LEGAL FOUNDATIONS OF CAPITALISM

CHAPTER I

MECHANISM, SCARCITY, WORKING RULES

Economic theory deals with two concepts, Value and Economy. Abstract reasoning regarding these concepts rests ultimately on mathematical concepts of quantity, time and energy. The three are inseparable, for quantity and time are dimensions of energy. The quantity relationships of energy, usually termed "statics," turn on the problem of the relation of the parts to the whole, while the time relationships, usually termed "dynamics," are the relations of a process that connects past, present and future.

Value and Economy are distinguishable as two quantitative relationships of the parts to the whole. The whole is always a function of its parts, but the whole may be the *sum* of its parts or the whole may be a *multiple* of its parts. The former is the quantitative concept of Value, the latter of Economy. A "fund of value" is the sum of the values of all the parts that constitute the whole. A certain quality which we call Value is abstracted from other qualities of commodities, is measured in money as prices, and these are then added together, so that the sum of the parts is the sum of a *similar* quality of all the parts.

But Economy is the proportioning of parts that have different qualities yet are complementary to each other, such that one kind of energy acts upon another kind, and the resultant is larger or even smaller than the sum, according to the good or bad proportions in which the limiting and complementary parts are combined. Value is a sum of similar values, but economy is a proportioning of dissimilar values.

These two quantitative relationships of the parts to the whole run everywhere in economic theory. A sum of individuals is the total population, but a proportioning of different kinds of activity of different individuals is a society. A sum of prices is the total business assets of a firm, but a proportioning of land, labor, cap-

ital and management is a going concern. Wages are a sum of money paid for periods or pieces of work, but a proportioning of different kinds of activity in acquiring the wages is a job. A sum of all the prices of all kinds of commodities is the total nominal wealth of a nation, but the proportion existing between one commodity and all the others is supply and demand.

The concept of good or bad economy is so self-evident, and its psychological equivalent, the sense of fitness or unfitness, which is "common sense," or "good sense," or merely habit and approved custom, is so continually present in every act that, in the history of economic thought, good economy, which is merely a good proportioning of the parts, has often been either taken for granted or erected into an entity existing outside or above the parts. For, is it not an astonishing and blessed thing that the whole should be greater than the sum of its parts? And, how can the parts be greater than their sum unless a benevolent deity or "law of nature" organize them harmoniously? But a mark of the progress that has occurred in economic theory, from the time of Quesnay and Adam Smith, has been the emergence of the concept of good or bad political economy out of mythical entities such as nature's harmony, natural law. natural order, natural rights, divine providence, over-soul, invisible hand, social will, social-labor power, social value, tendency towards equilibrium of forces, and the like, into its proper place as the good or bad, right or wrong, wise or unwise proportioning by man himself of those human faculties and natural resources which are limited in supply and complementary to each other.

An accompanying mark of progress in economic theory is indicated by changing views as to the Time dimensions of value and economy. Early economists found the "cause" and "substance" of value in the stored-up energy of the past, either Quesnay's vital forces of nature, or Ricardo's and Marx's stored-up labor power. Then followed the hedonic economists who found value in the pains and pleasures of the present, aided perhaps by a calculating mechanism of the future, while the later theories find value in the hopes, fears, probabilities and lapse of time of the future, depending on the will of persons existing in the present. The progress has been from "efficient causes" flowing from the past into the present, to "final causes" originating in the purposes and plans for the future and guiding the behavior of the present. While the earlier theories were

quantity theories of value and economy, the later are expectancy theories.

These changes in concepts of quantity and time have accompanied changes in the concept of the energy itself which is the "substance" of value and the "cause" of economy. Early theories attempted to get away from the human will, since that was conceived to be internal, capricious, not subject to law, and therefore economics should be reduced to one of the nature sciences, analogous to chemistry, physics, or physiology. It should be a theory of commodities or mechanisms, not a theory of the will. But a larger knowledge of the human will, derived from the human-nature sciences of psychology, ethics, law and politics, begins to find the will, not in an unknowable caprice, but merely in human behavior, and this behavior begins to be formulated into natural laws of its own.

These many sciences of human nature furnish increasingly a foundation for economic theory, which is concerned with both physical nature and human nature. In one direction economy is a relation of man to nature, in another it is a relation of man to man. The first is Engineering Economy; the second is Business Economy and Political Economy. The first has given us theories of Production, Exchange and Consumption of Wealth, while Business Economy and Political Economy give us a variety of theories specialized in different branches of learning. Theories of Psychology deal with the relations both of man to nature and man to man—his feelings, intellect and will, his persuasions and coercions, his commands and obedience. These are inseparable from Morals, or Ethics, which deals with the good or bad, virtuous or vicious, right or wrong, uses that man makes either of nature or of other persons. This leads to Jurisprudence which concerns itself with both the rights, duties and liberties of Property and the powers and responsibilities of Sovereignty, which, again, are relations of man to man. And, finally, Politics deals with the mass movements and mass psychologies which define, enact and enforce private rights and official responsibilities according to notions pertaining to ethics, politics and economics.

Thus economic theory runs into other theories of man and nature, or else assumes certain common-sense notions regarding them. Early economists, whose outstanding theorists were Quesnay, Smith, Ricardo, Karl Marx and Proudhon, started with man's relation to nature, or engineering economy, in the form of commodities which

are produced, exchanged and consumed. But these commodities involved certain notions, express or implied, of human nature, of use-value, utility, scarcity, exchange-value, labor, saving, expectation, private property, liberty, government and economy, which split these physical or technological economists into the several schools of Physiocrats, Classical Economists, Socialists and Anarchists.

They were followed or accompanied by a school of Hedonists, or Hedonic Economists, whose outstanding names are Bentham, Senior, Gossen, Jevons, Menger, Walras, Böhm-Bawerk, Clark, and these concerned themselves with the subjective side of economic theory. Instead of a commodity their starting point was a feeling of pleasure or pain, of satisfaction or sacrifice, but these feelings turned out to be commodities after all. And while the later hedonists, by the device of diminishing and marginal utility, were able to interpret the concept of value as a function of economy, yet their individualistic point of approach required certain notions, express or implied, of ethics, law, private property, liberty, society, government, which the hedonists either took for granted without investigation, or avoided as being "non-economic" or "anti-economic," or erected into an entity such as "social value" or "fund of value."

These two classes of theories we designate mechanistic theories of value and cost, since they look to the physical sciences for their models of economic theory, and they work out their solutions on what may be designated the Principle of Mechanism. another class of theories, which we designate Volitional Theories, whose initial thinkers are Hume, Malthus, Carey, Bastiat, Cassel, Anderson, but especially the Supreme Court of the United States, start, not with a commodity or with a feeling, but with the purposes of the future, revealing themselves in rules of conduct governing transactions which give rise to rights, duties, liberties, private property, governments and associations. These are the reciprocal promises and threats, express or implied, of man to man which determine the limits of human behavior in its social and economic transactions. Instead of a commodity or a feeling, their unit of observation becomes a Transaction between two or more persons looking towards the future. Theirs becomes a theory of the human will-in-action, and of value and economy as a relation, partly of man to nature but mainly of man to man; partly of quantities and partly of expectancies depending on future quantities.

Meanwhile, ethical, philosophical and psychological, as well as economic theories, have been approaching a volitional theory. Psychology is becoming "behavioristic," philosophy and ethics "realistic" or "pragmatic," and economics has become historical, experimental and idealistic in that it deals with past, present and hopedfor or dreaded transactions as well as commodities and feelings. fact, transactions have become the meeting place of economics, physics, psychology, ethics, jurisprudence and politics. A single transaction is a unit of observation which involves explicitly all of them, for it is several human wills, choosing alternatives, overcoming resistance, proportioning natural and human resources, led on by promises or warnings of utility, sympathy, duty or their opposites, enlarged, restrained or exposed by officials of government or of business concerns or labor unions, who interpret and enforce the citizen's rights. duties and liberties, such that individual behavior is fitted or misfitted to the collective behavior of nations, politics, business, labor, the family and other collective movements, in a world of limited resources and mechanical forces.

Thus economic theory began with a Commodity as its ultimate scientific unit, then shifted to a Feeling, in order to explain a Transaction which is its practical problem.

Underlying all of these concepts of commodities, feelings and transactions have been certain principles of explanation, which the theorists either avowedly assumed or took for granted out of the prevailing habits of mind or ways of thinking of the time when they wrote. These may be distinguished as the Principle of Mechanism, the Principle of Scarcity and the Principle of Working Rules of Going Concerns. The principle of mechanism, established by Sir Isaac Newton, became the principle of explanation not only for all physical sciences, but also for biology, physiology and the human sciences of psychology, ethics, law, economics and politics. Gradually, however, the principle of scarcity, always taken for granted but not always definitely incorporated, began to be pointed out along with the principle of mechanism, first by David Hume and Robert Malthus, then was generalized by Darwin for biology and by Gossen, Jevons and the hedonic economists for psychology and economics.

The principle of scarcity did not materially change the habit of mind that relied on principles of mechanism, but rather gave to the latter a more precise formulation in the theories of marginal utility. This was because commodities and feelings were concepts related to the wants and efforts of individuals rather than groups or associations of individuals, and the theories could be worked out on Adam Smith's mechanical principles of individualism, selfishness, division of labor, exchange of commodities, equality, fluidity, liberty and that divine providence which led individuals to benefit each other without intending to do so.

But later theories have had to account for the incoming of corporations, trade unions, voluntary associations of all kinds, said to number 25,000 in America in the field of business alone, as well as the interference of government through taxes, the police power, and the legal tender power. Consequently later theories have concerned themselves with what may broadly be named the Working Rules of Going Concerns, taking many forms and names, such as the common law, statute law, shop rules, business ethics, business methods, norms of conduct, and so on, which these governing or regulating groups of associated individuals have laid down for the guidance of transactions.

Consequently, it is not only principles of mechanism and scarcity conceived as working themselves out automatically and beneficently, through commodities, feelings and individual selfishness, but also principles of the collective control of transactions through associations and governments, placing limits on selfishness, that are more recently included in economic theory. For a working rule lays down four verbs for the guidance and restraint of individuals in their transactions. It tells what the individuals must or must not do (compulsion or duty), what they may do without interference from other individuals (permission or liberty), what they can do with the aid of the collective power (capacity or right), and what they cannot expect the collective power to do in their behalf (incapacity or exposure). In short, the working rules of associations and governments, when looked at from the private standpoint of the individual, are the source of his rights, duties and liberties, as well as his exposures to the protected liberties of other individuals.

These changes from mechanism to scarcity and thence to working rules as the underlying principles of economics have had a profound effect upon the concept of property, changing that concept from a principle of exclusive holding of physical objects for the owner's private use, into a principle of control of limited resources needed by others

for their use and thus into a concept of intangible and incorporeal property arising solely out of rules of law controlling transactions. The change was gradually accomplished in American jurisprudence between the years 1872 and 1897, and consisted in changing the definitions, by the Supreme Court, of the terms "property," "liberty" and "due process of law," as found in the Fourteenth Amendment to the Constitution.

Thus both legal theory and economic theory, in modern times, have based their explanations first on Newton's principle of mechanism, then on Malthus' principle of scarcity, then on juristic principles of common rules that both limit and enlarge the field for individual wills in a world of mechanical forces and scarcity of resources. Since transactions are the economic units, and working rules are the principles on which the Supreme Court of the United States has been working over its theories of property, sovereignty and value, and since that court occupies the unique position of the first authoritative faculty of political economy in the world's history, we shall begin with the court's theory of property, liberty and value. For it is mainly upon that theory that modern business is conducted and that American legislatures, executives and inferior courts are held in conformity to the Constitution of the United States, which, as latterly interpreted by the Supreme Court, prohibits the taking of property, liberty or value without due process of law or equal protection of the laws.1

While the economists start with a commodity or an individual's feelings towards it, the court starts with a transaction. Its ultimate unit of investigation is not an individual but two or more individuals—plaintiff and defendant—at two ends of one or more transactions. Commodities and feelings are, indeed, implied in all transactions, yet they are but the preliminaries, the accompaniments, or the effects of transactions. The transaction is two or more wills giving, taking, persuading, coercing, defrauding, commanding, obeying, competing, governing, in a world of scarcity, mechanism and rules of conduct. The court deals with the will-in-action. Like the modern

¹ Fifth Amendment (1701) applicable to the Federal Government:—No person shall be "deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use without just compensation." Fourteenth Amendment (1868) applicable to State Governments:—"Nor shall any state deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

physicist or chemist, its ultimate unit is not an atom but an electron, always in motion—not an individual but two or more individuals in action. It never catches them except in motion. Their motion is a transaction.

A transaction occurs at a point of time. But transactions flow one into another over a period of time, and this flow is a process. The courts have fully developed the notion of this process in the concept of a "going concern," which they have taken over from the customs of business, and which is none other than a technological process of production and consumption of physical things and a business process of buying and selling, borrowing and lending, commanding and obeying, according to shop rules or working rules or laws of the land. The physical process may be named a "going plant," the business process a "going business," and the two constitute a "going concern" made up of action and reaction with nature's forces and transactions between human beings according to accepted rules.

Thus economic theory has passed from commodities to feelings, and finally to a process, and from principles of mechanism to principles of scarcity, and then of working rules that apportion the conduct of individuals. Value and economy become verbs instead of nouns. Value becomes valuing; economy becomes economizing. mizing becomes the operation of rules of conduct in the nation or the business concern. A transaction is a unit picked out of the process for minute examination. Value and economy become millions of people valuing and economizing through billions of transactions in conformity to numberless working rules over a stretch of time that has no beginning and no ending. The mathematical concepts of deductive reasoning become statistical concepts of quantity and time, of correlations, probabilities, lags and forecasts, respecting billions of valuations in billions of transactions, moving forward on that energy which we call the will, within limits set by the accepted rules of conduct.

This process has three attributes which give us three meanings of value, each of which was separately emphasized by different schools of economists. Value has that subjective or volitional meaning of anticipation which may be named psychological value and which is the moving force. It has next that objective meaning of commodities produced, exchanged and consumed, which may be named real value. It has lastly that behavioristic meaning of prices

which emerge in the transactions of buying, borrowing and hiring, in terms of standards of weights and measures prescribed by the working rules, which may be named *nominal value*.

The system of prices is like the system of words or the system of numbers. Words, prices and numbers are nominal and not real. They are signs and symbols needed for the operation of working rules. Yet each is the only effective means by which human beings can deal with each other securely and accurately with regard to the things that are real. But each may be insecure and inaccurate. Words are deceptive if they do not convey the meaning intended; numbers are liars if they do not indicate the actual quantities; prices are inflated or deflated if they do not reflect the course of real value. Every transaction has these three aspects of valuing. It is a meeting of wills, a transfer of commodities, a determination of their prices. A transaction is thus a compendium of psychological value, real value and nominal value. The courts, in their decisions, endeavor, by means of common rules, to make the nominal value or prices, represent, as nearly as practicable, the psychological value, or anticipation, and the real value, or quantity, of commodities and services. Their goal is a scheme of "reasonable value."

But the court does not cover the whole of the will-in-action. Individuals deal with the forces of nature as well as with other persons. This dealing with nature may be distinguished as action and reaction, so that the behavior of individuals consists in two kinds of acts, action and reaction with nature's forces and transactions with other persons. The one is production and consumption of wealth, the other is buying and selling, borrowing and lending, leasing, renting, "hiring and firing," exchanging, competing and governing.

Now, a transaction may be looked upon from several points of view, each of which is related to the others, though with widely different implications. It may be looked upon as the activity of one of the forces of nature, say, will-power, operating like other forces, in which case we have a physical or mechanical equivalent of the will-in-action. It may be looked upon as accompanied by anticipation and memories which are its psychological equivalent. These expectations may be looked upon as induced by and inducing others to act or avoid action, giving us an equivalent in social psychology. This social psychology of two or more individuals is influenced, in turn, by a mass psychology, or collective psychology, giving us

ethical, juristic or political grounds for the working rules. Finally, both the individual and the mass psychology are an adaptation of the will to the principle of scarcity, and this point of view gives us an economic equivalent of the transactions and the working rules. The words which express one order of phenomena are tinged with meanings projected from the others. We simply look upon the same process from different angles, always seeing the same outline, but with different shapes, colors and shades.

We thus have two concepts with which economic theory deals, the concepts of Value and Economy. These are inseparable from the subject-matter which various schools have picked out for investigation, namely, Commodities, Feelings and Transactions. And three ultimate principles have been relied upon, the principles of Mechanism, of Scarcity and of the Working Rules of associations, concerns and governments. Hence, while we begin with the working rules that underlie the decisions of the Supreme Court of the United States, we shall find the economic and juristic dimensions derived from those rules shading off into mechanical, psychological, ethical and political dimensions.

CHAPTER II

PROPERTY, LIBERTY AND VALUE

I. USE-VALUE AND EXCHANGE-VALUE

In the year 1872 the Supreme Court of the United States was called upon, in the Slaughter House Cases, to interpret the meanings of the words Property and Liberty as used in the Constitution of the United States. The Thirteenth Amendment to the Federal Constitution, adopted in 1865, prohibited slavery and involuntary servitude except as punishment for crime, and the Fourteenth Amendment, adopted three years later, prohibited a state from depriving any person of "life, liberty, or property" without "due process of law," and gave to the federal courts jurisdiction. The legislature of Louisiana had granted to a corporation a monopoly to maintain slaughtering places for stock in the city of New Orleans, and had regulated the charges to be made to other butchers who used these The latter, through their attorneys, contended that the statute deprived them of both their property and their liberty without due process of law. The Supreme Court divided. If the court should hold that property meant exchange-value, then the federal court would take jurisdiction under the Amendments. But if property meant only the use-value of physical things, then the court would not interfere with the legislature of Louisiana. Justice Miller, for the majority, declared that the act was not a deprivation of property or liberty as the terms were used in the Thirteenth and Fourteenth Amendments. The term "liberty," he said, should be construed with reference to the well-known purpose of those Amendments, namely, to establish freedom from slavery or personal servitude. Even conceding that the term "liberty," as popularly used, might mean "civil liberty" or the right to buy and sell, yet that aspect of liberty was not included in the meaning of the term as used in the Prior to the adoption of these amendments the liberty of citizens, whether personal, civil or economic, was, for the

most part, in the keeping of the states. The Thirteenth and Fourteenth Amendments only transferred from the states to the federal government the protection of such fraction of the total concept of liberty as was comprehended in freedom from personal slavery. All other aspects of liberty were left, as they had been, to the keeping of the states.1 And as to the meaning of the term "property," as used in the Fourteenth Amendment, he held that the term retained its common-law meaning of physical things held exclusively for one's own use. Property, according to the Fourteenth Amendment meant use-value, not exchange-value. "Under no construction of that provision that we have ever seen," he said, "can the restraint imposed by the state of Louisiana upon the exercise of their trade by the butchers of New Orleans be held to be a deprivation of property within the meaning of that provision." 2 The state of Louisiana had not deprived the butchers of the use-value of their propertyit had deprived them of its exchange-value.

The minority of the court, however, contended that the police power (which they admitted, of course, might justly deprive a person of liberty or property for public purposes without compensation), could have been exercised in this case without resorting to a monopoly, by merely regulating all of the butchers alike in the interest of public health, but that the monopoly feature of the law deprived the other butchers of their liberty and property and turned it over to the monop-They then went on to define the property and liberty which was thus unjustly taken away, not by a proper exercise of the police power, but by a special privilege granted to the slaughter-house monopolist. A man's "calling," his "occupation," his "trade," his "labor," was property, as well as the physical things which he might own; and "liberty" included his "right of choice," his right to choose a calling, to choose an occupation or trade, to choose the direction in which he would exercise his labor. Justice Bradley, of the minority, for example, declared that the "right to choose one's calling is an essential part of that liberty which it is the object of government to protect; and a calling, when chosen, is a man's property and right. . . . Their right of choice is a portion of their liberty: their occupation is their property." (116, 122.) Justice Field, also of the minority, desired to change the meaning of "slavery" from physical coercion to economic coercion. He said, "A person

allowed to pursue only one trade or calling, and only in one locality of the country, would not be, in the strict sense of the term, in a condition of slavery, but probably none would deny that he would be in a condition of servitude. . . . The compulsion which would force him to labor even for his own benefit only in one direction, or in one place, would be almost as oppressive and nearly as great an invasion of his liberty as the compulsion which would force him to labor for the benefit or pleasure of another, and would equally constitute an element of servitude." (90.) Thus Justice Field described slavery as physical coercion and servitude as economic coercion. And Justice Swayne declared, "Property is everything which has exchangeable value, and the right of property includes the power to dispose of it according to the will of the owner. Labor is property, and as such merits protection. The right to make it available is next in importance to the rights of life and liberty." (127.) Thus Justice Swayne defined property as the exchange-value of one's ability to work, and liberty as the right to realize that exchangevalue on the labor market.

These minority definitions of liberty and property as exchangevalue were unavailing in the Slaughter House Cases. The majority held to the older meaning of use-value. Twelve years later the municipal authorities of New Orleans, acting under a new constitution for the state, granted to another company privileges in conflict with those of the original monopolist, thus infringing upon their exclusive right. This time, therefore, the Slaughter House company was plaintiff against the municipality. The majority of the court now retained its original definition of property and liberty, but now held that not only the original act, as they had contended before, but also this annulling act were a proper exercise of the police power.1 But Justices Bradley and Field, while concurring in the court's decision, placed it on the grounds of their dissenting opinions in the original Slaughter House Cases, and repeated their earlier views that the original act was itself an unlawful deprivation of liberty and property. In their earlier dissent the minority had not cited any cases where the term property had been used in the sense of a trade, occupation, calling, or one's labor, whose value to the owner is in its exchange-value, though they asserted that it ought to have that meaning. Thus, in the constitutional sense of the term, they

¹ Butchers' Union Co. v. Crescent City Co., 111 U. S. 746, 751 (1884).

had not been able to controvert Justice Miller's denial that that meaning had ever been given to it. In the later case, however, they suggested the origin of their new definition. Justice Field now stated that this meaning of property was derived from Adam Smith who had said: "The property which every man has in his own labor. as it is the original foundation of all other property, so it is the most sacred and inviolable." 1 And Justice Bradley contented himself with saying, "If a man's right to his calling is property, as many maintain, then those who had already adopted the prohibited pursuits in New Orleans, were deprived, by the law in question, of their property, as well as their liberty, without due process of law." 2 Thus the new meanings of property and liberty were found in Adam Smith and the customs of business, and not in the Constitution of the United States.

After the Slaughter House Cases the minority definitions of property and liberty began to creep into the constitutional definitions given by state and federal courts,3 as indeed was inevitable and proper if the thing itself was thus changing. Finally, in the first Minnesota Rate Case, in 1890 4 the Supreme Court itself made the transition and changed the definition of property from physical things having only use-value to the exchange-value of anything.

This decision was a partial reversal of the decision of the court in the case of Munn v. Illinois in 1876. In the Munn case the Supreme Court had held, agreeably to its holding in the Slaughter House Cases, that when a state legislature reduced the prices which a warehouse company charged for the use of its services the resulting reduction in exchange-value of the business was not a deprivation of property in the sense in which the word was used in the Fourteenth Amendment and therefore was not an act which the federal courts might restrain. It was only a regulation of the "use and enjoyment" of property under the police power of the state. The court went so far as to declare that, if the legislature abused its power, "the people must resort to the polls, not to the courts."6

That the state legislatures might possibly abuse their power had

¹ 111 U. S. 746, 757; SMITH, Wealth of Nations, 1:123 (Cannan ed., 1904).

²¹¹¹ U. S. 765 (my italics).

² Powell v. Penn., 127 U. S. 678, 684 (1887); Matter of Jacobs, 98 N. Y. 98 (1885); People v. Marx, 99 N. Y. 377 (1885); People v. Gillson, 109 N. Y. 399 (1888).

4 Chicago, M. & St. P. Ry. Co. v. Minnesota, 134 U. S. 418 (1890).

^{6 94} U. S. 113 (1876).

⁴⁰⁴ U. S. 113, 134,

been clearly suggested in the decision of the Supreme Court of Illinois in sustaining the act of the Illinois legislature, when the Munn Case was before that court. The Illinois court had held I that the authority was not abused in that case by the Illinois legislature, since the property of the owner was not "taken" from him, in that he was not deprived of the "title and possession" of the property. In this respect the Illinois court adhered to the primitive definition of property as the mere holding of physical objects for one's own use and enjoyment. The legislature, under the police power of the state, might reduce the charges which a warehouse company had established for its services, but that was not "taking" their property. The owners continued to hold their physical property even though deprived of the power to fix the prices for its use. To this Justice Field had rightly answered, "There is indeed no protection of any value under the constitutional provision which does not extend to the use and income of the property, as well as to its title and possession." 2 For, of course, the title of ownership or the possession of physical property is empty as a business asset if the owner is deprived of his liberty to fix a price on the sale of the product of that property.

But Justice Field in the Munn Case had gone too far. He denied the authority of both the legislature and the courts to fix the compen-The majority had only denied the authority of the court to fix it. Fourteen years after Munn v. Illinois this further issue came up in the Minnesota Rate Case,3 and the petitioners for the railroads asked the court to review the decision in the Munn and similar cases and to restrain the state legislature from fixing finally the prices charged for the use of property. (445.) The court now acceded, and Justice Blatchford, for the majority, wrote, "This power to regulate [police power] is not a power to destroy, and limitation is not the equivalent of confiscation." (456.) And confiscation, or the reasonableness of a rate, "is eminently a question for judicial investigation, requiring due process of law for its determination." (458.) Thus Justice Field's definition of property as the exchangevalue of property was approved and, therefore, the protection of that property was brought under the jurisdiction of the federal courts conformably to the Fourteenth Amendment.

As interpreted by Justice Field, 94 U. S. 139; Munn v. People, 69 Ill. 80 (1873).

Q4 U. S. 143.
 Chicago, M. & St. P. Ry. Co. v. Minnesota, 134 U. S. 418 (1890).

But Justice Bradley, who in the Slaughter House Cases had agreed with Justice Field, now again dissented (supported by two other justices) and held that the majority opinion asserted an "assumption of authority on the part of the judiciary which. . . it has no right to make." (418, 463.) "If not in terms, yet in effect," he said, "the present cases are treated as if the constitutional prohibition was. that no state shall take private property for public use without just compensation—and as if it was our duty to judge of the compensation. But there is no such clause in the Constitution of the United States." (465.) "There was," he said, "in truth, no deprivation of property in these cases at all. There was merely a regulation as to the enjoyment of property, made by a strictly competent authority, in a matter entirely within its jurisdiction." (466.) In this respect he, like the Illinois court in the Munn Case, continued to adhere to the primitive definition of property as the mere exclusive holding of objects for one's own use, a kind of property that is not taken from the owner unless he is deprived of its title and possession, for which he is entitled to just compensation.

The majority, however, now held, as they had not held in the Munn Case, that not merely physical things are objects of property, but the expected earning power of those things is property; and property is taken from the owner, not merely under the power of eminent domain which takes title and possession, but also under the police power which takes its exchange-value. To deprive the owners of the exchange-value of their property is equivalent to depriving them of their property. Hence, differently from the Munn Case decision, they now held that, under the Fourteenth Amendment, it is the province of the court and not the legislature, to determine the extent to which that "taking" of the value of property might go and yet not pass beyond the point of confiscation. They thus extended to the exercise of the police power the judicial authority to ascertain just compensation which the judiciary had exercised over the power of eminent domain.¹

Thus the transition in the definition of property from physical objects to exchange-value was completed. "Title and possession" of physical property could be taken from its owner for public purposes under the power of eminent domain, but only on condition

¹ Under the original constitutional provision that no state should take private property for public use without just compensation.

that equivalent value should be paid, such that the owners' assets should not be reduced; and this equivalent value, or just compensation, is a judicial question. Now it is enlarged to read: The exchange-value of property may be taken from its owners under the police power, but only to the extent that they retain sufficient bargaining power to maintain the same exchange-value that they had, and this also is a judicial question. The definition of property is changed from physical things to the exchange-value of anything, and the federal courts now take jurisdiction.

Evidently, however, the exchange-value of property has no existence if either the owner or expected purchasers are forbidden access to markets where they can sell and buy the property. Hence liberty of access to markets is essential to the definition of exchangevalue. This attribute was finally added seven years after the Minnesota Rate Case, in the Allgeyer Case, and the minority definition of liberty in 1872 became the unanimous definition of liberty in 1897.1 The court now said: "The liberty mentioned in that Amendment [Fourteenth] means not only the right of the citizen to be free from physical restraint of his person, but the term is deemed to embrace the right of the citizen to be free in the enjoyment of all his faculties; to be free to use them in all lawful ways; to live and work where he will; to earn his livelihood by any lawful calling; to pursue any livelihood or avocation, and for that purpose to enter into all contracts which may be proper, necessary, and essential to his carrying out to a successful conclusion the purposes above mentioned. . . . His enjoyment upon terms of equality with all others in similar circumstances of the privilege of pursuing an ordinary calling or trade, and of acquiring, holding, and selling property is an essential part of liberty and property as guaranteed by the Fourteenth Amendment." 2

Furthermore, while liberty of access to markets on the part of an owner is essential to the exchange-value of property, too much liberty of access on the part of would-be competitors is destructive of that exchange-value. During the past three hundred years this

¹ Allgeyer v. Louisiana, 165 U. S. 578, 589 (1897).

² Ibid., at 580, 589. This latter sentence was quoted in part from earlier decisions cited above, Powell v. Pennsylvania, 127 U. S. 678, 684 (1888); quoted in 165 U. S. 578, 590. For a discussion of the change in meaning of these terms while the process was going on, in 1801, see Shattuck, C. E., "The True Meaning of the Term 'Liberty' in those clauses in the Federal and State constitutions which protect life, liberty and property." 4 Harv. Law Rev. 365 (1891).

excessive liberty has been restrained by the courts in the long line of cases going under the name of "goodwill" or "unfair competition." Evidently, these decisions of the courts had been designed to protect the exchange-value of property, and now that the definition of property itself had been changed from physical things to the exchangevalue of anything, it was an easy step to change the definition of goodwill from "fair competition" to "property." The long-recognized goodwill of a business which had always possessed exchangevalue, but which was merely the expected beneficial behavior of other people, now became simply a special case of property. Other courts followed, and the transition from the meaning of property as physical things to that of the most ethereal invisibility was reached in 1902 in a case involving the right to exclusive telephonic communication of news to the daily press by mere word of mouth. The lower court then said, "Property . . . is not, in its modern sense, confined to that which may be touched by the hand, or seen by the eye. What is called tangible property has come to be, in most great enterprises, but the embodiment, physically, of an underlying lifea life that, in its contribution to success, is immeasurably more effective than the mere physical embodiment." And, in 1911, by another lower court, Justice Swayne's definition in 1872 of labor as property became "the right to labor in any calling or profession in the future."2

The foregoing cases, it will be noted, have turned on a double meaning of property, and the transition is from one of the meanings to both of the meanings. Property, in the popular ordinary usage, the usage of the old common law and the one adhered to in the Slaughter House Cases and the Munn Case, meant any tangible thing owned. Property, in the later decisions, means any of the expected activities implied with regard to the thing owned, comprehended in the activities of acquiring, using and disposing of the thing. One is Property, the other is Business. The one is property in the sense of Things owned, the other is property in the sense of exchange-value of things. One is physical objects, the other is marketable assets.

Thus it is that "corporeal property," in the original meaning of the term, has disappeared, or, rather, has been relegated to what may be described as the internal "economy" of a going concern or

¹ National Telephone News Co. v. Western Union Tel. Co., 119 Fed. 294, 299 (1902), by Justice Grosscup.

² Gleason v. Thaw, 185 Fed. 345, 347 (1911).

a household in the various processes of producing and consuming physical objects, according to what the economists call their "usevalue." And, instead of the use-value of corporeal property, the courts are concerned with its exchange-value. This exchange-value is not corporeal—it is behavioristic. It is the market-value expected to be obtained in exchange for the thing in any of the markets where the thing can or might be sold. In the course of time this exchangevalue has come to be known as "intangible property," that is, the kind of property whose value depends upon right of access to a commodity market, a labor market, a money market, and so on.1 Consequently, in conformity with the customs and usages of business, there are only two kinds of property, both of them invisible and behavioristic, since their value depends on expected activities on the commodity and money markets. One of these may technically be distinguished as "incorporeal property," consisting of debts, credits, bonds, mortgages, in short, of promises to pay; the other may be distinguished as "intangible property" consisting of the exchange-value of anything whether corporeal property or incorporeal property or even intangible property. The short name for intangible property is assets. Assets is the expected exchange-value of anything, whether it be one's reputation, one's horse, house or land, one's ability to work, one's goodwill, patent right, good credit, stocks, bonds or bank deposit, in short, intangible property is anything that enables one to obtain from others an income in the process of buying and selling, borrowing and lending, hiring and hiring out, renting and leasing, in any of the transactions of modern business. We shall identify these two classes of property as "encumbrances" and "opportunities." Encumbrances are incorporeal property, that is, promises to pay, enforced by government; opportunities are intangible property. that is, accessibility to markets, also enforced by government.

Going back, therefore, to the common-law meaning of property as physical things held for the owner's use, we find that what property really signified, even in that original sense, was not the physical thing itself but the expected "uses" of the thing, that is, various activities regarding the thing. These uses, or activities, arose from the producing and consuming power of a person in control of, or working with, the thing. The legal terms carry this futuristic, behavioristic meaning. The legal term "use," is said to have been "Below, Chap. VII, Sec. III.

derived from the Latin opus, meaning work or working, through the Anglo-French oeps and the Old French oes. It means the work a person can do with a thing, his behavior respecting the thing. Thus it differs from the economic term, "utility," which is derived from the Latin usus, through the French utilité, and means the satisfaction a person gets in using a thing. Use is behavior. Utility is feeling. The early feudal grants of land to tenants were granted ad opus—that is, "to the use" of the tenant in production and consumption. Then when property began to yield exchange-value as well as use-value, the term "uses" was simply enlarged by the courts to include it. It now means both the expected use-values of production and consumption and the expected exchange-values of selling and buying.

The difference is unimportant in the law of private property. In fact, the term "uses" has a social meaning and a business meaning. Socially it means what we understand by producing and consuming things; that is, increasing the supply and enjoyment of things. But in the business sense it means also acquiring and disposing of the thing in transactions with other people. This explains the easy transition from the common-law meaning of property as physical things, valuable to owners on account of the expected physical uses of production and consumption, to the business-law meaning of property as assets, valuable to owners on account of their expected bargaining uses as purchasing power in buying and selling.

The common-law and popular notion of property as physical things is, therefore, but an elliptical statement of what commonsense can take for granted without the pedantry of explaining every time that what is meant by property is the uses and not the thing. The trouble is that, by using this common-sense notion of uses, not only the courts and business men, but also theoretical economists, pass over from the significance of "uses" in the sense of producing an increase in the supply of goods, to its exact opposite meaning in the business sense of an increase in the power of owners to command goods from other persons in exchange. The one is producing power which increases the supply of goods in order to increase the quantity of use-values; the other is bargaining power which restricts the supply of goods in proportion to demand, in order to increase or maintain their exchange-value. Bargaining power is the willful restriction

¹ POLLOCK, F., Principles of Contract, 5 (9th ed., 1921); 3 Law. Quar. Rev., 115 (1887); BOUVIER'S Law Dictionary, title "Use."

of supply in proportion to demand in order to maintain or enlarge the value of business assets; but producing power is the willing *increase* of supply in order to enlarge the wealth of nations.

Hence the transition in the meaning of property from the use-value to the exchange-value of things, and therefore from the producing power that increases use-values to the bargaining power that increases exchange-values, is more than a transition—it is a reversal. The reversal was not at first important when business was small and weak—it becomes important when Capitalism rules the world.

The transition in meanings of property and liberty applies to agriculture as well as manufactures, commerce and transportation, and to individuals, partnerships and associations as well as corporations. Farming has become a going-business, or a bankrupt business, like other businesses. The isolated, colonial, or frontier farmer might produce and consume things, attentive only to their use-value, but the modern farmer lives by producing "social-use-values" and buying other social-use-values produced and sold by other business men. In this way he also "produces" exchange-value, that is, assets. He farms for sale, not for use, and while he has the doubtful alternative of falling back on his own natural resources if he cannot sell his products, yet his farm and crops are valuable because they are business assets, that is, exchange-values, while his liabilities are his debts and his taxes, all of them measured by his expectations and realizations on the commodity markets and money markets, in terms of exchange-value or price.

This, we take it, is the substance of Capitalism distinguished from the Feudalism or Colonialism which it displaced—production for the use of others and acquisition for the use of self, such that the meaning of property and liberty spreads out from the expected uses of production and consumption to expected transactions on the markets where one's assets and liabilities are determined by the ups and downs of prices. And this is, in substance, the change in the meanings of Property and Liberty, from the Slaughter House Cases in 1872 to the Allgeyer Case in 1897, a change from the use-value of physical things to the exchange-values of anything.

II. OPPORTUNITY AND ENCUMBRANCE

If the meaning of property (as distinguished from rights of property), is not merely that of a thing, but is the liberty of expected activity

in acquiring, using and disposing of things, then the significance of property is in the behavior expected with regard to the thing, and the value of the thing is in the expected desirable behavior regarding it. In other words, value resides in the expected will-in-action, and the expected will-in-action is its expected actions and transactions. We shall name this a going concern, consisting of two inseparable components, a Producing Organization turning out use-values, and a Going Business bringing in exchange-values.

The transition from rights of property in the use-values of things, to rights of property in their exchange-value is a change from physical things to a going business and, first in point of significance is the fact that it unites property and liberty in an identical concept. Property means anything that can be bought and sold, and since one's liberty can be bought and sold, liberty is assets, and therefore liberty is property. A person may sell a portion of his liberty in two ways. You agree to pay me a thousand dollars a year from now. Originally such a promise was a matter of conscience and the confessional. Now the state will physically compel you to pay, if your conscience and the priest do not morally do so. You have sold a part of your liberty, and I, in turn, can sell it to a third party.

Or you sell to me the goodwill and trade-name of your business by agreeing to refrain from competing with me or using your name in your business. Originally one or both of us might have been imprisoned or fined for making such a contract in restraint of trade.² Now the court will punish you if you do not keep your promise and it will punish others who make use of that trade-name in competing with me. Again you have sold to me a part of your liberty and I, in turn, can sell it to a third party.

What is it that I have bought and now own in each of these cases? It is not a physical thing. It is a promise of future behavior on your part and a permission to me to get the officers of the law to compel you to behave as you promised if you do not do so willingly. You have sold to me a part of your liberty. Let us call it an Encumbrance on your Liberty. An encumbrance has two ends exactly equal in size. One end of it is my right, my asset, the other end is your duty, your liability.

I now may own two kinds of encumbrances on your liberty, both

¹ Below, Chap. V.

BOUVIER'S Law Dictionary, under title "Restraint of Trade."

of which constitute my assets, or the exchange-value of my property. One is positive, the other is negative. One is your promise to do something, the other your promise to not-do something—your promise to pay and your promise not to compete. One is a debt, the other is a goodwill. Each is an encumbrance on the field of your expected behavior. One restricts your liberty of action by requiring a performance, usually described as compulsion; the other restricts your liberty by compelling an avoidance, usually described as restraint. Each has a present value to me. Each is my property, which I have acquired, am holding and can sell. The exchange-value of each is my asset.

But the two objects which I buy, hold and sell are different. When I buy or sell your indebtedness I am buying or selling your positive duty to do something at a future date measured by, say, one thousand dollars. When I buy your promise not to do something I am apparently buying nothing at all. I am evidently not buying your customers. I do not own my customers, you did not own yours. I do not own any duty or encumbrance imposed upon them requiring them to do anything positive for me. They are not my assets. My customers still have their liberty to buy elsewhere. They are not compelled to buy of me. What I own is not an encumbrance on them. Let us call it an Opportinity to deal with them if I can. I simply own the opportunity to sell my goods or services to them if I can. And I do not own it against all the world-I own it only against you, to the extent that you have promised not to try to sell to them, and against competitors only to the extent that they are prohibited from using my trade-name, or otherwise unfairly competing with me. Outside these rights I am exposed to competitors.

Thus the meaning of property has spread over from visible things to invisible things. The invisible things are encumbrances and opportunities. Encumbrances are the duties that other people owe to me, and opportunities are their liberties, their absence of duties to me. Yet both are valuable to me and valuable to third parties who buy them of me, and are therefore property in the sense of exchange-values, or assets.

These two kinds of property are rightly described as intangible, incorporeal, invisible. They cannot be seen by the naked eye like physical things, and they are not always even symbolized by words

written out on paper as evidences of ownership. They may be created by word of mouth. They may even be implied from the conduct of the parties. Their intangibility is the invisibility of the promised and expected behavior of people, which is felt, not seen, by the inner eye of confidence.

These intangible and incorporeal properties are more valuable than all physical things, in a land whose government and people are stable, for upon them are built both the credit system and the business initiative that have displaced feudalism by capitalism. They have arisen in manifold varieties. Encumbrances range from merely implied promises inferred only from simple acts, to elaborate bonds that bind a business or a nation for a century to come. Opportunities range from the simple choices between alternatives made daily in every transaction, to that expanse of enduring market opportunities known variously as goodwill, patent rights, the right to continue in business or to continue business connections, the right to a labor market, the right to liberty of contract, and the many kinds of public franchises, corporation charters, and public utility franchises.

Generally, as we noted above, the encumbrances are coming to be known as "incorporeal" property, or debts; the opportunities as "intangible" property, or exchange-value. Each is invisible, for each exists only in the unseen future. One is the invisibility of future behavior of creditors and debtors, the other the invisibility of future behavior of buyers and sellers, whether they be borrowers and lenders, merchants and customers, landlords and tenants, principals and agents, employers and employees. In the one case they are the expected beneficial performance of duty; in the other they are the expected beneficial exercise of liberty; in both cases they are expected beneficial actions or transactions. In both cases they are assets, since they are the exchange-values of things.

Though invisible and in the future, they are more substantial than even the physical property which we see in the present, for it is they that have produced all physical capital, that reproduce it when it wears out, and that enlarge it faster than the growth of population. Though physical capital may disappear through war or other catastrophy, yet if these invisible expectations of beneficial behavior remain intact, then the physical capital will be shortly reproduced.

The invisible capital of many a going concern is more valuable

than all of its machinery, lands, buildings, stock on hand, and, indeed, if that invisible capital loses its value all of the visible capital is likely to sink at once to the value of old iron and scrap. It would not be incorrect to say that all capital is invisible value, in that it is the present value, not of physical things, but of the hopes of the future aroused through confidence in the now invisible but expected transactions of the future.

For, what is the value of lands, buildings, machinery, commodities, but the value of their expected "uses"? And what are their uses but the uses not yet made but yet to be made of them, either in using them directly or in selling their products for money or other products? One is use-value, the relation of man to nature. The other is exchange-value, the relation of man to man. Both of them lie in the future but have a value in the present. We may call them Expectancies. All value is expectancy. Use-value is the expected behavior of things in man's activity of production and consumption. Exchange-value is the expected behavior of people in buying and selling, lending, hiring, borrowing and paying debts.

The meaning of property has thus expanded so that it includes expectancies of two kinds of future behavior of other people, one of which is the expected restraint or compulsion placed on others in my behalf; the other is opportunities afforded by them and open to me. Both of these are measured off and determined by that power superior to both of us, the state, and therefore one of them, the encumbrances, is recognized as their legal duties; the other, the opportunities, as their legal liberties. Expected restraints and compulsions by the state, that is, encumbrances, are legal duties; expected absence of restraint or compulsion, that is, opportunities, are legal liberty.

If liberty is the absence of duty, that is, of compulsion or restraint, then this absence of something, paradoxical though it seem, must contain something in order to be valuable. What it "contains" is an economic equivalent. My liberty is valuable to me to the extent of the different economic objects which may happen to be its equivalent. What it contains is not things but expected transactions. Liberty is the legal equivalent of expected transactions. If I sell the goodwill of my business to you, I am selling a part of my liberty. Here my liberty is valuable in exchange. Its value consists in what I can get for it when I part with it. I am at liberty to sell my liberty

to a limited extent. I am not at liberty to sell all of my liberty. The value of liberty is its exchange-value in terms of money—realized assets. Here I capitalize my expected liberty and sell it.

Another way in which my liberty is valuable is in using it or leasing it for the sake of increasing my income. When I own the goodwill of a business what I own is my absence of restraint, compulsion, or duty in selling things that I own. The valuable equivalent of this absence of duty is the more profitable bargains I can make by using my liberty than I could make if I did not have that liberty. That profit is the difference between the prices I could get for my products, if I did not own and keep the goodwill, and the prices I can get by keeping and owning it. Likewise with others. If I am a laborer and my present employer pays me \$3.00 a day, but another employer offers me \$3.50 a day, the daily income from my liberty to leave one employer and to work for another is 50 cents a day. The valuable content of this part of my liberty is therefore exchangevalue measured by money. But in this case it is a surplus that gives greater value to the thing sold. What I sell is the use of my labor power. The exchange-value of my labor power is my assets. Yet I am not permitted to sell all of it permanently. I cannot capitalize it. I can only hire it out for a daily income. It is of greater value to me at \$3.50 a day than at \$3.00. The liberty to choose between opportunities is worth the difference between the higher and lower value received in exchange. Thus the value of liberty in this case is the surplus exchange-value one can get by choice of opportunities.

Yet in either case I give up a part of my liberty. The practice of selling or leasing a part of one's liberty goes along with all transactions. The sale of liberty is a necessary part of every sale. Liberty is thrown in with every valuation in making an exchange. The owner who sells his horse, or the investor who lends his purchasing power, or the laborer who sells the use of his labor power, sells with it a part or the whole of his liberty to use his horse, or his purchasing power, or his labor power. The landlord leases to the tenant his liberty to use the farm and impliedly agrees to obey the commands of the tenant to keep off. The lender sells to the borrower his liberty to use his right to draw checks on a bank. The agent or employee who sells the use of his labor power sells a part of his liberty by accepting obedience to the commands of the other. Each sale is the acceptance of a duty either of avoidance or performance, and each duty

is a deduction from liberty, and therefore a sale of a part of one's liberty.

In these cases the value of the liberty when sold seems to be wholly absorbed by the value of the thing sold. The sale of liberty is not distinguished from the sale or lease, or loan, of the horse, of the bank deposit, or of the labor power. Value received seems to have a positive basis for exchange only in the positive thing that is sold and not in such a negative thing as the absence of restraint or compulsion. But in the sale of goodwill the value of liberty often visibly separates itself out from the value of the plant and merchandise, and is computed as a separate or additional value. The physical plant of a certain newspaper, for example, is worth \$100,000. Its goodwill is separately worth \$900,000. The goodwill is not in the plant but in the customers.

Yet is it so very different? When a person sells his "business" the courts usually infer that he sells his goodwill with the physical plant, for goodwill is nothing more or less than the profitable or beneficial exercise of the will over the thing sold. So when I sell my horse I sell the liberty to exercise my will over my horse, which is something that would have been profitable or beneficial to me and therefore good, but is henceforth to be the beneficial exercise of the buyer's will over the horse, and therefore a goodwill for him.

So it is with the sale of my bank deposit or labor power. When I sell either of these peculiar objects I sell the beneficial or profitable exercise of my will over it, and the borrower or employer buys the expectation of a profitable exercise of his will over it. My goodwill—not sentimentally good but economically good, not good-will but goods-will, because good for my benefit or profit—becomes his goodwill, good for him.

Hence the sale of that part of one's liberty that goes along with every transaction is not such a paradoxical sale of the absence of something as it seemed at first, but is the transfer of something very positive, substantial and good, namely, an economic equivalent in the expected free exercise of one's will in acquiring things from the world and people about us.

This is the economic equivalent of liberty and property, and it is this that has come to be known as "intangible" property, distinguished from "incorporeal" property. Intangible property is opportunity. Incorporeal property is debt. Here is where value

lies—not in the visible things or persons, but in the will to acquire, to use, to control, to enjoy and so to get an expected benefit or profit out of things or persons. What we buy and sell is not things, but our goodwill over things. And when we say that liberty is valuable and liberty is therefore property, what we mean is that the free and beneficial exercise of the will in dealings with nature and other people is economically valuable and therefore is property.

Thus it is that the terms Property, Value, Capital, Assets, Liberty, and The Will have come to mean the same thing from different points of view. Property is none other than the beneficial exercise of the will in dealing with nature or other persons. But dealings with nature are "corporeal property" and "corporeal property" has dropped out of sight. The business man is not interested in his corporeal property except as a means to an end and that end is its exchange-value. The right to have this exchange-value is simply the right of access to markets. And it is these rights of access to markets that were named "liberty" in the Slaughter House Cases but are now known as "intangible property." But intangible property is merely the expected beneficial behavior of other people to be obtained by way of expected transactions with them, while incorporeal property is their expected fulfillment of promises which they have made to us. And this is Capital. Capital is the present value of expected beneficial behavior of other people. Property has become intangible and incorporeal; liberty has become intangible property; duties are incorporeal property; each is the expected beneficial behavior of others in dealings with self, and the present value to self of that expected behavior is capital or assets.

III. Power

We have seen that liberty is valuable, and liberty is property, in two directions. It is valuable because it will bring in something in exchange for something. The two are equivalent. The value of the liberty is the exchange-value of the thing given in exchange. The other direction in which liberty is valuable is by bringing in a surplus equivalent to the difference. The first of these directions is power in exchange, purchasing power, or bargaining power, that is, economic power, or briefly power. The other direction is choice of opportunities, that is choice of alternatives, or, briefly, opportunity. Thus, liberty is absence of restraint, or compulsion, or duty, and

is equivalent to the exercise of power and the choice of opportunities which it permits. But choice of opportunities is, in fact, but a choice between two degrees of power. If I can sell the use of my labor for \$3.00 a day, that is one degree of power over my employer. If I can sell it for \$3.50 a day that is another degree of power. If a railway corporation charges 3 cents a mile, that is one degree of power over passengers; if it charges 2 cents that is a lesser degree of power. The economic equivalent of liberty, therefore, is freedom to choose between two degrees of power over other persons.

In some cases this power dimension of property attracts more attention than the opportunity dimension. Public-utility laws, usury laws, labor laws, are designed sometimes to curb the bargaining-power of property where it seems to be excessive. The courts have declared certain of these laws unconstitutional or void, on the ground that they restricted liberty. They do indeed restrict liberty, for liberty is absence of restraint, compulsion or duty, and these laws are the presence of restraint, compulsion or duty. But these decisions of the courts failed to distinguish "liberty" from the economic equivalent which is the "content" of liberty. Liberty itself is empty and meaningless. Its meaning is in its content. Its content is freedom to choose. But even this is empty, and the will does not exist in vacuum. It exists in its choice of opportunities. But its opportunities are degrees of power over nature or man. The economic equivalent of liberty is liberty to choose between degrees of economic power. Liberty is inseparable from power. Courts, in more recent decisions, have discovered that liberty is economic power, as well as economic opportunity.1

We may designate opportunity and power as the external dimensions of the will in action, to be distinguished from "economy," the internal dimension of property. They are external in that they are the dimensions that come into contact with other persons. They are the dimensions which tell us whether property, including its liberty to exercise the will, is enlarged or diminished in dealings with other people. For this reason they may be named the expansion side of the will and property. Property, then, the free exercise of the will, is expanded by one and the same act, which, however, has the two dimensions of opportunity and power.

But opportunity and power differ greatly in their method of expan
Below, Chap. III.

sion. Opportunity is expansion without cost to self. It is the costless enlargement of power by merely choosing between two degrees of power, both of which are accessible at the moment. It is the passive aspect of choosing. But power itself costs something. It is effort, outgo, as well as income. It means that something is given up, that something is given in exchange. It may be a day's labor that is given up; it may be a horse or a bushel of wheat that has been owned; it may be a part of one's liberty that is sold. One school of economists reduces all costs to commodity costs, including the commodity money paid out; another reduces them to pain-costs, the pain endured. But all costs are property-costs. The laborer does not sell his pain—he sells his labor power; it is the same when he sells his horse or a part of his liberty. In all cases he gives up property and throws in liberty.

But the sale has a purpose. It is something given up in order to induce something else to come back. It is outgo of property, in exchange for income of property. It is power-in-exchange. It is realization of assets. We measure the degree of power by a ratio of exchange. I sell a day's labor for \$3.00. The ratio is one day's work = \$3.00. I sell it for \$3.50. The ratio is I = 3.50. I sell a bushel of wheat for two bushels of oats. The ratio is I = 1.00 bushels—the ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00. The ratio is I : 1.00. I sell it for \$2000. The ratio is I : 1.00.

But when I merely choose between two ratios of exchange, both of which are accessible at the moment, I give up nothing in addition. I choose between the power ratio of 1:3 and 1:3.50, between 1:2 and 1:3, between 1:1000 and 1:2000. I give up, in either case, only the identical day's labor, or bushel of wheat, or part of my liberty. But I gain a pure surplus, a costless addition to my property. We may designate this costless increment a ratio of surplus, or ratio of opportunity. My ratio of opportunity is the ratio which the surplus bears to what I would have had were it not for the costless choice. When I gain 50 cents by merely choosing to sell my labor for \$3.50 instead of \$3.00, my ratio of opportunity is 50:300, that is 1:6 or $16^2/3$ per cent pure costless gain.

Thus, while the ratio of exchange is a measure of power, the ratio of opportunity is a measure of the difference between two degrees of power. The two ratios are merely the measurement of two dimensions

of the same transaction, like two dimensions of a box. The ratio of exchange measures the *cost* side of a transaction, the ratio of opportunity the *costless* side. The one measures the sacrifice, the other the "velvet." But in measuring sacrifice the ratio of exchange also measures power, and in measuring velvet the ratio of opportunity measures the costless choice of opportunities that goes along with the exercise of power.

But power may be increased directly without choice of opportunities. Suppose the laborer has his employer at a disadvantage where the employer has no alternative opportunity. The laborer demands and receives \$3.50 instead of \$3.00; or the corporation demands and receives 3 cents a mile instead of 2 cents, if the passenger has no alternative. In either case one has increased his power, not by choosing between two persons, but by a direct increase of power over the same person. The same service is given to the same person, but at a higher ratio of exchange, a greater degree of power.

Thus liberty and property have two meanings, either of which signifies expansion of power. One is choice of opportunities, a passive, indirect, costless increase of power. The other is choice of greater or less degree of power. Liberty applies to both. Liberty is the absence of restraint, compulsion, or duty, but in one case liberty is expansion through choice of two degrees of power over two others: in the other it is expansion through choice of two degrees of power over one other.

In either case, likewise, the increase of power is, in modern business, expressed in terms of price, and prices are referred to a standard of money. We say that money is a measure of value and a medium of exchange. But it is a peculiar medium. Money is a kind of universal container of everything within reach at the option of its owner and the prices of commodities. It is a medium and a measure because it is a universal power of acquisition at certain prices. As such it becomes the measure of one's assets and liabilities, as well as the medium through which one's assets are usually realized on the markets in the form of other things to be acquired in exchange. We may, therefore, speak of assets as the quantity of other things expected from the prices to be obtained by sale of the things owned, and money as the medium by which those things are obtained. The things owned are simply Things. The quantity of other things expected in exchange for them is the expected prices to be obtained for things owned; and expected prices are book assets, that is, assets hoped for. Money is the medium and measure for changing hopeful assets into realized assets. So that an increase of power over others in terms of price is an increase in one's assets or diminution of one's liabilities, and this is the expansion equivalent of property and liberty through opportunity and power. Inversely, the diminution of power or absence of opportunity is the contraction-equivalent of property and liberty, or rather exposure, which reduces one's assets or enlarges one's liabilities.

Thus we see that the legal term "liberty" has a two-fold economic content, namely, opportunity and power. Yet these two are really but two aspects of one act of the will, namely, choice between two degrees of economic power. This concept of the economic power of property and liberty was first admitted to the decisions of the Supreme Court in the case already cited, of Munn v. Illinois, in 1876. Prior to that decision the term power had meant only the physical power of the sovereign in enforcing the laws, out of which power came the grants of special privileges or monopolies which were not property, but were arbitrary infringements upon the rights of property. The concept of property itself had come up out of the common law and carried with it the idea of a natural, or common-law right of liberty to acquire, use and dispose of physical things. Hence property was not powerproperty was liberty, and there was a world of difference between the power of the sovereign and the liberty of the subject. But, in the Munn Case, for the first time, it came to be seen that this liberty of private property meant also the economic power of private property. The power of sovereignty was the physical power to compel obedience; the power of property was the economic power to withhold from others what belongs to self but is needed by others. The legislature of Illinois had fixed the maximum charges permitted to be made by grain elevator and warehouse companies for the handling and storage of grain. This business of a warehouse had always been a private business, and had never been granted any special privilege or franchise by the sovereign either in England or America. The majority and the minority in the Supreme Court agreed that in the case of a special grant of sovereign power, the power of the sovereign to regulate the charges went along with the grant. The charges must be reasonable and this was the common-law rule applying to all special grants or licenses, whether express, implied, or claimed by prescription through long usage and consent, such as public ferries, bridges, turnpikes,

¹ Below, Chap, IV.

wharfingers, or hackmen and draymen who made use of the King's highways.¹ The judges disagreed as to whether this sovereign power could lawfully be extended to a grain elevator and warehouse which did not need and did not have a special grant of sovereign power to carry on its business.

The majority introduced a new principle of law, as charged by the minority, in order to sustain the power of the Illinois legislature to fix the prices for handling and storage of grain, and to compel the owners to furnish service at those prices. This was, in effect, the principle that it was economic conditions and not a special grant of sovereignty that determined the right of the sovereign to regulate prices. The Munn Case was not the case of a railway depending on a public franchise, but of a private business. These warehouses, without a special grant of sovereign power, had become strategic centers for control of the prices of grain shipped from the Northwest, by the mere fact of location, character of the business, and power to withhold service. The majority, recognizing this economic fact, held that property lost its strictly private character and became "clothed with a public interest when used in a manner to make it of public consequence and affect the community at large." Thus the fact of economic power over the public in withholding service and thus fixing prices need not proceed from a sovereign grant of a privilege, but proceeds, in this case, from the circumstance that the public had come to depend on the use of the owner's private property, and that therefore the owner had employed his property, not merely to his own use and enjoyment, but had devoted it to use by the public. To that extent he must submit to be controlled by the public. (113, 126.)

Justice Field, who, in the Slaughter House Cases, had denied the right of the state to restrain liberty, now denied its right to restrain the power to withhold services. He distinguished both between a sovereign privilege and private property, and between the use and enjoyment of the property by the owner and the price that the owner could charge for its use and enjoyment by others. A sovereign privilege, he agreed, might be regulated as to the compensation, or prices, derived from its exercise, and indeed such regulation was implied in such a grant. "When," however, "the privilege ends, the power of regulation ceases." (147.) And the owner of the private property might be restrained, under the police power, as to its use and enjoyment

^{1 94} U. S. 113, 149 (1876).

if that became dangerous to the life and health of others, but not as to the compensation or price charged for its use by others. The police power, he thus held, extended only to the use and enjoyment, that is to the use-value of things, and not to the compensation for the use, that is, the prices of things, except in cases where some right or privilege is conferred by the government which gives the beneficiary special advantage over others. "In the case of the warehousemen of Chicago no right or privilege is conferred by the government upon them." (113, 149.) "Their buildings are not nuisances." (148.) "The business of a warehouseman was, at common law, a private business, and is so in its nature." (154.)

Notwithstanding these cogent and accurate historical objections of Justice Field, supported by two other justices, the majority of the court recognized that the coercive power of property emerges with changes in economic conditions, even when not supported by a special grant of sovereignty. For it was evidently not the health of the public that was menaced by the warehouses but the *prices* that the public as producers and consumers should receive and pay for food. And so, in sustaining the authority to restrain that economic power, they reduced the scope of property by enlarging the police power of the state legislatures. But the property which they reduced in scope was not the ownership of physical property—it was the ownership of the exchange-value of that property.

The decision in Munn v. Illinois recognized for the first time the economic power of property, or power to withhold, growing out of economic conditions, as distinguished from the physical power of sovereignty, or power to compel, exercised on behalf of citizens as their privilege or "liberty." Thenceforth, it would require, not a special, personal favor of the sovereign in order to justify the legislature in regulating the prices to be derived from that favor, but a mere showing that the citizen had engaged in business upon which other citizens depended for their liberty and property. The grant of power over citizens in fixing prices now comes, not from the sovereign directly, but indirectly from the citizen's ownership of a kind of property to which that economic power attaches. The transition is made from a legal monopoly, the ancient "liberty" of the subject to exercise sovereign power, to a "natural" monopoly, the modern liberty to exercise economic power, since it proceeds automatically from economic conditions rather than designedly from an act of the sovereign.

Previously it was only the grant of a special privilege that gave to the sovereign the right to prevent extortion by regulating the prices charged, and private property was not such a grant from the sovereign but was a natural right derived from the common law, which expressed the common usages of the people without privilege, and therefore carried the natural right of liberty in fixing prices. Now, when the grant of special privilege no longer avails, another source of authority, the "police power," which had been used only to prevent excessive nuisance, is enlarged to prevent excessive economic power.

Where the decisions that followed the minority in the Slaughter House Cases enlarged property at the expense of sovereignty, the police power enlarges sovereignty at the expense of property. The citizen himself, since the Munn decision, now takes the initiative without waiting for the sovereign to act, and of his own free will grants to the sovereign the authority to regulate his prices, because he no longer uses his property only for his own use and enjoyment, but he devotes it to the use of other citizens who necessarily depend upon it for the prices that give value to their liberty and property. Liberty is no longer defined merely by the dimensions of choice of opportunity, as was done by the minority in the Slaughter House Cases. It is now defined also by the dimension of economic power.

This dimension was not conceded by the minority in the Munn Case. Had that case been one of a railroad with a franchise to operate a highway, the minority would doubtless not have dissented, for such a franchise is a special grant of sovereign power. But the case was that of a warehouse without a public franchise, and the minority could not see that mere property as such, when not aided by a franchise, could possess a similar kind of power. If, however, property, as perceived by the majority, did possess this similar kind of power, it followed, by a stretch of the implied powers of sovereignty, that the sovereign should have power to restrain the owner of that property. This the majority affirmed, and in doing so, enlarged the definition of the "police power" beyond the mere control of the use and enjoyment of property where prejudicial to health or comfort, to the control of the bargaining power of property where prejudicial to the bargaining power of others. The police power was thus extended from use-value to exchange-value, from physical things to business assets.1

¹ See Justice Field's criticism that the police power had never before been extended to the compensation for the use of property except where "some right or privilege" was con-

Yet the decision in the Munn Case left the authority to exercise this enlargement of the police power solely in the hands of the legislature. This was because, as we noted above, the court had not yet changed the definition of property from physical things to the prices of things. Not until the first Minnesota Rate Case, 1 already referred to, fourteen years after the Munn Case, was this change made. The result was. after 1890, that the judicial branch of government, rather than the legislative branch, took jurisdiction of the police power in determining how far the legislature might go in exercising it. The Munn Case recognized the economic power of property, distinguished from the economic power of a monopoly; the Minnesota Rate Case defined this economic power, or exchange-value, as the essence of property, which therefore could not be taken from its owner except by judicial process instead of legislative process. The rate case reversed the Munn Case as to the limits of the police power, but not as to the definition of economic power.

IV. ECONOMY

We have considered two economic or volitional dimensions of the legal concepts, liberty and property, the one being choice of opportunities, the other choice of greater or less degrees of economic power. When these two dimensions are joined together, they constitute what may be named the principle of Expansion, since they signify an enlargement of economic power through dealings with other persons. A person may expand the field of his will or resources in the threefold dimensions of (1) a costless choice between alternative degrees of power over opposite persons, a dimension measured by a ratio of opportunity; (2), the degree of power chosen, however, is a costful expansion measured by a ratio of exchange; but this ratio of exchange may be reduced by, (3), a forbearance 2 which is a choice of a less instead of a greater degree of power over a single person. Liberty therefore means absence of constraint or compulsion in the Expansion of one's will or resources. But liberty also signifies the absence of

ferred by government, 94 U. S. 146. At a later date the Supreme Court of Oregon, in the minimum wage case, referring to this concept of the police power, said, "when new conditions arise which injuriously affect the health or morals or welfare of the public, we no longer say that we will expand the police power to reach and remedy the evil. Instead we say that a new evil has arisen which an old principle of government—the police power—will correct." Stettler v. O'Hara, 69 Ore. 519, 532 (1914).

¹ Chicago, M. & St. P. Ry. Co. v. Minn., 134 U. S. 418 (1890).

^{*} Below Chap. IV, Sec. II.

constraint or compulsion in a fourth dimension of the will-in-action, which is the obverse of Expansion, namely, Economy.

A worker receives a salary of \$1000 a year. This marks the limit of his economic expansion through choice of opportunities and economic power. If he received \$1200 his economic power would be expanded; if he received \$900 his power would be contracted. Supposing his power of expansion is measured by \$1000 per year, he distributes this \$1000 among food, clothing, shelter, amusement, tobacco, whiskey, religion, books, education, etc. He spends 40 per cent for food, 20 per cent for clothing, 25 per cent for shelter, 15 per cent miscellaneous. Another man spends 40 per cent for whiskey, 10 per cent for tobacco, and the rest on his family for food, clothing, shelter.

We infer from this scheme of proportioning his purchasing power something as to the character of the man. One person spends 40 per cent for food, the other 40 per cent for whiskey. Their power and opportunity are equal, but their proportioning of that power and opportunity is different. Each presumably proportions his expenditures so as to get what for himself he judges to be the maximum satisfaction. His personality reveals itself in his scheme of proportioning his powers and opportunities. His scheme of proportioning resources is his plan of life. It is his scheme both of economy and of ethics. Ethically it is his moral character, his personality, his individuality, his selfishness, sympathy or sense of duty towards other people. Economically, it is the proportioning of resources so as to obtain the maximum expansion of that personality.

It is remarkable how much both nature and man accomplish by mere economy without expansion. It is believed that nature does not enlarge the total quantity of the elements in the universe, but she accomplishes all of her work by merely re-proportioning them. Her economy, in one respect, is precise and effective. The several chemical elements unite or repel in fixed proportions. Water is always H₂O. Protoplasm is always a certain CHNO. An explosion of TNT gives off a definite amount of gas. Heat, electricity, motion, life, are the kinds of work these elements perform when uniting and repelling in predetermined proportions.

Each element or part in a group is, not an item added to a lot of others, but each element is in turn a limiting factor and a complementary factor. Each is complementary to the work of all the others and each places a limit on the work of the others. A surplus of one factor

does no work of that kind. It is wasted. The limiting factor limits the total amount of work of the complementary factors. For this reason nature is wasteful. She does not hunt around for methods to increase the supply of the limiting factors in order to produce the kind of result desired. She lets them come along as they happen. The sun turns out more heat than anybody can use. But when they do come along, the elements combine and repel in definite, powerful proportions. Nature's economy, from man's standpoint, is exact and powerful, but wasteful.

Animal and vegetable life is different, or rather, additional. Unconsciously the primitive protoplasm exerts itself to supply the limiting factors. The rootlet pushes itself downward where it finds food, and the leaves and blossoms bend toward the sun. The internal constitution of a living creature is a proportioning of chemical elements, and the creature must obtain a similar proportion from the world about. It seeks out the limiting factors, avoids the useless factors, acquires without effort the complementary factors, and thus unconsciously enlarges life both by expansion and economy.

Conscious life advances a step. More highly organized, peculiarly guided or warned by pleasure or pain, it maximizes the pleasure and minimizes the pain by proportioning the limiting and complementary factors in its endeavor to get the best proportioning under the circumstances. Each separate pain or pleasure is a part of the whole, and the best proportioning of the parts is the maximum contentment of the animal.

Self-conscious life is a further step upwards. It is the life of man in society, the life of expansion of the individual through opportunities and power available mainly through transactions with others, and the life of economy through proportioning these opportunities and powers. It is this scheme of proportioning, as already suggested, that reveals character, individuality, personality, and coördinates ethics with economics. For, morally and ethically, this proportioning of opportunities and powers is the means of self-expression, self-development, "self-realization." Economically it is economizing one's power over the services of others in order to obtain the maximum result as determined by the character of the man who is thus realizing himself. The ethical aspect is the scheme of human values that centers about his personality. The economic

aspect is the proportioning of all the external factors according to their instrumental value in realizing this scheme of human values.

In all of this ascending scale of economy from the lowest to the highest, a proper proportioning may be said to multiply all of the complementary factors by the limiting factor. For economy is not the mere addition of separate units whose result is an arithmetic sum, but economy is similar to a multiplication of one factor into the complementary factors. Five and six are arithmetically eleven, but five times six are geometrically thirty. Hydrogen and oxygen may be a numerical sum of atoms, but hydrogen and oxygen rightly proportioned are thunder, lightning, and rain. Salt is but a small item in the economy of life, but a deprivation of salt means decay and corruption of all parts of the body. Potash is a small item in agricultural economy, but without potash the yield may be five bushels per acre, with it twenty bushels. Coal and oil are relatively small quantities of material in a manufacturing plant, but the total product is limited by the amount of coal under the boilers and the oil on the bearings. Managerial ability is but one of several kinds of ability and it costs relatively little in terms of money, compared with the total cost, but without it a thousand men are a mob-with it they are a going concern. Physical capital is often a small item in a business compared with labor, but without the willingness of investors and capitalists the concern goes bankrupt. The business man proportions his product to his market. If he furnishes too many potatoes and not enough cabbages, he loses on the one and misses on the other. He proportions also his factors within the concern. If he pays too much for capital and not enough for labor, or hires too many laborers and not enough capital, his concern winds up in the courts.

It is said that nature takes no leaps. She does not jump from one species to another entirely different. No, she does not, but when she reproportions her existing factors she jumps from gases to liquids, from liquids to solids, from physics to biology, biology to psychology, psychology to sociology. Pantaleoni has well said: 1

"The law of definite proportions is one of the most generally applicable of natural laws, and economic science only recognizes a particular aspect of it. It is well known that bodies combine chemically only in definite proportions, and that any quantity of an element in excess of that required for

¹ PANTALEONI, MAFFEO, Pure Economics, 83, 85 (1898).

combination with other elements present in definite quantities, remains free. If the quantity of one element is deficient with respect to that of other elements present, the combination only takes place to the extent the former element admits of. Just in the same way, any quantity of a commodity, in excess of the proportion in which nature, or any technical art, can combine it with a determinate quantity of other complementary commodities present. is useless or noxious as regards the economic result; and if all the complementary commodities requisite for the production of a direct commodity are present in various quantities, then the quantity of the complementary commodity that is present in a lesser quantity than any other, is that which determines the quantity that can be produced of the direct commodity in question; the superfluous quantities of the other complementary commodities being, for this purpose, destitute of utility. This law of definite proportions is of capital importance in explaining a very frequent form of economic crisis, consisting in the disproportionate production of complementary commodities. It must, however, not be understood as if there were only one definite proportion in which complementary commodities can be combined. There are generally a great many, but only one gives a maximum hedonic result. This maximum combination is the one towards which every economic effect tends. . . . If an instrumental commodity cannot be transformed forthwith into a direct commodity, but requires the concurrence of other instrumental commodities, as is generally the case, we cannot discuss its utility, as such, singly, because it is subject to the law of complementary commodities. Here, too, recurs the phenomenon, that the single element that is lacking may come to possess the total utility [value] due to the complex of instrumental commodities required for the production of a direct commodity. Instrumental commodities are also subject to the law of definite proportions." 1

Here we must distinguish between a part-opportunity and a whole opportunity. Each transaction of buying or selling is a part of the total opportunity. To sell a bushel of potatoes to one customer is a single transaction. To sell a thousand bushels to a thousand buyers is a total of which each sale is a part. Yet the total is not a mere addition of a thousand bushels. The total is the exchange-value of a thousand bushels, that is, their purchasing power, that is, the assets of their owner. Ten bushels may sell for fifty dollars, but a thousand bushels may overstock the market and sell for less than ten dollars. The diminishing value of the added bushel is not added to the preceding value of the ten bushels, but it actually changes their value and brings it down, and it does this even before they are

¹ Pantaleoni ascribes the original statement of this law to Ortes, 1774, but not made current until 1871, by Menger, who, however, "added nothing to it." It was explained, in 1854, "in the most masterly fashion by Gossen."

sold. The one is a multiple of the other, not a mere addition to it. Each added increment affects the value of all the other increments. Its own diminished value diminishes the value of the entire stock on hand. Here the limiting factor is the demand of other persons. But the demand of other persons is not their mere psychic wish, it is the supply of other things they offer in exchange. Hence the limiting factor is the supply of other commodities. The complementary factor is the supply of one's own commodity. Proportioning supply to supply is business economy by which assets are enlarged in value, and the total opportunity of a business is not a physical problem of adding separate items to obtain a total, but is a psychological and social problem of proportioning factors, each one of which changes the dimensions of all the others and thus changes, not things, but assets and liabilities, which are the exchange-values of things.

So it is with happiness and virtue. A single glove on the one hand may yield a certain pleasure, but if there is no glove for the other hand the total happiness is grievously impaired. The whole is not the sum of the parts but an amazing multiple of them. Throughout the entire scheme of proportioning food, clothing, shelter, whiskey, and miscellaneous, the pleasure derived from all is not a sum of pleasures or virtues but a multiple, in which one little mistake or vice, though it be but one act in ten thousand, vitiates the pleasure or virtue of all the others and transforms happiness into misery, morality into scandal.

Thus it is that in the economy of nature and man the mere proportioning of resources, without enlarging or expanding them, or even in spite of their contraction and repression, creates of itself new and astonishing products of a higher, or at least different order in the scale of values. Chemical activity is a reproportioning of chemical elements; business assets, personal happiness and moral character are a proportioning of the opportunities and powers that constitute resources.

In each distinct field of human life is the similar practice of economy; home economy is the proportioning of resources within the family; business economy the proportioning of lands, machinery, man-power, within the going concern; political economy the proportioning of human factors within the nation. And with each distinct field of economy are the outside limits set by opportunities and powers,

which we name expansion of resources, so that home economy and business economy are limited by the bargaining powers of its members with outsiders, and Political Economy by the Political Expansion and Contraction of conquest, defense, treaties, and so-called "penetration" into other lands and peoples.

Throughout this ascending scale of economy from nature to man and society the peculiar operation of the principle of economy seems to be that of a central but unknown focus, a force, a unity, a nucleus, of a higher order which collects and proportions the units of lower orders and thereby lifts them up to a higher unity of its own. The lowest order of all, supposed to be the electron, is lifted into a higher unity by the unknown nucleus of the atom; the atoms by a still higher unity or chemical "force" are proportioned into chemical compounds or molecules; the biological nucleus, whatever it may be, call it Life, proportions these lower orders, already themselves a proportioning of still lower ones, and thus lifts them up to the higher unity of a living organism. The self-conscious focus, the human will, again lifts the lower orders into a higher unity of personality, and finally, the principle of association, or management, or collective will, or society, the working rules of concerns, or whatever we describe it, is the proportioning of human activities into a higher, or at least different and larger unity. Throughout it is an ascending scale of economy, each within its own rather distinct level, but in all cases it is a proportioning of parts which are themselves wholes in their own lower domains, and each proportioning focuses about an unknown force which both subordinates the lower orders to itself and coördinates them into a larger whole.

Yet economy is not separable from expansion; or rather economy is the internal, expansion the external, aspect of the identical behavior. One is the outside, the other the inside, one is the obverse of the other. On the internal side some unifying principle or force, the principle of life or of human personality, or of national existence, coördinates, subordinates, and thereby proportions the parts into a new and larger unity. On the external side it is the same unifying force or principle, but it is now in contact or conflict, in action and reaction, in power or weakness, dealing with and controlling others like or unlike itself.

It is this principle of economy that makes it impossible to say that any one factor in a business concern or a nation produces any definite part of the total wealth. Capital is productive, labor is productive, managers are productive, investors are productive, not because they physically do any particular thing, but because they are limiting and complementary factors. Each is productive simply because it is a necessary part of the whole. But if it is badly proportioned to the others, the excess is unproductive. Each is productive in limited quantities, and production of wealth is not the mere production of things—it is a good proportioning of all limiting and complementary factors.

It is this good proportioning that gives rise to the phenomena of value. None of the factors of production produce value unless they produce things in limited quantities. Restriction of physical production is as necessary as expansion of physical production. The important purpose of each of the economic factors is, not the production of things, but the production of values. And this is accomplished by the principle of Economy. Hence the two concepts, Value and Economy, are the basic concepts of economic theory.

It will thus be seen that, in passing from the economy to the expansion of the individual we are moving upward to a still higher economy in that ascending scale which we have previously noted. Economy is the inward, self-centered, aspect of behavior; expansion is the outward aspect that comes into contact with the world and other persons. Yet this outward aspect may itself be a correlation of opposing individuals within a higher unity which we distinguish as a greater or less degree of Reciprocity.1 This lower, self-centered economy we may name Private Economy; the higher is Political Economy. The lower is the proportioning of opportunities and powers by the individual, the family, or the business concern, for their private purposes. The higher is the proportioning of that same behavior of individuals, families, or other concerns, by the State for public purposes. And, just as there may be a good or a poor, an economical or wasteful, a virtuous or vicious, private economy and private expansion, so there may be a good or a poor, an economical or wasteful, a just or unjust, political economy and political expansion.

Liberty, then, has this fourth meaning or content, the absence of restraint, compulsion, or duty, in proportioning one's opportunities, powers and forbearances, according to one's own scheme of

¹ Below, Chap. IV, Sec. IV.

life and one's own ideas of the way to get a maximum benefit and endure a minimum burden in dealings with other people. And the fourfold economic content of liberty is opportunity, power, forbearance and economy. Opportunity, power and forbearance 1 are the outward aspects of the content of liberty, which therefore we name, from the economic standpoint, expansion or contraction, and from the ethical standpoint, justice or injustice; while the inward aspects of the content of liberty are, economically, a good or poor economy, and, morally, a virtuous or vicious economy.

We have said that the obverse of expansion is economy. We may now say that the inverse of economy is waste. Here there are three different meanings of the term "opposition" or "opposite" which should be distinguished. A thing is wasted if it is furnished in excess of the best proportioning with other factors. It is then to be looked upon as a complementary factor. If it is not provided adequately in order to combine with the other factors in the best proportion, its deficiency is the cause of their waste, since it is then a limiting factor. In any changing economy from day to day each factor is in turn a limiting factor up to a certain point, and the waste of complementary factors, is reduced and the work of all the factors, therefore, increases at an increasing rate. By increasing it beyond that point the aggregate product may continue to increase but at a diminishing rate of increase. At that point another complementary factor begins to be the limiting factor. It now must be increased, if the total result is to increase.2 Thus all of the limiting factors yield, in turn, increasing returns and diminishing returns. The optimum is perhaps a mean of the maximum and minimum returns of all the available factors, ascertained by approximating that point where "marginal utilities" of all factors are equal. If this optimum is not maintained, it is because certain factors are in excess and therefore wasted, because certain other factors are deficient and therefore limiting the work of the others. The term "opposite" here is used in the sense of two conditions that vary inversely with each other, of which the positive is a good economy and the negative is a poor economy. The opposition of economy and waste is not the opposition between something that is economy and something that is not economy, but between an economy that is good and an economy that is poor. One is the inverse of the other.

When, however, we speak of "expansion," as above, we refer to something that is the opposite of economy in a different sense of the word "opposite," in that it is something that is not economy at all but is the obverse of economy.

¹ The equivalent physical terms, avoidance, performance, forbearance, are explained below, Chap. IV, Sec. II.

² Cp. Clark, J. B., Distribution of Wealth, 403 ff. (1899).

Again, a person may enlarge his powers and have access to large opportunities and yet make a wasteful use of them. Here the opposite of expansion is contraction, in the sense that one is the *reverse* of the other. Expansion is enlargement, but its opposite, that is its reverse, is contraction or recession.

Thus a person's powers and opportunities may diminish through causes external to himself but he may still make an economical use of them. A good or poor economy may go along with either one's enlarging or one's diminishing opportunities and powers. While expanding, one is also economizing, and even while contracting one is also economizing, and whether enlarging or contracting, his economizing may range from the good to the poor, the best to the worst. Economy and expansion are the *obverse* sides of the same transactions, one the internal, the other the external. But poor economy is the *inverse* of good economy, and contraction is the *reverse* of expansion.

A fourth meaning of "opposition" comes to the surface when we speak of two opposing persons and their two opposing economies, in the same transaction. Here the expansion of one may be the contraction of the other. If the seller can force up a price from ten cents to twenty cents, then, for him, it is a process of expansion, but for the buyer it is a process of contraction. The economy of one is enlarged by the very transaction which contracts the economy of the other. The latter may find compensation elsewhere, but, so far as that single transaction is concerned, it is expansion for one and contraction for the other. Here the opposition between two economies of two persons signifies that one is the adverse of the other. The compensation, or offset, which the other gets, arises from his choice of opportunities. If the buyer's best alternative was, say, 25 cents, then he gains a surplus of five cents even though he is forced to pay 20 cents. Always this happens. A person always gains by choosing, and the harder the alternative avoided the more he gains, even though the opportunity actually chosen is a hard one in itself.

Here the term "opposition" refers to opposite persons, and we shall employ the terms "correlative" and "correlation" to indicate this relation of two opposite persons. The two correlated persons in any transaction are expanding and contracting their powers and opportunities at that particular point. The one is the adversary of the other. Yet each is also an opportunity for the other to escape from a worse alternative, and each gives to, and takes from, the other. It is this opportunity to escape from worse alternatives by exchanging their services that correlates them into a larger unity of interest, and which, according to the accompanying degree of power exerted by each and the hardship of the alternative avoided, we may distinguish as a greater or less degree of reciprocity of adversary interests. Here we may speak of a high or low degree of reciprocity of opposing persons, the higher being the reverse of the lower; the higher constituting a social unity, the lower a social conflict.

Thus the relation between economy, expansion and reciprocity is fourfold, implying a fourfold meaning of the term "opposite" or "opposition." (1) For the identical person economy is the obverse of expansion in that it is the internal, the self-centered, the introspective, the subjective, aspect of all transactions, which unifies all the separate transactions by proportioning them into a different and larger unity around the individual's central purpose. Expansion, then, is the obverse of economy, the external, the other-than-self, the objective, aspect of all transactions, the opportunities, powers and forbearances by which the person adapts himself to conditions and enlarges or recedes in his control of resources which, at the same time are economized.

But, again, (2) for the identical person, economy is the *inverse* of waste in that the one is a poor economy, the other a good economy. Or (3) contraction is the *reverse* of expansion, in that the one is a subjection to, the other a control over, the forces and powers of the environment.

Lastly, (4) for opposing persons, one economy is the adverse of another, and one person the correlative of another person, in the sense that the two are related, each as an opportunity for the other to escape from worse alternatives and thereby to enlarge his powers without cost, yet each as exerting power over the other, to the extent that each takes and yields. Out of this correlation arises that still larger unity of opposing persons which we distinguish as a high degree of reciprocity, the inverse, or low degree of reciprocity, being the source of conflict.

Consequently, the term "opposite" or "opposition" of interests, will necessarily be used in four meanings depending on the context.

(1) Waste and economy are opposite in the sense of the inverse fortunes of the same person, in that one is poor or bad, the other is good. (2) Economy and expansion are opposite in the sense that they are the obverse relations of the same person in the same transaction, in that one is inward, the other outward. (3) Contraction and expansion, conflict and reciprocity are the reverse relations of the same person, in that contraction or conflict is a reduction of his opportunities and powers, expansion and reciprocity is an enlargement. (4) Contraction and expansion are opposite in the sense that they are the adverse experiences of opposing persons in the same transaction, such that the contraction of one is the expansion of the other. Yet each may be better off than without the society of the other, depending on the degree of reciprocity.

CHAPTER III

PHYSICAL, ECONOMIC, AND MORAL POWER

Modern economic theory started with the Industrial Revolution of the 18th and 19th centuries. The steam engine was invented by John Watt in the same year that his friend, Adam Smith, published the Wealth of Nations. This coincidence of wealth and machinery explains, in part, the prominence of physical things in the form of commodities, rather than legal relations in the form of transactions, which dominated economic theory for a hundred years.

But the economic theories of the Supreme Court go back to the business revolution of the 17th century. It was that revolution, which, from the close of Elizabeth's reign to the Act of Settlement of 1700, displaced Feudalism by Capitalism. The dissenting opinions in the Slaughter House Cases went back to the time of Elizabeth, James and Charles, where they discovered the precedents for their definitions of economic liberty. Justice Field cited the Case of Monopolies, decided in 1602,1 where a grant by the Crown to a private citizen of the sole right to import, manufacture and sell playing cards within the realm was declared void as against the common law and acts of Parliament. Also, he cited the case of Davenant v. Hurdis, decided three years earlier,2 in which a gild of merchant tailors operating under a charter granted by the Crown, had attempted to restrict the trade of cloth-worker to members of the gild, but the by-law was declared void by the court. Likewise, the Statute of Monopolies, enacted in 1624, which declared void all grants of the Crown for "the sole buying, selling, making, working, or using of anything" within the realm, except patents for new inventions, for printing, and for the manufacture of certain implements of war.

Justice Bradley went back still further, to the year 1215, and claimed that the right to economic liberty was asserted in Magna Carta where it was declared, "No freeman shall be taken, or impris-

¹ 161 Wall. 102; Trin. 44 Eliz. (1602), 11 Coke's Repts. 84, 86.

Trin. 41 Eliz., Moore (K. B.) 576 (1599); 72 Eng. Rep. 769.