contract.

494. Payments. — The manner of payment may be varied in many ways to suit the particular circumstances. It is *essential* that the provisions shall enable the contractor to demand and to obtain his money as readily as they enable the owner to obtain the work for which he pays.

It is desirable and proper to provide that: "Before the . . . day of each month, the contractor may submit to the engineer a written statement showing (*a*) the value of the work and materials actually wrought into the work up to the first of the month, and (*b*) the value of the materials delivered at the site but not incorporated into the work, deducting the aggregate of previous payments." It is then provided that the engineer shall issue a cer-

tificate on or before such a date, and that a certain percentage of the money due shall be retained until the amount so retained amounts to a certain sum, after which all moneys becoming due shall be paid in full. It is also not uncommon to provide that upon final adjustment of accounts at completion of the work a certain sum is to be retained by the owner for the purpose of making good any defects in the work which may develop within a specified time, failing which the balance is then paid the contractor.

495. The idea of retaining percentages until the end of the work is intended to insure proper completion. The American practice of retaining an unchanging amount throughout is often a real hardship on the contractor, and serves no useful purpose after the work has been approximately half completed, unless special sums are retained to cover known defects.

In this connection the General Contractors' Association of New York has recently suggested the insertion of a clause to the effect that 6% interest shall be paid to contractors upon overdue payments, the interest to be computed from the time money is due until it is paid. This is a reasonable request, since it saves the loss of interest on the funds they would otherwise be obliged to borrow for running expenses. It also benefits the other party to the contract, since a failure to make payments when due does not then constitute a breach, as it must do if the agreement is to pay unconditionally at a fixed date.

496. Liquidated Damages. — In conjunction with the extended discussion given elsewhere (see Appendix Note 9), the following clause is offered. It is suggested by Mr. Bamford that it may be going as far as is advisable toward obtaining just and reasonable damages for delay in completion. Certainly no one could object to its fairness.

"The contractor agrees that the time for the completion of the work shall be considered as of the essence of the contract and he agrees that for liquidated damages he will pay the owner for the cost of all extra inspection, and for all amounts paid for rents (when completed building is to be rented), or for more protracted services on the part of the engineer, or other employee of the owner kept on the work, and other expenses entailed on the owner by reason of the delay in completing the work."

The owner is then authorized to retain such sums as will cover the foregoing damages provided that the maximum so claimed shall not exceed a stated amount. If this stated amount is exceeded, then the whole matter is to be handled by arbitration, and the foregoing is inapplicable.*

* There is an extensive discussion of Liquidated Damages and Penalties, particularly referring to government contracts, by Mr. G. A. King, in *Engineering Record*, Vol. 58, p. 383. He also treats of the bearing of Alterations upon the time limit in an illuminating way. The whole article is an able one, and well worthy of careful study.

EXAMPLE III. Specification Writing

497. These specifications were prepared by the N. Y. C. & H. R. R. R. to cover the contract work in the "*Improvement of the Grand Central Yard*," in New York City, begun about 1903-4. As the expenditure involved amounted to several million dollars, much care and effort was doubtless given to their preparation, necessitated by the large variety of things to be done.

The specification covers about 40 large pages, contains over 90 clauses, and is indexed for over 200 subjects. As railway terminal improvements in large cities are more and more the order of the day, and as in each there are some elements in common, a study of this specification will prove suggestive and well worth while. Accordingly its subjects of most general interest will be enumerated, and its framework sketched without particular reference to the details.

Clause 1. Description. States what work the specifications are intended to describe, what the contractor is to furnish, and enumerates eleven general divisions into which the work is divided, as Excavation, Masonry, Sewers, Drains and Ducts, Track, etc.

2. Describes by title the 25 plans which accompany the contract, and provides for detail plans to be prepared later, and for necessary changes and alterations, all of which are to be equally binding upon the contractor.

3. Uses language which incorporates these specifications with the contract, and refers to latter as containing the terms of payment.

4. Character and Quantities of Work. Disclaims responsibility for accuracy of borings, and relative quantities of earth and rock, requiring the contractor to satisfy himself as to all these matters by personal examination. " And no information upon any such matters derived from plans, profiles, or specifications, or from the engineer or his assistants, shall in any way relieve the contractor from all risks incident to this work."

5, 6, 7. Prohibits the use of ardent spirits; requires the contractor to provide watchmen and red lights when necessary, and directs him as to final cleaning up of the site.

8. Requires imperfect work to be made good, even if overlooked or accepted by the inspector.

9. Requires suitable sanitary conveniences for the laborers.

498. 10. Prohibits advertising on fences or buildings.

11. Provides that night work shall be performed when required, and at same rate as day work.

12. Is a very long clause dealing with procedure of the work and maintenance of existing structures. To be prosecuted at such times and places as to promote rapidity of construction consistent with uninterrupted operation of the railroad, safety to persons and property, and minimum interference with public travel.

Surface and sub-surface structures to be maintained in service, such as water and gas mains, steam pipes and pneumatic tubes, electric subways, sewers, drains, sidewalks, curbs, buildings, etc., which in case of injury must be restored to their original condition before injury.

Notice to be given owners of these structures, or to proper city officials, one week prior to commencing operations at such places, and if alterations in such structures are required, the owners must be satisfied. If done by owners, work must be done promptly. They must be given full opportunity to do the work themselves. No work to be done on any section until a permit is issued authorizing contractor to proceed.

13. Specifies in detail what materials, tools, and labor are to be furnished by the railroad.

14 and 15. Removal of Old Buildings from site. How paid for, to whom salvage shall belong, and which buildings are to be removed by owners.

16. Names the classification of Excavation, as Old Masonry, Solid Rock, and Unclassified.

17. Enumerates more particularly what the scope of the excavation is.

18. Excavation to be so conducted as to give Fire Department access at all times to Fire Hydrants.

19. States, in general, how deep excavations shall go.

499. 20. Materials for Masonry found on the site, may be used if suitable.

21. Requires widths and depths of excavations to be completed according to the engineer's opinion to permit expediting the work.

22. Covers Shoring and Bracing sides of excavations, and pumping when required, explaining what special pumping methods may be called for.

23. Requires blasting to be done with all necessary precautions and according to city ordinances. Right to regulate explosives used, and storage according to city ordinances.

24. Explains precautions that may be required in backfilling about sewers, etc. No frozen earth permitted.

25, 26, and 27. How excavation is to be measured, and to include backfilling or other disposal, places for which are mentioned.

28. Outlines how the excavation work is to be carried forward

in co-operation with railroad when material is to be hauled away by the company.

29. Describes what types of rolling stock, and amount of same, are to be furnished by contractor, and specifies the charge of railroad to contractor for locomotive service.

500. 30, 31, and 32. Piling and Timber. Ordinary specification for piling; to be placed as ordered by engineer. Variety and quality of timber in permanent work, and style of workmanship required. General requirements for lumber in temporary work.

33-37. Masonry. Complete specification for Portland cement, water, sand, broken stone, and gravel.

38, 39, and 40. Keeping pits dry; weepholes in walls; and use of salt in mortar for work in freezing weather.

501. 41. Mixing and Laying Concrete. Work to be monolithic. Description of moulds and forms; coating forms to obtain smooth surfaces; final finish of exposed faces, etc. Expansion joints in walls, copings, etc. Describes five "Classes" of concrete of varying richness, stating definitely where each class is to be used.

41½. Concrete Paving. Guaranty bond required for maintenance of same for two years. Preparation of subgrade; materials for pavement; laying, curbs, cleavage lines, roughened top surface, etc.

42. Stone Masonry. Gives proportions for Pointing Mortar, explains how pointing is to be done, the laying of stone, and its quality. Special requirements for copings and bridge seats, arch sheeting, ring stones and quoins, and concludes with ordinary specifications for First, Second, and Third Class stone or rubble masonry.

43. Brick Masonry. Quality of brick, wetting, quality of mortar, and shove joints; to be plastered and waterproofed where required.

44. Sewers. To be according to plans. All general clauses of the contract to apply also to sewers. What price is to include. Cement mortar to be used; other sewers and water pipes to be relaid if disturbed.

Connections with present sewers; quality of foundation timbers; disposition of material; length of trench to be opened; flow in intersected sewers to be maintained; quicksand; repaving; rock excavation; backfilling; brick masonry; joints; spurs and house connections; quality of concrete; kind of sewer pipes, quality, thickness and length of same; are each given a separate clause, and greater or less particularity.

There are also particular directions as to laying, cleaning, and inspecting the pipes; when iron pipes are to be used; description

of manholes, covers for same; directions as to change of location of receiving basins, culverts, and when concrete sewers may be called for, each receiving a paragraph. In all, there are about sixty subdivisions of this clause on sewers.

45. Provides for the drainage of the railroad yard, and regulates the placing of sub-drains, pumps, and sumps.

46. Electric Ducts. Describes the quality of clay products intended, and discusses laying, rodding, and inspection.

47. Water Mains. In sixteen paragraphs covers quality of iron pipe, lengths, weights, and thickness for each size, how castings shall be marked, cleaned, coated with specified pitch, tested at the foundry, kind of joints required. Requires notices to be given in case any water main, hydrant, etc., must be interrupted in its flow.

48. Gas Mains. Materials for pipe; trenching; careful directions as to laying, making joints, and amount of lead required for caulking; location of drips, testing mains for leakage (pneumatically), and backfilling, — each receives a separate paragraph.

49. Wrought and Cast Iron. Specifications for all of these materials which are to be furnished on whole contract.

502. 50. Reinforcing Bars for Concrete. Type called for, and tensile strength specified.

51. Erection of Structural Steel. Ten paragraphs, telling what items are included in contract price, as unloading, storing, painting, and setting of anchor bolts; giving directions as to removing old structures, and ownership of the same; stating who shall pass upon false work supporting company's tracks, regulating the conduct of field riveting, methods of erection and the procedure upon detecting defective shop work.

52. Waterproofing. Intent to secure structures permanently free from moisture due to percolation of water or other liquids from outside, etc.

53. Materials. Specifies what is meant by "Pitch," coal-tar pitch, natural asphalt, petroleum pitch; what weight of felt and quality of burlap is required.

54. Application of Waterproofing. Temperature of tar and asphalt, and condition of surface same is placed upon; requires skilled workmen; protection must be given waterproofing after membrane is completed; directions how to lay felt or burlap, break joints, etc.

55. Leaks in waterproofing developing before completion of entire Improvement to be re-treated and stopped.

56. Waterproofing work is divided into fifteen classes, depending upon the number of layers of felt or burlap, and upon the bituminous material used, whether asphalt, petroleum pitch, or coal-tar pitch. (Each class has a different price per square foot.)

There is also a long clause explaining the special waterproofing features on solid steel track floor. (As for subway roof beneath railroad yard.)

57. Provides that hollow building-tile shall be placed on particularly wet sections of retaining walls, the waterproofing to be applied outside of that.

58. Pavements and Sidewalks Restored. Required to be done when backfills are complete and settled; work to satisfy city authorities, etc.

59. Allows other pavements to be laid if desired and arranged for with the proper officials and property owners. Shows how contractor's liability is to be terminated, in case other contractors are to do new paving.

503. 60. States what pavements are included under this contract.

61. Sidewalk Lights. Arrangement of bull's-eyes, materials and mode of construction to be approved; whole to withstand load of 350 pounds per square foot, and to be guaranteed against excessive wear and leakage for two years.

62. Track. General requirements as to skill of workmen, general foreman, and high quality of work. Clauses as a whole relate to permanent and not temporary track.

63-4. Track Materials. Loading, handling, and storing rails and track materials, and duty of contractor with reference to loss or injury of same.

65. Direction as to laying rails, location of joints, tightening nuts, and requirements for switch points used in making temporary connections of tracks.

66 to 71, inclusive. Where second-class rails may be used; spacing of ties; quality and placing of joint-ties; ends of ties in line; care in handling ties to prevent bruising with mauls, cutting notches, or sticking picks into them; adzing; laying heart-side down; and use of wooden plugs when spikes are drawn.

504. 72-75. Directions as to spiking rails; drilling rails; when short and special lengths of rails will be required, or may be used.

76. Rails on Curves. Gives a table of middle ordinates for chord lengths up to 100 feet, for 1 to 29-degree curves.

77. Expansion at Joints. Requires iron shims in laying track, and gives table of thickness for temperatures zero to 100 degrees F.

78. Step Joints. Requires step chairs and compromise splices.

79. Tie Plates. Directions for placing them.

505. 80. Lining and surfacing track when laying new rail.

81-2-3. Gauge. To be widened on curves according to given

table; particular care given to gauge at joints; requires use of level-board by track men.

84. Regulates super-elevation of rail on simple, compound, and transition curves.

85. Special precautions for laying switches and frogs.

86. Ballasting. Contractor's duties relating to same, and until acceptance of tracks by a railroad officer.

87. Signals and Interlocking. Contractor for that work not to be interfered with by this contractor.

88. When concrete road-bed or other special construction may be required.

89. Setting of bumping-posts.

506. 90-93. Mill Work and Hardware for Station. Size, quality, etc. of doors, door-frames, moulding, window-frames, sills, and casings; pulleys for window-frames, sash-locks, lifts, weights, sash-chains, hinges for doors, bolts, locks; painting and glazing both of wood-work and iron grillework are each and all appropriately specified.

Summary. — This specification is divided into groups of clauses, so that

Nos. 1–13 relate to General Provisions.
14, 15 relate to Removal of Old Buildings.
16–29 relate to Excavation.
30–32 relate to Piling and Timber.
33–43 relate to Masonry.
44–48 relate to Sewers, Drains, Ducts, and Water and Gas Mains.
49–51 relate to Iron and Steel.
52–57 relate to Waterproofing.
58–61 relate to Pavements and Sidewalks.
62–86 relate to Track.
90–93 relate to Mill Work and Hardware.

APPENDIX NOTES

App. Note 1. (See § 21 Footnote.) **Legal Aspects of Modern Technical Problems.**

In the engineering field a learned judge has said, " New technical questions are arising [such as electrolysis, for instance], and we are without precedents in decided cases for our guidance, but as these new questions arise the administration of the law should keep step with the new situations arising in the march of scientific invention and improvement, not by inventing new legal principles, but by the expansion of old and well-recognized principles of law and equity so as to meet and cover the new situations. It would be a reproach to our system of jurisprudence and the administration thereof, if a situation could arise in which large and material injury should be done to legal rights and destruction caused to property and the law be powerless to apply a remedy."

App. Note 2. **Arbitration Clauses.** (§ 33.)

In connection with this topic of public policy, and its relation to arbitration clauses, see the article on Engineers, Contractors and Specifications, by Mr. Willis Whited, in *Eng. News* of November 13, 1902. He makes the following very pertinent remarks: " It is pretty generally held by the courts that *no* provisions in a contract can oust the courts of their jurisdiction. The provisions making the engineer sole judge of disputed points are held valid, with the reservation that the engineer is to exercise his judgment in good faith, and not in an arbitrary or oppressive manner. Of course, the burden rests upon the contractor to prove that these conditions are not fulfilled.

" Most intelligent jurists recognize the fact that when a man lets a contract for a building, for example, he wants a building and not a lawsuit; that questions frequently arise which must be decided on the spot by somebody if any work is to be accomplished; and that they can be far better decided by the architect or engineer who is familiar with all the circumstances than by any court or jury, especially as they are usually technical questions. Courts usually favor settling disputes by arbitration, and if provision for arbitration is made in the contract, it will almost always be sustained in the absence of fraud, — and the complainant must prove the fraud."

App. Note 3. (§ 34.) **PUBLIC POLICY, in connection with Railroad Passes.**

With reference to matters indifferent to the public, the parties may contract according to their own pleasure, but they cannot do so when the public has an interest in the matter. That is, certain duties are attached by law to certain employments, and these cannot be waived nor dispensed with by individual contract. In this class is the duty of a carrier to carry passengers safely, etc. The boundaries of the domain within which rules of public policy will apply are elastic, and this adds to the difficulty of the question.

In 150 Massachusetts 365 (A. D. 1890) a man *asked* for a free pass which was given him on condition that he released the Railroad Company, which he used, thus accepting its terms. It is said that no sound public policy was contravened by the Company's stipulating that it should be released from

liability in this case, since it was doing all it could reasonably be held to do by giving the ride for nothing, — the public had no rights which could be harmed by such an agreement, and hence such an agreement was not contrary to public policy. In this case he was not a *passenger for hire.*

The United States Supreme Court, in Stevens *v.* Railroad Company, in 1877, defines more clearly what a passenger for hire is. Here, Stevens made a contract with X, wherein a part of the consideration was that Stevens should go to Montreal from Portland, Me., and that X should pay all his expenses, including of course, his railroad fare. Now X was the Railroad Company, and as a fact it gave him a pass in the ordinary form, i.e. with release for the Company's negligence, etc. The fact that on the face of matters the pass did not cost Stevens anything makes it *look* like a free pass, but he was held *not* to be a free passenger at all, since the true relation of the parties was as though the Railroad Company had handed him the cash with which to buy his ticket. Hence the release was invalid, and the Company was liable for negligence.

In 64 Massachusetts 228, decided in 1852, the proposition is laid down that where a laborer was being carried to and from his work on the gravel train, he was *not* in any way a passenger for hire, because in general the laborer should get to the work himself. He was within the fellow-servant rule, i.e. Company was not liable for injury received through the engine driver's negligence by reason of which there was a collision and the laborer (plaintiff) was run over.

The case of a civil engineer working for a railroad would seem to fall under the rule of Stevens *v.* Railroad Company, since it is undoubtedly a part of the consideration of his employment that he shall be transported from place to place by the Company. It is evident that he couldn't walk.

App. Note 4. (§ 70.) **Implied Contract with a Condition Precedent.**

A passenger entered a railroad car without a ticket and was later approached by the conductor and asked for it. This may be considered to be an offer to contract made by the agent of the railroad company, but as no express language was used to that effect, the contract must be an implied one. This implied contract is to the effect that *if* the fare is paid then the company will carry the passenger, and forthwith assume the liabilities of a carrier of persons. But the payment of fare is a condition precedent to the company's entering into the contract of carriage. If the payment is refused then there is no contract even if the passenger subsequently offers the money, since the company is not bound to accept performance after breach of the condition precedent by the passenger. This is because the offer made by the conductor was refused; hence there was then no outstanding *offer* to contract.

This case arose because a person who refused to pay fare was put off the train with some force (after it had been stopped for that purpose), and this, he claimed, was a breach of his contract of carriage. The reasoning given above was that of the highest court of Massachusetts, and shows clearly why there never was a contract of carriage made, and why, therefore, there was no breach of it by the Company. (16 Gray 20.)

App. Note 4A. (§ 72.) **Implied Condition Precedent.**

Where a building-superintendent or engineer is to certify upon the

quality of the work before it is to be paid for, yet the contractor may recover for work done by showing:

(1) That the certificate is withheld through fraud or bad faith on the part of the engineer; or

(2) Through collusion between defendant and engineer; or

(3) Through a manifest mistake made by the engineer. (138 U. S. 183, 51 N. J. Law, 1, etc.)

This well illustrates a condition within a condition, the first of which may be either express or implied (generally express), and the second one is a condition "*implied in fact*," since it is a necessary implication from the express one. Even the second condition must be absolutely performed. (6 Gray 402.)

Pursuing this point, the student should notice that granting the certificate of quality by the engineer is usually an *express* condition precedent to the contractor's receiving pay. To this, by the terms of the contract, the parties fairly agree; but the contractor cannot be supposed to agree that he will allow the engineer to cheat and defraud him at his pleasure, nor that he agrees to accept without question any statement made by the engineer, which is founded upon a manifest mistake, and known to be so by the contractor. Therefore, these are *necessary implications* on the express terms used, and their importance should not be underestimated.

App. Note 5. (§ 73.) **Time Element as a Condition Precedent.**

Where the circumstances are such that for some reason the time element in a contract is of extreme importance, the parties may by appropriate language make "time of the essence," meaning that noncompliance with the time provisions is a substantial breach and discharges the contract, if the party injured so elects. Failing a complete discharge, still the injured party is entitled to damages if the contractor (without fault of the owner), fails to complete the work on time. And when a contract *requires completion at a specified time*, the question of the contractor's negligence or diligence is not considered; nor do strikes, lockouts, accidents, delays in carriage, etc., relieve him unless there is a particular provision to that effect. The point is that the contractor agrees *absolutely* to complete at the time named. He should have contracted in contemplation of the contingencies that might arise; failing to do this he is bound by the terms assented to, as already alluded to under "Impossibility of Performance." Probably if the work is destroyed by "Act of God," performance on time would be excused.

The converse of the above proposition deals with failure to complete on time by reason of the wrongful acts (or neglect to act) on the *owner's* part. Thus it is obvious that an owner cannot forbid a contractor to proceed, and then sue him because he did *not* proceed and finish on time. The contractor should also be excused from the time-limit if the owner was so occupying the site as to prevent him from setting up his plant thereon at the agreed time. Other instances might be where the owner had failed to obtain a building permit, to furnish lines and grades when same were called for by the contract, etc., etc. All of these, it will be seen, are true conditions precedent to the owner's right to sue for breach by non-completion on time. The same remarks

apply where the engineer, as the owner's agent, makes mistakes requiring the work to be done a second time, or fails to give the lines at proper times, etc., etc.

App. Note 6. (§ 80.) **Statutory Regulations Encountered in Performance.**

It is not uncommon to place upon the contractor the burden of keeping fully informed upon existing State, municipal, or national laws and ordinances in effect or made during the continuance of the work, and affecting the men or materials employed. (See clause in Charles River Dam Example.) Since it may happen that these requirements are very divergent and even contradictory in different places, often the local interpretation of purely local ordinances is extremely difficult to be come at. Hence there may be great hardship to the contractor when the specification writer, by a blanket clause, avoids the personal responsibility of writing the specification in accordance with existing laws or ordinances such as building and other regulations relating to the preservation of the public health and safety, and thus puts the onus of his negligence or his ignorance where it does not justly belong.

Mr. Bamford (Proc. Am. Soc. C. E., XXXV, 1330), cites with commendation the English scheme, noteworthy for its fairness: If the local authorities require the work to be done in a different manner from that called for in the specifications, and that work requires additional expense, it is only fair that the owner and not the contractor shall pay the same. Mr. Bamford (copying from the English standard form) suggests this language, in part: "Before making any variations * * that may be necessary to so conform, the contractor shall give the engineer written notice, specifying the variation proposed to be made, and the reason for making it, and apply for instructions therein. If instructions are not given, he shall proceed in conformity with the ordinance or regulation, and the question of extras shall be determined under the general clause for arbitration of all differences." "All contract requirements over, above, and beyond said ordinances shall be fully complied with."

App. Note 7. (§ 123.) **Breach by Abandonment.**

If a contractor without just cause abandons the work before completion, he cannot recover anything for what he may have done up to that time; and even if the owner uses the incomplete work for his own benefit it is not certain that he will have to pay anything for it, since as it is located on his premises, if he does not use it he may thus be deprived of the use of his own land, and he should not be obliged to tear down and remove the new work, nor yet abandon his own land. (171 Pa. 46.) (See Substantial Performance.)

This application of principles may seem harsh, but it results from reason and logic. As the right of compensation would arise only when performance was complete, the contractor has merely delivered materials upon the land of another without entitling himself to be paid therefor, and the owner suffers the same to remain there, but should not be obliged to go to the expense of removing them. A corollary to this would be that the contractor should have the right to remove the materials again.

But in this connection, it should be observed that if the *breach* is made *by the owner*, and the contractor is thereby prevented from performing (either because the owner refuses to allow him to do so, or because the owner omits to perform some highly essential part, — perhaps a prerequisite) then the con-

tractor may recover for the value of the work he has done, and also his damages sustained by reason of the owner's breach. The natural measure of damages would be the profit the contractor would have made on the job.

App. Note 8. (§ 131.) **Indirect Damages.**

The principles of damages* apply equally well whether the action for damages arises by reason of a breach of contract, or by reason of a tort suffered by the plaintiff. It should be noted, however, that there is a modification to the broad rule given, and that under certain circumstances, an action "on the case," as lawyers term it, may be successfully had where the damages are *indirect.* It seems this remedy can but rarely be availed of, however, because of the difficulty in determining, as a practical matter, just what the damages have been.

This is a point of some interest to engineers, since the legislation in New York pertaining to the acquisition of an additional water-supply, and also that in Massachusetts creating the Metropolitan Water Board, has dealt somewhat with this matter, and recognized that there are cases where indirect damages should be allowed.

In Vol. 51 of *Eng. Record* No. 20, there is an editorial in which it is pointed out that where (for example) a manufacturing plant must be moved because of the occupation of its site by a new reservoir, this question of indirect damages might fairly arise. The manufacturer would naturally claim that it was a disadvantage to him to be moved, and for the *moving* he would undoubtedly be made whole. Then he would claim that there was a further indirect damage to him by reason of his being obliged to do business at the new place. A jury might find, however, that it was *in fact* more advantageous to him to have to do business at the new place instead of at the old location. If the equitable maxim "He who seeks equity must do equity," were now to be applied, should not the manufacturer be obliged to pay for the benefit which he has received? There is now no evidence perhaps that this last step has or will be taken, but the argument serves to show the difficulty of proving the amount of indirect damages, and it is said that in suits brought under circumstances of this sort the awards made on claims for indirect damages have been disappointingly small, for the reasons just given.

App. Note 9. (§ 131.) **LIQUIDATED DAMAGES.**

It has been previously hinted that contract provisions bearing upon liquidated damages would need careful scrutiny because they impinge upon that important contract essential, viz.: An enforceable contract must not be contrary to public policy.

The element of public policy here raised is to the effect that every one has a personal right to have his grievances heard in a court of justice. The constitutional and historical background of this proposition cannot be entered upon here. Suffice it to say that it has been regarded as a fundamental maxim of Anglo-Saxon jurisprudence since the day of Magna Charta. Therefore with a view to extending the protecting mantle of the law over those not wholly competent to safeguard their own interests, the courts have always refused to enforce certain kinds of agreements, on the ground that a person

* See §§ 130, 157.

could not contract away his legal right to be heard in court. It will not be unjust to say, therefore, that contract provisions as to liquidated damages are regarded as falling within this class, and are contemplated by the courts with something akin to professional bias or prejudice.

There is a great difference, however, between the power of the parties to bind themselves to pay bonuses for completion ahead of time, and the contrary proposition, to enforce the payment of large sums as *penalties* for failing to complete at such specified time. As previously shown under "Consideration," stipulations as to bonuses for early completion will not be inquired into, since it is no concern of the Court to find out whether or not it was really worth the bonus to have the thing done so early; the parties themselves are the best judges as to that. But the tendency to oust their jurisdiction involved in avowed penalties is a matter the courts have consistently frowned upon.

Even where such penalties are expressly stipulated for, and every effort is made by the parties to have them construed as essential parts of the contract, yet under *such* an agreement the injured party can recover only the *actual* damages received by himself. As already noted, about the only situations where liquidated damages expressed in the contract will be allowed is where for special reasons it is practically impossible for the Court, or a jury, to ascertain the *actual* damages. It may well be expected, therefore, that the courts will disregard the actual language used, and will inquire as to the *spirit* underlying it. But irrespective of the language, it will often be very difficult for the Court to decide whether in a given case liquidated damages are called for which *can* be allowed, or whether there is a penalty demanded which can *not* be allowed.

CONTRA. — There is another situation, however, in which liquidated damages figure, and which the student and the engineer should clearly discern. Suppose that the contract makes no mention of penalties or damages, liquidated or otherwise, and breach of some sort or abandonment has occurred. It is a well settled policy that "The law favors compromises," — hence if *now* the parties get together and liquidate, i.e. ascertain and agree upon their damages, such an agreement can be enforced. It will be observed that in effect here is a new contract which either in terms or by implication abrogates and discharges the original contract. And as the second contract is of a sort which the spirit of the law plainly favors, the suspicion of "ousting the Court's jurisdiction" is entirely removed.

App. Note 10. (§ 168.) **Electrolysis.**

The view of the courts upon electrolysis may be seen in *Eng. News* January 3, 1901, where a Gas Company is suing a Street Railway Company for electrolytic damage to its mains. The Court says: "The defendant can, by the use of approved appliances at a reasonable expense, so operate its cars as to avoid injuring the plaintiff's pipes. But the plaintiff cannot by any known method protect its pipes from injury."

"The plaintiff owns its pipe line laid in the street by legal authority. The Street Railway Company seizes upon this property and makes use of the pipes as a conductor for its return current, and in so doing greatly injures and in some instances wholly destroys them, and this is done under a claim that

it is performing a public service under authority of law. Is not this a taking of private property for public use, and for which just compensation must be made? * * * * "

"The city could not and did not grant a monopoly of the street to the defendant, and when the tracks, poles and wires were placed in the street the Railway Company knew that gas and water pipes might be laid in the street at any time, and it acquired its rights to run an electric road subject to that fact and all the consequences that might follow. The plaintiff is not a trespasser, but occupies the street lawfully, and while there its property is taken by the Railway Company as a consequence of its operations. 42 Fed. Rep. 279."

"Where a person is making a lawful use of his own property, or of a public franchise in such a manner as to occasion injury to another, the question of his liability will depend upon whether he has made use of the means which, in the progress of science and improvement, have been shown to be best."

"A street railway company is not, however, bound to adopt the latest invention, nor to adopt any before its utility and practicability have been demonstrated by use. But * * * when at reasonable expense, by the adoption of well known and approved appliances, the injury could be avoided, and the person injured is powerless to guard against or prevent such injury, then it must be held to be negligence in the use of its franchise on the part of such corporation not to adopt such appliances." (See also App. Note 1.)

App. Note 11. (§ 190.) **Appropriation of Municipal Water Supply.**

The Supreme Court of Georgia (49 S. E. Rep. 779) has settled for that jurisdiction, at least, the following: *First*, a municipality that buys a piece of land upon a non-navigable stream several miles distant from its corporate limits does not thereby become a riparian owner sufficiently to become entitled to take water therefrom for its city water supply. *Second*, that the right of a *bona fide* riparian owner to have the water come to him in its usual and natural flow and condition is a right inseparably connected with his land, and to deprive him of it without due process of law is confiscation. *Third*, equity will enjoin such a taking by the municipality in derogation of the riparian owner's right, even though he may not be at once seriously injured by it.

App. Note 12. (§ 210.) **Lateral Support and Negligence.**

Since the owner of land has the absolute right to have his land remain in its natural condition, if his neighbor digs so as to injure this right, the first has an action against the second without proof of negligence. But the damages are limited to injury to *land*, and do not include any injury to buildings or improvements. This is because no one can enlarge his neighbor's liability by reason of an interference with this right. If a man is not content to enjoy his land in its natural condition but wishes to build upon it, he must either make an agreement with his neighbor, or else carry his foundations so deep or take such other precautions as to insure the stability of his buildings or improvements whatever excavations his neighbor may afterwards make in the exercise of *his* own right. * * * No *easement* of lateral support can be acquired because the next owner (of the servient [?] estate), cannot see, use,

or know of that use and support; hence he cannot acquiesce in it, and hence there can be no prescription. (122 Mass. 199.)

App. Note 13. (§ 268.) **Construing Partnership Articles.**

The partnership relation is one of contract, primarily, and the partners may by agreement define their various rights, relations, and interests in the partnership. If they *fail* to make specific provision for any case that may arise, the following rules of construction will apply.

(1) All partners are entitled to share equally in the capital and profits, and they must contribute equally to meet the losses.

(2) The firm must reimburse every partner for payments made out of his own personal property, for matters in the ordinary and proper conduct of the business, or in reference to matters done and necessary for the preservation of the property or interests of the firm.

(3) Every partner may take part in the management of the partnership business.

(4) No partner is entitled to remuneration for acting in the partnership business. His compensation lies in being entitled to a share in the profits when they shall have been ascertained.

(5) No new person shall be introduced into the firm without consent of the rest of the partners.

(6) Partners are bound to render true accounts and full information upon all things affecting the partnership business to any other partner, or to his legal representatives, as his executor, or administrator.

App. Note 14. (§ 274.) **Final Accounting.**

Solvent partners may voluntarily close up their business, settle their accounts, and divide their surplus. Where the firm is insolvent or the partners cannot agree, or conflicting claims arise, the intervention of a court of equity will be necessary. The method of accounting may be outlined as follows:

(1) Ascertain how the firm stands toward all outsiders.

(2) Ascertain the extent of the obligation as between each partner and the firm, including (*a*) what each has contributed, either as capital or advances; (*b*) what each should have brought in, but has not; (*c*) what each has taken out more than the others.

(3) Apportion the profits to be divided, or the losses to be made up, and ascertain what each has to pay to the others so as to settle cross-claims.

When the accounting is complete, the *assets* are distributed in the following order:

First: In paying the debts due from the firm to third persons.

Second: In repaying to each partner his advances.

Third: In repaying to each partner his capital.

Fourth: The balance will be distributed equally as profits, unless there is an agreement that the proportions shall be different. (Lindley on Partnership, 402.)

App. Note 15. **SURETYSHIP.**

There is a distinct body of contract law relating to Suretyship, as there is in Sales, Partnership, etc. It is the present purpose to outline a few of its salient principles.

Suretyship Defined: " Suretyship is the obligation of one party to answer for the debt, default, or miscarriage of another." (Bouvier's Law Dict.) To constitute the status of suretyship, three essential elements must be found:

(*a*) There must be three parties, a creditor, a principal debtor, and a surety.

(*b*) There must be two obligations running to the creditor's benefit, — one from the principal debtor, and one from the surety.

(*c*) As between the principal debtor and surety, the former must be the person ultimately liable.

In contradistinction to suretyship is a contract for *indemnity*, where the obligation is given by X to protect the indemnitee (S) against his liability to another (C, the creditor), whereas by *suretyship* S guarantees the discharge of X's liability *to* C. Indemnity is well illustrated by ordinary casualty insurance, where, for instance, an employer is insured against liability to his employees for personal injury, etc.

Alteration of Contract, or Changes Affecting the Risk. — As already treated at some length (see § 32) alterations in the contract may materially modify the surety's relation to the whole transaction. There are, therefore, two cases presented: (*a*) Where the original agreement between the principal and creditor has been altered, either physically on the face of the written instrument, or they have by a collateral contract either rescinded or modified all or a part of the original agreement. When these acts have taken place without the surety's consent or ratification, he plainly cannot be held in a suit upon the altered contract, since his rational defence is that he never made such a contract.

(*b*) Where though the original contract remains unchanged, its performance as between the creditor and the principal debtor is not in precise accordance with its terms; or where the principal and creditor have, in the course of performance brought about a condition of affairs not fairly to have been expected by the surety. Here, the principal question is held to be whether the surety's risk has been unfairly increased by actions of the principal and debtor outside the contract. If this condition is found, the resulting situation is that of a case where an attempt has been made to bind a third person. (See § 31.) In such a case (131 Mass. 77) the Court said: " If such change amounts to a substitution of a new agreement for the old, so as to discharge and put an end to the latter, the surety is discharged. But if the change is from its very nature beneficial to the surety, or it is self-evident that it cannot prejudice him, the surety is not discharged." The weight of authority is against this view however.

Relation to Specifications. — In cases on building contracts where changes are made during progress of the work, the question of whether the surety was released or not has frequently been held to depend upon the proper interpretation of the surety's contract. If such interpretation properly makes the specifications a part of *his* contract, then of course alteration of them effects his release; otherwise not, unless there are special circumstances which vary the risk and raise an equity in his favor. (186 U. S. 309, and 8 Wall. 13.)

Fraud, Misrepresentation, etc. — We have previously seen the fatal effects of fraud upon contracts generally. Its importance in contracts of surety is no less. The general trend of the cases is that if the creditor and debtor deal

in any way unfairly, with a resulting increased burden upon surety, he will be discharged. Equally pertinent is the rule that if any unfair dealing is practised directly upon the surety by the creditor, the contract of surety is ineffectual. A distinction is made, however, between cases where the creditor actually misrepresents *facts*. and those where he says certain things *will* come to pass. For if such statements are merely of his expectation, failure to make them good will not discharge the surety. But if on the other hand they are essentially *promises*, a breach of them will work the surety's discharge on the ground of failure of consideration, or breach of an implied or express condition precedent.

Indemnity. — The student should note carefully that with reference to engineering contracts, the whole matter of suretyship does not in any way decrease the responsibilities and burdens of the contractor. It is merely a device for strengthening the contractor's credit for the benefit of the owner, or the contractor's employer.

In fact it is common for the contractor to enter into an express contract of indemnity with his surety, that in the event of the surety's having to pay, the contractor will later make him whole. But in the absence of such a contract, nevertheless the surety can hold the contractor upon an *implied* contract of indemnity, if the surety has to pay the whole or any part of the contractor's debt, or default, etc.

From the foregoing principles, important rules of the law of suretyship spring. Thus, if a surety pays, he succeeds to the rights of the creditor whom he has discharged, and may prosecute the original obligation against the debtor in the creditor's name. This is called the right of **subrogation.** If the debtor has been obliged to hypothecate other securities by putting them into the hands of the creditor, the surety, upon paying, succeeds to the possession of such securities, and holds them in his own behalf. Again, if the debtor has assets which he refuses to apply to his debt, the surety can, in a proper case, come into a court of equity and compel his principal to pay the debt before the creditor collects from the surety. If successful in this, of course the surety is exonerated from payment of the debt.

Discharge of Surety. — In general it may be said that if the debtor is discharged otherwise than by an act of the creditor (as bankruptcy, death, etc.), the surety is not discharged. But any act of the creditor which results in the complete or partial discharge of the debtor results in discharging the surety to the same extent.

App. Note 16. (§425.) **Types of Engineering Contracts.**

The common law essentials must be observed in forming any contract if it is to have binding effect. That is not saying, however, that the provisions of contracts framed to secure substantially the same results may not be varied so as to require grouping as different types. This is particularly true of engineering contracts, and the prominent features of three types will be outlined here. The engineering contractor classifies them according to the mode of letting, or awarding the contract, since each type differing in this respect carries also its own special characteristics.

Mr. Frank B. Gilbreth, a prominent and widely experienced contractor,

writing in *Engineering News*, October 18, 1906, describes in a masterly fashion the salient features of (*a*) " Lump-Sum," (*b*) " Percentage," and (*c*) " Cost-Plus-a-Fixed-Sum " contracts. He analyzes each upon four points:

(1) Lowest total cost to the owner.

(2) Greatest speed of construction.

(3) Best workmanship.

(4) Future business between owner and contractor, based upon past experience.

(*a*) Under the " LUMP-SUM " contract the contractor agrees to furnish all labor and materials necessary to complete a certain definite piece of work, (plans, specifications, and details of which *must be complete*), for a definite lump-sum (or at unit-prices).

While at first glance this appears to be a very reasonable, harmless and peaceful sort of a contract, it is in fact often anything but that. Difficulties arise when the owner changes his mind, or the engineer changes his plans, and the opportunity arises for the contractor to charge for " extras," — often a thing he has been earnestly hoping for. From now on the essence of the lump-sum theory is violated, for there is now added the contingencies of costs for extras, time extensions, and lawyer's fees.

As the interests of the owner and of the contractor are opposed financially, the above loop-holes, and many others practically unavoidable in a lump-sum contract will ordinarily be taken advantage of by the contractor, since the money he can save he is saving for himself.

" What does the owner pay for under this form of contract?" The first premise is that the contractor will not work without a profit. Furthermore, he is taking the risk of unfavorable circumstances; he therefore adds a good stiff percentage so that he may be sure of his profit, whatever happens. If the possible extra hazard does not materialize, then the contractor has made two profits, if he has previously allowed for a reasonable profit supposing that he will do the work under *ordinary* conditions. But *specially favorable* circumstances are as likely to arise, on the average, as often as the unfavorable ones first contemplated, and in such a case the contractor will have made three profits.

Another disadvantage is that the owner cannot hold the contractor to the speed requirements, nor to the date of completion in case he has ordered extra work. (See " Effect of Alterations " §§ 32, 109.)

(*b*) In the " PERCENTAGE " contract, the contractor agrees to furnish all materials and labor necessary to complete the entire undertaking for cost, plus an agreed percentage of the said cost. This would seem to be a very desirable arrangement. " Nearly perfect, — but not quite," says Mr. Gilbreth. The owner can regulate the time of completion, the class of labor he will employ, the modes of execution, quality of materials, etc. The interests of the owner and contractor are identical, so far as speed of construction and the desire to obtain good work are concerned, and the chances for continued pleasant relations are good, if it were not for the fact that the owner is apt to suspect that the contractor may be increasing the cost for the sake of getting more profit, since that is directly proportional to the cost of the whole undertaking.

(*c*) To remove the above temptation from the path of the contractor, the "COST-PLUS-A-FIXED-SUM" contract was devised. It possesses all the advantages of the "percentage" contract, and the only discoverable disadvantage is that the owner cannot possibly get his undertaking completed for less than cost, as might happen under the "lump-sum" contract, — supposing the contractor had made an error in his bid, and had not had an opportunity to recoup himself on "extras."

Under a scheme of profits equal to a predetermined sum, the interests of both parties are identical, since the owner knows in advance just what the contractor will make, and as the contractor's profits or salary are assured, it is for his interest to perform the work in such a manner as to retain the owner's patronage. This means that he will honestly endeavor to perform the work in the shortest possible time, with the best possible workmanship, and for the least cost. And the money which his skill and enterprise can save inures to the benefit of the owner, who is, moreover, relieved of the menace of "extras" done at excessive costs. The owner may change his plans at will, he may purchase his own materials if he so desires, or he may require that proposals to buy shall be submitted to him in advance of ordering the materials. He may complete his excavations and foundations while plans for the superstructure are being drawn, and can have any number of skilled or carefully trained mechanics massed on the work as his own judgment or initiative indicates. Many other advantages will accrue to him which it is not necessary to enumerate here.

From the contractor's standpoint, the advantages are not less significant and important. He now has an opportunity to win high business prestige solely upon his merits. His profits will be assured. He will be free from relations with owners who have not the courage to take legitimate risks in conjunction with their undertakings, and who wish to saddle them upon a contractor on a lump-sum basis, and leave him to gamble his way out as best he can. And last, but not least, the contractor has the satisfaction of dealing with an owner who has no reason to suspect him of overreaching, who is not in constant dread of extortionate charges for extra work, and who is in fact a party to a contract offering him complete financial insight into the job.

Mr. Gilbreth intimates that contractors are not wanting who, like wolves, are willing to masquerade in sheep's clothing, if they may thus ensnare the unwary. He points out that this is the effect of the "Cost-Plus-a-Fixed-Sum-and-Guaranteed-Maximum" contract. At first glance such a contract appears to have the advantage of the first and third types herein discussed, but this is fallacious. In fact, he says, they are nothing more than lump-sum contracts (if they have a guaranteed maximum cost), and the "fixed" sum is fixed only in case the maximum is not reached.

The entire theory of the "cost-plus-a-fixed-sum" type is that the owner shall have complete control and his own way in any and all matters pertaining to his work. And it is obviously ridiculous and absurd, under these conditions, to expect a contractor to guarantee any maximum cost. But in order to get satisfactory results from a cost-plus-a-fixed-sum contract, it must be clearly understood that the owner is to pay *all the cost* and that the *entire fixed sum* is to be *net profit* to the contractor.

Mr. Gilbreth's final comment upon this type of contract is worthy of

serious consideration from engineers who let contracts, and would like to see the business of engineering contracting raised from a plane of sordid gambling to a more enlightened and equitable one befitting its importance to the engineering profession. He says, "The cost-plus-a-fixed-sum contract has proved, time and again, that the same amount of effort, thought, and money required to win lawsuits, can be better spent to reduce the costs and the time of completion, and in securing better workmanship."

In writing the above, Mr. Gilbreth probably had agreements for the construction of buildings largely in mind. The student should not jump to the conclusion that this form of contract is universally adaptable to all classes of construction work, nor that it will probably ever wholly supersede the lump-sum contract. It is submitted that a wider adoption of it would lessen litigation and raise the general business level of contracting.

App. Note 17. (§ 397.) **Objects of Specifications.**

Mr. J. H. Bacon, in a paper before the American Society of Engineering Contractors, January 10, 1910, discussing the purpose in specification writing, observes that there are two main objects common to *all* specifications: (1) To define the work to be done so that any competent contractor may submit an intelligent bid. (2) To establish a guide and a standard by which the contract may be interpreted with fairness to each party.

To obtain the second result three cardinal principles should be observed:

(*a*) The schedule of prices should include every item that can possibly be foreseen with a view to reducing "force account" work and "extra items" to a minimum. This will prevent either party from claiming or denying without justification that any piece of work is covered by the specification.

(*b*) Every item in the schedule of prices should be adequately covered by a corresponding clause or section in the specifications.

(*c*) The specifications should be so worded as to reduce to a minimum the possibility of difference of opinion as to which clause of the specifications will cover any given item in the schedule of prices.

With these principles in view, the expression, "In the opinion of the engineer," or its equivalent, should be excluded as far as possible. The price to be paid should be connected with the work to be done by concise and clear language. The contractor should have no excuse for insuring himself against loss by bidding higher prices than the actual work justifies.

Difficulty of the Task. — It is demonstrable that specification writing is worthy to rank high among other more showy, but scarcely more interesting professional work. Indeed it requires for its satisfactory accomplishment a high degree of technical knowledge, more than a smattering of legal information, and a sound commercial training. If in addition, the writer is possessed of sound common sense, allied to practical experience in his work, he will be well fitted to assist in dispelling the much too popular fallacy that the preparation of engineering specifications is a necessary but uninteresting piece of drudgery, carrying with it no reward but that which always accompanies work well done. (H. L. Butler, in *Engineering-Contracting*, February 3, 1909.)

App. Note 18. **TRUE ECONOMY IN GOOD SPECIFICATIONS.**

In *Engineering News*, September 18, 1902, there is a strong editorial

containing pertinent criticism of current practice in specification writing, some of which is well worth quoting. A valued correspondent with long experience in engineering work submitted a definition, suggested by numerous specifications in current use. It was: "A specification is an instrument or document purposed to set the contractor guessing at the engineer's meaning." And, it is asked, if this indictment is true, why do engineers write such specifications?

The reason, it is urged, is easily seen. The engineer writes his specifications to fit, — not the honest contractor who aims to do good work, and has a reputation to that effect, but to fit the dishonest and crooked contractor who will scamp his work at every turn. The engineer knows that he may be obliged to let the work to a man of the latter class, and wishes to secure all possible hold upon him. Therefore, if the specification leaves the engineer unlimited discretion as to accepting the work, he feels that he can better control the sharp contractor who seeks to take unfair advantage of every loop-hole. This is the engineer's view of the case.

Looking from the honest contractor's standpoint, it is evident that even with the most complete and definite specifications he must, in most engineering work, take a large amount of risk. When the specifications are incomplete and indefinite, and the engineer's "judgment" is a prime element, the contractor must often reckon on it as being almost the largest element of risk involved.

If we candidly consider the question, "Is it not a mistake to place any unnecessary risk upon the contractor?" it is self-evident that every such added risk means that a bidder who is financially responsible must add enough to his bid to cover that risk. The irresponsible bidder has little to lose, and the result is that too often he submits the lowest bid. If he is lucky he makes a profit; but if luck goes the other way the contract will probably be abandoned, and there will be the expense and delay attendant upon re-letting the work.

Nor is this the sum total of the evils attending poor specifications. From time immemorial manipulation of the specifications has been a favorite scheme of corruption in contract work. If specifications, the most severe that wit can devise are made, they can be defended as necessary requirements of the work. But the contractor "on the inside," is aware that they will not be enforced, since he knows what his competitors do not know, — the "personal equation" of the engineer.

Considering all these matters, is it not fair to judge a specification by the extent to which it makes definite and clear the work to be done. When this result is accomplished, the contractor can estimate with certainty what financial obligations he must assume, and need not add on for uncertainties of meaning.

This editorial analyzes the contractor's status in the specification of an important United States Government contract, laying especial stress on a blanket clause covering "Omissions and Misdescriptions." It points out the danger lurking in clauses pertaining to "Control of Work," and "Progress of Work" is commented upon, all of which may be read to advantage by the student or engineer. It is shown that "hair-splitting requirements" in specifications are factors wherein the "personal equation" of the engineer enters prominently and affects the price which the contractor must bid. More-

over, many of these exquisite refinements are so technical or highly theoretical as to be impracticable of execution.

If important points in the work are necessarily uncertain and subject to numerous variations, it is sometimes argued that " blanket clauses " are the only way of meeting the difficulties. In rebuttal it is urged that the only logical way of dealing with such situations is to do the work by day-labor.

App. Note 19. (§ 400.) **"Political Contracts" and "Trouble Breeders."**

Editorial writers have long pointed out that in municipal work as elsewhere, specifications are frequently so drawn as to place all burden of doubt on the contractor. This necessarily breeds a class of contractors who are not primarily business men so much as they are gamblers, or they may be purely politicians who rely upon their " pull " to save them from financial loss in case the conditions prove worse than anticipated.

It is apparent that a clear, complete, and fair specification, if universally used on municipal contract work, would soon eliminate such gamblers and politicians, for as a rule they do not have the business ability to successfully compete with the modern contractor.

Three items, known as breeders of trouble, may well be mentioned here. It is said that the great majority of lawsuits brought by contractors arise (1) over excavation, or (2) over changes in construction necessitated by the discovery of unexpected conditions when the excavation was made.

The third relates to the power or authority of the engineer on the work. Recently the General Contractors' Association, of New York City, has asked that in all future contracts for city work, the provision that the decision of the Chief Engineer shall be final and binding in settlement of all disputes, measurements of quantities, and interpretations of specifications, be strongly modified, since they assert (probably with reason), that such provisions have been the subject of endless discussion, friction and litigation.

App. Note 20. **Bibliography of Specifications.**

The following list of current specifications makes no claims for completeness. It is given in the hope that from some of its references the practicing engineer may get assistance in a given problem which confronts him. The list, therefore, has been chosen with a view to its accessibility to the engineering profession, — probably each specification can be obtained by application to the Company named. The number following the name of the subject is a part of the title, and should be so used.

For convenience, the specifications have been grouped by subjects, alphabetically.

Asphalt, *Discussion*, in *Engineering Record*, Vol. 58, p. 31.

Asphalt Pavements, Richardson (Wiley); *Asphaltic Oils* (Hot Treatment), *Engineering-Contracting*, December 8, 1909; *Asphalt Macadam, Municipal Engineering*, October, 1909, p. 274.

Cables.

Single Conductor, Intermediate Cable, Type 44, #419, U. S. Signal Corps; *Electric Wires and Cables, #15W1*, United States Navy Dept.; *Twisted Pair Outside Distributing Wire*, N. E. T. & T. Co.; *Construction of High Tension Power Transmission Lines above Telephone Wires*, Am. Tel. &

Tel. Co.; *Galvanized Steel Wire, #2965*, Am. Tel. & Tel. Co.; *10,000 pound Strand, #2881*, Am. Tel. & Tel. Co.

Coal.

Coal, #10, International Paper Co.; *Coal*, Purchased for New York City, *Engineering News*, September 9, 1909.

Concrete.

Portland Cement, American Society Testing Materials. Available from most cement companies; *Pavement Foundations.* Pamphlet issued by Warren Bros. Co., Boston, Mass., and in *Engineering-Contracting*, November 10, 1909; *Granolithic Mill Floors*, Aberthaw Construction Co., Boston, Mass. in *Engineering-Contracting*, June 1, 1910; *Concrete and Railway Masonry*, Baker's *Masonry*, Appendixes II and III, 3d edition, 1909.

Chemicals.

Alum, #18, International Paper Co.; *Aluminum Hydrate, #25*, International Paper Co.; *Bleach, #17*, International Paper Co.; *Disinfectant, #27A*, Penn. R.R. Co.; *Lime, #2*, United Box Board & Paper Co.; *Manganese Dioxide, #3*, Carolina Glass Co.; *Nitre, #4*, Carolina Glass Co.; *Oil of Vitriol, #14*, International Paper Co.; *Sal Ammoniac, #24S5*, United States Navy Dept.; *Soda Ash, #101*, A. D. Little Standard; *Soda Ash, #5*, Am. Writing Paper Co.

Iron.

Cast Iron Wheels, #14C, Penn. R.R. Co.; *High Grade Wrought Iron*, Boston Elevated Ry. Co.; *Merchant Bar Iron, #9C*, Penn. R.R. Co.; *Staybolt Iron, #98*, B. & M. R.R. Co.; *Wrought Iron*, Brooklyn Rapid Transit Co.

Oils.

Analysis of Dead Oil of Coal Tar or Coal Tar Creosote, #1458, Am. Tel. & Tel. Co.; *Asphaltic Oils* (Hot Treatment), (see Asphalt); *Bituminous Compound*, Boston, City of (Street Dept.); *Lard Oil, #18*, Penn. R.R. Co.; *Oils*, Am. Bridge Co.; *Linseed Oil*, Am. Linseed Co.; *Heavy Machinery Oil, #3*, Am. Writing Paper Co.; *Turpentine*, Southern Railway Co.

Machinery.

Elliptic and Semi-Elliptic Springs, Am. Locomotive Co.; *Railway Motor Pinions for Motors of 50 H.P. and over*, Am. St. & Interurban Ry. Eng. Assn.; *Elliptical Springs, #13*, Penn. R.R. Co.; *Gears*, Interborough Rapid Transit Co.

Masonry.

Concrete and Railway Masonry, Baker's *Masonry*, Appendixes II and III, 3d edition, 1909; *Granolithic Mill Floors*, Aberthaw Construction Co., Boston, Mass., in *Engineering-Contracting*, June 1, 1910.

Metals. (See Steel.)

Babbitt Metals, Interborough Rapid Transit Co.; *Bearing Metal, Babbitt & Bell Metal, #C.S.12*, Union Pacific R.R. Co.; *Ingot Tin, #21T2*, United States Navy Dept.; *Composition Castings*, Brooklyn Rapid Transit Co.; *Tin Coating for Copper Wire, #B37*, N. E. Tel. & Tel. Co.

Miscellaneous.

Dust Preventives. See also Richardson's *Asphalt Pavements*, Bulletin #34, U. S. Dept. Agriculture (in Hubbard's *Dust Preventives*); *Inspec-*

tion of Material, Parts I and II, United States Navy Dept.; *Symposium on Penalties, Damages, Duties of Inspectors, etc., Engineering-Contracting*, November 17, 1909; *Twine, #28*, International Paper Co.

Paints.

Brown Freight Car Color, Central R.R. of N. J.; *Dark Trimming Paint, Color No. 2, #43A*, Norfolk & Western R.R. Co.; *Freight Car Color No. 21, #32A*, Southern Railway Co.; *Painting All-Steel Cars, #43E6*, B. & O. R.R. Co.; *Standard Black for Use on Steel or Iron, #58*, Superseding Experimental Specifications of Sept. 18, 1905, Penn. R.R. Co.; *Standard Black Paint, #137*, Rock Island Lines; *Standard Paint Specifications*, Canadian Pacific Ry. Co.; *Tuscan Red, #37A*, Penn. R.R. Co.

Pavements.

Brick Pavement, National Paving Brick Manfrs. Assn., Will P. Blair, Secretary, Indianapolis, Ind.; *Creosoted Wood Paving Blocks*, Tabulation of requirements of 14 American cities, in *Engineering-Contracting*, June 15, 1910. *Pavement Foundations*, pamphlet issued by Warren Bros. Co., Boston, Mass., and in *Engineering-Contracting*, November 10, 1909; *Bituminous Macadam*, N. Y. State Highway Speci. and in *Engineering-Contracting*, December 8, 1909; *Street Roadway Pavements*, Samuel Whinery, Eng. News Pub. Co., 1907.

Pipe.

Seamless Copper Pipe, Iron Pipe Size, #25P2, United States Navy Dept.; *Rubber Hose, #101*, B. & M. R.R. Co.

Sewers.

Sewers, Trenching, Filling, Paving, Masonry, Catch Basins, etc, Charles Carroll Brown, *Engineering World*, October 5, 1906.

Steel and Structural Work.

Steel Bridges, different authors, Eng. News Pub. Co.; *Galvanized Sheet Steel, #21S1*, United States Navy Dept.; *Steel Passenger and Freight Car, Locomotive and Tender Axles*, Southern Railway Co.; *Boiler and Fire Box Steel, #1A*, Penn. R.R. Co.; *Electric Wires and Cables, #15W1*, United States Navy Dept.; *Structural Steel*, Freitag's *Structural Engineering; Steel Rails*, Comparison of five specifications for modern Bessemer and open hearth steels, *Railroad Age Gazette*, May 21, 1909; *Spring Steel, Open Hearth, #105*, B. & M. R.R. Co.; *Steel Blooms and Billets for Rod Straps and Miscellaneous Forgings, #90*, B. & M. R.R. Co.

Tar.

Tar, Board of County Road Commissioners, Wayne County (Pa.); *Dust Preventives*, see also Richardson's *Asphalt Pavements*, Bulletin #34, U. S. Dept. Agriculture (in Hubbard's *Dust Preventives*); *Floors with Tar Concrete Base and Wood Tops*, Aberthaw Construction Co., Boston, Mass., in *Engineering-Contracting*, June 1, 1910.

Waterproofing. Jour. Assn. Eng. Societies, June, 1910.

Wire.

Special Copper Returns on 5th St., etc., #78, appendix 3-8-25-90, Bell Tel. Co. of Phila.; *Trolley Wire*, Boston & Northern St. Ry. Co.

App. Note 21. **Intention of Parties as to Passing Title.**

Since in many sales the parties fail to *express* their intention as to when

title shall pass, or express it too vaguely to make their intentions certain, rules for construing their intentions from their acts have been developed. Several characteristic situations have thus been provided for.

(1) Sale of a Specific Chattel Unconditionally. Where the subject of the contract is agreed upon, and the article is ready for immediate delivery, the law presumes an *immediate* passing of title. This rule is never questioned where the price has been paid, or where credit is expressly given. Some jurisdictions hold that where the sale is for cash, payment is a condition precedent, but others follow the English view that title *passes*, reserving to the seller his lien for the price.

(2) Sale of a Specific Chattel Conditionally. If by agreement something remains to be done by the seller to put the goods into deliverable condition, title will not pass until such work is done. Thus the testing of a dynamo, or water-wheel, if agreed upon, would be a condition precedent to the passing of title. Probably the best authority holds that where the price depends upon the quantity or quality of the goods, the weighing, measuring, or testing of the goods are conditions precedent to the passing of title.

(3) Sale of Goods not Specified. Where the sale is of goods not specified, but covers, for example, goods to be manufactured though not forming a specific lot, title does not pass until there is an appropriation of them to the contract. (See § 313.) If the goods are part of a uniform mass, as so many tons of rails, so many kegs of spikes, etc., a few American courts hold that no appropriation is necessary to pass title. The greater weight of authority, however, is to the effect that appropriation is no less necessary because of the above facts. (Grain in elevators forms a recognized exception to the rule.)

(4) A *subsequent* appropriation may complete the passage of title, where the class of goods is agreed upon, though the particular chattels are not specified.

(5) If the goods are to be manufactured upon the order of the buyer, the title does not pass until the goods are finished and appropriated to the contract. In New York this rule has been held to still apply even when the entire price has been paid in advance, or where the buyer superintends the work.

(6) Reservation of the *jus disponendi* (see § 315) is a highly practical sort of construing which the seller puts upon the question of passing of title. By it he unequivocally shows that he does not *intend* the title to pass until the purchase money is in sight.

App. Note 22. **Advantages in Corporate Form of Organization.**

The advantages of transacting business as a corporation over undertaking it individually or as a co-partnership, may be briefly stated as follows :

(1) There is immunity from *individual liability* for debts arising out of the conduct of the business. (Compare this with the doctrines of partnership.)

(2) The element of *perpetuity* for the life of the enterprise is secured, so that the death of any of the parties interested does not interfere with the conduct of the business.

(3) The "*good will*" and prestige of the business is not then the property of an individual, but belongs to the corporation.

(4) Capital is readily obtained through the sale of stock, thus doing away with the necessity of admitting general or special partners into the concern.

(5) The sale of bonds, or of preferred stock facilitates the raising of additional funds.

(6) The individual interests in the business may be sold or *transferred* with ease, and it is not necessary to obtain the consent of any third party to the sale.

(7) The danger of being ruined through the *dishonesty* or extravagance of a partner is removed.

(8) The *expense* connected with incorporating an enterprise is small.

(9) More far-reaching and extensive powers are usually conferred upon a corporation than are possessed by a partnership or an individual,

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