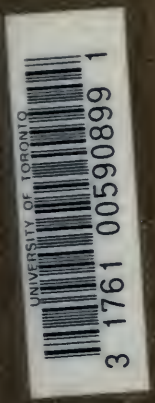

II

SPECULATION ON THE STOCK AND PRODUCE EXCHANGES OF THE UNITED STATES

STUDIES IN HISTORY, ECONOMICS AND PUBLIC LAW

EDITED BY
THE FACULTY OF POLITICAL SCIENCE OF COLUMBIA
UNIVERSITY IN THE CITY OF NEW YORK

Volume VII] [Number 2

SPECULATION

ON THE

STOCK AND PRODUCE EXCHANGES

OF THE

UNITED STATES

BY

HENRY CROSBY EMERY, Ph.D.

New York
1896

TABLE OF CONTENTS

CHAPTER VI

CHAPTER I.

INTRODUCTORY

THE American people are regarded by foreigners as the greatest of all speculators. The opportunities for great accumulation of wealth, the boldness which characterizes the ventures of the leaders in the business world, and the brilliant success with which their undertakings are often carried out, have excited, if not the admiration, at least the wonder of all observers. Especially has attention been widely called to the more distinctively speculative operations of the stock and produce markets. Speculation proper, as well as the speculative spirit of vast industrial enterprise, has had its most striking development perhaps in the United States. The greatest speculation in produce which the world has ever seen has grown up recently in Chicago, while a speculative market of almost unequaled magnitude is found in the Stock Exchange of New York. While, however, in other countries the Bourse has been a not uncommon field of inquiry and study, little has been written in this country either to describe the details of exchange methods, or to estimate the function of these exchanges in the economic order.

An attempt to make some beginning in this direction is timely for two reasons. In the first place, the effect of the speculative market of to-day has come to be a matter of great practical importance and a subject of some popular discussion. In recent years several bills have been introduced in Congress for the suppression of speculation in produce, and two of these showed suffi-

cient strength to pass one branch of that body. There was undoubtedly considerable public sympathy in support of these measures, and there is reason to believe that efforts at legislation in this direction will be renewed when other questions of greater importance have been settled. In Germany a still more vigorous attack on the speculative system has been made. The subject has given rise to a wide-spread agitation and discussion, leading to the appointment of an Imperial Commission to investigate the whole field,[1] and culminating in the repressive legislation of 1896, which is to go into effect on January 1, 1897. Other countries also are showing a tendency to agitate the question of taxing or in some way regulating the speculative market. The public opinion which is finally to decide these questions is far from being founded on an intelligent understanding of the conditions which exist. Both as to the methods employed in the business of the exchanges, and as to the influence of such trading in the economic world, very inaccurate ideas are prevalent. Consequently from the purely practical side a study of the speculative market is of importance.

Another reason for directing attention to speculation is the question as to what place shall be given to the study of it in the theory of economics. Speculation has become an increasingly important factor in the economic world without receiving a corresponding place in economic science. In the field in which it acts, in the trade in grain and cotton and securities and the like, speculation is the predominant influence in determining price, and as such it is one of the chief directive forces in trade and industry. But treatises in the English language on general economic theory and conditions have given very

[1] This commission made an important report in 1893 which is considered in the last chapter of this essay.

little space to this influence, which is fundamental in the world of economic fact. Speculation has been considered an interesting off-shoot of the competitive régime in business; and, not seeming to fit into a well-ordered system of economics, has in most works been relegated to chapters which show little vital connection with the general theory. Mill, for example, takes up the subject of speculation (his treatment of which is confined to the influence of corn-dealers) in the fourth book of the *Principles* quite apart from his study of production and exchange.[1] This example has been largely followed. A new departure is made by Professor Hadley in his recent work, in which he devotes an early chapter to speculation, and makes it the starting-point in the determination of the course of industry and trade.[2] It is true that forty years ago speculation was far less important than it is now, and there was, therefore, more justification for disregarding it. Professor Hadley has given due consideration to the new conditions which prevail in modern business. At the same time it should be remembered that MacCulloch, already in his day, had grasped the true idea of the function of speculation, a fact shown by the incorporation of his treatment of the subject into his chapters on value.[3] Wide as is the influence of speculation, its force is felt primarily in the field of prices. By making prices it directs industry and trade, for men produce and exchange according to comparative prices. Speculation then is vitally connected with the theory of value.

From the point of view of theory, therefore, it is incorrect to attach so little importance to the function of speculation; in practice it is impossible to deal intelligently with the evils of the speculative system without first recog-

[1] *Principles of Political Economy*, Bk. IV, ch. 2.

[2] Hadley, *Economics*, ch. 4. New York, 1896.

[3] MacCulloch, *Principles of Political Economy*, Pt. II, ch. 3.

nizing its real relation to all business. Both the writer and the reformer must reckon more than they have yet done with the fact that speculation in the last half century has developed as a natural economic institution in response to the new conditions of industry and commerce. It is the result of steam transportation and the telegraph on the one hand, and of vast industrial undertakings on the other. The attitude of those who would try to crush it out by legislation, without disturbing any other economic conditions, is entirely unreasonable. This truth was recognized long ago by Proudhon,[1] who clearly saw the place of speculation in the modern world. Proudhon was an unalterable foe of the Bourse, but his position was consistent. To him the Bourse was the crowning result of the institutions of private property and free enterprise. It was the necessary outcome of the evolution of new forms, concentrating in itself all the qualities which characterized the system as a whole. But to Proudhon the primary institutions on which it all rested were abhorrent. To him society itself seemed but a great system of robbery and exploitation. He would do away with the Bourse and speculation because he would do away with law and property. It may be that we need not accept Proudhon's alternative of the Bourse as it is or anarchy, because we do not accept his alternative of labor and property and industry as they are or anarchy. Reform in all fields is possible, and is nowhere to be hoped for more than in the field of speculation. But as between those who would maintain the existing order of society and yet crush out speculation, and Proudhon who would crush out both, there is more consistency in the latter.

In attempting to deal, within the limits of an essay, with matters which have been so little treated as speculation in this country, it has seemed necessary to fix the discussion

[1] See *Manuel du Spéculateur à la Bourse.*

within close limits and to exclude much that is beyond doubt essential to a complete understanding of the subject. The missing elements in the following pages will be only too apparent. In the first place a study of speculation in produce needs a previous discussion of the nature of the grain trade and cotton trade in this country, of their practices and history. Little attention is here paid to these questions, however interesting and important they may be, beyond dealing with their relation to the purely speculative market. Furthermore, no attempt is made to give an historical account of speculation in this country. It has seemed to the writer that the first step in the order of investigation is to understand more clearly the practices which prevail to-day. The attempt to trace their development can be more profitably made after the practices themselves are understood.

Finally, this essay is presented with much misgiving, because of the small space devoted to the evils of speculation. The benefits of speculation in the economic world are so little appreciated by perhaps the majority of people, that there is justification for presenting its more favorable aspects first. It is only fair that an unprejudiced expression of the great services of speculation to trade and industry should be made, and that its place as a great directive force in business should be clearly indicated. But because comparatively little attention is paid to the enormous harm in modern speculation, it does not follow that this evil has not impressed itself upon the writer's mind. It is not only want of space, however, which has excluded a full discussion of these topics. The evils of speculation, though more widely appreciated by the public, are by no means so simple of comprehension or so easy of description as its benefits. An adequate study of this part of the subject would re-

quire not only a careful historical study of the deals and manipulations of the speculative market, but a mind trained by a wide experience of business life to weigh justly the influences for harm and good. Especially must one be well equipped for judgment in such matters, before attempting to estimate the evil that results from the incentive to gambling which the speculative market affords. These are difficult questions. But whatever the evils which seem to accompany it, the fact remains that speculation is not an unnatural device of man's invention, but a normal means of meeting economic needs. The stock and produce exchanges are the nerve centres of the industrial body, and are in themselves as necessary institutions as the factory and the bank. If their evils are great, their advantages are certain. There is then occasion for a discussion predominantly on the favorable side.

The fifth chapter of this essay attempts to consider the evils of speculation, so far as to describe their nature and to point out what forms are of chief importance. There are many points which are passed over with the most meagre reference. So important a question, for example, as the relation of speculation to crises is little considered; but it is believed that enough has been said to show that the advantages of speculation presented are not the advantages merely of an idealized speculation, but are genuine and practical advantages of speculation to-day, however much off-set by corresponding evils. Some books are devoted purely to the harmful influence of speculation,[1] some more exclusively to its benefits. Neither the one nor the other can make any claim to furnishing a ground of ultimate judgment on the system as a whole.

[1] *Cf.* the statement of Ehrenberg in the preface to *Die Fondsspekulation*, p. vi, Berlin, 1883.

CHAPTER II.

THE ORGANIZATION OF THE EXCHANGES

I.

THE stock exchanges of this country are private voluntary associations of persons who deal in securities. They originated like any business association in the organization of certain persons for their mutual benefit and the advancement of their business. More especially did they receive an impetus from the desire to maintain uniform rates of brokerage. Despite the overshadowing importance which they have come to assume in the business world as the country has advanced in wealth, they have preserved their truly private character. They are controlled by no special legislation, and they make their own rules and carry on dealings subject only to the laws which regulate such transactions everywhere.

This position of American stock exchanges is very different from that of the European Bourses. In England the conditions are the same as here, but the exchanges of the continent, with scarcely an exception, exist by special legislation and are subject to more or less stringent control of government.[1] This does not mean merely that they exist under corporate charters like the produce exchanges of this country. Their rights, their duties, and to some extent their methods of business are defined by special laws or by the regulations of those officials or governmental bodies to whom they are immediately answerable. Long series of such statutes tell the history of many of

[1] *Cf. Handwörterbuch der Staatswissenschaften*, article "Börse," Vol. II, p. 674.

these exchanges, now favored by a liberal government, now constrained and threatened by an extortionate minister or a prejudiced legislature. To governments which maintain a paternal attitude toward all business organizations, so dominant a factor in the commercial world as the Bourse, with its combined speculative and monopolistic features, has naturally seemed an object demanding more than usual care in its regulation. It may be that this control is a municipal function, as in Belgium, or an imperial function, as in Austria; it may be an almost unexercised right, as in Holland, or it may reach into minute details, as in France; but whatever may be the particular form it takes, some such external control is recognized, with hardly an exception, by all the leading exchanges of continental Europe.

In Berlin[1] the Bourse, which is a single organization with two branches, one for securities and one for produce, is under the control of a corporate body of merchants of the city acting through its governing board. But this body, called the *Aeltesten-Kollegium der kaufmännischen Korporation*, must carry out any directions of the Prussian Minister of Trade, whose ordinances affect all the exchanges of the kingdom. Thus the Berlin Bourse is under a double external control, that of the *Kaufmannschaft* and that of the Royal Minister.

[1] In Germany there is no uniformity in the legal status of the exchanges, but some external control is recognized in nearly every case. This may not be a direct governmental regulation of the exchanges so much as an external supervision vested in the organized merchant body of the particular city, under the general legislation fixing the powers of such bodies. In Prussia the exchanges exist under governmental supervision. In Saxony and Bavaria there is little control. There is a small stock exchange in Dresden which is a purely private association. In Frankfort and Leipsic and many other cities all such organizations are under the control of a semi-public *Handelskammer*. In Hamburg a similar power is vested in the organized *Kaufmannschaft* of the city. (See *Bericht der Börsen-Enquête Commission*, Berlin, 1893.)

The Vienna exchanges,[1] like all those within the Imperial jurisdiction, are under the joint control of the Finance Minister and the Minister of Trade, whose approval is necessary for all the rules adopted by any exchange or any change in such rules. They may also, for cause, close the exchange temporarily or permanently, or remove the governing body of the exchange and substitute men of their own choice, whether members of the exchange or not, to perform the functions of that body. Moreover a special commissioner is appointed for each Austrian exchange to see that the ordinances of the authorities are carried out and to report any breach to the Ministers of Trade and Finance. In performance of this duty the commissioners are even granted access to the books of individual brokers. The Budapest exchanges are under royal control exercised by the Hungarian Minister of Trade and Industry. He is represented by Commissioners of the Bourse, who sit at all the meetings of the Directors of the Bourse, superintend the publication of quotations, and exercise a general supervision of the affairs of the Bourse.

The status of the Paris Bourse is well known. The *agents de change* of Paris are not so much a commercial association under public control as an official body. Dealing in securities is theoretically a monopoly put into the hands of sixty *agents de change*, and any transfer going through the hands of any other middleman is illegal. This number, however, which was fixed in 1816, has proved entirely inadequate to the enormous amount of business which has grown up since then, and an outside body of brokers known as the *Coulisse* has developed, which at times has transacted more business than the original *parquet* of sixty. This second body, however, exists only by sufferance and can be suppressed at any

[1] See *Bericht der Börsen-Enquête Commission.*

time. The *parquet* still maintains a monopoly of many of the best securities, and the *coulissiers* are obliged to connect themselves with members of the *parquet*, and to transact much of their business through them. An *agent de change* may, like any broker in this country, transfer his membership; but besides an election by the *chambre syndicale*, or governing body of the *parquet*, the approval of the Minister of Finance is required. The appointment is finally made by a decree of the President of the Republic and the oath is administered before the Tribunal of Commerce. The *agents de change* then are officials appointed by the government on nominations by the governing body of the Bourse, and as administrative officers are responsible to the Minister of Finance.

In striking contrast to the foregoing description of the legal position of the principal continental exchanges is the private and independent character of the New York Stock Exchange. This privacy has been intensified by the settled policy of the Exchange to keep its affairs as secret as possible, to attend strictly to its own business, and to resent any interference from without. It has resisted every effort toward incorporation. That an association which dominates the financial market, directs the course of investment, and settles the value of property for millions of people has for nearly a century maintained itself as a purely private organization, and will perhaps continue to do so for another hundred years, is a striking example of the confidence of people of the Anglo-Saxon race that, as fast as public wants develop, private activity will furnish the best means to satisfy them.

This position of the Stock Exchange, however, is unique even among the independent business organizations of this country. "A voluntary association of persons, like the New York Stock Exchange, by which an individual broker is enabled to carry on his separate business, under

regulations made alike for the protection of himself and his client or principal, has no technical name or place in the law. . . . An institution like the New York Stock Exchange is an anomaly in law. It is amphibious in its nature; for without being either a corporation or a partnership, it possesses some of the characteristics of both. Like a corporation it has perpetual being; and in this respect it has an advantage over bodies politic, for the charters of the latter generally limit their existence to some definite period; whereas the New York Stock Exchange can preserve its organization (as it has done since 1817) until it voluntarily dissolves itself."[1] It is not a partnership, as the business is not a joint business and profits are not shared; it is not a corporation, as it does not exist by statute. But the legal title to personal property is vested in all the members, as in a partnership, though no member can maintain a claim for a proportional division of such property. The real estate is held by a corporation created solely for that purpose (in 1863), all the stock of which is owned by the Stock Exchange.

The internal organization of the Stock Exchange is fixed by its constitution, which includes rules for the transaction of business. The whole government of the Exchange is vested in the Governing Committee composed of the President, the Treasurer and forty members. The President and Treasurer are elected annually, and the forty members are so divided into four classes of ten members each, that the term of one class expires each year, necessitating the choice of ten new members at each annual election. This committee is vested with all powers necessary to the government of the Exchange. There are twelve standing committees for various purposes, but these are all appointed and dissolved by the Governing Committee and exist under its control and

[1] Dos Passos, *Treatise on the Law of Stock Brokers and Stock Exchanges*, pp. 13, 14.

supervision. The Governing Committee may entertain an appeal from the decision of any other committee except the Committee on Admissions, or the Arbitration Committee in matters involving less than $2,500. The other officers of the Exchange are the Secretary and the Chairman, the latter of whom presides over the Exchange and maintains order when it is assembled for business on the floor. The qualification for membership in the New York Stock Exchange is simple. An applicant must be a citizen of the United States and at least twenty-one years of age. All applications for membership, and all applications of suspended members for reinstatement to their privileges, are referred to the Committee on Admissions. The initiation fee in 1823 was $25.00, and rose by gradual steps to $20,000, but the constitution now provides that the present membership shall not be increased except after such action by the Governing Committee and ratification of that action by the Exchange as occurs in the case of an amendment to the constitution. There can then be no admission to the Exchange except by transfer of membership. Any member may transfer his membership provided the name of the proposed transferee has been submitted to the Committee on Admissions and approved by two-thirds of that body. The revised constitution accordingly says nothing about an initiation fee, except a comparatively small fee of $1,000 for admission by transfer. The important payment is that between the old member and the transferee. The present number of members is 1,100, and the value of "seats" varies according to the supply and demand, rising (other things being equal) with the activity of business. In the early eighties a "seat" was worth $32,500,[1] in 1886 about $25,000, while in 1894 the value had sunk below $20,000. The figures for the total

[1] Gibson, *The Stock Exchanges of London, Paris and New York*, New York, 1889, p. 74.

number of shares sold in corresponding years shows the relation of the value of seats to the amount of business—in 1881, 117,078,167 shares; in 1887, 85,821,027 shares; in 1893, 79,939,760 shares.

The effect of a limited membership on the value of seats, and the enormous value of such a privilege when it becomes a monopoly, is seen in the case of the Paris Bourse. Here the membership is limited to sixty *agents de change*, who exercise a government monopoly in dealing in securities. The *agent* becomes a public functionary.[1] He pays a sum of 50,000 f. as a guarantee, but he can obtain a membership only (as in the New York Stock Exchange) by transfer, and for this he has often paid over 2,000,000 francs. This prohibition of all dealings in securities except through a small body of sixty men, which to the American mind seems a most unwarrantable restriction on trade, has called forth vigorous protests from the bankers and business men of France.[2] As we have seen, the letter of the law is allowed to be violated by the establishment of the *Coulisse*, but the

[1] The number of *agents* was first fixed in 1595 at eight, and ever since the financial needs of the government have brought about changes in the numbers and in the amount to be paid. Between 1634 and 1708 the number varied back and forth between 20 and 40. In 1714 it was made 60, and varied between that and 40 until 1791, when membership was made free. In 1801 it was limited to 80, and finally in 1816 the number was fixed at 60. (Courtois, *Opérations de Bourse*, p. 198 *et seq.*) Since that time the number has not changed, but the value of seats has varied with the activity of business and more especially with the tendency of political events, as seen from the following table:

1815, 300,000 f.	1857, 2,400,000 f.
1830, 400,000 f.	1871. 1,400,000 f.
1847, 800,000 f.	1880, 1,800,000—2,000,000 f.
1848, 400,000 f.	1884, 1,000,000—1,700,000 f.

(See Alf. Neymarck, *De l'Organisation des Marchés Financiers*, in the *Journal des Economistes*, March and June, 1884.)

[2] *Cf. Du Relèvement du Marché Financier Français*, Paris, 1890, by Jacques Siegfried and Raphael-Georges Lévy. *Cf.* also, *l'Economiste Français*, Feb. 20, 1892.

self-interest of the *parquet* keeps this from performing the functions it would if free from all restraint. On the other hand there is doubtless a very decided safeguard in the dignity and responsibility with which the position of *agent* is invested.[1]

There is no division into classes of the members of the Stock Exchange. In some European exchanges we find "sworn brokers" and "free brokers;" in London we find "dealers" or "jobbers" and "brokers." But in the exchanges of this country all members are on the same footing. To be sure many members do nothing but a strict commission business, and others do no brokerage business at all, but this is only a matter of individual choice. A majority of the members do a regular brokerage business and also buy or sell for their own account, perhaps through other brokers, whenever a favorable opportunity presents itself. A broker who wishes to buy for his customers goes into the open market and bids for the stock, which he probably gets from a broker whose customer wants to get rid of that particular stock. There is no class corresponding to the London "dealer" who stands ready either to buy or sell any stock according to the need of the broker who approaches him. The London "brokers" ordinarily do not deal for their own accounts, and the Paris *agents* are forbidden by law from so doing; but in this country neither law nor custom prohibits a member from acting indiscriminately as broker or principal.

Of course no one not a member can do business on the floor of the Exchange. The parties to a transaction, whether trading for their own account or for the account of clients, are always members of the Exchange and almost always trade in their own name. The name of a

[1] For the solemnity of the ceremony of installation of an *agent de change*, see Neymarck in the articles cited above.

principal may be given up, provided he be a member of the Exchange, but need not be accepted by the other party, and in such a case a broker remains personally liable on the contracts. Though the stock broker is liable on his contract, his legal relation to his client is purely that of a broker, or of broker and pledgee. He is not interested in the transaction except to the extent of his commission, while all the benefits, liabilities and disadvantages of ownership are attached to the principal. To his responsibility to his principal as broker is added a responsibility as pledgee where a deposit is made by the principal to insure the broker from loss, or where, as is commonly the case, the stock remains in the possession of the broker until a second transaction completes the speculation.[1]

The regular rates of commission on the New York Stock Exchange are fixed by the constitution. The Stock Exchange originated in an association to keep up commissions, and this purpose is still of vital importance. The rates are one-eighth of one per cent on all business for parties not members of the Exchange, including joint-account transactions in which a non-member is interested; and one-thirty-second of one per cent on all business for members of the Exchange, excepting only transactions in which one member merely buys or sells for another, giving up a principal, in which case the charge is one-fiftieth of one per cent. Brokers dealing in this way are called "two-dollar brokers." The commissions are charged upon all transactions, both purchases and sales, and are calculated in all cases upon the par value of the securities. They are in every case the lowest commissions that can be charged, free from all allowance or rebate of any kind, and any member found guilty of offering to do business at a less rate may be suspended for the first offence and expelled from the exchange for the second offence.

[1] See Dos Passos, *op. cit.*, p. 101, *et seq.*

Any member who fails to comply with his contracts, or who is insolvent, is suspended until he has settled with his creditors, when he may be reinstated by the usual procedure of application to the Committee on Admission, provided he can present satisfactory proof to the Committee of his settlement of all the claims of his creditors. In case he fails to settle with his creditors within one year after his suspension, he forfeits his membership.

A member's seat in the Exchange is a species of property, and in case of its forfeiture, whether by expulsion for fraud or other infraction of the constitution, or because of failure to meet contracts, the Committee of Admission disposes of the membership, and credits the proceeds to him after first satisfying therefrom the claims of all creditors who are members of the Exchange. Similarly in case of death the balance from the sale of the deceased's membership, after satisfaction of all claims, goes to the heirs. In the case of outside creditors the courts uphold a lien on the seat of a member of the Stock Exchange. An outsider cannot attach a seat, but it is a right having value and forms a part of the debtor's assets; consequently the insolvent member can be made to sell his seat to a member elect, and the balance of the proceeds, after settling the claims of all members of the Exchange, can be recovered by the assignee in bankruptcy.[1]

All claims and matters of difference between members are brought before the Arbitration Committee, whose decision is final unless an appeal is taken to the Governing Committee. The former committee may also investigate and decide claims preferred against members by non-members where such non-members agree to abide by the rules of the New York Stock Exchange; though the committee may at its option dismiss the case and

[1] See Dos Passos, *op. cit.*, p. 64 and p. 86. *Cf.* also Bisbee and Simonds, *Law of the Produce Exchange*, ch. 4.

refer the parties to their remedies at law. A non-member making such a claim must execute a full release of his claim against the member, which he delivers to the chairman of the Arbitration Committee, to be delivered by him to the defendant in case the claim is not presented within prescribed time or in case judgment is rendered for the defendant.

There are two other prominent features in the organization of the New York Stock Exchange,—the Gratuity Fund and the Clearing House. The latter will be fully described in the next chapter. The Gratuity Fund, though a characteristic of all the stock exchanges and some of the produce exchanges of the United States, is merely a provision for the life insurance of the members and has no relation to the Exchange in its character as a market for securities.

The organization of the other stock exchanges of the United States is in all essentials, and for the most part in detail, the same as that of the New York Stock Exchange. They are in every case governed by a single Committee or Board of Directors. This Board appoints the standing committees, entertains appeals from them, and has all powers necessary to the government of the Exchange. The requirements for admission are substantially the same in all, and memberships are in every case transferable. But the limitation as to members, the initiation fee, and the value of seats vary considerably. The Consolidated Stock and Petroleum Exchange of New York has the largest membership. It is limited by its constitution to 2,403 members, and at present numbers only about 2,050. The fee for admission by transfer is only $25. This ease of admission and the large membership gives a small market value to the seats. They are quoted at about $100. On the other hand, exchanges which transact much less business have memberships of much

greater value. The Philadelphia Stock Exchange limits its membership to 250, and now has not more than 230 members. The initiation fee for admission by transfer is $250 and for new members is $10,000; but a membership can be purchased under $3,000. The Boston Stock Exchange has a membership limited to 150. The initiation fee for new members is $10,000. Membership by transfer has been quoted at from $18,000 to $20,000, but are now worth a few thousand less than that. The membership of the Chicago Stock Exchange is limited to 445. The initiation fee for new members is $2,500, but for membership by transfer is only $25. In 1894 such memberships were valued at $2,000 or less.

The commissions charged also vary somewhat in the different exchanges. In the New York Stock Exchange we saw that the general charge for non-members was one-eighth of one per cent calculated on the par value of the shares. On the Consolidated the rate is the same, one-eighth of one per cent when the securities sell above five per cent of their face value; while a similar charge, but a specific one of twelve and a half cents a share, is made in the Boston and Philadelphia exchanges, though in Boston and Philadelphia half-rates are made for stock selling below ten dollars a share. The Consolidated makes different rates for mining stocks, and the Boston and Philadelphia exchanges provide for special rates on particular securities. The commissions on business for members vary slightly in the different exchanges, but, as a rule, are about one-quarter of the regular rates.

II.

The associations which regulate speculation in commodities in the United States are as a rule associations which were organized originally for more general purposes. This speculation is carried on in some of those Produce Exchanges, Chambers of Commerce, Boards of

Trade and like bodies, which have grown up in large numbers in this country in response to a general desire for trade organization. In the main these organizations exist either to advance some particular trade, or to give expression in general to the best commercial opinion of the community. With the hundreds of such bodies all over the country this essay is not concerned, except to recognize the relation between them and those particular exchanges which have developed an organized speculation. Many merchants' associations, whether by purpose or by force of circumstance, came to constitute the most important markets in their respective fields, while a few of these, in response to certain external conditions, became speculative markets as well. These have kept the same names and have maintained the same organization which they had before speculation appeared, and are still very largely composed of traders and business men who have no connection with the speculative market. In any case the number of exchanges or associations in which speculation has become the predominating function are very few. Those for speculation in various commodities, especially grain and provisions, are the New York Produce Exchange and the Chicago Board of Trade, each of which existed as a commercial institution in pre-speculative times. To these should be added the New York Cotton Exchange and the New York Coffee Exchange, both of which organizations are devoted to an exclusive trade in cotton and coffee respectively. The Cotton Exchange was organized in 1870, after speculation in cotton had begun in England and in this country, and the Coffee Exchange in 1882, so that in these cases a direct purpose to establish a speculative market seems evident. Less important than the New York Exchange as a speculative market, and yet a seat of considerable cotton speculation, is the New Orleans Cotton Exchange. Other exchanges,

which are primarily trading markets, have developed a considerable speculation, which, however, maintains a place of only secondary importance. Such for example are the Chamber of Commerce of Minneapolis, the Duluth Board of Trade, the Merchants' Exchange of St. Louis and the Toledo Produce Exchange. Minneapolis and Duluth are primarily wheat markets, and little speculation occurs in any other commodity on the Boards of those cities.

All of these exchanges exist under charters of incorporation or are incorporated under general laws. The Chicago Board of Trade, organized in 1848, was incorporated in 1859. This act grants the usual rights of holding property, organizing under its own officers, and under rules and by-laws adopted at will. In addition the charter makes an important provision for an Arbitration Committee, as follows:

SEC. 7. Said corporation may constitute and appoint Committees of Reference and Arbitration, and Committees of Appeals, who shall be governed by such rules and regulations as may be prescribed in the Rules, Regulations, or By-Laws for the settlement of such matters of difference as may be voluntarily submitted for arbitration by members of the Association, or by other persons not members thereof; the acting chairman of either of said committees, when sitting as arbitrators, may administer oaths to the parties and witnesses, and issue subpœnas and attachments, compelling the attendance of witnesses, the same as justices of the peace, and in like manner directed to any constable to execute.

SEC. 8. When any submission shall have been made in writing, and a final award shall have been tendered, and no appeal taken within the time fixed by the Rules or By-Laws, then, on filing such award and submission with the Clerk of the Circuit Court, an execution may issue upon such award as if it were a judgment rendered in the Circuit Court, and such award shall thenceforth have the force and effect of such a judgment, and shall be entered upon the judgment docket of said court.

Power was also given for the appointment of inspectors to "examine, measure, weigh, gauge or inspect" such articles of produce or traffic as are commonly dealt in by members of the exchange, the certificate of said inspectors to be binding as to quantity and quality upon the mem-

bers of the corporation; but this provision has since been superseded by a law putting the inspection and grading of grain into the hands of officials appointed by the State.

The New York Produce Exchange was incorporated in 1862 under the name of the New York Commercial Association, having already existed as an unincorporated association under the name of the Commercial Exchange since 1850. The name was changed to the New York Produce Exchange in 1868. In the act of incorporation the purposes of the organization were declared to be: "To provide and regulate a suitable room or rooms for a Produce Exchange in the city of New York, to inculcate just and equitable principles in trade, to establish and maintain uniformity in commercial usages, to acquire, preserve, and disseminate valuable business information, to adjust controversies and misunderstandings between persons engaged in business, and to make provision for the widows and families of deceased members." The preamble to the By-Laws of the Chicago Board of Trade is a substantially similar declaration of the purposes of that organization.

The charter of the New York Produce Exchange also makes provision for an Arbitration Committee like that of the Chicago Board of Trade. It can consider such controversies, when submitted to it, as might be the subject of an action in law or equity, may subpœna witnesses within the Metropolitan Police District, and make an award which shall be binding upon both parties. Upon filing such an award, according to the proper legal procedure, in the office of the Clerk of the Supreme Court of the City and County of New York, a judgment may be entered therein, and executions issued thereon, the same as authorized by law in regard to judgments in the Supreme Court. The rôle played by this Arbitration Committee has been an important one, and the power

and dignity conferred upon it by the charter is significant of the high position and great influence in the commercial world of such a corporation as the New York Produce Exchange. This dignity has been carefully maintained, and it should be a source of gratification to those who treasure the reputation of American business life that foreign merchants have not infrequently resorted voluntarily to this body for an adjudication of their claims, without fear of prejudice or discrimination.

The charter of the New York Cotton Exchange, which was incorporated by an act of 1871, and that of the New York Coffee Exchange, incorporated in 1885, contain similar provisions for arbitration committees. The objects of these exchanges are also plainly expressed and correspond to the objects of the Produce Exchange and the Chicago Board of Trade, except that they look especially to the increase of the cotton and the coffee trade respectively. The smaller exchanges of St. Louis, Minneapolis, Duluth and other places exist under charters, with no arbitration committees, and assert as their object not so much the facilitation of any particular trade as the advancement of the material interests of their respective cities.

The internal organization and the law of the produce exchanges are not materially different from those of the stock exchanges.[1] The New York Produce Exchange may be taken as an example. Its charter provides that the management of the Exchange shall be in the hands of a President, Vice-President, Treasurer and twelve managers, who together shall constitute a Board of Managers. The President, Vice-President and Treasurer are elected annually, while the managers are so elected that they serve two years, six new members being chosen at each annual election. The President appoints, subject

[1] See Bisbee and Simonds, *The Law of the Produce Exchange*.

to the approval of the Board of Managers, a Secretary and a Superintendent, who though nominally appointed each year are permanent officers, and certain standing committees for the general management of the Exchange.

The membership of the Exchange is 3,000 and is limited to that number, membership being obtainable by transfer. Section 3 of the By-Laws reads:

"Any respectable person, on the proposal of one member, seconded by another, and on presentation of a certificate of membership duly assigned to him, and a written application stating the nature of his business, and such other facts as the Board of Managers may require, after ten days' notice of such application has been conspicuously posted upon the Exchange, shall be admitted to membership, if approved by the Committee on Admissions and elected by the Board of Managers, on the signing of an agreement to abide by the Charter, By-Laws, and Rules of the Exchange, and all amendments that may be made thereto."

Due notice is given when seats are to be sold, and as seen in the above section, a purchaser has to be elected by the Board of Managers before becoming a member, no qualifications for membership being specified except that of being a "respectable person." Each member receives a certificate of membership which is transferable. The transfer fee is five dollars, and certificates are quoted at a few hundred dollars.

The produce exchanges are not as strict as the stock exchanges about excluding non-members from the floor. The New York Stock Exchange does not permit any outsider to go on the floor of the Exchange, but the Floor Rules of the Produce Exchange and of the Chicago Board of Trade provide for the admission of visitors, who, though they are forbidden from doing any business themselves, may be on the spot to direct their brokers at every variation in the market. If any member is unable to attend at the Exchange, he may appoint a substitute, not a member, to deal for him for such limited time as he may be incapacitated.

An important part of the organization of the Produce Exchange are the standing committees for the various trades. The Exchange is a market for dealings in many different commodities, and the members divide themselves, according to their business, into the grain trade, the provision trade, the lard trade, etc. Accordingly the Board of Managers appoints a committee on provisions, a committee on grain, a committee on oils, a committee on cheese, and so on through the list, each committee to have the management of its particular trade, while each trade adopts rules of its own to govern all transactions in its department. Take, for example, the rules regulating the grain trade. These provide for the inspection and grading of grain, for its proper warehousing and delivery, and for all transactions in grain on the floor of the Exchange. These provisions, so far as they affect the speculative market, will be considered later in connection with the business methods on the exchange.

The organization of the Chicago Board of Trade corresponds to that of the New York Produce Exchange. It is governed by a president, two vice-presidents and fifteen directors, who together constitute the Board of Directors. Membership depends on election by the Board of Directors; the initiation fee for new members being $10,000 and the transfer fee, in case of membership by transfer, $25, while seats by transfer are quoted between $500 and $1,000. The rules of the Chicago Board of Trade are not divided, as are those of the New York Produce Exchange, into rules for different trades, adopted by each trade itself, but are all thrown together into one body of general regulations, a special rule, where necessary, being devoted to any particular trade. Special rules for the inspection and grading of flour, provisions, flaxseed, etc., are provided, but the inspection and the grading of grain are now regulated by the State, through the Board of Railroad and Warehouse Commissioners.

The Cotton and Coffee Exchanges of New York are similarly organized, but, dealing as they do in only one commodity, they do not have the complication of committees and rules necessary to meet the exigencies of several different trades. They have similar provisions for gaugers, weighers and inspectors, duly licensed and authorized, and connected with these a highly important "Quotation Committee" not found in the other exchanges, the significance of which will be considered in a later chapter. The provisions in regard to membership and the transfer of seats are also the same. The membership in the Cotton Exchange is about 450. The initiation fee for new members is $10,000, but the transfer fee is only $25, and seats are valued at about $1,000. The membership of the New York Coffee Exchange is limited to 500 and is now about 300. The initiation fee is $1,000, and seats are transferable at about $150.

Commission rates are fixed by the rules of the exchanges. In Chicago they are, "for the purchase or sale and for the purchase and sale" of all kinds of grain, in 1,000 and 5,000 bushel lots, one-fifth of one cent a bushel or, "under special arrangement," one-eighth of one cent. The latter rate is the regular charge. On lard the rates are five cents a tierce, and on pork five cents a barrel. Half-rates are charged on transactions for members of the Board. About the same rates are fixed on the New York Produce Exchange. The charges on the Cotton Exchange are twelve and one-half cents per bale, charged on both the purchase and the sale, with lower rates to members.

A Gratuity Fund has been established by a good many of the exchanges. Clearing-Houses exist on the Produce and Cotton Exchanges of New York, the Chicago Board of Trade and the Minneapolis Chamber of Commerce. The methods of clearing are described in the following chapter.

CHAPTER III.

BUSINESS METHODS ON THE EXCHANGES

I.

THE foregoing chapter has dealt with the organization of those speculative markets known as "exchanges." Speculation, however, may occur in any market. A purchase or sale, to be speculative, does not need to be at a particular place or under the control of any particular organization. Nevertheless, speculation in securities and in a few forms of produce has become of such extent that it has assumed an organized form with a special machinery. Such speculation is confined to transactions of a particular kind made under certain fixed conditions, all of which matters are regulated by the exchange on which such trading occurs. It is only with this organized speculation of the exchanges that the present essay is concerned. In examining the rules of such trading it will be convenient to begin with the simplest methods adopted, namely, those for speculation in produce.

Speculation in produce is to-day always associated with that particular kind of contract known as a "future." The future is primarily a contract to be fulfilled at some future time, and as such is one of a large class of business transactions. Some contracts by nature require a future fulfillment. Such are all contracts for services, contracts for building, and the like. Some contracts, on the other hand, are entered into long before the period set for fulfillment merely because one of the contracting parties thinks he can secure better terms at the time of contract. He fears possible changes in the conditions affecting such a contract. If the changes in question are price

changes, and the contract is for the delivery of goods, the opportunity for speculation appears. All time-dealings arise from a desire to provide in the present for the events of the future. Speculative time-dealings arise when an anticipated difference in the present and future prices of the commodity in question leaves room for a possible profit.

This method of speculation by means of time-dealings arose later, and has been much less common, than the simple speculation of buying property outright and holding it for a rise. The latter form of speculation is found everywhere and at all times, and is entirely independent of any organization or any rules of commercial custom. Since Thales cornered the olive-presses of Miletus,[1] or Joseph, still earlier, cornered the grain of Egypt, such speculation has been universal. It is not unreasonable to believe that time-dealings of some kind also arose wherever commerce was well developed, especially as a highly-advanced form of such dealings seems to have occurred in securities, at least, in the days of the Roman Empire.[2]

It is only, however, in the last few centuries that unquestioned evidence appears of "future dealings" of a well-developed kind. In Holland, early in the seventeenth century, time transactions took place in the products of the whale fisheries. The great uncertainty of the industry and the consequent fluctuation of prices led dealers to sell the products of any particular voyage long before its result became known. The tulip speculation of this period, 1634–37, is famous. In 1698 time-dealings in grain were forbidden in Antwerp. Much more important than this early dealing was the business which

[1] See Aristotle, *Politics* (Jowett's translation, London, 1885), I, 11, § 8. It is interesting to note that Thales, being a man of moderate means, worked his corner by securing options on the use of the presses at the next harvest season.

[2] *Cf.* A. Deloume, *Les Manieurs d'Argent à Rome*, Paris, 1890.

had grown up in the first years of the eighteenth century, and which was described in 1722, by Ricard, in *Le Négoce d'Amsterdam*.[1] At this time practices almost identical with those of the modern speculative market were common in the trade in grain, coffee, cocoa, saltpetre, and other commodities,[2] being particularly advanced in form in the case of coffee.

It was not until the present century, however, that the system became widely developed, and not until the great expansion of foreign trade in the last fifty years that it became of great importance.[3]

The beginnings of the development are found in the case of articles of foreign trade, though these earlier time-dealings were very different from the improved practices of to-day. They were sales "for forward delivery," but for the delivery of some particular lot of goods, and were made on the basis of samples forwarded or sometimes on the basis of a fairly recognized standard, with allowance made in the payment for any variation in quality when the goods were delivered. These sales arose from the desire of the dealer to take advantage of a favorable price before his goods were ready, as was the case in regard to the whale products in Holland. An importer

[1] For the best account of these early dealings see Jacobson, *Terminhandel in Waaren*, translated from the Dutch, Rotterdam, 1889. *Cf.* also Fuchs, *Der Warenterminhandel*, p. 5, reprinted from Schmoller's *Jahrbuch*, Vol. XV, Heft 1.

Kohn, *Der Getreideterminhandel*, p. 28, Leipzig, 1895, quoting Roscher, says that sales of grain before it was threshed, or of herring before they were caught, were forbidden in the Hanse cities in 1417. Cf. a similar local ordinance in England, in 1357, Cunningham, *English Industry and Commerce*, I, 296.

[2] See Jacobson, *op. cit.* foot-notes to pp. 77, 79 for typical forms of "futures" and of "puts and calls," taken from Ricard.

[3] Tooke, for example, writing about 1840, speaks of the speculation that occurred in certain spices in 1825, which consisted simply of successive purchases on a rising market without intermediate deliveries, as a "very rare occurrence in the markets for produce." *History of Prices*, III, p. 159.

of cotton from this country into England, for example, would fear to await the arrival of his cargo before selling, and would sell the cotton "in transit," or "to arrive."[1] The goods might even be sold abroad before leaving the Southern ports, in which case the contract would read as a sale of so much cotton "for shipment." Closely connected with these methods was the development of the so-called "ports of call," which are still of importance in export trade. These are central ports to which goods are originally shipped, and where orders are received fixing their ultimate destination. Before arrival the consignee at the port of call sells the goods in the best market for the moment, and on its arrival gives orders for the vessel to proceed to the port where the goods have been sold.[2] Dealings for forward delivery were practiced in the domestic trade almost as early as in the export trade. In the case of lake and canal shipments, grain was largely sold ahead by sample "to arrive" and "for shipment." These are still regular methods of trading; for example, much wheat "to arrive" is bought by the miller, or cotton "to arrive" by the spinner; but today these transactions are merely for the matter of convenience of delivery. Their old importance as insurance against fluctuating prices has disappeared with the advent of the improved methods of the speculative market.

It was only with the development of the warrant and grading system, however, that the real future became possible. The use of warrants began in England in 1733 in the business of the East India Company.[3] Their possi-

[1] *Cf.* Fuchs, *Die Organisation des Liverpooler Baumwollhandels*, in Schmoller's *Jahrbuch*, XIV, p. 115.

[2] For example, goods may be consigned "to Cork for orders," with stipulation in the shipping contract concerning the right of further delivery; thus "privilege U. K." means that the ship must proceed to any port in the United Kingdom designated by the consignee. *Cf.* also Kohn, *op. cit.*, p. 29.

[3] Felix Hecht, *Die Warrants*, p. 2. Stuttgart, 1884.

bilities so quickly became evident that at an early date complaints appear of well-developed abuses through fraudulent issues. The function of the warrant was to transfer ownership without any actual transfer of the goods. Secondarily it facilitated advances of capital against the goods held. Both these advantages gave a stimulus to trade, and there arose an active business in warrants of a more or less speculative nature. They passed easily from hand to hand and frequently bore many endorsements before finally being presented for the goods. In these cases, however, the warrants were special receipts; that is, they represented specific lots deposited, and no established grades were fixed in terms of which sales for forward delivery could be made; hence the speculation in them was limited to the kind of speculation that might take place through buying and selling the goods themselves. It was only in the case of the metals that a grading system and general warrants came into use.[1] Until this method was adopted no one could sell goods before purchasing them, so no organized speculation for future delivery could arise.

In the case of metals, especially iron, the warrant system received an important extension. The warrant became a general warrant, that is, a receipt for no particular lot deposited, but merely a transferable order for an equal amount of the given commodity of the same grade. This was made possible by a fixed system of grading, all the iron of the same grade being stored in bulk, to be taken out on presentation of the warrants. Thus the ordinary warrant for Scotch pig read for 300 lbs. of No. 1 and 200 lbs. of No. 3 pig-iron, and was made good by a delivery of those amounts and qualities, without reference to the specific iron deposited.[2]

In England warrants issued in terms of recognized

[1] Hecht, *Die Warrants*, p. 10. [2] *Ibid.*, p. 28.

grades were extended gradually to other commodities. In the United States they developed independently in the case of the great agricultural staples. What the import trade did for England in developing these methods, was done for this country by the export trade on the one hand and the internal trade on the other. The striking increase in the grain and cotton business in the United States during the last fifty years has been accompanied by the growth of commercial practices that are of great interest to the student. Untrammeled by business traditions of past centuries, or by the tendency to fit new conditions to old methods, the trade of this country has unconsciously adopted new and direct means for attaining its ends. There has been little "history" or "evolution" about the process, for the practical mind of the business man has simply seized the most direct method of "facilitating business," a course forced on him by the constantly increasing size of his transactions.[1]

Thus in the growth of receipts at export points is found the cause of the adoption of the warehouse system, while the extension of the railroads into the vast wheat fields of the West led to a similar storage system there. Grain elevators sprang up along the lines for the convenience of the producers, the dealers and the roads themselves. The movement of vast crops from such scattered sources was increasingly difficult under the old method of selling by sample, and during the fifties the system of grading was fully adopted.[2] As wheat was presented for storage it was inspected and classified in established grades. Receipts (warrants) were issued by the elevator or warehouse according to the grade, and became the equivalent

[1] For a contrast of American and continental practice, see *Handwörterbuch der Staatswissenschaften*, article "Getreidehandel."

[2] There is little available material for a study of the history of the grain trade. A valuable beginning in this direction is made in two articles by H. Schumacher, *Der Getreidehandel in den Ver. Staaten von Amerika*, in Conrad's *Jahrbücher* for September and December, 1895.

in the market of the given amount of the given grade. By 1860 most of the grain in Chicago was duly graded. These receipts, although made in terms of fixed grades, were at first specific orders for actual lots deposited. With the enormous storings of grain in bulk, however, the difficulties of delivering at any moment the actual wheat deposited on a warrant became increasingly great. Consequently a change was made to the system of general receipts. Grain received by the railroad or the warehouse was properly graded and classified, and all the grain of the same grade was stored in bulk without regard to particular lots. A delivery of the receipt constituted a fulfillment of a contract, and in fact the receipts themselves might be considered the commodity bought and sold, since they were rights to receive a certain amount of the given grade on demand.

This practice of issuing general receipts began early in the West but was not adopted in New York till 1874. It has never become established in the cotton trade. Cotton is not stored in vast quantities in terminal warehouses and lacks entirely the flowing quality of wheat, which makes the storing and "loading out" of that commodity so distinctive a process.

The development of the system of grading and of elevator receipts is the most important step in the history of the grain trade.[1] It is only with such a machinery that an extension of forward sales in the modern sense is possible, that is, of forward sales of goods having no definite existence until the moment of delivery. The goods may or may not be in the possession of the seller at the time of the contract. When they are not,

[1] "Die Entwicklung des Warrantsystems ist in der Kette der für das Gedeihen des Grosswaarenhandels wesentlichen Institutionen das letzte Glied, welches auf den Umsatz im Waarengeschäft fördernd, anregend und regelnd einwirkt. Es bedeutet einen Kulminationspunkt in der Entwicklung der für den Grosshandel erwünschten Institutionen." Hecht, *Die Warrants*, p. 172.

and when the seller has made no contract to receive them, such a transaction is called a "short sale." The seller merely contracts to deliver a certain amount of a certain grade of the commodity in question. Such transactions may be made to any extent as soon as a commodity is regularly graded and classified, and receipts of a stereotyped kind are accepted as a good delivery. The future fulfillment of the contract is assured by the possibility of getting such receipts. A full-fledged speculation is at length made possible. Without a system of grades and receipts there could be no "short-selling," and without short-selling there could be no operations "for the fall," that is, operations in which the dealer seeks to secure profit by selling for forward delivery at one price and by making the delivery with goods bought later at a lower price. Under the old methods "bull" speculation alone was possible; the speculative market is not complete till the machinery for "bear" speculation is added.

It is stated[1] that the future contract proper, however, was preceded in the West by a form of dealing which is of peculiar interest as an early form, because it is both the form of transaction which now prevails in our stock exchanges, and one which has recently been suggested as a possible substitute for the present method of the produce exchanges. This dealing was effected through a process of borrowing which had also sprung up in the trade in Scotch pig-warrants referred to above.[2] When much wheat had been stored in the elevators and many receipts had been issued, the holders were glad to loan these receipts against cash and get the use of the money during the time of holding. Thus any one looking for a fall in price could sell wheat which he would deliver by means

[1] See evidence taken before Senate Committee on the Judiciary, Feb., 1892, on Senate bills 685 and 1757, 52d Congress, 1st Session, p. 225.

[2] *Cf.* Hecht, *op. cit.*, p. 30.

of borrowed, transferable receipts properly endorsed by the holder, expecting to be able to replace these, when demanded, by purchases of receipts at a lower price. There was never any obligation to return the identical receipts, since all receipts for the same goods were equally good. In this way a single receipt might serve for the satisfaction of any number of contracts. In such a system, however, the extension of short-sales was limited by existing stocks, that is, by the number of receipts for borrowing in the market. The possibility of a combination of the holders of wheat always put a limit to the number and size of contracts to be settled by such loans.

It was perhaps the hardship of this restraint on trade which hastened the adoption of the "future" system. The future once established, transactions for future delivery increased enormously on those exchanges which formed the chief markets of the country. The necessity of uniform and fixed regulations for such contracts, and the increased complexity of a growing business, led to the gradual growth of a body of rules on the various exchanges by which all the details of such contracts are regulated.

It is difficult to say how early dealings in "futures" in the United States began. As soon as they became of importance the exchanges adopted rules controlling them. The first appearance of printed rules for "future" trading in the reports of the Chicago Board of Trade was in the report of 1869. Such trading had been more or less actively carried on for four or five years before. In the evidence before the Congressional Committee on Agriculture, in February, 1892,[1] it was stated that the government contracts for pork during the Civil War were the beginning of future trading. Cases of such trading, however, probably occurred in a small way as early as

[1] On bills 392, 2699, and 3870, 52d Congress, 1 Session, p. 161.

1855.[1] Trading in futures began in other western markets, such as St. Louis, Milwaukee and Toledo, at about the same time, Milwaukee taking the lead as early as 1855. In New York it appeared some years later, not becoming of great importance until the later seventies. The first public call in grain on the New York Produce Exchange was May 17, 1877, and in pork and lard, January 31, 1876,[2] but future sales occurred some years before these dates.[3]

The first rules were adopted for the petroleum trade, and "wash sales" in that commodity were already complained of in 1873.[4] The first future trading of importance in New York was in cotton. It began soon after the Civil War, and was due to the great uncertainties of the cotton trade at that time.

It appears that a period of only thirty years covers the real growth of the vast body of speculative transactions in this country, and of the code of rules which regulates them. Without attempting to consider in detail the changes made in these rules, it remains to examine their workings as exemplified in the exchange business of today. The importance of the grading and classification of a commodity thus dealt in has already been emphasized. To be sold "short" a commodity must be representative, that is, of the same quality throughout. This

[1] Future-dealing was adopted considerably earlier in Europe. Futures were sold in some kinds of grain in Berlin by 1832, and some years earlier in France and Holland. See Fuchs, *Der Warenterminhandel*, p. 6, Jacobson, *op. cit.*, pp. 85, 89.

[2] See *Report of New York Produce Exchange*, 1881.

[3] Statistics of transactions for early years give an idea of the degree of importance of such dealing. (From *Report of New York Produce Exchange*, 1881.)

	Wheat (bushels).	Corn (bushels).	Lard (tierces).	Margins.
1877.....	15,061,000	17,862,000	268,000	$673,776
1879.....	34,358,000	27,847,000	859,250	2,783,854
1881.....	44,492,000	41,912,000	782,000	10,716,838

Compare with these figures the sales of wheat and corn in 1893, 1,281,811,000 bushels and 239,257,000 bushels.

[4] See report of Produce Exchange of that year.

property is fairly exemplified in grain and cotton and provisions, but is made complete by means of an established classification. For contract purposes each grade is truly representative. The fixing of grades is then a factor of the greatest importance in the speculative system. The early grading, however, was of an untrustworthy kind until the produce exchanges, as preëminently concerned in the matter, began to adopt rules to control it. In some cases the exchanges still maintain this control, but several of the Western States, notably Illinois, Minnesota and Missouri, containing the important markets of Chicago, Minneapolis and St. Louis, have removed the inspection of grain from the exchanges and have made it a State function. In these States the inspectors are State officials and the grades are fixed by a State Board —in Illinois by the Board of Railroad and Warehouse Commissioners. In the case of provisions, however, in Chicago grading is still regulated by the Board of Trade. In New York the Produce Exchange has provided rules for the inspection and grading of all commodities which are dealt in on the Board. Warehouses are duly authorized, sworn inspectors and gaugers are provided, grades are established, and receipts of a set form are issued. All contracts are made in terms of these grades, and all settlements are made by the transfer of these receipts.

There is a lack of uniformity in the grading of grain in different States and different exchanges, which is a cause of some confusion to the trade. Each exchange or State Board can fix its own grades, and can change them at any time. In Chicago there are about twenty-five grades of wheat and about ten grades of corn, and about the same number in New York. The classification in the two exchanges is, however, not the same. The contracts on the produce exchanges specify the grade, and only a delivery of that grade, or some higher grade, constitutes a settlement of the contract. The provision that a higher

than contract grade constitutes a good delivery was adopted comparatively recently with a view to avoid "corners." So large a proportion of the transactions are made for speculation, that in the case of wheat and pork special "contract grades" are established, which are understood in all contracts not specifying the contrary. "Contract wheat" is in Chicago No. 2 wheat, either Spring or Red Winter; in New York it may be No. 2 Red Winter, No. 1 Northern Spring, or No. 1 Hard Spring.[1] In the case of pork, unless the grade is specified in the contract, mess-pork is understood. On the cotton and the coffee exchanges the rules are different. Like the produce exchanges, the New York Cotton Exchange provides for a grading and classification of cotton with sworn inspectors and the like; but it has an entirely different feature in its quotation and revision committees. These committees fix the price of the various grades of cotton in terms of one particular grade, Middling Uplands.[2]

[1] The "contract" or "speculative" grades vary considerably in different markets. At Minneapolis there is one such grade, No. 1 Northern; at Duluth two grades, No. 1 Hard and No. 1 Northern, at St. Louis one grade, No. 2 Red Winter. Further confusion is caused by changing the contract grades. For example, at St. Louis when there was a scarcity of No. 2 Red in 1895, a particular variety, known as Turkey Red and grown chiefly in Kansas, was made a contract wheat, but was abolished after a year's trial. The contract grade must of course depend upon the local conditions, and will embrace the variety or varieties constituting the chief receipts at the market in question.

[2] The Quotation Committee consists of seven members, and meets twice a day to fix the official quotation of Middling Uplands and of all other grades in terms of this one, according to the relative differences established by the Committee on Revision of Quotations. This latter committee consists of nine members, who meet nine times a year and determine the relation of the values of all other grades to the value of Middling, which becomes the basis of the official quotations until the next revision. The same is true of the New Orleans Cotton Exchange and the New York Coffee Exchange. In the latter exchange the Spot Quotation Committee posts daily the values of all grades in terms of No. 7 (Low Ordinary), and any question of the revision of the comparative values of the standard is referred to the governing board.

The form of contract, therefore, does not specify the delivery of any particular grade, but the price reads for Middling Uplands, and any grade from Good Ordinary to Fair, inclusive, may be delivered, with allowance in the price (as fixed by the Revision Committee) for its variation from Middling in quality. Some of the effects of such a provision will be considered in a later chapter.

Besides these fixed stipulations regarding grades that are uniform for all contracts, there are on all the exchanges stereotyped conditions regarding the amounts to be delivered. Contracts are made in terms of a fixed unit of amount. On the Chicago Board of Trade the unit in the case of grain is 5,000 bushels. Contracts are made in multiples of this unit as a matter of convenience, and all deliveries on contracts are made in lots of 5,000 bushels. The same unit is used in New York. Where wheat or corn is sold, however, in "boat-load lots to arrive," 8,000 bushels is understood. In such cases ten per cent deficiency or excess from the contract amount does not vitiate the delivery. In the regular contract a five per cent variation is allowed in New York, and a one per cent variation in Chicago. In any case the excess or the deficiency is to be settled for at the closing price of the day of tender. Similar units of sale exist for other products, for example, in mess-pork and lard 250 packages for large sales, 50 packages for smaller sales; in cotton 50,000 lbs. "in about 100 bales;" in coffee 32,500 lbs. "in about 250 bags." In the European exchanges[1] similar rules exist. In the case of wheat in Berlin, the minimum or *Schluss* is 1,000 *Zollcentner*, about 1,900 bushels, in Budapest 1000 *Metercentner*, about 3750 bushels, in London 250,000 lbs. Similar allowances are also made for deliveries in slight variation of the contract amount.

[1] *Cf.* Kohn, *Der Getreideterminhandel*, p. 33; also *Handwörterbuch der Staatswissenschaften*, article, "Börsengeschäfte."

Another feature of the time-bargains made on the produce exchanges is the determination of the time of fulfillment. The products which are sold for future delivery come into the market continuously, and yet irregularly, and cannot be promised for delivery on any fixed day. At the same time, the date of delivery within certain limits is rigidly fixed in the contract. In this country the universal practice is to specify the month of delivery and allow the seller the option of delivering on whatever day of the month he may prefer. Thus if wheat is sold for May delivery, "seller's option," the wheat may be delivered on any day of the month, and must be taken and paid for by the ultimate purchaser whenever he is served with due notice of intention to deliver. On the other hand, if it is not delivered before, the seller is bound to deliver on the last day of the month. Occasionally the option as to the day of the month is given to the buyer, and the contract then reads "buyer's option;" but this is unusual, and seller's option is always understood unless otherwise stated.

There are no regular sales on American exchanges for which the option for delivery extends beyond a single month.[1] In Europe, however, sales are frequently made for a longer option—for two months, or even for four or six months; in Paris, for example, for the four *premiers mois*, January to March, or four *chauds mois*, May to August. There are also in Germany and Austria specially fixed periods, March and April, called the *Frühjahr-Termin*, and September and October, called the *Herbst-Termin*.[2] The delivery is effected in a similar way, however, as in American exchanges, the only difference being the length of option.

[1] By this is meant the time within which delivery may be made. Futures may be sold six months or more ahead, but the contract specifies some one month in which delivery is to be made. Although no longer options than one month are quoted, there are sometimes sales of "year corn," that is, corn to be delivered (seller's or buyer's option) at any time within the current year.

[2] See Kohn, *Der Getreideterminhandel*, p. 22.

The foregoing description of the conditions of the contract for future delivery makes it possible to summarize in the form of definitions the conclusions reached. It is common experience that commerce cares little for definitions, and that accuracy in terms is generally secured only after more or less has been written on a subject of this nature. The Germans, for example, have arrived at a distinct use of terms which we can hardly equal unless we go beyond the familiar language of business. The "future," as distinguished from other forms of time dealings, evidently depends upon the existence of warehouse receipts issued in terms of fixed and accepted grades, by which means a commodity is made entirely representative. It also depends upon an organized market, for without strict regulations from a central body the grading and classification of commodities would be impossible, and the difference in form of contract would be too confusing to admit of any great extension of that kind of business. It is then perhaps correct to define a "future" as a contract for the future delivery of some commodity, without reference to specific lots, made under the rules of some commercial body, in a set form, by which the conditions as to the unit of amount, the quality, and the time of delivery are stereotyped, and only the determination of the total amount and the price is left open to the contracting parties.[1] At least futures not so made are a rare exception.[2]

[1] *Cf.* David Kohn, *op. cit.*, p. 37. "Das Termingeschäft ist ein solcher mit Rücksicht auf den zukünftigen Preis geschlossener, in usancemässig festgestelltem zukünftigem Zeitraum zu effektuierender, übertragbarer, in seinen Bedingungen typsicher Kauf und Verkauf, dessen Objekt nach Quantität und Qualität vertretbar oder durch geschäftliche Usance mit Hülfe kaufmännischer Fiktion nach Möglichkeit dazu gemacht ist."

Fuchs, *Der Warenterminhandel*, p. 4. "Das Termingeschäft ist also äusserlich nur ein genauer formuliertes, durch Börsenusancen reglementiertes, Zeit- oder Lieferungsgeschäft."

[2] The word "future," however, lacks the etymological significance which its equivalent in other languages possesses. The German speaks of a "*Zeitgeschäft*" as we do of a time-contract, while a "*Termin-*

Another important class of transactions are the dealings "for cash." These "cash" or "spot" contracts are merely the outright sale and purchase of goods for immediate delivery.[1] They do not necessarily imply a cash payment, as the seller and buyer can make their own arrangements as to the giving of credit. They do, however, represent actual goods available in the market at the moment. It is a mistake, nevertheless, to associate "spot" dealings with "actual business," and "futures" with speculation. Spot dealings may be purely speculative, as where a person buys and sells in order to profit by daily fluctuations in the spot market, or buys "spot stuff" outright to hold for a rise, or, finally, makes cash purchases to settle on future contracts previously made. On the other hand, contracts for future delivery are as much a part of trade contracts as cash sales are a part of speculative contracts. It may be by futures that the dealer sells and the miller buys his wheat, or that the merchant sells and the manufacturer buys his cotton.

The amount of futures sold on the exchanges, however, far exceeds the amount of cash dealings. The figures for the Produce and Cotton Exchanges of New York for 1895 are:[2]

Wheat,		Cotton,	
"futures,"	1,443,875,000 bushels.	"futures,"	63,828,300 bales.
"spot,"	43,405,076 bushels.	"spot,"	240,456 bales.

When it is remembered that the unprecedented wheat

geschäft" is a transaction based on a fixed period of fulfillment, the *Termin*. The same idea is conveyed by the French phrase "*opération à terme*."

[1] In the midst of the transactions on the board, actual delivery of the receipts at the moment of contract is evidently impossible, but "spot" contracts are stereotyped in form, and delivery under the rules is postponed until the close of business on that day.

[2] See *Bradstreet's*, Jan. 4, 1896. It is doubtful if these figures, though official, include all the transactions made.

crop for 1891 in the United States was little more than 600,000,000 bushels, it will be seen that the annual sales on the New York Exchange alone far exceed the amount of the annual crop. Yet the New York market is small compared with that of Chicago. No comparative figures of spots and futures are available for the latter market. The amount of clearings on future contracts, however, under the method of clearing differences to be described below, gives some idea of the enormous extent to which such tradings are carried on in Chicago." [1]

	Clearings.	Balances.
1891	$104,083,529	$32,430,827
1893	68,707,668	26,896,677
1895	78,133,437	28,726,400

Though the sales in New York are only a fraction of those in Chicago, they are far greater than those of any other grain exchange.

Another important class of contracts are "privileges." A privilege is a contract whereby one party acquires the right, but is not thereby obligated, to buy from or sell to the other party a certain amount of a certain commodity at a certain price. He has the *privilege* or *option* of completing the contract or not. This differs entirely from the option allowed the seller in an ordinary future contract. There the seller is obligated to deliver on the contract as stipulated, if demand to that effect is made, but has an option as to the particular day within a certain month on which to make delivery. In the case of a privilege the option is whether or not the delivery shall be made at all. The optional element in both contracts has caused the word "option" to be applied indiscriminately to both futures and privileges. The "anti-option" bills which have been introduced in Congress in recent years adopted the word "option" to signify those con-

[1] See *Report of Chicago Board of Trade*, 1895, p. 119.

tracts in which fulfillment is not obligatory, and made the distinction sharp between "futures" and "options." Commercial usage, however, often makes the two words synonymous. In view of such ambiguity it will be better not to use the word "option" to indicate a particular *form* of contract, but to use it only in relation to some particular time of delivery, as "the May option" or "the September option." The term "privilege" is more definite in business usage, and confusion may be best avoided by making the division between "futures" and "privileges."

In one sense a privilege is a cash transaction, since a cash payment (as explained below) is paid for the privilege. In another sense it may be classed with futures, in opposition to cash dealings, since, if the transaction is completed, the privilege fulfills itself in terms of some future delivery.[1]

Privileges are either "puts" or "calls." The "put" is a contract made with a view to a fall in price. It enables the seller to limit his risk of loss to a definite amount. By paying a fixed sum of money he acquires the right to deliver within a fixed period of time, to the party taking the put-money, a certain amount of a commodity at a stated price. If the price goes down he purchases and makes his delivery according to contract; if the price goes up, on the other hand, he relinquishes the "put-money" and exercises the privilege of not delivering. He loses the amount of the price paid, but can lose no more.

Suppose a "put" is sold in wheat: the price in January

[1] According to German usage of terms, transactions are distinguished as *Comptant-* or *Locogeschäfte* (spot dealings) and *Termingeschäfte* (future dealings), while the *Termingeschäft* may be either a *Fixgeschäft* (the "future" proper as defined above) or a *Prämiegeschäft* (privilege). In the same way, in France the *marché à terme* embraces both the *marché ferme*, and the *marché à prime*. Usage in this country furnishes no distinct term which includes both a future and a privilege. See Kohn, *op. cit.*, p. 22, Courtois, *Opérations de Bourse*, ch. 3, Buchère, *Opérations de la Bourse*, ch. 3, Paris, 1877, or any general account of exchange operations in Europe.

of wheat for May delivery being seventy cents, A, who is expecting a fall but is unwilling to run great risk, pays B ten dollars for the privilege of delivering to him 10,000 bushels at some price, say sixty-nine cents, within the next twenty-four hours. If the price falls below sixty-nine cents, A will buy this wheat and deliver. The term "deliver" is here used to signify that the owner of the privilege can make the other party *contract* to receive the wheat. If the privilege is in wheat for May delivery it cannot of course be delivered in January. On the other hand, if the price rises, A will not deliver, and loses only ten dollars. This payment then is made for the privilege of making delivery or not as he chooses. He can lose only the ten dollars. He may make, however, a profit limited only by the amount of fall in price. On the other hand, B, who is called the "seller of the put," never makes more than the ten dollars, while he may lose any amount. For the certainty of the ten dollars he is willing to risk a considerable fall. The name "put" is derived from the right acquired by A to *put* the wheat to B, who is obliged to take it at the contract price.

A "call" is exactly the reverse of a put. It is a contract whereby, for a consideration in cash, one party acquires the right to receive from the other party, within a fixed period of time, a certain amount of a commodity at a stipulated price. The loss to the buyer of the call is limited to the price, and the gain of the seller is limited to the same amount. It is clear that a "call" is the same in nature as an option on real estate, a common form of contract among real-estate dealers. The principle of both contracts is that a party does not wish to assume the ownership of any property until he is sure of a good market, and hence will pay a premium in order to be able to secure the property at a stipulated price when a good buyer is found.

A combination of the two forms of privileges makes what

is called in England a "put and call option," and on American exchanges more expressively a "straddle." A "straddle" is a contract by which one party acquires the right either to put or to call from another party, within a fixed period of time, a given amount of a commodity at a stipulated price. The seller of a straddle evidently counts on a stagnant market. This form of contract, however, is used very little in the grain market.

A straddle is generally made "at the market," a put or call "away from the market;" that is, if the market price of wheat for May delivery is seventy cents, the seller of a put will agree to take it, not at seventy cents perhaps, for the risk is too great, but at something less than that, perhaps sixty-nine or sixty-nine and a half cents. The seller of a call, on the other hand, will add something to the market price and agree to deliver at seventy-one cents: but the seller of a straddle will make his contract at the market price, because for him to make a profit the fluctuation either way must be less than the price of the privilege.

The amount paid for a privilege depends upon the risk to the seller. The farther away from the market the privilege reads, the less the risk to the seller and the lower the price. The price of a straddle is, of course, greater than that of a put or a call alone, because when made at the market it creates a much greater risk, a movement in either direction which would not affect either a put or call being sufficient to wipe out the seller's profit. The most important factor, perhaps, in determining the price of a privilege is the condition of the market. If the market is fluctuating, a put or a call is either made at a wide margin from the market, or commands a high price. On the other hand, in a stagnant market a privilege is sold very near the market at a small price. Evidently on a rising market a put is sold at better terms than at other times, and on a falling market a call is sold

at better terms. In the next place, the longer the time the privilege runs, the greater the risk and the higher the price. Commonly, privileges in the grain market run for either one day or one week, though they may run for a longer time. To sum up, the price of a privilege depends chiefly upon three things: the distance it reads away from the market, the state of the market, and the time the privilege runs. As a matter of fact, however, it is customary to keep the price fixed and to let the other conditions vary. For example, in wheat a put or a call generally sells in Chicago at one dollar a thousand bushels. In a dull market a put or a call for twenty-four hours, reading one-fourth or three-eighths of a cent from the market, can be bought at that price, while as the market becomes more active the price does not change, but the margin between the privilege and the market is widened to one cent or any amount more.

A privilege is fulfilled, not by any delivery of grain, but by making a regular contract for its delivery. It may be that the man who sold a put stands ready to take the wheat when due; if not, he sells the wheat to another party, and the transaction is now merged into a whole line of similar futures, and, as will be seen below, profits are perhaps taken at once by means of "off-sets." In any case, the moment the buyer of the privilege announces that he will put or call the property in question, a contract like any other future exists, and there is no further option of delivery except as to the particular day within the option month.

It is seen that, as viewed on the exchanges of this country, the privilege is a right which can be bought and sold, and which entitles the purchaser of the right to enter into a certain contract with the other party within a specified time. The terms of the contract that is to be made, at the option of the owner of the right, are definitely fixed in the terms of the sale of right. From an-

other point of view, however, the privilege may be considered as an ordinary contract for future delivery with a special stipulation that, in consideration of a cash payment, one of the parties has the right to withdraw from the contract within a specified time. This is the German view of the privilege or *Prämiegeschäft*, and is in fact the prevalent view on the continent.[1]

Something will be said later in regard to the influence of these privileges on prices and their function, if any, in business. Suffice it to say here that they are generally looked upon with disfavor as gambling devices, and are forbidden by almost all the exchanges of the country. It was necessary to describe them as regular transactions, for they do take place, and no description of the speculative market would be complete without them. The New York Produce Exchange adopted the following rule in 1887:

"Any person who shall buy or sell privileges known as 'puts and calls,' or who shall, under the rules governing the various trades of the exchange, deliver, receive or margin any contracts based upon such privileges, shall be deemed guilty of misconduct and liable to discipline under Sec. 32 of the By-Laws."

Privileges are sold chiefly after hours and not on the exchange floor.[2] In Chicago, after the Board closes there is a

[1] This is evident from the use of terms. It is said that a *Lieferungsprämie*, or *Vorprämie*, is paid by the *buyer* for the privilege of withdrawing from the contract, and an *Empfangsprämie*, or *Rückprämie*, by the *seller* for a similar privilege. Here the terms buyer and seller refer to the completed contract. According to American usage, the seller and the buyer of the *privilege* are spoken of, and the buyer of the privilege may be either the party to receive or the party to deliver on the final contract, according to the nature of the privilege. See Fuchs, *Der Warenterminhandel*, p. 11, also Kohn, *Der Getreideterminhandel*, p. 22, and Courtois, *Opérations de Bourse*, p. 75.

[2] Vigorous efforts have sometimes been made to get rules passed forbidding puts and calls off as well as on the Board. In the spring of 1895 a hot fight against privileges was waged in Chicago, with President Baker as leader of the anti-privilege men. Privileges are forbidden by statute in Illinois, and there was an attempt to forbid privileges even outside of the Board, since statute-breaking was a daily occurrence.

further meeting in the corridors, or in some room of the same building, where puts and calls are sold without let or hindrance. They form, however, a very small part of the total volume of transactions, and perhaps are not discountenanced more than they are because of the legitimate use to which they are sometimes put by bona fide traders.

Nominally public trading that does not take place within the regular hours of the Board and on the floor of the Exchange is forbidden by most of the exchanges, but little attempt is made to enforce the rule. Such trading is generally called "curb-trading," and is used both for speculative and for bona fide business purposes. The quotations of Chicago prices that appear on the "tape" begin with the quotation of the "curb" before regular business hours and end with the quotation of puts and calls after business closes. The reason for making rules against curb-trading seems to be that it is not within the cognizance of the Board and cannot in any way be controlled. The rule is merely a question of practical policy among the exchanges. Transactions outside the Board are not enforceable under the rules, but, since fidelity in meeting engagements is a necessity for any one who wishes to continue in business, the danger of loss through fraud is not much greater here than on the Board.

II.

It may be well to examine the way in which an actual transaction is put through on an exchange, taking as an example the New York Produce Exchange. Suppose in March A, who is a speculator and expects a fall in wheat, sells to B 100,000 bushels of May wheat,[1] which he does

[1] The designation of wheat by months has nothing to do with the kind of wheat or the time of harvest. The expressions "May wheat" and "September wheat," simply refer to wheat which is to be delivered, according to the terms of the contract, in those particular months.

not own, at 70 cents a bushel. The form of contract adopted by the New York Produce Exchange is as follows:[1]

CONTRACT WHEAT.

NEW YORK, ..., 18

In consideration of one dollar in hand paid, the receipt of which is hereby acknowledged .....have this day sold to.....
.....or bought of .....bushels of CONTRACT WHEAT (which shall be either No. 2 Red Winter Wheat, No. 1 Northern Spring Wheat or No. 1 Hard Spring Wheat), New York Inspection, at.....cents per bushel of 60 pounds, deliverable at seller's (or buyer's) option.....18

This contract is made in view of, and in all respects subject to, the By-Laws and Rules established by the New York Produce Exchange, in force at this date.

.....

So far it is a simple transaction between A and B. From this point on until the first of May there will be a constantly changing market price for May wheat. Suppose that the price rises to 72 cents and that B thinks that a two-cent profit is better than the chance of more.[2] He sells to C 100,000 bushels of May wheat. This is a separate contract. These sales may continue to any extent. Frightened by a slight reaction, C perhaps fears a fall. He sells the same amount at 71½ cents, again a separate transaction. D, the purchaser, has perhaps sold short before at the same price as A, 72 cents. By the transaction with C, he secures a profit of half a cent. E, to whom D formerly sold, has perhaps already sold to F, and he to G, and so on. Thus two series of transactions are linked together by the contract between C and D. Each individual along the line, with the exception of the first and last, has made two contracts, one to deliver

[1] As will be seen below, though every contract is made according to the above conditions, written contracts are not exchanged.

[2] In referring to profits the deductions for commission and interest charges are omitted for convenience.

100,000 bushels of wheat in May, one to receive the same amount.[1]

Those who were trading for the rise, the "bulls," made their purchases first. Those who were trading for the fall, the "bears,"[2] made their sales first, and their purchases later. In both cases the second or realizing transaction was made before the fulfillment of the first one.[3] In the example taken the sales of the bears were short-sales. B, though he did not own the property, did not sell "short" to C, for he (B) had already contracted for an equal amount. The purchases of the bears are called "covering contracts." A bear "covers" a short-sale by making a purchase of the same amount deliverable at the same time. If he sells at seventy-two cents and covers at seventy cents he makes a profit of two cents a bushel, less commission charges, while if the price in the covering contract is greater than that of the short-sale, the bear loses. The opposite of the short-sale is the purchase by the bull (say B in our example) who, as the saying is, is "long" on wheat, or is on the "long side of the market." His sale always follows his purchase and is called a "realizing" or "liquidating" sale.

[1] The supposition of transactions in equal amount is made for convenience. As a matter of fact perhaps one purchaser in the line has bought the 100,000 bushels in question at the same time with much more and has merged the amount into a single sale of several hundred thousand bushels, or perhaps the original 100,000 gets split up into a number of smaller transactions.

[2] The names "bull" and "bear" originated very early in the jargon of the exchange. They appear in Mortimer's *Every Man his own Broker* (London, 6th ed., 1765), where an explanation of their use is suggested. See p. 38.

[3] It is sometimes said (*cf.* Michælis, *Die wirthschaftliche Rolle des Spekulationshandels*, in *Volkswirthschaftliche Schriften*, ii, 15), that in the case of speculative transactions, as distinct from ordinary trading, the realizing contract always precedes the fulfillment of the original contract. The distinction is an interesting one as showing the general contrast between trade and speculation, but it is not universally true. Speculators, as well as traders for business purposes, may buy outright for a rise.

It is evident that, so far as most of the parties are concerned, their interest in the transaction is at an end long before the time for delivery arrives. That is, the question of profit is decided as soon as the bear covers or the bull liquidates. Each one is responsible for the delivery of his wheat, but each one has contracted to receive the same amount and depends on the party who sold to him to furnish what he needs to fulfill his contract. There are perhaps two in the line who have made but a single contract; one who has actual wheat to dispose of and one who wants actual wheat for use. In the example taken, A was a short seller under the necessity of covering his sale by a purchase before the time of delivery. Suppose that he purchases from a dealer X, who is expecting wheat from his buyers in the country about May, or that he waits till May and buys cash wheat of X. X makes only the single contract, since, having the actual wheat for delivery, he does not need to cover. A uses this wheat to make his delivery to B, who delivers it to C, and so on. In the meantime a purchaser may have appeared who has made no other sale. Perhaps he is an exporter or a miller, or he may be a speculator who is ready to hold the actual wheat. In any case as the wheat is passed along he becomes the ultimate holder of the 100,000 bushels, which has settled all the intermediate contracts.

It is ordinarily said that the speculators who execute both a buying contract and a selling contract before the time of delivery, and who make their profit (or loss) by the difference in price in the two contracts, are merely "trading for differences." It is true that they are merely trading for differences, if by that is meant that the purpose of their transactions is to secure the difference in price. They are not concerned with buying from the farmers, or milling, or exporting. They are after a profit from a fluctuation in price. The effect of such dealings

and their economic function are matters for consideration under a different head. Here it is only important to emphasize the fact that these dealings are in no way different in form from any other dealings. What men are after may be the "differences," what they *do* is to buy and sell property. Only one form of future contract is recognized by the exchanges, and that is essentially the form given above, adopted by the New York Produce Exchange. No contract ever reads for the payment of such differences in price alone; it reads for the purchase and sale of so much grain, or pork, or cotton. Nor is a contract ever made on which delivery cannot be enforced.[1] Furthermore, a contract made with one purpose is not necessarily completed with the same purpose in view. A miller may buy wheat for grinding, and, before delivery is made, may sell the wheat he has contracted for because of some change in the market, and make merely the difference in price. In this case he can fairly be said to have been trading for differences. Or a speculator, who has bought with the idea of selling out before delivery, may after all receive and hold the actual wheat. In no case would any change be made in the form of contract.

That some method or machinery for facilitating transfers must be adopted is evident from the way in which trading is done. Formerly the dealings took place at the public "calls," which were a kind of auction where some presiding member called off the commodity by months of delivery, and those wishing to buy and sell compared their wants and made their contracts. These calls have been generally given up, however, except for special purposes. The immense amount of business to be transacted became

[1] The only recorded example of contracts avowedly to be settled without delivery is the form which in former years prevailed in the Paris *Coulisse*. Contracts were *liquidable suivant règlement*, which meant by the payment of differences only. Courtois, *Opérations de Bourse*, p. 168.

unmanageable with so slow a process. Now brokers swarm in the "pit" and all simultaneously make their offers to buy or sell. In all this confusion it is impossible to make written contracts. A word, a nod, a snap of the fingers and a contract is made. The parties make hasty entries on their pads and continue to offer and bid as before. This keeps on day after day and thousands of future contracts are entered into in which hundreds of brokers and dealers are mixed up in various relations. Even at the end of the day written contracts are not exchanged, but the comparing and settling is done by the clerks of the trading parties.

It often happens that some of the sales and purchases of a broker have been made at the same price, and in such cases arrangement is made for his purchaser and his seller to now become parties to a new contract at that price, allowing him to drop out altogether. Even where the contract prices are different, such an arrangement may be made by paying differences, but in the main it is more convenient to settle these contracts through the clearing-house.[1] The next thing then is to arrange for making such off-sets as the clearing-house can dispose of at once, which is done by the formation of "rings." Finally, there is a large mass of transactions left over which are for the time being to stand. These are settled later either by "rings" or by deliveries. Some of the parties perhaps want the real commodity in question, some expect to have it for delivery, and many intervening parties are waiting to receive on one contract in order to deliver on another. It will be best to first examine these settlements by delivery, since the "ring" is really but an extension of this form of settlement. Furthermore, since the clearing-house is not essential to this kind of busi-

[1] When a broker arranges an off-set for other parties he receives a regular clearing charge. For the practice in Paris and Marseilles of settling and clearing through a particular set of brokers, see Jacobson, *op. cit.*, p. 29.

ness, and is in fact a recent development, its description will be postponed till the settlement in its simplest form has been explained.

After the clerks have made their off-sets, the remaining contracts are confirmed by the exchange of so-called "confirmation slips." These simply stand for the contract in its regular written form,[1] which either party may at any time demand in lieu of the slip. The form used on the New York Produce Exchange is as follows:[2]

CONFIRMATION SLIP.

NEW YORK,.....18

We hereby confirm **PURCHASES** made by us to-day, under the RULES OF THE NEW YORK PRODUCE EXCHANGE (and either party may at any time demand a contract in place hereof, as provided in the BY-LAWS, in lieu of this slip), as follows:

OF JOHN DOE.

Amount.	Delivery.	Kind of Property.	Price.

RICHARD ROE & CO.

When the time of settlement arrives, it will often be found that there is a long chain of transactions caused by so many speculators having bought and sold the same amount for the same delivery. A has sold to B, B to C, C to D, and so on. As soon as one person in the chain makes a delivery of wheat, it is handed on from party to party. This shows why the sellers are not all after wheat to deliver. They have contracted for it and can wait till

[1] See above, p. 55.

[2] Exactly the same form is used for confirming sales. The slip is generally printed on both sides, one side reading purchases, the other sales.

delivery is made to them, the day of the actual delivery within the month named being at the option of the party who has sold wheat which he actually owns. If that party has the wheat in stock, he will ordinarily deliver on the first day of the month in order to save the cost of storage expenses for any longer period. If then X, who had sold the wheat which he actually owned, should deliver elevator or warehouse receipts, and each party in turn hand them on, they would finally come into the hands of the party who wanted the actual wheat for use. In the meantime they would have constituted a complete delivery on all the contracts in line.

Exactly the same result can be effected without multiplying the endorsements on the receipt and without the cumbersome repetition of cash payments.

The only two parties directly interested in the actual wheat are the man who holds it and the man who wishes to receive it. Between these two there stands a body of speculators who have both bought and sold. If the holder of the wheat can find the man who wants it and make delivery direct to him, the intervening parties settling their own accounts, the same result as by the first method of delivery will be obtained. This is accomplished by the issue of a transferable notice by the party who owns the wheat. This notice, which is passed to his buyer, states that he is ready to deliver certain warehouse or elevator receipts in fulfillment of his contract. Each seller in turn hands it on with proper indorsement, and the last receiver presents it to the party issuing it and demands the delivery of the receipts.[1]

The difficulty is that the seller and the receiver did not contract together, and therefore what one has agreed to pay does not correspond with what the other was to re-

[1] An instance of a transferable notice was given as early as 1722 by Ricard, who stated that he had seen as many as thirty-six indorsements on a single notice. Quoted by Jacobson, *op. cit.*, p. 79.

ceive. This is obviated by making the transfer at the "official market price," that is, the market price at the close of the previous day's business as determined and posted by the constituted authorities. This is the payment made for the actual delivery. The parties in line then pay, or receive, the differences between this settlement price and the prices in their particular contracts.

The delivery notice in New York takes the form of an order drawn by the issuer on himself for the delivery on presentation of the order of the ware-house or elevator receipts specified in the order. On the New York Cotton Exchange and the Chicago Board of Trade this notice is merely a statement of intention to deliver.

The form used on the New York Produce Exchange[1] is this:

[1] The form adopted by the Chicago Board of Trade is this:

☞ *This notice is deliverable on contracts in the Exchange Hall, only between the hours of 1:30 and 2:00 o'clock P. M., excepting on the first business day of each month, on which day also between the hours of 8:30 and 9:15 o'clock A. M., and the property must be called and paid for at the office of its issuer before 2:45 o'clock P. M. and 11:00 o'clock A. M.*

DELIVERY NOTICE.

No.....

OFFICE OF.....

.....

CHICAGO, ...189....

.....

We have on hand ready for delivery the following described Warehouse Receipts, and hereby make tender to you of the same, in fulfillment of our contract of sale to you of

.....at.....

DATE.	WAREHOUSE.	QUANTITY.		STORAGE.	
		Bushels.	Lbs.	Cts.	Amount.

.....

NEW YORK PRODUCE EXCHANGE.

Transferable Order for .....Bushels.....Settlement price.....

NEW YORK, ... 18

M.....

Deliver to the order of M .....

.....Bushels.....which is to be received by the last endorser hereon, who must pay.....for the same at the rate of..... cents per bushel CASH, except as provided in Rule 10 of the Grain Rules.

The condition upon which this transferable order is given and received is that it may be passed by endorsement, under the provisions of Rule 10 of the Grain Rules, in accordance with subjoined contract.

.....

NEW YORK.....

In consideration of one dollar paid by the drawer of the above order to each receiver thereof, the receipt of which is hereby acknowledged, it is agreed that the last receiver will, by 2:30 P. M. this day, present the said order to THE PARTY ISSUING THE SAME, in accordance with Rule 10 of the Grain Rules, and receive and pay for the Grain delivered thereon at the rate of.....cents per bushel.

It is further agreed that each receiver of this order shall continue his or their liability to each other for the fulfillment of the contracts referred to, until the above Grain is delivered and paid for.

Transfers of this order, subject to all the foregoing conditions and obligations, may be made by proper endorsements on the subjoined blank.

Each party to this order shall adjust differences to the contract price through the Clearing House on the succeeding business day.

TIME	ACCEPTED BY	DELIVERED TO

The transferable order or delivery notice is passed very rapidly from hand to hand. In New York no party can hold it more than fifteen minutes, in Chicago more than five minutes, the time of delivery being endorsed by each seller on the back of the order.[1] The last receiver presents the order and receives the receipts which it repre-

[1] In Chicago each party endorses his contract price. In New York only the settling price appears on the order. The latter form makes the individual contracts more secret. *Cf.* Fuchs, *op. cit.*, p. 15.

sents. If the order is not presented at the fixed time, the last receiver is responsible for all charges incident to the delay in delivery.

This "delivery by transferable order" must occur unless the two ends of the line of traders can come together. It has been stated that some contracts are settled by offset among the clerks at the close of the day. The same method is adopted in a more formal way, and with use of the clearing-house, in two forms of settlement known as "direct settlements" and "rings." The two forms are in nature much the same. The direct settlement occurs where there are only two parties, each being respectively buyer from, and seller to, the other. For example, A on April 10th sells to B 10,000 bushels of May wheat at seventy cents. Both parties are speculators. Suppose the price falls, and A makes his covering purchase by buying the same amount from B at sixty-five cents. A has now bought wheat from B to deliver back to B in fulfillment of the original contract. It would be absurd for either party, even if he had the wheat, to make the delivery. B in any case has lost five cents a bushel, and he pays $500 over to A without more ado. This is a direct settlement. The second contract may be made before the month for delivery arrives, perhaps even on the day of the original sale. In this case there is no occasion for waiting till May for settlement. The question of profit or loss is already decided. B pays his loss at once and the account is settled.

A "ringing out" settlement is simply the same thing between several parties. In such a series as was instanced before, say from A to G, A and G are both speculators. A must buy to cover, and G must sell to liquidate or take the goods offered. If they can arrange it, G will sell to A. Were A to issue a transferable order against himself, he himself would be the one to demand delivery. A "ring"

has been formed. There is nothing to be delivered, for A is both deliverer and receiver. It only remains to settle or "ring out" the differences; that is, for the profit and loss of each one to be reckoned up. This method differs from the form of settlement by transferable notice only in that when the time of settlement comes around, the two ends of the chain are connected. The parties to a ring may not all have bought or sold originally with speculative intent or with the expectation of forming a ring. The contracts of dealers, of millers and of speculators may all figure in these settlements. This is also true of direct settlements.

The accounts of all the parties are settled, that is, differences are paid immediately upon the formation of the ring. Consequently it is the favorite form of settlement whenever it proves possible to bring the two ends together, because profits can be taken at once, while in the case of a delivery by transferable order it is necessary to wait for the stipulated month of delivery.[1] The ring then is particularly adapted to close out at once the transactions of a single day. The differences are settled, as in a series of contracts where delivery is made, by the establishment of a settlement price and the payment among the contracting parties of the difference between the settlement price and the price in their particular contracts.

The transferable order with the settlement price enables delivery to be made from the real owner to the last receiver directly, and obviates the intermediate payments by providing a means of payment of differences only, according to the settlement price. A still further convenience is secured by the process of clearing these differences.[2] The

[1] A customer in any case gets his profit at once because he probably keeps an open account with his broker. The broker, however, has to wait.

[2] For the European practices in the matter of the transferable notice, settlement price, and clearing, see Kohn, *op. cit.*, pp. 39–44; Fuchs, *Der Warenterminhandel*, pp. 13–17; Jacobson, *op. cit.*, pp. 23–32.

clearing-house of the produce exchanges is in principle like a clearing-house for banks. It is intended "to facilitate the payment of the differences on the *deliveries*, *direct settlements* and *rings* of the previous day."[1] Since, so far as differences are concerned, these forms of settlement are alike, and differ only in the matter of delivery, the process of clearing is the same for all. The clearing-house clears the accounts of each of its members for each day. As delivery can be made on any day of the month at the choice of the seller, every day is a settlement day. Since, however, deliveries are generally made on the first day of the month, the clearings on the day following are the most important.

The machinery is simple. Whenever a contract for grain is made and is not settled by direct off-set at the end of the day, the "confirmation slips," already referred to, must be sent to the clearing-house,[2] directed to the other party within a specified time; on the New York Produce Exchange before 9:30 A. M. the following day; in Chicago before 6 o'clock on the same day. The clearing-house in this matter acts only as a post-office. This completes the transaction till the settlement time arrives. Settlement may be effected either by actual delivery or by the completion of a ring before the time of delivery. When the settlement is made, each party to the transferable order or to the ring, whichever the case may be, sends to the clearing-house "comparison slips," addressed to the same parties as were the confirmation slips. These are statements of the amount of "difference" to be settled one way or the other. This amount is evidently the difference between

[1] Statement in the rules printed on back of clearing-sheet used on New York Produce Exchange.

[2] In the case of the New York Produce Exchange a bank is appointed to clear the differences and is known as the Clearing-House Bank. All notices are sent to the bank and checks are made payable to the bank.

the settlement price and the price in the contract between the two parties in question. The form of comparison slip is as follows:[1]

COMPARISON SLIP.

NEW YORK,.....189

JOHN DOE

WE OWE YOU (CLAIM FROM YOU),

Differences to be adjusted through the Clearing-House.

$.....

RICHARD ROE & CO.

Besides these slips each party must send to the clearing-house a report (clearing sheet) of all the balances due to or from other members of the Exchange arising from settlements as ascertained by exchange of comparison slips. This report represents the balance sheet of profits and losses of the member in question for the day previous to the clearing. Parties whose reports show a net balance against them must accompany the report with a certified check for that amount made payable to the order of the clearing-house. Parties whose reports show a net balance in their favor must enclose a draft for the amount drawn to their own order, which draft they may demand back duly approved, at such time as is fixed in the Rules. Thus not only are contracts settled by the payment of differences, but these differences are themselves cleared each day, and a single check represents the total loss or gain of each member on all his settlements of the given day.

This method of clearing has nothing to do with the transfer of the goods or the payment for them. The transfer is made by means of the transferable order, and

[1] In Chicago the form reads, "We owe you (claim from you) on offsets to-day as follows: $——."

payment is made at the settlement price between the original seller and the last buyer. The clearing-house as it exists in the produce exchanges of Chicago and New York is solely for the clearing of differences. A new method has been adopted by the Minneapolis Chamber of Commerce. The Clearing Association of that body clears the grain as well as the differences. It ascertains which parties are long and which short on their net transactions, and itself directs the deliveries of the grain. The intervening parties have nothing to do with the delivery. This is the method adopted by the stock exchanges, and will be explained more fully below.

What then shall be said to the question so often asked as to the actual delivery of property under the rules of the Chicago Board of Trade and the New York Produce Exchange? In the first place, it is evident that the practice of clearing differences makes no change whatsoever in the nature of delivery. The clearing-house has been adopted merely to make more simple and convenient those settlements which were customary before its adoption. On the New York Cotton Exchange, where up to 1896 no clearing took place, there was the same trading for differences and the same practice of ringing out which prevailed on other exchanges. In the next place there can be no question about the real delivery of property by means of the transferable order or delivery notice. Here too the existing machinery is used only to afford greater convenience. By the consent of all the parties, the transferable order is passed along and represents the actual receipts; the man who wants the property gets it, and the others take their profit or loss. The result is the same as if the receipts themselves were passed.

But suppose a ring is formed or contracts are off-set by clerks; does actual delivery occur in such a case? In these cases no property is transferred at all. There is no "actual

delivery," but there is also no pretended delivery. To admit that there is no delivery in such cases, however, is not to mark such transactions as "illegitimate." It is easy to set up a fetich of delivery on all contracts, and to make that a test of business or gambling, but no such distinction in the nature of the transactions should be made. A number of men buy and sell with a view to a profit from market changes. It may happen that one out of the lot delivers goods which he is actually holding, and one receives and holds the goods, and the intervening parties all made delivery with the same goods. It may be that the last buyer sells to the first party in the line and so completes a ring. So far as the nature of the transactions made by all the intervening parties is concerned, it remains the same whether at the end of the series the last man sells again to the first or not. That may be a matter of chance and cannot affect the other transactions. If the transactions were made with a view to differences, they would have been the same if settlement had been made by a transferable order. On the other hand, as already pointed out, real trade transactions may figure in a ring. In all kinds of business outside the exchanges such settlements of contracts without delivery are made and are never considered in any way "illegitimate."

It should be borne in mind that the right to demand delivery is provided in every contract. No ring can be formed if any one party insists upon this right. Furthermore, contracts waiving this right are forbidden by the rules of the exchanges.

The clearing-house was adopted in Chicago in 1884.[1] In New York a beginning in the matter of clearing was made in 1879, but the system was not so perfected as to secure much saving until 1888. In Minneapolis the

[1] *Fuchs, op. cit.*, p. 14, states that the first such clearing-house for produce was adopted for cotton in Liverpool, 1876.

clearing-house was established in 1891, while the Toledo, St. Louis and Milwaukee exchanges have no regular clearing-houses. The delivery itself, however, where the clearing system does not prevail, is practically the same as in Chicago or New York. The delivery is made by the holder of the property to the last receiver by means of a delivery notice of some kind and at a settlement price. Off-sets among parties are effected and rings made wherever possible. The differences are settled between the parties themselves.

The Cotton Exchange of New York has carried on an enormous business in the past without the clearing system. In 1896, however, it adopted a method of clearing through the Corn Exchange Bank, which will doubtless become a permanent and popular feature of the exchange. The delivery is by the same process of a delivery notice as on the Produce Exchange. A five days' notice, however, must be given.[1]

Reference has already been made to the right of the seller on a cotton contract to deliver various grades. The form of contract is as follows:

NEW YORK COTTON EXCHANGE.

CONTRACT.

NEW YORK, ...18

In consideration of one dollar in hand paid, receipt of which is hereby acknowledged, ... have this day Sold to (or Bought from) .... 50,000 lbs. in about 100 square bales of Cotton,

[1] The formation of rings is further facilitated by the purchase of so-called "short notices." If a party receives a five days' delivery notice too late to pass it to his purchaser the same day, he cannot deliver it the following day, since that would be to give but four days' notice. He can issue a new notice and hold the cotton himself one day, but to avoid the inconvenience of holding he may prefer to sell his "short notice" cheap. This he can often do to the original issuer. Thus a holder of cotton may issue a notice one day at the settlement price and buy it back the following day at a discount, making a profit while still holding the cotton.

growth of the United States, deliverable from licensed warehouse, in the port of New York, between the *first* and last days of.....next, inclusive. The delivery within such time to be at seller's option in one warehouse, upon five days' notice to buyer. The cotton to be of any grade from Good Ordinary to Fair inclusive, and if Stained, not below Low Middling (New York Cotton Exchange Inspection and Classification) at the price of.....cents per pound for Middling, with additions or deductions for other grades, according to the rates of the New York Cotton Exchange, existing on the afternoon of the day previous to the date of the Transferable Notice of delivery.

Either party to have the right to call for a margin, as the variations of the markets for like deliveries may warrant, and which margin shall be kept good. This contract is made in view of, and in all respects subject to, the rules and conditions established by the New York Cotton Exchange, and in full accordance with Article II, Title IV, Chapter Second of the By-Laws.

This provision as to delivery has been cited against the Cotton Exchange as evidence that the contracts are merely gambling contracts, and are not concerned with real cotton. But the transferable notice specifies the actual receipts to be tendered, and actual cotton is delivered on such contracts. The method is a benefit to the planter if he wishes to sell for forward delivery before knowing how his crop is going to grade, while it is also a strong safeguard against corners. The more grades are available for delivery, the more difficult is it to squeeze the shorts. The same plan of delivery prevails on the New York Coffee Exchange.

The coffee trade in Europe seems to have developed a special form of clearing-house known as the *caisse de liquidation* or *Liquidationskasse*, which has also been adopted in a few cases by grain exchanges. The peculiarity of this form is that the clearing-house itself becomes responsible on all contracts. When the parties first make a contract, notice is given to the *Liquidationskasse*, and a deposit made for security. In case of the default of either party the clearing-house secures the other party to the contract from loss, and makes its own account good, so far as possible, from the assets of the defaulting party, and

any balance from an assessment fund.[1] It has been attempted more than once to introduce such a clearing-house into the New York Coffee Exchange, but the proposition has never got farther than the Board of Managers.[2]

In all contracts for future delivery security is provided by the right to call for a deposit. Each party may be required to deposit with some duly constituted authority a sufficient sum of money to secure the other party from loss in case of failure to fulfill his contract. This is known as "calling an original margin," and the one who calls is bound to make the same deposit himself. In New York the maximum deposit which can be called is for wheat, rye and barley, ten cents a bushel; for corn and oats, five cents a bushel; for pork, a dollar a barrel, and for all other meats one cent a pound. The maximum original deposit on the Cotton Exchange is from one to five dollars per bale, and on the Coffee Exchange from fifty cents to two dollars per package. In Chicago, St. Louis, Minneapolis, Toledo and other exchanges, the maximum deposit is ten per cent of the contract price. These deposits are made by sending to the proper official in the Chicago Board of Trade, the Secretary, in the New York Produce Exchange, the Superintendent, checks on the banks where the deposits are made. These deposits can be withdrawn only on the order of the said official, acting with the consent of both parties.

[1] The *caisse de liquidation* is in reality a party to each contract. All payments are made to it and all deliveries are made by it. See Jacobson *op. cit.*, p. 47 *et seq.*; Jannet, *Le Capital, la Spéculation, et la Finance*, p. 271, Paris, 1892; Fuchs, *Der Warenterminhandel*, p. 17.

[2] Fuchs erroneously states that such a clearing-house was adopted by the New York Coffee Exchange in 1882, *op. cit.*, p. 20. The New York Coffee Exchange was first organized in 1882. See Fuchs also (pp. 39-49) for an interesting account of the controversy waged in 1889 over the advantages and the evils of the *Liquidationskasse*. There is little reason to regret its absence in American exchanges.

More important than the original deposit or margin are the margins called for after fluctuations in price. If the market goes against either party, he may be called on to deposit the full amount of the change in the value of the property, thus keeping the original margin good. If the price rises a cent a bushel, the seller can be required to put up an additional margin of one cent a bushel. If the price falls, the buyer can be called on for that amount. It is evident that these additional margins are simply the amount of profit either way, put up so that the other man may be sure of it. The call for a margin is optional, and if a dealer is in good credit he can trade largely without being called, or, as is frequently done, he may be called for a deposit less than the maximum. Even where the original margin, or any part of it, is not called, a party is generally required to keep the price "at the market," that is, to put up his additional margins as the particular fluctuations take place.

On the New York Produce Exchange it is common among some traders to call only margins against fluctuations with one cent a bushel additional. Evidently if an original deposit is called, and the additional margins are put up as the market changes, there can be no loss to either party from the insolvency of the other. It is not the value of the property that is at stake, for that has been neither delivered nor paid for. It is only the amount of profit for which security is sought, and that is amply covered by the margins. Loss comes when a party is unable to put up a margin after fluctuations have occurred.

In case of default by either party the other has the right to close the transaction in open market. On the New York Produce Exchange if the commodity contracted for (say grain) is not delivered at maturity of the contract, the purchaser may at once give notice to the Committee on Grain, which committee immediately holds a public call and buys

the grain for the account of the parties directing the purchase.[1] In case of a failure to receive grain tendered, the seller must, in order to establish any claim on the buyer, sell out his holdings on the market within twenty-four hours. Any loss resulting from either transaction must be borne by the party in default. It is interesting, however, to note that the rules provide that "no unreasonable price shall be paid, arising from manipulated or fictitious markets, or any unusual detention in transportation." That the account of a defaulting dealer should be settled by an open sale or purchase in the market is evidence of the fact that the right to demand a real delivery is a vital part of these transactions. This method of action in case of default is practically the same on all exchanges.

III.

In turning to the conduct of business on the stock exchanges, the same general principle is found as prevails on the produce exchanges, with some marked differences in the actual methods employed.

Stocks and bonds possess in themselves that quality of representativeness which is secured for commodities only by means of classified grades and a warrant system. For such speculation as depends on future dealings this quality is the most essential attribute, and consequently such speculation first developed in securities. It is stated by Deloume[2] that a regular speculation in the securities of the *sociètes des publicains* took place in Rome under the Empire. If the companies of those days issued any kind of transferable certificates of stock, there is every reason to believe that speculation did arise in them. Ehrenberg[3] says that instances of such trading are to be found in the

[1] The matter may be settled more informally by agreement of all parties.

[2] See *les Manieurs d'Argent à Rome.*

[3] *Die Fondsspekulation*, p. 3.

14th and 15th centuries in Genoa and Venice, but that the first well-developed speculation in securities of which we have any account was in the shares of the Dutch East India Company, which began soon after its foundation in 1602. The wild speculative manias which followed in the next century, the "Mississippi Scheme" in France (1716 to 1720), the "Bubble Era" in England in the years following 1720, are too well known to need more than passing mention. They show that speculation has not become increasingly reckless in recent years. It was not, however, till the end of the last century that stock speculation became the fixed factor in the financial world which it has since been, and not till very much later that it became in the United States a controlling force. It was the great increase in public loans in Europe between 1750 and 1815 which furnished securities suitable for a continued speculation,[1] and for a long period the "public stock" or "funds" were the chief securities of the market.[2] In this country also it was the trading in public stock which first caused brokers in New York in 1792 to form an organization to maintain rates, while the foundation of the present New York Stock Exchange in 1817 was coincident with the greatest extension of the public debt prior to the Civil War.[3] The Philadelphia Stock Exchange was established about 1800. While in Europe, however, government securities have maintained a prominent position in the speculative market, in the United States they have

[1] For example, the securities of stock companies listed in 1815 numbered only 30 in London, 20 in Paris and 11 in Berlin. *Handwörterbuch der Staatswissenschaften*, article, "Börse."

[2] For an historical account of stock speculation in Europe see Ehrenberg, *Die Fondsspekulation*. *Cf.* also Bender, *Der Verkehr mit Staatspapieren*, Göttingen 1830, for an account of the transition from speculation in shares to speculation in public stock, p. 11 *et seq.*, and for a general historical account, pp. 54–140.

[3] Gibson, *Stock Exchanges of London, Paris and New York*, p. 68.

long since lost their place. Our own government securities have offered little field for speculation in recent years, while foreign loans have never been taken up by American speculators, because of a multiplication of home securities of a private nature already too great for them to handle.

These securities are of various kinds. The great extension of the joint-stock principle in this country has developed a mass of securities any of which may become factors in the speculative market. Most important have been railroad securities, and until recently these have been the dominant factor in all speculation. Their development began just as the government stock became too scarce and valuable to serve the purposes of speculation, and, had it not been for this new supply, speculation would have had nothing to feed upon. More recently the development of industrial trusts of great magnitude has provided another large field, and already the "railroads" are giving place to the "industrials" as the centers of speculative activity.

The methods of speculation in stocks, as developed in Europe and in the United States, were much the same as those adopted later in produce. Time-dealings were used, and a form of "future" with a fixed day of delivery was the regular kind of contract. Speculation arose because of fluctuating values, and just as those who expected a rise bought with a view to profit, so those who expected a fall sold for future delivery.[1] This method is still employed on the stock exchanges of Europe, but in this country time-dealings have given place to dealings which are practically for immediate delivery.[2]

[1] Mortimer, *Every Man his own Broker*, p. 22 (1765), says time-dealings arose in order to enable the Dutch capitalists to sell stocks in London and ship them for delivery.

[2] For an account of the time-dealings formerly in use, see Trow's *Manual of the Stock Exchange*, New York, 1865.

How then can there be speculation for a fall? This is easily secured by a system of borrowing stocks. It will be remembered that at the beginning of the speculation in warehouse receipts for grain in the West these receipts were sometimes sold short, and the contract made good by borrowing receipts for delivery. The borrower expected to get his profit by buying equivalent receipts at a lower price when called on to return them. This is exactly the system that is used on our stock exchanges to-day, and it is this method which constitutes the chief difference between the machinery of stock speculation and speculation in produce. There is not the same economic reason for future dealings in stocks as in produce, for while any kind of produce is something the supply of which is itself a future thing, and so often cannot be contracted for except for future delivery, a particular stock on the other hand is, in the main, fixed in amount. The stock to be delivered is all in existence at the time of sale, and there seems to be no reason, except for speculation, for postponing its delivery.[1]

As the New York Stock Exchange is far and away the most important exchange of the United States, it will be advisable to examine the rules for dealing adopted by that body. As on the produce exchanges, so here, regular hours are fixed for trading, and all trading outside those hours is strictly forbidden. The time fixed is from 10 A. M. till 3 P. M. Loans can be made after three o'clock, but no purchases or sales.[2] Transactions take place by general bidding on the floor of the exchange, a special place being assigned to a security which has de-

[1] The fact that time-dealings in stock are infrequent on the New York Stock Exchange is often cited to show how little speculation depends on a particular form of contract. *Cf. Bericht der Börsen-Enquête Commission*, p. 79.

[2] It may be added, that in the case of stocks as well as of produce, this rule is at times completely disregarded, and "curb-trading" in active times is considerable.

veloped dealings of sufficient magnitude. "Calls" are no longer regularly held for stocks. Even if they were now held, all the dealings in active stocks would really be done in the open market. They were discontinued about 1875.[1] On the other hand, a public call is desirable for quiet securities, especially for bonds. Accordingly a call of bonds and of bank stock is held each day in the "bond room," where quiet transactions take place, and the market price for such securities is fixed.

There are several kinds of transactions, "cash," "regular way," "time-dealings" and "at three." Cash dealing are out-and-out purchases of stock for cash, and need no further description. Sales made "regular way" are for delivery the following day. They constitute by far the greater part (perhaps ninety-five per cent.) of the total dealings. Time-dealings are exceptional on the stock exchange. They are of two kinds, according to the length of the option, those for three days and those for a longer option (thirty or sixty days). Options for more than three days carry interest. No sale for a longer option than sixty days can be made.[2] In any case the option for delivery runs from the time of the contract. There is no selling for delivery in some future month (beyond the sixty days), which is the common method in produce. The option of delivery may be given either to the buyer or to the seller. Thus there are contracts "seller-three" and "buyer-three," according to which the seller (or buyer) can deliver at his option at any time within three days; and "seller-thirty(sixty)," and "buyer-thirty (sixty)," in which delivery can be made at any time within the thirty (sixty) days. In no case is the option as to the fact of delivery, but merely as to the time.

The sale "at three" is a new form of contract which

[1] Gibson, *op. cit.*, p. 77.

[2] For an interesting account of the circumstances which led to this rule, see Clews, *Twenty-Eight Years in Wall Street*, p. 10, New York, 1888.

has come in since the adoption of the clearing-house. As time-dealings cannot go through the clearing, contracts in clearing-house securities are made, not "seller (buyer) three," but "at three," which means delivery specifically at the end of three days.

Of predominant importance are the transactions made "regular way," that is, for delivery the following day. This time for delivery is fixed as a matter of convenience, since evidently immediate delivery (depending in many cases on borrowed stocks) in the midst of business hours would be impracticable. The contract, however, is not intended to be of the nature of a time-transaction, nor the delivery to be a future delivery. But incidentally "regular" transactions serve the purpose of time-dealings in the case of dealings for the fluctuations of a single day. If the realizing sale is made the same day as the original purchase, or the covering purchase the same day as the short sale, the two contracts balance each other before the time for delivery, and the interest of that particular party is only concerned with getting the "difference." Thus there is a similarity in these particular cases between the sales on the New York Stock Exchange and the sales "for the account" on the European exchanges. The "account" is only one day ahead. At times these transactions for the fluctuations of the day assume large proportions. "Scalping," as this is called, is especially prominent when the outside public is holding aloof from the market and the trading is left to the "professionals."

In the main the transactions are not settled in this rapid fashion. The buyers are holding for a longer period, and the sellers are selling for a more or less remote fall. Delivery, however, must be made the next morning, and, if the short is unprepared to buy in, he must borrow in order to make his delivery; while, if the purchaser is unable to pay for and carry his own stocks, he must arrange

to lend them before the next morning to some one who will carry them until he wants them himself. The interest of a seller does not center in the process of getting stock to deliver to his purchaser, for he borrows that and with it completely ends the transaction between the purchaser and himself. He has sold and delivered, and received his price. His interest lies in his later purchase, made in order to return the stocks to the lender. Yet the lender of securities is not as such a speculator. He lends a certain property and merely receives back the same, regardless of fluctuations in its value. It is true that in most cases the lender of securities has himself bought them for speculation, and lends them to save the cost of carrying them till the time of his sale, but it is his purchase, not his loan, which is speculative.

In addition to these forms of contract, privileges occur in the case of stocks as well as in the case of produce. They are not recognized by the New York Stock Exchange, but if the purchaser of the privilege decides to carry out the contract, it becomes as regular as any other. In the last few years, however, privileges have been less common than they formerly were. The trade in privileges depends chiefly upon a few men of large means. The public buy, but seldom sell, privileges, and if the men who are accustomed to dealing in that way stop selling, the field for such practices becomes very circumscribed. The same principles, which control the prices of privileges in the case of produce, control them also in the case of stocks. These are, first, the nature of the market, second, the length of time the privilege holds, third, the nearness of the price stipulated to the market price for the moment. In the case of stocks, however, an important additional element appears in the shape of the nature of the security itself. Besides the general tendency of the market, there is the all-important question of the particular security's

position in the market. If the market is dull, a privilege may be bought in a very stable stock at a low figure; but if the security is one of wide fluctuations, the price of the privilege will be very much higher unless the price fixed for the security itself is at a wide margin from the market. The wider the margin, the less the danger of loss from the fluctuations. Furthermore, speculative conditions may largely affect the price of securities. If, for example, there is a big short interest in the market, the shorts may wish to protect themselves by selling puts, and will so reduce the price. It is consequently impossible to make any general statement as to the price of puts and calls in the stock market. The chances are so different in the different cases that prices vary much more than in the produce markets. Privileges also often run for much longer periods in the stock market than is common in the case of grain, frequently for thirty or sixty days. This of course enhances the price. A privilege in a fluctuating security, running for thirty days, may read five points away from the market, and yet bear a high price. As a rule the men who sell puts or calls would rather sell near the market and get a larger privilege money, while the men who buy, usually men of small means, would rather buy away from the market in order to limit their loss to a smaller payment.

A "straddle" is much more common in securities than in produce. A straddle reading at the market price in a fluctuating security would rarely be sold, and then only at a very high price, but in more stable stocks they are not infrequent.[1]

With these transactions as described there is little opportunity for trading for any particular settlement period.

[1] A straddle, or rather a combination of put and call, sometimes called a "spread," may be made not at the market, but at two different figures on each side of the market price. For some hypothetical instances of privilege dealings, see Castelli, *Theory of Options*, London, 1877.

The fulfilment of "seller-thirty" and "seller-sixty" contracts is indefinite, while in the case of contracts made "regular way" and "at three" delivery occurs too quickly to make a real time speculation for that particular delivery possible. There is no real correspondence between these dealings and the English practice of "trading for the account," that is, for the periodical settlement that comes monthly in consols and fortnightly in other securities. In the New York Stock Exchange each day is a settling day and a clearing day for the transactions of the day before. It will be remembered that the same is true of produce exchanges. This is a marked difference from the European practice. The merits of the two systems will be briefly compared after an account is given of the clearing process on the New York Stock Exchange.

Comparatively few securities are admitted to clearing on the New York Stock Exchange,[1] and contracts in those which are not admitted are settled by the old method of cash payments. No practical difficulty is experienced, since the only test of the admission of a security to clearing is the amount of trade in it. As soon as it becomes active enough to make cash payments difficult, it is made a clearing-house security. In the case of all such securities the method of settlement is as follows: Both parties to any transaction at the close of business exchange "tickets" confirming their transaction. The seller sends to the office of the buyer a "deliver ticket," stating that he is to deliver the property through the clearing-house, and receives in exchange a "receive ticket" for the same amount. This is the only comparison necessary and the only written sign of the contract made. These tickets must be exchanged by 4.15 o'clock of the day of the transaction. They are in form as follows:

[1] Forty-three securities in August, 1896.

No. 448 NEW YORK, ... 189

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE,

DELIVER TO (RECEIVE FROM) JOHN DOE

..... shares ..... @ ..... $ .....

for account of the undersigned.

RICHARD ROE.

These are exchanged, whether the securities are sold or loaned. Loans are made between 3 and 3.30 P. M., and so can be entered on the same clearing sheet with sales and purchases. Loans are made at the market price, that is, the borrower of the stocks pays the cash price for the securities borrowed, and receives back the money on the return of the securities.[1] He gets, however, an interest on the money he advances in exchange for the securities. This is called a "charge for carrying." It is generally the man who is holding the securities who is glad to pay some one for carrying them, that is, for advancing him the money on them while he still retains ownership. It may be, however, that the demand for a particular stock by short sellers, who must make delivery, is so great that the interest charge falls to nothing, or is even supplanted by a "premium for use," which the borrower must pay beside the cash value to the owner of the securities for the privilege of borrowing them. Of these payments we shall speak more fully below. This connection of sales and loans makes the relations between parties as complicated as on the produce exchange, despite the fact that there are no long futures. Suppose that A sells 500 shares of St. Paul to B, who sells the same on the same day to C. It may be that C buys for the rise but is unable

[1] This is what the method amounts to in the end. In practice, however, instead of the original money payment being given back when the stocks are returned, any change in price, pending the return, is made good between the parties, that is, the property is "kept at the market," and the final payment is the market value at the moment of return. This evidently results in the original amount being ultimately returned.

to carry the shares himself. He loans them after the close of business to D, who has sold short during the day to E and wants them for delivery. But E himself may not want to receive them, so loans them to F, who wants them to make delivery to G. In the meantime, A has borrowed from X, who has bought during the day from Y. What will happen? By the intermixture of loans with sales a line has been formed, as in the case of a future settlement, and Y can deliver direct to G.

Each party in the above example has not necessarily sold in turn, but each in turn has contracted to *deliver* either by sale or loan. It was seen above that tickets do not read "sold to" and "bought from," but "deliver to" and "receive from." Thus they cover equally well the case of loans and sales. Evidently the distinction between the two forms of transactions is an important one for the parties themselves, but for the clearing-house the only question is as to the fact of delivery and price. Whether the shares are to be returned or not is immaterial. Hence loans and sales are both entered on the clearing-house sheet, and without any sign being given to the clerks as to which is which.

The clearing-house of the Stock Exchange clears stocks as well as differences. This is the chief point of difference from the clearing-houses of most of the produce exchanges. These clear only differences and take no part in directing the delivery of the property, which latter is effected through a transferable notice. In the delivery of stocks there is no transferable notice, but, by a comparison of the sheets sent in to the clearing-house, the officials discover what parties are "even" on stocks, what parties must deliver, and what parties must receive. The clearing-house serves to bring these parties together. The party that has contracted to deliver a stock (either by a sale or a loan), without making any contract to receive an equivalent amount, receives a notice from the

clearing-house to make such delivery to some specified party, probably not at all the one with whom he contracted.

The clearing-house, however, does not handle either stocks or money.[1] It simply directs the delivery of stock between the parties who are not "even," and settles the differences between all the parties. Each party makes settlement by a single check. If the balance is against him, he encloses a certified check in favor of the clearing-house. If the balance is in his favor, he encloses a draft drawn to his own order on the banker of the clearing-house (the Manhattan Company), which is approved by the clearing-house and is returned the next morning. The checks received and the drafts approved by the clearing-house necessarily balance each day.

Every delivery of stock is made at the "delivery price," which is the whole number nearest to the closing price of the day before, and the balances due to a difference between contract price and delivery price are settled by the clearing-house. The fixing of this arbitrary delivery price by the clearing-house is purely for the convenience of accounts.

The first stock exchange clearing-house in the United States was that of the Philadelphia Stock Exchange in 1870. It worked successfully there for a considerable period before being adopted elsewhere. The Consolidated Exchange of New York established a clearing system in 1886, and the Boston Stock Exchange in January, 1892. Curiously enough the New York Stock Exchange was the last exchange of any importance to adopt the clearing system. The first trial of the system was made May 16, 1892, the transactions of that day being cleared on the day following. At first the experiment was confined to four

[1] Large clearings in gold took place from 1867 to 1879, when gold speculation was rife, under the auspices of the Gold Exchange Bank, and, by the arrangement at that time, both the gold and the cash were handled by the clearing-house. *Cf. Report of the Committee on Clearing-House*, New York Stock Exchange, 1892, p. 5.

railroad stocks (St. Paul, Reading, Northern Pacific preferred, and Louisville and Nashville), but it was quickly extended to all stocks sufficiently active to warrant an application of the clearing method.

It was the borrowing panic of 1890 and 1891 that brought forcibly home to the Stock Exchange the impossibility of further continuing the cumbersome method of cash payments. This method necessitated a vast amount of borrowing and a cash settlement of all loans. When the stringency came at that time, many failures resulted from the impossibility of procuring the necessary loans. On the other hand, on the Consolidated Stock Exchange of New York, a young and less important exchange, the failures were comparatively few. This difference was ascribed by *Bradstreet's* solely to the fact that one institution attempted to carry on its business by old-fashioned methods, while the other was equipped with a modern clearing system.[1] The explanation is easily accepted in view of the comparative ease with which the Stock Exchange has weathered similar troubles since the clearing-house was adopted. The demoralization that prevailed in industrial shares in the spring of 1893, for example, put the new system to a severe but successful test. It was stated that the adjustment of losses due to the important failures incident to the heavy decline in "Cordage," "Sugar" and other stocks was effected by stock deliveries involving only $200,000;[2] while it was thought by some that, without the clearing system, the panic of that summer would have necessitated closing the Exchange.

The difference which such a system of clearing makes may be seen by an examination of two sample clearing sheets, with comparison of payments under the old method and the new. One represents the party as "even" on stocks with none to receive or deliver, in which case no delivery price appears; the other shows a balance to be delivered.[3]

[1] See *Bradstreet's*, February 13, 1892. [2] See *Bradstreet's*, May 13, 1893.
[3] These are taken from the *Report of the Committee on Clearing-House*.

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE.

NEW YORK, *May 17th*, 1892. OFFICE ADDRESS, *28 Wall St.* CLEARING SHEET OF RICHARD ROE.

C. H. Check.	RECEIVE FROM	SHARES.	STOCK.	PRICE.	AMOUNT.	C. H. Check.	DELIVER TO	SHARES.	STOCK.	PRICE.	AMOUNT.
	A. B. C.	100	St. Paul.	80½	8,050 00		A. & Bro.	500	St Paul.	79	39.500 00
	D. & Bro.	500	"	80¼	40,125 00		C. & Co.	100	"	79¼	7,925 00
	E. & Son	300	"	80⅛	24,037 50		D. & Son	200	"	79⅜	15,875 00
	F. & Co.	1,000	"	80	80,000 00		E. F. & Co.	400	"	80	32,000 00
	G. H. & Co.	600	"	80	48,000 00		G. H.	1,000	"	79¾	79,750 00
	I. & J.	500	"	80	40,000 00		I. J. & Co.	300	"	79½	23,850 00
	K. L.	200	"	80	16,000 00		K. Bros.	100	"	80	8,000 00
	M. & N.	500	"	79⅞	39,937 50		L. M.	200	"	79⅞	15,075 00
	O. P. & Co.	500	"	79¼	39,875 00		N. N.	800	"	80	64,000 00
	Q. R.	1,000	"	80	80,000 00		P. & Q.	500	"	80	40,000 00
	S. & T.	1,200	"	80	96,000 00		R. S. & Co.	500	"	80	40,000 00
	U. & V.	200	"	80⅛	16,025 00		T. U.	500	"	80	40,000 00
	W. & X.	200	"	80⅛	16,025 00		V. & W.	1,000	"	80	80,000 00
	Y. & Z.	200	"	80⅛	16,025 00		X & Co.	100	"	80⅛	8,012 50
	A. Bros.	100	Lake Sh.	135	13,500 00		Y. Z.	800	"	80¼	64,200 00
	B. C. & Co.	200	"	135½	27,100 00		A. B. & Co.	500	Lake S.	134	67,000 00
	D. & E.	100	"	135¼	13,525 00		B. Bros.	300	"	134	40,200 00
	F. G. & Co.	200	"	134⅞	26,975 00		C. & Son	100	N. Eng.	47⅞	4.787 50
	H. & I.	100	"	134½	13,450 00						
	J. & Son	100	"	134⅞	13,462 50						
	K. N. & Co.	100	N. Eng.	48	4,800 00		Bal. Cheque	.....	.....	.....	1,837 50
		7,900			$672,912 50			7,900			$672.912 50

Compare the position of the above party having the same contracts to be fulfilled under the former system, with his position under the clearing system.

	CHEQUES ISSUED.	AMOUNT.	CHEQUES REC'D.	AMOUNT.	SHARES REC'D.	SHARES DEL'D.
Under former system,	21	$672,912 50	18	$671,075 00	7,900	7,900
Under clearing system,	1	1,837 50	0	0	0	0

Every member whose sheet is even in stocks has no stock to pay for or to deliver. He has only one cheque (for the balance) to give or receive. The object of clearing is to place each member in nearly the position he would occupy had every one of his transactions been made with one member only.

CLEARING-HOUSE OF THE NEW YORK STOCK EXCHANGE.

NEW YORK, *May 17th*, 1892. OFFICE ADDRESS, *28 Wall St.* CLEARING SHEET OF RICHARD ROE.

C. H. Check.	RECEIVE FROM	SHARES.	STOCK.	PRICE.	AMOUNT.	C. H. Check.	DELIVER TO	SHARES.	STOCK.	PRICE.	AMOUNT.
	A. B. & C	100	St. Paul.	80	8,000 00		A. & B	500	St. Paul.	79⅞	39,937 50
	C. Bros	500	"	79½	39,750 00		C. D. & Co	100	"	79¾	7,975 00
	D. E	300	"	80⅛	24,037 50		E. F	400	"	80	32,000 00
	F. G. & Co	1,000	"	.....	80,013 33		G. & Co	500	"	80⅛	40,062 50
	H. I. & Co	200	"	80¾	16,150 00		F. Bros	600	"	80⅜	48,225 00
	J. K	200	No. West.	119	23,800 00		G. & Co	200	"	80½	16,100 00
	L. Bros	100	"	119½	11,950 00		H. I. & Co	100	"	89	8,000 00
	M. N. & P	100	"	120	12,000 00		J. K. & Bros	1,000	No. West.	120	120,000 00
	O. Q. R	500	"	120¼	60,125 00		L. M. & Co	100	"	120½	12,050 00
	S. T. U. & Co	300	"	120	36,000 00		N. O	500	"	.....	60,006 66
	V. W	100	"	119¾	11,975 00		P. Q	200	Reading.	59	5,900 00
	X. Y. Z	400	"	119½	47,800 00		R. S. & Co	1,000	"	60	30,000 00
	A. & B	1,000	N. Eng.	48	48,000 00		T. Bros	2,000	"	60	60,000 00
	C. D. E	200	Reading.	58	5,800 00		U. V	600	D. L. & W.	159	47,700 00
	F. G	1,000	"	58¾	29,250 00		W. Z	1,000	"	159	79,500 00
	H. I. & Co	500	"	59	14,750 00						
	J. K	800	"	58	23,200 00						
	L. M	400	"	58	11,600 00						
	N. O. & Co	600	"	58½	17,437 50						
	P. & Q	1,000	D. L. & W.	160	80,000 00						
	R. S. & Co	200	"	.....	16,002 67		Bal. to Receive (Delivery price)	100	No. West.	120	12,000 00
	T. Bros	400	"	160½	32,100 00		Bal. to Receive (Delivery price)	1,000	N. Eng.	47	47,000 00
	Bal. to Deliver (Delivery price)	300	St. Paul.	80	24,000 00		Bal. to Receive (Delivery price)	300	Reading.	58	8,700 00
	Bal. to Draft	.....	.....	.....	1,415 66						
		10,200			$675,156 66			10,200			$675,156 66

Compare the position of the above party having the same contracts to be fulfilled under the former system, with his position under the clearing system.

	AMOUNT OF CHEQUES HE ISSUES.	AMOUNT OF CHEQUES HE RECEIVES.	TOTAL SHARES REC'D AND DEL'D.
Under former system	$649,741	$607,456 66	18,700
Under clearing system.	67,700	25,415 66	1,700

The chief objections made to the clearing plan before its adoption were, (1) that transactions under it would be illegal, since an intent to deliver is in all cases necessary to avoid the charge of a gambling contract; and (2) that the clearing-house officials would acquire a dangerous knowledge of the speculations of private parties. The first of these objections was groundless, for the courts have generally held that the method of delivery is not an essential factor in determining intent; and the second was ultimately overcome. In fact, under no clearing system can secrecy be so well preserved as under that of the New York Stock Exchange, where loans and sales are entered in the same way. "This practice," remarks the committee appointed by the Stock Exchange to consider the adoption of a clearing-house, "places it in the power of a member to make his sheet as misleading as he desires."

The practice of borrowing stocks also prevails, though in a different form, on the exchanges of Europe. As already said, transactions on the London Stock Exchange[1] generally are for "the account," and the same is true for the most of the continental Bourses. The "account" is the fortnightly clearing, and the contracts are like "futures," except that the time of fulfilment is fixed for a single day, not as in produce with an option throughout a month. There are no daily settlements as in New York. The account consists of three days, "contango" or "continuation day," "ticket day," and "settling" or "pay day." The "continuation day" is the day fixed for continuing contracts. A party who enters into a transaction for the account may not wish to close out when

[1] For the methods of business on the London Stock Exchange, see *Report of the Stock Exchange Commission of 1878, with Evidence;* Melsheimer & Laurence, *Laws and Customs of the Stock Exchange*, London, 1879, Stutfield & Cautley, *The Rules and Usages of the Stock Exchange*, London, 1893; E. Struck, *Die Effektenbörse*, Leipzig, 1881.

the account comes round, and, in such case, must proceed to some method of borrowing. On the New York Stock Exchange it was seen that in such a case the shares are loaned or borrowed outright. On the London Exchange, however, when a loan is based on stocks, the identical shares must be returned. Hence, in order to avoid this inconvenience, a method of borrowing and lending is employed which takes the form of a sale.

Suppose, for example, that A has bought for the account, but is not prepared to take up the shares and make payment. He wishes to turn them over to another, B, who will carry them to the next account. Instead of lending them against cash he sells the amount to the other party, B, for the immediate account at the "making-up price," and at the same time purchases from B the same amount at the same price for the following account, two weeks ahead. This transaction, which gives the day its name, takes place on "continuation day." In the clearing on settling day the stocks which A bought are turned over to B, who is said to "take them in," and who becomes sole owner of them, subject only to the obligation to deliver a similar amount on the next account day. The bull may have to pay something to the "taker in," since he gets the use of the money for two weeks, and yet gets back his shares at the same price at which he sold them. This payment is called a "contango."

The opposite transaction is where a short seller, not wishing to buy in at the end of the account, practically borrows by buying for that account at the making-up price, and selling at the same price for the next account; to do this he must advance the money, and he may receive a "contango" for its use. On the other hand, he may have to pay not only the making-up price, but an additional premium in order to secure his shares for that delivery. Such a premium is called a "backwardation."

The same method is used on the exchanges of France and Germany, both in stocks and produce. The transactions on the German exchanges are called "*Prolongationsgeschäfte*," the bull transaction being a "*Reportgeschäft*," and the bear transaction (at least where a premium is paid), a "*Deportgeschäft*." That is, the *Report* is equivalent to a "contango," and the *Deport* to a "backwardation."

It is evident that these methods of "continuation," though in the form of a purchase and sale, are really borrowing transactions,[1] and are the same in nature as the transactions which take place regularly on the New York Stock Exchange. The contango, or *Report*, is merely what is paid for the use of money, and corresponds to what is here called an "interest charge for carrying," and the backwardation, or *Deport*, corresponds to the "premium for use" sometimes paid for borrowed stock.

The interest charge (contango) and the premium (backwardation) are evidently the opposites of each other. What now determines the rate of interest or of premium? This depends on two factors, the state of the money market and the state of the market for the particular security in question. If the demand for money against a particular security is greater than the demand for that security with which to make deliveries, there will be a payment of interest, and the greater the demand for the money the greater the interest charge will be. This demand is a part of the whole demand for money in the market, so that the current rate of interest is of chief importance in determining the charge in a loan against a particular stock. It

[1] "Das Reportgeschäft ist ein Mittel für den Handel, sich seine Geldvorräthe, deren er ja ebenso gut bedarf, wie der Waarenvorräthe, rentabel zu machen, es ist ein Darlehnsgeschäft in einer Form, welche gänzlich ausserhalb des Bereichs der Wuchergesetze steht." Michaelis, *Die wirthschaftliche Rolle des Spekulationshandels*, in *Volksw. Schriften*, Vol. II, p. 26. *Cf.* also Stutfield and Cautley, *op. cit.*, p. 44.

may be more or less than the current rate, according to the market for the stock itself. Under normal circumstances some interest rate is charged, but, if there is a strong demand for a particular stock, this charge may become very low, or may be converted into a premium, before the stock is forthcoming. Hence a strong bull interest in any stock will increase the demand for money and raise the interest charge, while a strong bear interest will increase the demand for the stock and bring about a premium for use. When the shorts have oversold and find all the available stock held in a few hands, the premium may rise to any extent. Such an occurrence is one form of "corner."

Nothing was said of this kind of transaction in describing the methods of dealing on the produce exchanges, because in the United States there are no such "continuation" contracts as take place on the European produce exchanges.[1] The regular form of future serves for all purposes. If a party who has sold for May delivery wishes to continue his transactions to the July delivery, he does so by buying May wheat at the market price, and selling July wheat at the market price for that delivery. He does not buy and sell of the same party at the same price, as on the European exchanges, but makes both contracts in the open market at the prevailing prices for the respective deliveries. In other words, he fulfills his first contract and makes another. If July wheat is two cents higher than May wheat, it is said to be at a "premium of two cents over May," and this to the advantage of the seller;

[1] The transactions for continuation in the continental exchanges are the same in produce as in stocks. If a man has sold wheat for June delivery, and is not ready to deliver on the last day of June, he borrows the amount by buying in at the market and selling at the same price to the same party for the next delivery. If he has bought and is unable to receive at the end of the month, he will loan his wheat by a similar process. If there is a scarcity of money and an abundance of wheat, a *Report* will be paid; if reverse conditions prevail, a *Deport* may be demanded.

if two cents lower, this is the premium he pays. Operations of this kind are called "switching contracts."

A proposal was made a few years ago to adopt on the Chicago Board of Trade such a borrowing system as prevails on the Stock Exchange. This proposal is of particular interest in view of the early practice in the West of making deliveries on short contracts by means of borrowed receipts. The discussion was occasioned by the attempted federal legislation against futures. The so-called "anti-option" bills sought to prevent all sales of property without delivery. It was suggested accordingly that a system of "dealing in spot stuff" might be adopted in the case of grain, which would fulfill the requirements of the proposed law. This was to consist simply of deliveries on the following day made by means of borrowed receipts, which could be replaced by future receipts for the incoming grain.

The committee appointed to examine this suggestion reported that the system was impracticable for the existing grain trade. That it would be so is not difficult to see. The transactions of the Board of Trade, determined as they are by the grain movements throughout the whole world, cannot be made dependent on the grain stored in Chicago alone. The power for possible evil in the hands of the elevator men would check all independent speculation.

The advantage of the European system of fortnightly settlements is the advantage that comes in any case in postponing clearings—that there is opportunity for more off-sets and a smaller use of stocks and cash in the end. But the American system facilitates clearings sufficiently and has the important additional advantage of allowing a continuous and even business without breaks or disturbance. The machinery of trading and clearing runs smoothly from day to day, each day's transactions being settled at once, and not left hanging. On the other hand, on the English and continental Bourses business is sus-

pended every two weeks while an elaborate settlement is effected, which never fails to be a disturbing influence. No one wishes to take decided action till the result of the settlement is known.

A method which combines some of the characteristics of both the English and the American clearing systems is that adopted by the Consolidated Stock and Petroleum Exchange of New York. Under this method stocks are cleared once a week, each Monday, and trading for the account, that is, for the weekly settlement, is common. At the same time money differences are cleared daily. This practice doubtless presents some advantages in the greater ease of borrowing and continuing to the next account. The daily clearing of stocks probably hampers speculation somewhat and narrows the market. The daily settling of differences, however, is a great safeguard against over-trading, and perhaps is sufficient, without the additional clearing of stocks, to obviate the difficulties of the London method. Experiments in trading for the account have been made on the New York Stock Exchange, but the method was made optional and never became popular.[1] The Chicago Stock Exchange has adopted a monthly clearing of stocks with trading for the account.

Another thing which distinguishes the methods of trading on the London Stock Exchange from those of this country, and of the continent equally, is the separate class of "dealers." There are two classes on the London Exchange, the brokers proper, and the "dealers" or "jobbers." These latter always deal for their own account, the brokers always for others, and the dealers always serve as intermediaries between brokers.[2] A broker who wishes to buy, or sell, never makes his bid among other brokers, as is our custom, but seeks out some dealer and asks him

[1] *Cf. Bradstreet's*, July 30, and October 8, 1887.

[2] Jobbers and brokers can never form partnerships with each other. See *Rules of the Stock Exchange*, Rule 43.

to make a price on the given stock.[1] This the dealer does by fixing one price at which he will buy and another at which he will sell. Then the broker announces which he will do, and the transaction is made.

It is hard for an American broker to see any advantage in such a plan, and many doubts as to its advantages are expressed by the London traders themselves. It is claimed that, in this way, a ready market is always secured, which would not be provided if broker were to deal directly with broker, because of the difficulty of finding a broker who wanted the particular stock in the particular amount. But no such difficulty exists in the case of an active stock, where there is active bidding among brokers in open market; and in the case where the English method would doubtless be of advantage, that is, where the stock is a specialty or the market is one-sided, the jobbers usually refuse to trade, and brokers have to fill their orders in some other way.[2] It sometimes might be an advantage to be able to make a single sale or purchase on a customer's order, instead of placing part with one broker and part with another, and yet in the case of active securities this inconvenience is not great. On the other hand, it is true that there is a distinct advantage in being able to place a large order at a single price. Nevertheless, in the long run, the English jobbing method seems to the American mind a cumbersome and unnecessary duplication of middlemen with a corresponding extra charge on the public.[3]

[1] The jobbers or dealers are divided into different markets as "Americans" or "Home Railways." It is not necessary, but it is customary, for a dealer to confine himself to a single market.

[2] Stutfield & Cautley, *op. cit.*, p. 26.

[3] The jobbing system abroad, however, even on the continent where it does not prevail, is looked upon with considerable favor. *Cf.* Struck, *Die Effektenbörse*, pp. 6–12, where, however, approval is expressed in comparison chiefly to German conditions which do not exist here. *Cf.* also Stutfield & Cautley, pp. 22–25, and the *Report of the Commission of 1878*, p. 9, and, for a criticism of the system, the *Economist*, Sept. 30, 1893.

CHAPTER IV.

THE ECONOMIC FUNCTION OF SPECULATION

I.

From the account of the forms of exchange speculation presented in the foregoing chapter, the nature of modern speculation becomes evident. It consists in buying and selling commodities or securities, or other property, in the hope of a profit from anticipated changes of value. The word is, however, sometimes used in a more comprehensive way. Professor Hadley says: "Speculation, in the narrowest sense of the word, is the attempt to make money out of fluctuations in the value of property, as distinct from its earnings. In a wider sense, speculative business is that business which involves large risks for the chance of large gains."[1] It is with speculation in the narrower sense, and with that only so far as it occurs on organized exchanges, that the present essay is concerned.

Few things have called forth greater extremes of praise and blame than modern organized speculation. On one side it is strongly denounced, either as being morally wrong in itself, or as being in addition to this a disastrous influence in business. This view is, perhaps, that of a large majority of respectable persons outside of business life, and of the greater part of the newspaper press.[2] On the other side the

[1] *Railroad Transportation*, p. 48.

[2] For example, so conservative a publication as the London *Speaker*, in its financial column of October 12, 1895, makes the general statement, as if self-evident, that "dealing in options—that is, in stocks (of commodities) which may or may not be held by the nominal seller—is clearly ethically wrong."

system is as strongly upheld. Its assailants, however, are not confined to those without, nor its defenders to those within, the speculative circle. It is often attacked most bitterly by those who have been in close connection with it, and defended most vigorously by disinterested scholars and publicists. An English writer, who was for many years a broker in Liverpool, has recently published an almost savage arraignment[1] of "the option, future, and settlement systems which have been introduced into various forms of produce and food products, with the result that gradual misery and ruin have been entailed on all classes." Similarly, a broker writing in the United States says,[2] "The New York Stock Exchange, which is the soul, the motive power of Wall Street, is an evil in the land, a danger to private wealth, a disturbing force in general business, and a foe to public morals. . . . The Chicago Board of Trade is a den of speculators whose operations are even more pernicious."

On the other hand, the distinguished French economist, Leroy-Beaulieu, defends speculation with equal vigor: "On se plaint des maux qu'elle entraine mais ceux qu'elle épargne seraint beaucoup plus grands que ceux qu'elle cause. On s'est souvent demandé comment sans intervention du gouvernement, sans injonctions des administrations publiques, des pays de quarante ou cinquante millions d'habitants, des villes de deux, trois, ou quatre millions peuvent être régulièrement approvisionnées chaque matin, sans aucune défaillance de tout ce qu'il leur faut. C'est à la spéculation qu' en revient le mérite; ce sont les variations de prix qui constituent ses moyens d'action."[3]

A countryman of Leroy-Beaulieu exclaims with enthus-

[1] C. W. Smith, *Commercial Gambling*, London, 1893.

[2] J. F. Hume, *Art of Investing*, ch. 2, New York, 1888.

[3] Quoted in the article "Spéculation," *Nouveau Dictionnaire d' Économie Politique*.

iasm :[1] "Et pour ces désavantages exceptionnels, ces rares infractions à la loi générale, que de bienfaits la spéculation engendre, que de richesses elle crée!" And again, "elles (les Bourses) diminueront les écarts de la folie humaine, si elles ne les rendent pas impossibles; elles éleveront le niveau de la moralité, si elles ne rendent par les hommes parfaits, ... elles amélioront à l'état de liberté le sort de l'homme ici-bas."

The criticism directed against speculation is made from two somewhat conflicting points of view. The first is that speculation is merely gambling and has no reference to actual trade, except that it consists in betting on the course of prices. The second is that speculation is all-powerful in trade, which has become completely demoralized by its subjection to fictitious speculative conditions. The former view is utterly beside the mark. However the gaming instinct may control it, the fact must be recognized that speculation is an important factor in the commercial world, and dominates trade in the field in which it acts. Speculation in any case is not mere gambling. Whether it is better or worse than gambling is a question on which opinions will long differ.

The close resemblance in many ways between gambling and speculation has obscured the essential point of difference. Both depend upon uncertainties. Both involve the risk of present possession for the sake of future gain. In speculation, as in gambling, the occurrence of a certain event results in gain for one party, while an occurrence of a different kind results in loss. What distinctions can be made between them? It has been suggested that speculation and gambling differ in that in gambling a fixed sum is staked, while in speculation the amount varies. But a fixed stake is not an essential of gambling, and in any case the suggested difference is superficial. Another dis-

[1] Courtois, *Opérations de Bourse*, pp. 45, 54.

tinction often suggested is the comparative degree of judgment or pure chance in the transaction.[1] But it cannot be claimed that a careful study of probabilities is foreign to the nature of gambling. An opinion as to the next day's weather may be based on the most careful observation, yet one can bet on, but cannot speculate in, the weather. Much betting, whether on cards or horse-racing, is based on a careful consideration and previous study of the conditions determining the result, while much speculation is based on the wildest chance.[2] Professor Hadley makes a somewhat similar distinction.[3] The distinction, he says, between legitimate speculation and gambling is one of intent and purpose. Legitimate speculation "involves anticipation of the needs of the market." At the same time he introduces the criterion of public benefit as a test of the gambling nature of business. This test cannot be applied to any particular transaction at the same time with the test of "intent and purpose," since with mere luck a man may sometimes anticipate future conditions and perform a public service, while with the best intentions another may make great mistakes. In the field of speculation more public benefit comes from a good guess than from a bad judgment.

It is true that, if transactions are to be classified by some test according to which they may be approved or disapproved, it is necessary to adopt the somewhat shadowy distinction of "intent and purpose," in other words, the spirit pervading them. Such classification of transactions must be made, but it is not necessary that the words speculation and gambling be given their meanings with this end in view. It is allowable to make a distinction in

[1] *Cf.* MacCulloch, *Principles*, p. 261.

[2] MacCulloch, however, is consistent, and classes betting after careful study of probabilities, not as gambling, but as speculation.

[3] *Economics*, p. 110.

these terms based on some objective difference of a fundamental nature, even if it disregards the question of moral judgment. This distinction was brought out in the last chapter, where it was seen that, whatever the intention of the speculator may be, what he actually does is to buy and sell goods. In every transaction on an exchange, the speculator incurs the duties and acquires the rights of a holder of property. He may not handle the goods himself, or he may pass to another his agreement to receive, but the nature of the transaction is the same. Even where a ring is formed later, the original contract fixes definite property rights.[1] Gambling is a transaction in which one party pays over a sum of money from his own wealth because of the occurrence of a chance event. Speculation is a transaction in which one acquires by purchase the right to a certain property (not specifically designated perhaps), and gains (or loses) for himself the difference between the value of the property at the time of the sale and its value at the time of purchase. The difference is a significant one. In gambling one party must lose just what the other wins. In speculation this is not necessarily so. A dealer in wheat may buy of a farmer and sell to a speculator, and the wheat be sold at a constantly rising price through a line of speculators, till bought by a miller for grinding at the highest price of all. Neither the dealer nor the miller loses by the transaction, which is not speculative on their part, yet each speculator in turn wins. The reason is that there has been an actual increase in value. The gains of the speculators result from the division among them of this increase. The charge is made against speculation, that it is like gambling, because it is unproductive, and consists in the transfer of money from

[1] The form of a sale is not sufficient to mark the distinction. A bucket-shop "contract" reads in terms of a sale and purchase, but is gambling because it cannot be enforced.

one pocket to another. The charge is misleading, if not false. Speculation does not directly produce wealth, but there is a real increase or decrease in the value of property due to outside causes, and this gain or loss in value is shared by the speculators. It is true that speculative gains and losses far exceed the ultimate increase or decrease in the value of the aggregate of the commodities dealt in, but this is because new rights of property are created at every speculation, with a corresponding enormous accumulation of speculative "differences" to be settled. How much of such business is desirable, how far it is marked by the same spirit as gambling, are questions not raised at this point. We shall not hesitate to speak of some transactions in general terms as of a gambling nature, and yet it is well to keep clear this objective and economic distinction between gambling and speculation. Both depend on uncertainties, but, whereas gambling consists in placing money on artificially created risks of some fortuitous event, speculation consists in assuming the inevitable economic risks of changes in value.

It is in this element of risk that we have the key to the function of speculation. It is often said that all business is to a certain extent speculative; in other words, there is an uncertainty as to the ultimate profits. These risks are inherent in all business, and are no more artificial than the whole commercial order under which we live. They are risks which thrust themselves upon business men and which business men must meet. Especially are these risks dependent on changes in value, and it is the assumption of such risks that constitutes speculation.

The central feature in the economic organization of modern society is the market. From the point of view of the individual, the production and distribution of commodities are carried on with a view to their exchange. The regulator of exchange, and therefore of production, is value.

Consequently the producer will expend his energies on such commodities as will have the greatest market value as compared with the expenses of production, just as the merchant will take them to the market where they will command the highest price. But this adjustment of production and distribution according to values will be accurate only in proportion to the success of the producer and consumer in ascertaining such values. The producer produces only when he thinks he can get a return greater than his outlay. The merchant buys only when he thinks he can sell at a higher price. In both cases there is always the risk that before the production is completed, or the sale made, the value of the commodity may fall. Similarly, there is a chance that it may rise. In the one case there is a loss; in the other a gain, to the producer or the merchant. Hence it may fairly be said that the test of the perfection of the organization of trade is the promptness with which such changes are learned and the accuracy with which they are predicted. It is by a due appreciation of this fact that one comes to a realization of the importance of organized speculation. If it is found to be the means of making the needed prediction, it will also prove itself the chief directive influence in the economic field in which it prevails. In such event, the idea of its being an artificial device for gambling purposes will give way to a conception of speculation as a natural growth to meet an actual want.

Organized speculation, that is, such speculation as was described in the last chapter, is a comparatively recent development, and a consequence of new economic conditions. Nothing will so clearly show its real nature as a glance at the economic changes which have made it necessary.

Changes of value become important only where the system of exchange is already developed. When every

man produced for himself alone, he was forced to undergo risks of production, but only when he began to produce more than he wanted for his own use, did he become subject to uncertainty in finding a market for his goods. The primitive man who started on a hunt, or who planted corn, necessarily took a risk of failure. The game might be scarce, or the crop might fail. These were risks of production, and were borne necessarily by the producer. But as soon as our primitive man began to kill more game or raise more corn than was needed for individual use, in the hope of bartering his surplus for more desired commodities, he began to incur a risk of quite another kind. However successful his production, it would profit him nothing unless he found others who wanted his commodities and had other commodities to exchange, that is, unless there was a demand for his goods. In other words, as soon as exchange set in, trade risks began. The things which he produced could not be of certain value, and, in so far as he took these risks of value, he might be said to speculate.

In such a system the functions of the producer and trader were combined in one person, who bore both the risks of production and of trade. In the case of many commodities this condition prevailed during a considerable period of development. In the course of time, however, the extension of exchanges brought out a distinctly trading class. Trade, as distinct from exchange, means buying in order to sell again with a view to gain from the transaction. Evidently the exchange of goods does not necessitate a trading class, and much exchange takes place to-day without the intervention of the trader. But any great extension of exchanges is impossible without such a class, and it is only when the producer and the trader are differentiated that real commerce begins.[1]

[1] It hardly needs to be said that, historically, different lines of production developed a special trading class at different periods. Doubtless the trader found his first field in luxuries, while the grain trade was among

This trading class stood ready at any time to take over the extra product of the individual producer and assume the responsibility of its exchange. Thus the trading risks, the risks, that is, of a change in value, were shifted to the shoulders of the new class, and the members of this class in turn, so far as they assumed such risks, became the speculators for the community.[1]

With the development of trade and the growth of intercourse among traders, these risks tended to become less. The more that men gave up the idea of producing goods mainly for their own consumption, the more steady became the market for articles of ordinary use. The functions of merchant and of transporter of goods, at first united, became separated to a considerable extent, and the traveling merchant, who still survives in our pedlar, gave way more and more to the stationary trader, especially in the cities of any size.[2] The growth of great centers of trade and of special markets (the earlier counterpart of modern "exchanges"), the constant meeting of traders, their great gatherings in the important fairs and yearly markets, all tended to increase the knowledge of market conditions and so to diminish the risks of fluctuations in value. Of great importance, too, were the merchants' organizations, which are represented, in a sense, to-day by chambers of commerce, produce exchanges, and similar institutions. Such organizations brought the most intelligent traders together and diffused information through a wider group.

the last to extensively differentiate the trader from the producer. *Cf.* Schmoller, *Die Epochen der Getreidehandelsverfassung und -politik*, in the *Jahrbuch für Gesetzgebung, Verwaltung und Volkswirthschaft*, 1896, p. 695.

[1] For a line of argument similar to that of this section, see the pamphlet, *Der Terminhandel*, 1889, reprinted from the *Hamburgischer Börsen-Halle*, and the unrivalled essay of Fuchs, *Der Waren-Terminhandel*, Pt. III.

[2] *Cf.* Lexis, in Schönberg's *Handbuch*, Vol. II, article, "Handel."

By all these means the risk which the ordinary trader ran became lessened. Many of the local influences no longer affected his profits, and, as knowledge increased, the uncertainties of one age became the certainties of the next. The slight losses due to unforseen circumstances were perhaps in the long run offset by similar gains, so that a moderate profit became assured to the average trader under average circumstances.

There still remained, however, at the basis of all trade, the possibility of unexpected gain or loss. Especially was this so in regard to agricultural products, the supply of which is dependent on uncontrollable conditions of weather and climate, and also in regard to goods from distant sources of supply. In so far as traders assumed these risks they became speculators.[1] But the great mass of traders were not greatly affected. In the course of the history of trade, a tendency toward a multiplication of the grades of middlemen appeared, and a distinction between wholesale and retail trade was made. When this occurred the risks fell chiefly on the wholesale merchants.[2] The retailers, dealing in small quantities and observant of the local demand, had little to fear from sudden changes in supply. It was, then, through the large merchants that the chief economic functions of trade were fulfilled. Their business necessitated the development of large centres of supply with ample means for storage,[3] a detailed knowledge of the demand and supply in every locality, and the

[1] See Prof. Schmoller's article (as cited above) for some suggestions as to the general transition from the early conditions of municipal grain supply and distribution to the system of private traders. The growth of cities was an influential factor in the change. "Die Versorgung der Städte war eine dauernd, die Abwendung der Hungersnot eine nur periodisch wirkende Ursache," p. 704. See also Ashley, *Economic History*, Vol. I, § 28, 29.

[2] *Cf.* Lexis, "Handel," in Schönberg's *Handbuch*.

[3] *Cf.* Cunningham, *English Industry and Commerce*, Vol. II, pp. 189, 356.

best estimate possible of future conditions. In this stage of trade the prediction of the future is the uncertain and all-important element. Such a system of great merchants carrying large stocks, assuming the important risks, and thus regulating the supply, is evidently the existing system of trade in many commodities, and was, not long ago, the uniform system in nearly all trade of large extent.

It is often hardly realized what a complete transformation in trade conditions this century has brought about, especially in the case of agricultural staples. Indeed, one may say the last half-century, for the new movement had but begun before 1850.[1] The transformation has been from many local markets to one world market. The cause of the transformation is found in the development of steam transportation and telegraphic communication.[2] It is hardly too much to say that the Industrial Revolution of a hundred years ago has been matched in later years by a Commercial Revolution of equal importance.

Before this change the important markets were in the main independent of each other. To be sure, in all articles of international trade the conditions at all the sources of supply had their ultimate effect on distant values, and yet, even in these cases communications were so slow that the conditions might change entirely before their effect could be felt. Even the amount of international trade in such staples as cotton and wool, which for the earlier period was considerable, seems comparatively insignificant by the side of the enormous trade in those commodities to-day. In the main then it is true that the earl-

[1] In the case of grain for instance, before 1850 only from one to nine per cent., at the most, of the crop of the agricultural nations, or of the consumption of manufacturing nations, figured in international trade. Schmoller, *op. cit.*, p. 737.

[2] The aspect of the "world-market" on which emphasis is here laid is not the fact of large international shipments, but the resulting fact of the effect of distant occurrences on prices.

ier markets were of a circumscribed area; that, save over long periods, the supply and demand within this limited area were the regulators of price, and that these local conditions were consequently the chief concern of even those merchants who dealt on a large scale.[1] Under such circumstances these merchants bore the speculative risks as a part of their business, and were perhaps fully competent to cope with such risks as might arise.

All this was changed by the commercial revolution. The facilities of instantaneous communication and of rapid transportation from one end of the world to the other soon tore down the barriers about the local market. The stores of a given city, even the crop of a given country, could no longer control the price in any market. To-day the wheat of Russia and of the United States can be turned into the Liverpool market as quickly as could the supplies of the inland counties a hundred years ago; while long before its arrival, the Liverpool merchant knows just how much wheat has been shipped and when it may be expected. The Liverpool price is as quickly affected by a cable from India, or Argentine, or Dakota, as formerly by the news of a bad crop in the surrounding country. The same is true in regard to cotton and coffee, and many of the other articles of international trade.

With this change the market for all the great staples became a world market, and the total demand and total supply began to determine a single price for all places. The chances of local fluctuations in price became greatly lessened, for the local scarcity or abundance might be offset by opposite conditions elsewhere. At the same time the fluctuations possible because of these distant conditions became of much more importance. Formerly the

[1] In the case of grain this was particularly true. Schmoller, *op. cit.*, p. 722, says that till the building of railroads, "jede Stadt blieb mit ihrer Umgebung für den Getreidehandel ein isoliertes Wirthschaftsgebiet für sich."

merchant, from a thorough knowledge of his own market, was well-prepared to assume its speculative risks. Now he was called on to face a wider *Konjunktur*, and to assume the risk of changing values dependent on world-wide conditions.

This was a burden which the merchant body was hardly prepared to bear. With the advance in knowledge, the trading element and the speculative element in their business had come to be more sharply distinguished, and the more important the speculative element became, the greater was the burden on those who pursued their business for its trading profit. As merchants they were primarily concerned with buying, storing, and moving their actual commodities, and had little time to watch the ever-shifting conditions of the world market. What was now needed by the trader was a distinct body of men prepared to relieve him of the speculative element of his business, that is, of the risks of distant and future changes, just as he had formerly relieved the producer of his distinctly trading risks. A new body was wanted to cope with the *Konjunktur*. And as the need grew, the speculative class became differentiated from the trading body as the latter had been differentiated from the producing body.[1] The speculator was to assume these risks by standing ready at any moment to take over the commodity of the merchant, or to agree to deliver to him, at an established market price. The importance of this development can hardly be overestimated. The peculiar feature is, not that speculation has increased, for that is but a necessary accompaniment of increased trade, but that speculation has become the business of a special class. Previously the speculators had been

[1] Brückner, *Der Differenzhandel an der Börse*, p. 59, Berlin, 1894, criticises Fuchs for tracing the growth of a class of capitalistic speculators to these new conditions of trade, on the ground that dealing in futures took place in the 17th century. But the Dutch trade of that time was insignificant by contrast, and was itself due to similar causes working on a smaller scale.

traders seeking their own markets and moving their own goods. Now they became a third class, distinct from both producers and exchangers. Whereas formerly each man bore his own risks, the new class has arisen to relieve him of these risks;[1] instead of all traders speculating a little, a special class speculates much.[2]

The machinery of a speculation which assumes such a task has been examined, and it has been seen that such speculation is limited to certain kinds of goods. In the first place it is limited to commodities of an uncertain production. Such are preëminently the raw products of the soil. If there were a steady output of these products which was well under control, no speculation could arise. In general it may be said that where a quick increase of supply in response to a rise in price is possible, speculation is impracticable. This is the case with most manufactured goods. The New York Cotton Exchange, for example, provides rules for trading in print cloths, but little such trading ever takes place, or ever can. An exception is to be made in the case of half-manufactured

[1] That this need is historically the cause of a speculative class is shown by a comparative study of its origin in different trades. Pfleger summarizes his investigation in this direction thus: "Aber da wo der Terminhandel in einem Artikel zuerst und originär entsteht, ist der innere Grund seines Entstehens überall der Gleiche, nämlich das Bedürfnis der beteiligten Kreise, das Risiko der Preisschwankungen auf andre Schultern abzuwälzen." *Börsenreform in Deutschland*, Pt. II, p. 112.

[2] It will be seen that the theory of speculation suggested above bears a certain relation to the recent discussion concerning the reward for risk as one of the shares in distribution. (See especially the articles by Mr. Hawley and Professor Clark, *Quarterly Journal of Economics*, Vol. VI, p. 280, Vol. VII, pp. 40 and 459.) It is true that what is risked is capital, as urged by Professor Clark, and hence that the reward accrues to a certain type of capitalist. At the same time a new class has developed which is primarily speculative, secondarily capitalistic. Besides recognizing four functions in production and four rewards, it may be well to recognize four classes also to receive the rewards. That is, the *speculator*, with his reward for risk, may be added to the capitalist, the laborer, and the entrepreneur.

goods of foreign trade, because of the greater uncertainties of demand.[1] The speculation already referred to in "Scotch pig" warrants is an illustration in point. A similar trade in this country is impracticable, because the business is predominantly domestic and in a few hands. There has also been some speculation, based on this fluctuation of foreign trade, in copper and tin. Provisions (pork, lard, *etc.*) are also manufactured products, but since they are dependent upon an uncertain supply of hogs, which cannot themselves be kept long, the supply is uncertain.

Another condition of supply and demand which may throw out speculation is that of monopoly control. If either the demand or the supply is controlled by a single organization, the price is too much in their hands to allow any scope for speculation. Crude petroleum some years ago was a favorite article for speculative trade, and numerous flourishing oil exchanges were established. These exchanges now do no speculative business comparable to that of their prosperous days. Probably more than one cause can be given for this decline, but it is evident that so long as a single trust dictates the price of crude oil through its control of the demand for refining purposes, and, to a considerable extent, of the supply, no speculation will be possible, or at least safe. Similarly the New York Coffee Exchange has attempted to stimulate a speculation in sugar, and provides rules for trading in that article. But nothing comes of it while a single body controls the demand for raw sugar and the supply of the refined article. In Europe, however, where no such monopoly conditions prevail, sugar is one of the most prominent features of the speculative markets.[2]

[1] *Cf.* Lexis, *Handel*, in Schönberg, Vol. II., p. 879.

[2] For a critical discussion of speculation in sugar, see Bayerdörffer, *Der Zuckerterminhandel*, Conrad's *Jahrbücher*, LIX, 586 (1892). *Cf.* also Pfleger, *op. cit.*, Pt. II, ch. 4. In general the work of Pfleger gives some interesting material as to the conditions which favor speculation, see chs. 1–5.

This brings out another general condition of speculation. An article must be the subject of a general world-wide demand before extensive speculation in that article is possible. A more limited demand may allow of a limited amount of speculative trade, but, in general, speculation will arise only where the commodity is one of the staples of the world market. In this connection it is evident that any quickly perishable commodity is entirely unsuited to such trade. No futures can be sold in an article which will not keep at moderate expense for an indefinite period.

Finally reference may again be made to the important limitation of organized speculation to what are called representative goods. Securities are the best illustration of this quality, since every share is of equal value with every other of same issue. Wheat, cotton, coffee, *etc.*, are fairly representative, and are made completely so by the system of warehouse receipts already described. No extension of speculation is possible to articles which do not possess this quality. For example, land can never be subject to organized speculation. We see at times a fever of speculative land buying, but that is quite a different thing from the organized speculation of the exchanges. Each particular parcel of land is a unit in itself, and takes its value from characteristics peculiar to itself alone. In real estate dealings short-selling, and so complete speculation, is of course impossible.

So far reference has been made only to commodities. Securities also afford a field of great speculation because of their fluctuating values. They differ from speculative commodities in that they are of a fixed, not an uncertain, supply. Their values, however, are uncertain, since they depend on a fluctuating demand. The demand itself is determined by the market estimate of their earning capacity.[1] In other respects, securities fulfill the require-

[1] For a discussion of the values of securities, see Giffen, *Stock Exchange Securities*, London, 1879.

ments of speculative commodities. They are perfectly representative; and those in which speculation occurs are not under monopoly control.

The growth of modern stock speculation is not a result of the commercial revolution as such, and yet is closely connected with it. It began among capitalists naturally with the first appearance of stock companies, and was continued in the public funds, when these offered a field of large but uncertain investment. It was not, however, till the enormous increase in private securities, which came with the building of railroads and the following advance in industrial undertakings, that speculation assumed the great proportions of to-day. Steam transportation, while together with the telegraph it was revolutionizing the market for commodities, was also producing a great change in the method of investment. Private investment, no longer confined to participation in local concerns, came to be made, in a large measure, by small contributions to government loans or to vast industrial enterprises. Under these conditions an organized stock market became indispensable. Its place in the financial world will be more fully considered in another section. Suffice it to say here that the purchase of securities (that is, investment), in the face of the many distant and hidden causes affecting values, involved the same uncertainties as the purchase of commodities under the new conditions of a world market. The small investor, like the merchant, could hardly take such chances; and, like the merchant, he found a class ready to assume all the risk of buying or selling his security, and a market that fixed prices by which he could intelligently invest.

The function of an organized speculation, then, is limited to certain classes of goods. But within these limits are found great classes of securities, and many of the most important staples in international trade. This function of

speculation may be finally summed up as follows: To relieve trade of the risks of fluctuating values, by providing a class always ready to take or deliver a property at the market price; and, in so doing, to direct commodities to their most advantageous uses, and the investment of capital into the most profitable channels, by fixing for commodities and securities comparative prices for delivery at different times and places.

II.

The directive influence of speculation is its service to society in general, and its risk-bearing function its service to trade as such. Since its directive control is exerted through prices, it will be well first to examine the influence of speculation on prices, and return in another place to the assumption of speculative risks.

In the first place, it is desirable to dispose of a more or less prevalent idea that speculative prices are determined "regardless of the law of demand and supply." Such an idea is based on a complete misconception of the nature of value. The more free the competition between buyers and sellers, the more minutely is price regulated by demand and supply, and nowhere is competition more free than on the exchange. It is especially strange to hear this charge brought forward as if an infraction of the law of supply and demand was cause for criminal indictment. Even if it were true, that under complete competition on the exchanges prices were determined in some other way, it would only remain to modify the statement of the law of value, not necessarily to disturb the facts. There are plenty of instances outside the exchanges where prices are determined by other factors than demand and supply.

This notion is probably due to what may be called the objective idea of value, that is, the idea that value may be determined by certain physical facts independently of indi-

vidual feelings. Thus it is supposed that there is a physical supply of any commodity of an ascertainable amount, and at the same time a sufficiently definite demand on the part of the consumers of the commodity, and that these two factors must determine the value of the commodity.[1] It should be necessary only to state this proposition to show its error, and yet there are many who cannot grasp the idea of a subjective determination of value. They cannot see that the total physical supply has nothing to do with the value at the moment, but only that part of it which is available for the market under prevailing conditions. That part of the supply which does affect value varies according to the temporary opinions of the holders as to the market prospects for some later time. So, too, the demand for commodities is just as little an objective, definite affair. It is something purely subjective, dependent in the same way on the opinions of the persons concerned, regarding not only present but future conditions.[2]

Prices on the exchanges, however, are (and must be) determined by the existing demand and supply. But the existing demand and supply are both speculative, and depend for their strength on the conditions in other markets

[1] It would be possible to cite many instances of this feeling in regard to value. The reports and speeches of the advocates of "anti-option" legislation in Congress are full of it. Even writers of standing are not free from confusion on this point. Eschenbach (*Zur Börsenreform*, p. 33, Berlin, 1892) complains that speculative prices are determined, not by *Vorrath und Bedarf*, but by *Angebot und Nachfrage*. Cohn, *Ueber das Börsenspiel*, Schmoller's *Jahrbuch*, xix, p. 44, says of this idea: "Diese vermeintlich neue Weisheit kommt darauf hinaus, dass sie an die Stelle des denkenden Menschen die todte Sache setzt, an die Stelle des Schützen das Geschoss."

[2] Compare the trenchant remarks of Prof. Cohn, in the article just cited, on this idea of value, p. 44 *et seq*. Cohn points out that the price of potatoes or any other commodity in which there is no speculation is equally affected by the anticipation of future conditions of demand and supply, so far as these are known. *Cf.* also Brückner, *Der Differenzhandel*, p. 52.

and on the expected conditions of the future. It is in this way that distant and future demand and supply affect prices, by affecting the speculative demand and supply here and now, and it is only in so far as they do determine the speculative market of the moment that they have any influence on price.

The speculative demand and supply are just as real as any other, and are expressed in genuine offers to buy and sell goods. It may be to buy or sell either present goods or future goods, or, in other words, goods either for immediate delivery or for future delivery. They are at the same time estimates of what the future market is to be. It may be expressed by saying that the existing market for future goods is an attempt to forecast the future market for (then) existing goods. If a distinction is made between utility and value by considering the value of a commodity as an estimate of what its utility will be,[1] a further distinction may perhaps be made by considering the price of a "future" as an estimate of what the value of the commodity will be. It is an estimate of an estimate. The speculator makes his offers to buy and sell entirely on that estimate of future values. To be more specific, he trades at the moment in May wheat, or July wheat, or September wheat, according to his estimate of spot prices in the following May, or July, or September.[2]

Seen in this light, it is entirely natural that men should "make" prices according to their opinions, and the charge that the exchanges are "price factories" loses all its odium.

[1] *Cf.* Giddings, *Publications of the American Economic Association*, VI. *p. 43.*

[2] This must be true in the long run even where the speculator expects to complete his operation before the month of delivery. If he expects the price of a given option to rise or fall within a given time, it will ordinarily be because of conditions which would advance or depress the spot price of that particular future month.

It should always be borne in mind that the service of speculation comes in its "price-making power." [1]

Under these conditions the closest scrutiny of all the factors that may influence future prices is of essential importance. The success of a speculator depends on the accuracy of his estimates, and it follows that where we find organized speculation we find the best perfected facilities for securing early and accurate information. This is one of the striking merits of the speculative system. In any business, knowledge and foresight are the chief requisites of success.[2] Nowhere do we find such strenuous efforts in this direction as among large speculators. It may be said with scarcely an exception that every successful operator in the stock or grain market has been distinguished by his unusual success in securing accurate information in advance of his competitors. The old story of how Rothschild watched the battle of Waterloo and reached London in time to make large purchases in the funds before the news became public, is typical of the successful operator everywhere.[3] It is also true that the speculator has often been equally marked by his ability to mislead his rivals in regard to what he has learned. His real

[1] *Cf.* Fuchs, *Der Waren-Terminhandel*, 27. Kohn, *Der Getreideterminhandel*, § 4.

[2] As Professor Hadley well says (*Economics*, p. 113): "The success or failure of a man engaged in manufacturing, in transportation, or in agriculture, depends more upon his skill as a prophet than upon his industry as a producer."

[3] Even the earliest speculation gave rise to remarkable efforts in this direction. It is related of Sir Henry Furnese at the beginning of the last century that "throughout Holland, Flanders, France and Germany, he maintained a complete and perfect train of intelligence . . . the fall of Namur added to his profits, owing to his early intelligence." A Hebrew, Medina, accompanied Marlborough on his campaigns, and "Ramilies, Oudenarde and Blenheim administered as much to the purse of the Hebrew as they did to the glory of England." Francis, *Chronicles and Characters of the Stock Exchange*, p. 11. (American ed., Boston, 1850.)

opinion, however, is registered on prices by his purchases or sales. In the meantime it should be borne in mind that every increase in knowledge of future events is, in so far, a gain to the public as well as to the individual.[1]

Every event of any nature whatsoever is eagerly watched for and its effects discounted. Drouths in Kansas or rains in Argentina are noted at once in the markets of New York and Liverpool. New inventions, new discoveries, changes in freight rates, economic legislation, political complications, business failures, strikes, riots, storms, in any part of the world, are quick to affect prices on both stock and produce exchanges.[2]

Events are anticipated and exert their influence before they arrive. It is often surprising to see how absolutely without effect is the final occurrence of an event of importance, provided it has been expected. It is all epitomized in the familiar saying that "Wall Street discounts everything."

With this body of keen experts, striving by the use of private wires, special agents and every other means, to discover and foresee every event bearing on values, speculation has been well defined as the struggle of well-equipped intelligence against the rough power of chance.[3] Just in

[1] "*Erkenntniss der Zukunft ist Werth* für den Handel, Werth und segensreicher Nutzen für das Gemeinwesen. *Diesen Werth und Nutzen zu schaffen*, ist die *Spekulation* thätig." (Michaelis, *op. cit.*, p. 50.)

[2] This is humorously illustrated by Mr. C. D. Warner in a passage in *A Little Journey in the World* (p. 83): "What induced the beardless young man to make the 'investment' in 'three-eighths,' who can tell? Perhaps he heard, as he came into the room, that the Secretary of the Treasury was going to make a call of Fives; perhaps he had heard that Bismarck had said that the French blood was too thin and needed a little more iron; perhaps he had heard that a Norther in Texas had killed a herd of cattle, or that two grasshoppers had been seen in the neighborhood of Fargo, or that J. Hawker had been observed that morning hurrying to his brokers with a scowl on his face and his hat pulled over his eyes."

[3] "Sie [die Spekulation] ist der Kampf der mit Kenntniss der wissbaren Umständen ausgerüsteten Intelligenz gegen die rohe Naturmacht des Zufalls." Cohn, *Finanzwissenschaft*, p. 463.

so far as it meets and predicts changes of value it is successful for the individual and fulfills its function in business life. But its power is strictly limited. It may provide a special class to assume the risks, but it cannot do away with risks altogether. There are physical and social changes which are impossible of prediction and must remain so. Speculation tends to reduce these to a minimum, and perfect speculation would succeed in predicting all future conditions, that is, would destroy its own *raison d'être*. In the meantime it is the many chances of gain from uncertain developments that maintain the speculative class.[1]

It is customary to attribute any price which is unfavorable to a particular class to the machinations of speculators. In this country speculation is charged with the responsibility for a large part of the fall in prices of agricultural products since the complete adoption of speculative methods a quarter of a century ago. Its tendency is supposed to be always towards a depression of price. Under other circumstances, however, it is blamed for always enhancing prices above the "natural" rate.[2] To the person making either of these claims it is perhaps a sufficient answer to oppose the other claim, and probably the same person who will insist that speculation reduces the price of wheat will be ready on another occasion to applaud the

[1] "Der Sporn des Ungewissen mit der Lockung des Gewinns ist es, welcher das Getriebe der Spekulation im Gange hält. Und doch eines Ungewissen, welches zu überwinden Tausende von unternehmenden Köpfen sich anstrengen." Cohn, *Ueber das Börsenspiel*, *loc. cit.*, p. 46.

[2] "It is not so many years ago since a large and representative meeting of western American farmers passed a resolution against options on the score that they tended to unfairly reduce the price of wheat, and it was just three weeks after that meeting that a convention of the National Association of American Millers, attended by some 500 members, was held in Minneapolis, and passed a resolution condemning options, on the ground that they unfairly raised the price of wheat." Quoted in *Bradstreet's*, Aug. 22, 1896, p. 542. *Cf.* also Cohn, *Zur Börsenreform*, in *Deutsche Rundschau*, Nov., 1891, p. 211 *et seq.*, reprinted in *Beiträge zur deutschen Börsenreform*, Leipzig, 1895.

critic who asserts that speculation gives a "high fictitious value" to "intrinsically worthless" stocks. The one view is a contradiction of the other. If any tendency is inherent in the system, it must show itself equally whether the subject of speculation is stock or produce. The methods on the stock exchange and on the produce exchange are not essentially different. Short selling is rife on both.

This question as to the effect of speculation in depressing prices, which has been the chief argument of the anti-optionists in Congress, has been treated somewhat fully by the writer in another place,[1] and calls for only a brief summary here. The familiar argument is, that short selling is a selling of products that do not exist, in addition to those that do, and so furnishes a corresponding increase of supply, which necessarily depresses prices; and figures representing enormous sales are brought forward as statistical proof. These sales, however, are also purchases, and the question of their amount is of no importance. They represent a speculative demand as well as a speculative supply, and the real question is whether the speculative forces on the short side are stronger than those on the long side of the market, and whether the speculative supply or demand is warranted by actual conditions. It is the fact that they sometimes are not, which gives rise to the idea that speculative prices are "independent of demand and supply." The question of the depressing effects of speculation on prices cannot be decided by a comparison of prices before and after the advent of speculation; for the causes influencing prices are too many to permit of tracing the effects of a single cause easily. That there has been a great fall in prices in the past few years no one will deny, but there has been cheapening of transportation and entirely new competition in the markets of the world, due to the exports of Russia and Argentina.

[1] "Legislation against Futures," *Political Science Quarterly*, March, 1895.

Furthermore, since speculation began thirty years ago, there are several periods of high prices which may as justly be attributed to it as the low prices at other times. A comparison of the degree of depression with the amount of future sales shows that increased speculation has always accompanied higher prices. That is what any one familiar with the market would expect. In this case, the increase in speculation is rather the effect than the cause of advancing price; but the fact is damaging to the argument that falling prices are due to speculation.[1] The same facts apply in the case of the opposite theory that speculation necessarily raises prices. It may raise or lower prices; but so long as there is strong speculation on both sides of the market (and there always will be) there is no necessary tendency for it to do either.[2] Furthermore, any effect on price in either direction, which is not based on actual conditions, is necessarily temporary for the same reason.

What then is the effect of speculation on prices? Primarily, as has been shown, it acts to concentrate in a single market all the factors influencing prices. In this way a single price is fixed for the whole world. By means of arbitrage transactions former differences of price in different markets have been leveled. Of this there can be no doubt. The same should be true in regard to differences of time as well as of place. Since a great change in either the demand or supply of any commodity is less unexpected, it has far less influence on price, when it finally arrives, than it would have under a non-speculative system. This is both because an excited

[1] In view of the claim that agriculturists are all in favor of anti-option legislation, it is interesting to note that of the sixty-two letters by "prominent cotton growers" printed in the recent Report of the Senate Committee on Agriculture and Forestry, on *Cotton Production and Consumption*, only eighteen instanced speculation as the cause of the fall in prices. (53d Congress, 3d Session, S. Rep., 986.)

[2] *Cf.* the remarks of Mr. G. F. Stone, Secretary of the Chicago Board of Trade, in his annual report for 1891, pp. xvii *et seq.*

market due to unexpected events always registers extreme prices, and also because the anticipation of changes in the market affects the immediate price. On the other hand, every slight change in the demand or supply of a commodity has more influence than ever before. The more perfect the speculative market becomes, the more sensitive it is to every change in conditions. An "active" stock, for example, changes prices many times in an hour. The resultant of these two tendencies of the speculative market would seem to be a state of less violent but more frequent fluctuations of price. This is the ordinary statement in regard to the matter. The contrast between the two systems has been likened to the difference between the countless waves of the sea in fair weather and its billows in a storm.

Perhaps the most potent influence in preventing wide fluctuations is the much maligned short-seller. It is he who keeps prices down by his short sales, and then keeps them strong by his covering purchases. This is especially true in the case of inflation followed by panic. If it were not for strong short selling when the market becomes inflated, prices might rise to almost any extent before the final crash. Now the rise tends to be checked by the efforts of shrewd operators to take advantage of the inflation. On the other hand, when prices begin to tumble, they are kept from going as low as they otherwise would by the purchases which the shorts have to make to cover their contracts. Thus prices at both ends of a panic are less extreme than they would be without short selling. Under organized speculation both the sanguine and the skeptical elements are duly represented. Every decided rise or fall in values is fought by one party or the other. Compare the situation during a real estate boom. Here only the sanguine affect the price on the rise, and only the gloomy on the fall. At one end prices are more recklessly inflated, and at the other more needlessly depressed, than would be possible in an organized speculative market.

These are strong factors making for a condition of more steady prices. Against them must in fairness be set the possibility of increased fluctuation by reason of speculation. While the participation of speculators in the market increases the chances of an intelligent forecast of coming events, it also affords the opportunity for panic influence. The ease with which business is done, and especially the facility for trading on insufficient capital, occasionally precipitate movements in price which are due solely to the unreasoning excitement of a crowd. There are also occasional movements of a different kind, due to well-planned and executed "manipulation." Most striking of these is the successful corner. So, too, any temporary difficulty of either the bulls or the bears, due perhaps to the necessity of immediate delivery, or perhaps to a concentration of orders in the market of one particular kind, may create a sudden fluctuation one way or the other.[1]

It is of the greatest importance, however, to distinguish the frequency of fluctuation from its extent.[2] It is the whole tendency of speculation to cause a ceaseless fluctuation within certain limits, but it is no less a tendency of speculation to narrow those limits. Those cases which result in extreme prices of a fictitious kind are rare and in any case of short duration.

Statistics regarding the influence of speculation on prices must be regarded with due caution. We may compare the prices of some commodity during a speculative and a non-speculative period, or we may compare the course to-day of prices of a speculative and non-specula-

[1] For example, on March 6, 1894, the price of the Sugar Trust certificates advanced twelve points in less than an hour, and almost at once reacted ten points. Such fluctuations have no relation to actual conditions. Probably the flurry was due to a concentration of buying orders, increased by "stop loss orders" as the price rose, with no selling orders for the moment. This at least was the interpretation of the press.

[2] *Cf.* Cohn, *Ueber das Börsenspiel*, Schmoller's *Jahrbuch*, xix, p. 52.

tive commodity or security. In the first case it is never quite possible to tell what other changes besides the introduction of speculation may have been of influence; in the second case it is difficult to weigh the various influences, other than the presence or absence of speculation, which affect the prices of the two commodities. For example, it is sometimes said that wheat fluctuates in value more than many non-speculative commodities; but this is not because of speculation, but because of the inherent uncertainty of its supply. On the other hand, corn, in the long run, fluctuates more than wheat,[1] but this is not due to the smaller degree of speculation in the case of corn. It is grown in fewer countries than wheat, and is not in such steady demand for human food. The stocks which are chiefly speculated in are often most irregular in their price movements, but it is the natural fluctuation in value which induces the speculation, not the speculation which causes the fluctuation.

For these reasons statistics can hardly be used to furnish either proof or disproof of the foregoing estimate of the effect of speculation. Any general opinion on the subject must rest rather upon its own reasonableness than upon statistical verification. With the necessity of caution in interpretation duly recognized, it is possible to make some statistical comparisons which, if not of complete significance, are at least of interest. A comparison not infrequently made is that of the wide fluctuation in the price of grain in the middle ages with similar fluctuations to-day. For example, wheat in London sold in 1335 at 10 *s.* per bushel, and in 1336 at 10 *d.*[2] Such figures, however, throw little light on the subject in hand. More interest-

[1] The fluctuations of corn and wheat prices for a series of years are given each year by the secretary of the Chicago Board of Trade in his annual report.

[2] Marshall, *Principles of Economics*, p. 165.

ing is a comparison between periods in this country. Speculation in cotton began about 1870. Following are the highest and lowest prices of cotton per pound in New York for the decades 1821–30, 1851–60, and 1885–94, with the percentage of fluctuation from the highest price.[1] The grade quoted is the same throughout each decade, and a change of grade between the decades does not affect the comparison of fluctuation.

Year	Low.	High.	Per Cent	Year	Low.	High.	Per Cent	Year	Low.	High.	Per Cent
1821	11 cts.	20 cts.	45.	1851	8¾ cts.	15 cts.	41.7	1885	9.7 cts.	10.7 cts.	9.3
1822	10	18	44.4	1852	8½	11⅜	25.3	1886	9⅛	10	8.8
1823	9	17	47.	1853	9¾	11¾	17.	1887	9⅛	11⅜	19.8
1824	11½	18	36.1	1854	10	11¾	14.9	1888	9½	11	13.6
1825	12	30	60.	1855	8½	13	34.6	1889	9 1/16	11½	15.7
1826	9	17½	48.6	1856	9	11⅝	22.6	1890	10¼	12⅝	18.8
1827	8¾	11½	23.9	1857	11⅝	15¾	26.1	1891	7 15/16	10⅝	25.3
1828	8¼	13	36.5	1858	8⅞	15¾	43.6	1892	6 11/16	8¾	29.3
1829	8	11½	30.4	1859	11	13⅜	17.7	1893	7 7/16	10	28.1
1830	8	12½	36.	1860	10½	11¾	10.6	1894	6⅞	8 9/16	19.6

The above figures show constantly diminishing fluctuations. The average per cent. of fluctuation for the three periods is, for 1821–30, 40.79 per cent.; for 1851–60, 25.41 per cent.; for 1885-94, 18.83 per cent. The extreme fluctuations for any one year in the three decades were respectively 48.6 per cent., 43.6 per cent., and 29.3 per cent. The average annual fluctuation was lessened more between the first and second periods taken (37.7 per cent.) than between the second and third (25.9 per cent). That is, while the speculative period (1885–94) shows narrower fluctuations than the period 1851–60, there was even greater improvement between this period and the decade 1821–30.

For grain such accurate statistics for early periods are not available. A comparison, however, may be made of

[1] These figures (with the exception of the percentages, which are separately calculated) are taken from *Production and Prices of Cotton for 100 Years*, U. S. Dep't of Agriculture, 1895, Miscellaneous Bulletin, No. 9. The decade 1821–30 is the first for which highest and lowest quotations are given.

the annual fluctuations since the adoption of the "future" system (say 1865). Following are the highest and lowest prices of wheat at Chicago for thirty-one years, with per cent. of fluctuation from the highest price:[1]

Year.	Low.	High.	Per Cent.	Year.	Low.	High.	Per Cent.
1865	85	1 55	45.1	1881	95⅜	1 43¼	33.4
1866	78	2 03	61.5	1882	91⅛	1 40	34.9
1867	1 55	2 85	45.6	1883	90	1 13½	20.7
1868	1 04½	2 20	52.5	1884	69	96	28.1
1869	76½	2 47	69.	1885	73⅜	91¾	20.
1870	73¼	1 31½	44.7	1886	69⅜	84¾	18.3
1871	99½	1 32	24.6	1887	66⅜	94¾	29.7
1872	1 01	1 61	37.3	1888	71⅛	2 00	64.4
1873	89	1 46	39.	1889	75½	1 08¾	30.6
1874	81½	1 28	36.3	1890	74¼	1 08¼	31.4
1875	83¼	1 30½	36.2	1891	84¾	1 16	26.9
1876	83	1 26¾	34.5	1892	69¼	91¾	24.5
1877	1 01½	1 76½	42.5	1893	54¼	85	39.7
1878	77	1 14	32.5	1894	50⅜	63¾	21.
1879	81⅜	1 33½	36.2	1895	48⅞	81½	40.
1880	86½	1 32	35.2				

Dividing the whole time into two periods of sixteen and fifteen years respectively, as in the table, it appears at once that the fluctuation was decidedly less in the second period. From 1865 to 1880 the annual fluctuation was less than 35 per cent. in only three cases, while from 1881–1895 the annual fluctuation was less than 35 per cent. in all but three years. In the first period the fluctuation was less than 30 per cent, in one year only; in the second period it was less than 30 per cent. in eight years.

Nevertheless the fluctuations under a speculative system are still large. Wide fluctuations from year to year are inevitable, whether speculation prevails or not, because crops vary greatly, and in the end this variation of supply must have its effect.[2] Within the limits of a single year,

[1] Figures from the *Report of the Chicago Board of Trade*, 1895, p. xxxvi.

[2] According to the medieval conception of value a *just price* was, in the main, unvarying. In this view natural and continuous fluctuations found no place. (Cunningham, *op. cit.*, Vol. I, pp. 405–407: Ashley, *op. cit.*, Pt. II, p. 391.) Under a system of competition, however, prices should fluctuate in response to different conditions of supply and demand. It is

however, speculation should show a leveling influence. Figures of the highest and lowest prices in each year may fail to show the general tendency of speculation in this direction because of the temporary extreme quotations which arise from abnormal speculation. In the above table it will be seen that the fluctuation in 1888 was 64.4 per cent., the price rising to $2.00 per bushel. This was due to the corner at the end of September of that year. Similar occurrences on a smaller scale account for the degree of fluctuation in some other years. Such price movements are of short duration, and their presence in a price table may give a false appearance of similarity between the fluctuations of earlier and of recent years. A fairer method perhaps would be that of monthly averages. Professor Bemis has made some tables of interest in this connection,[1] one of which he summarizes as follows:

MONTHLY AVERAGE, PER BUSHEL, NO. 2, SPRING WHEAT, AT CHICAGO, 1885–1892.

Sept.,.....83.9 cts.	Jan.,.....82.8 cts.	May,.....89.2 cts.
Oct., ...87.6 "	Feb., ...83.4 "	June, ...86.6 "
Nov.,.....88.2 "	March, ...82.7 "	July,.....82.7 "
Dec.,.....85.4 "	April,.....84.5 "	Aug.,.....83.8 "

"The figures tell their own story. They not only show that there is no fall in prices at harvest, when we should most expect it, but they reveal a remarkable evenness of prices between all the months over a series of years."

The following table is a comparison of average monthly prices of winter wheat in New York[2] for four years before and four years after the advent of speculation.

not to be assumed as desirable that the price of grain should be constant under different sized crops. (*Cf.* Pfleger, *op. cit.*, p. 109.) Pfleger, however, gives too little credit to the advantage of a reduction of fluctuations by means of anticipation of future conditions.

[1] See "The Discontent of the Farmer," *Journal of Political Economy*, March, 1893.

[2] For the earlier period figures are taken from the reports of the New York Chamber of Commerce, 1857–1859, and for the later period from the annual reports of the Produce Exchange.

	1855–56	1856–57	1857–58	1858–59
July...	$2 07½	$1 55	$1 75	$1 04
Aug...	1 80	1 57	1 55	1 15¼
Sept...	1 85	1 55	1 40	1 18
Oct. ..	1 93	1 56	1 17	1 11½
Nov...	2 08	1 55	1 19	1 18
Dec...	2 05	1 57	1 17	1 18¼
Jan....	1 95	1 57	1 12	1 25½
Feb. ..	1 83	1 55	1 17	1 36½
March.	1 70	1 48	1 15	1 48
April..	1 64	1 45	1 17	1 43¾
May...	1 60	1 65	1 04	1 65
June ..	1 45	1 70	1 02	1 55¼

	1890	1891	1892	1893
Jan....	$0 86⅛	$1 05¾	$1 02⅜	79½
Feb. ..	85¼	1 10 1/16	1 04⅝	79 5/16
March.	87¾	1 13⅝	1 01	75⅞
April..	93 3/16	1 19 5/16	98½	70⅜
May...	98¾	1 13⅞	96½	77⅜
June ..	94⅛	1 07 3/16	91 3/16	72 1/16
July...	93 3/16	99⅞	86 3/16	71 1/16
Aug...	1 04	1 05⅜	82⅛	68
Sept...	1 01 5/16	1 03 5/16	78¾	72⅛
Oct. ..	1 06⅛	1 04¼	77 3/16	69⅛
Nov...	1 02¾	1 05 3/16	75⅞	66⅝
Dec. ..	1 04 1/16	1 05 7/16	76½	67⅛

An examination of these tables shows the marked differences in the amount of annual fluctuations in earlier years; but reveals in the main a smaller amount of fluctuation in the second period. For eight months in 1856–57, a very unusual year, the average monthly price varied only from $1.55 to $1.57, and then from April to June changed from $1.45 to $1.70. The range in average monthly prices for each year, measured in per cent. of the highest price, was:

1855–56	30 per cent.	1890	19.6 per cent.
1856–57	14.7 "	1891	16.3 "
1857–58	41.7 "	1892	27.4 "
1858–59	37. "	1893	15.7 "

The widest margins between any two successive months were:

1855–56	13.2 per cent.	(July-August).	1890	10.4 per cent.	(July-August).
1856–57	12.1 "	(April-May).	1891	7.36 "	(June-July).
1857–58	16.4 "	(Sept.-Oct.).	1892	6.13 "	(June-July).
1858–59	12.9 "	(April-May).	1893	6.86 "	(May-June).

The foregoing figures of price variations cannot, however, be accepted as an entirely accurate indication of the influence of speculation. In the first place they are summarized in the rough form of averages, and do not pretend to be more than fragmentary. Incomplete as they are in this respect, however, they do show a pretty uniform tendency toward a lessening of price fluctuations. In the

second place, it is impossible to attribute a change of this nature unmistakably to speculation. The course of the price movements of to-day is a joint result of a joint development. The increased facilities of transportation and communication, the improvements in trade methods, and the speculative system, have all developed together. The result of all these forces working in concert is toward smaller variations in prices, but how much of the result can be attributed to any one cause it is perhaps fruitless to discuss.[1]

Some statistics of fluctuation were given in the report of the German Commission of 1893, which have been cited by Professor Cohn[2] as of significance in regard to this question. In the matter of produce, however, comparisons were not made. In the case of securities, two speculative and three non-speculative stocks were taken for comparison, and the securities in which speculation did not occur showed greater ups and downs of price than even the extreme speculative stock (*Spielpapier*) taken for comparison. Such a comparison, however, is of doubtful value even if made by one who is perfectly familiar with the conditions affecting the value of each stock. It would be impracticable to attempt any such contrast in this place. Accurate figures of the real value of unlisted securities in the United States from time to time would require the most careful inquiry as to actual sales. Even then the complex conditions affecting the value of each security would make the results worthless as an indication of the effect of speculation on prices.

Strong evidence of smaller fluctuations under the speculative system is found in the smaller margin of profits of traders, and still more in the existing method of quotation.

[1] For an illustration of the different conditions affecting prices sixty years ago, see Tooke, *History of Prices*, Vol. V, p. 85.

[2] *Zum Börsenspiel*, *loc. cit.*, p. 53.

Before the war, cotton was quoted only within a quarter or possibly an eighth of a cent per pound. To-day cotton quotations are in hundredths of a cent. Wheat, formerly quoted in quarters of a cent per bushel, is now quoted in sixteenths. This is clearly seen from a glance at the table of average monthly prices given above.

There is one important change in price phenomena which may be traced directly to speculation as such, because no other cause could be equally influential in this direction. This change is not the greater stability of prices, but the greater graduation in price fluctuations. Even if it were to be admitted (for the sake of argument) that prices in the long run show as wide fluctuations as formerly, it is important to notice whether or not these extreme points are registered suddenly or by steady gradations. It needs little more than the mere statement to show the advantage of a speculative system in this matter. There are always some shorts ready to buy in as prices first fall, and some bulls ready to sell out as prices first rise, and these forces are very effective in graduating prices. So perfectly does the system work that a sudden change in price, of any importance, is very rare. The fact is so apparent from a glance at the daily market news as to render statistical illustration unnecessary.[1] This is almost entirely the work of speculation.[2]

The practical benefit of this effect of speculation is great. One of the chief advantages of speculation to the public is the early warning of the change in values. The course of

[1] No better illustration of this influence on a large scale can be given than the fall of prices on the New York Stock Exchange in 1893. Taking twenty representative securities, the fall in prices averaged forty-five points, more than fifty per cent. between January and July, but the real force of the panic was disguised by the gradual decline through the five months. See *Bradstreet's*, July 29th, 1893.

[2] See Michaelis, *op. cit.*, pp. 96–97.

the prices that each day registers is of importance to investors all over the country who have no desire to speculate, and the losses which the great mass of investors are able to avoid by unloading their stock on a gradually falling market are incalculable.[1] Consider the case of a single security, such as Atchison stock. A large amount of that stock found its way into the hands of small investors in New England at comparatively high prices. Without speculation the fall in the value of the securities would have been sudden, coming only with the Atchison bankruptcy. As it was, the market opinion of the value of that stock was registered from day to day, and a chance given the holder to unload at each new quotation.

There is a similar practical value to merchants, planters, manufacturers and others in the graduated price movements of speculative commodities.

Another question of interest in regard to the effects of speculation on prices is that of the relation between spot prices and prices of futures. In the main, the price of spot goods and the price of future goods are determined by the same factors, *viz.*, the aggregate of the present and anticipated future conditions of the market. It is not true that spot prices are determined by immediate conditions and futures by anticipated conditions. The amount offered and bid for at any particular time, which fixes the spot price, itself depends upon the anticipations of the future. Hence the prices for cash and future goods will generally vary together. When the option runs forward to the time of incoming receipts from the new crops, the price for that delivery tends to stand below the price for deliveries when the supply is small. Except for this influence of the new supply, futures normally stand higher than spot prices by

[1] *Cf.* Struck, *Die Effektenbörse*, p. 92.

the cost of storage, including interest, insurance, *etc.*, that is, prices for different times are much the same, just as for different places, varying with the cost of storage in the one case and of transportation in the other.[1] But sometimes causes act upon one price alone and make that change independently.[2] This may be the case under certain speculative conditions. For example, if a large number of shorts have delayed covering until the close of the month for delivery, their efforts to cover will send the spot price well above the prices for later deliveries. Their need is an immediate one. A sharp covering movement before the month of delivery may have a similar effect.

More important than speculative conditions in this regard is the trade situation at certain times of the year. When, for example, mills need the wheat for grinding, and elevators have unused capacity on which they want to earn storage, they will bid up wheat for immediate delivery, because they cannot afford to postpone receiving it. Thus, in Minneapolis for example, in the early spring the immediate demands of the millers and the elevators, together with the fact that the future needs will be met by the new crops, sometimes put the price of cash wheat above the price of

[1] For example, in Chicago the May option normally rules high and stands well above cash wheat early in the year. In July the receipts begin to increase, and that option is often below the price of May wheat. The price of September wheat is relatively low during the summer, but by the time trading in the December option has begun prices of futures again rule high, in some measure according to the distance of the option.

[2] Even the modified statement in the text is only roughly true. It is not uncommonly stated that in the last few years futures in the wheat market have not, in the long run, stood enough above spots to cover all the expenses of carrying. Some suggested reasons for this are: cut charges for storage; the failure of outside speculation to maintain the market against hedging sales; the fact that the great elevators will buy wheat and carry it for what they can get, and perform the functions of both carrier and trader for the commission of one. In any case, the tendency is strongly to bring all prices together.

the July or even of the May option. Various other particular causes of this kind may affect either the grain or cotton markets, and cause considerable variation in the relation between spot and future prices.

A rather more interesting question is that of the agreement of present prices of futures with future cash prices. Whether the price of the future is but the cash price plus carrying charges, or is determined independently by anticipated future conditions, it stands as an estimate of the actual cash price at the future time. The question of the agreement of these prices is then a fairly adequate test of the accuracy of the speculative judgment, and, in so far, of the desirability of the speculative market. Professor Cohn, about thirty years ago, made a collection of statistics to show this relation in the case of rye in Berlin, which have been brought down to 1890, with additional figures for wheat, by Dr. Kantorowicz.[1] These figures show the prices of rye in May and June for future delivery in September–October, compared with spot prices in the latter months, and also the September–October prices for delivery at the May–June *Termin* with like comparison. The results of the figures for forty years (1850–1890) give one case in which the predicted (speculative) price exactly agreed with the spot price, 43 cases in which it was below the spot price by an average of 8.75 per cent., and 36 cases in which it was above by an average of 9.28 per cent. For decennial periods the results were:

1850–'60	average error of	13.81	per cent.
1861–'70	"	"	"	8.50	"
1871–'80	"	"	"	6.56	"
1881–'90	"	"	"	7.90	"

[1] Cohn's figures first appeared in the *Zeitschrift des königl. preuss. stat. Bureaus*, 1868, and those of Kantorowicz in Schmoller's *Jahrbuch*, xv, p. 220. Both are reprinted in the *Statistische Anlagen* (p. 317) of the Börsen-Enquête Kommission, 1893. *Cf.* also the sugar prices given by Bayerdörffer in Conrad's *Jahrbücher*, lix, p. 586.

The increase in the last ten years was due to the fluctuations from 1885 to 1890, ascribed by the compiler to tariff changes and other political causes. The error for the period 1881 to 1884 was only 5.8 per cent. It will be seen that, save for the change in the last few years, there has been a steady progress toward increased accuracy of prediction. The widest divergences of prices in any one year for the four periods respectively, were 30 per cent., 28 per cent., 19.11 per cent., 15.78 per cent., showing here also the same tendency to improvement.[1]

It may be of interest to see what results are obtained by a study of similar statistics in this country. The material is not so complete as might be desired, but some tabulation of interest can be made. In the case of cotton, collections have been made of prices of futures from 1870 to 1877, and from 1880 to 1892.[2] These unfortunately give quotations for futures only four months ahead. The future quotations selected are January and August. The October price of the January option is compared with the January price, and the May price of the August option

[1] The figures of Cohn and Kantorowicz have been severely criticised by F. J. Pfleger in *Borsenreform in Deutschland* II, p. 110. The criticism is just in the main contention that the figures furnish little ground for a judgment on speculation, especially since an arrangement of the results in five or eight year periods does not show any very steady improvement. It is also true that price averages, which do not include the amount of sales, may lead to errors of judgment; but if they are not perfect, neither are they valueless. The further criticism as to the significance of the speculative "error" is verbal and unimportant. The amount of "error" was never intended by the compilers to serve as a test of the wisdom of the speculators (in the face of diverse problems to solve) in any particular instance.

[2] The prices from 1870 to 1877 are found in Mr. Wm. B. Dana's *Cotton from Seed to Loom*, New York, 1878, and for the later period in the Report of the Com. on Agric. and Forestry on *Cotton Consumption and Production*, 53d Congress, 2d Sess., Sen. R. No. 986, Pt. II.

with the August price.[1] The results are given in the following table:

Year.	Average Oct. price of Jan. Cotton. cents per lb.	Average Jan. price. cents per lb.	Diff.	Per Cent. of Error.	Average May price of Aug Cotton. cents per lb.	Average Aug. price. cents per lb.	Diff.	Per Cent. of Error.
1870–'71.	15.55	14.90	0.65	+ 4.36	15.70	17.66	1.96	—11.1
1871–'72.	19.60	21.50	1.90	— 8.79	23.97	20.50	3.47	+16.92
1872–'73.	18.76	19.87	1.11	— 5.58	18.60	19.65	1.05	— 5.34
1873–'74.	16.39	15.54	0.85	+ 5.47	18.12	16.07	2.05	+12.75
1874–'75.	15.43	14.95	1.52	+10.77	16.40	14.1	2.39	+16.24
1875–'76.	13.31	13.08	0.23	+ 1.76	12.62	12.24	0.38	+ 3.18
1876–'77.	11.37	13.15	1.78	—13.18	11.23	11.42	0.19	— 1.66
1880–'81.	10.98	11.80	0.92	— 7.88	10.70	12.33	1.63	—13.22
1881–'82.	11.81	11.98	0.17	— 1.42	12.45	12.49	0.04	— 0.32
1882–'83.	10.76	10.05	0.71	+ 7.06	10.89	10.11	0.78	+ 7.71
1883–'84.	10.81	10.63	0.18	+ 1.69	11.90	10.82	1.08	+ 9.98
1884–'85.	10.02	11.15	1.13	—10.1	10.91	9.59	1.32	+13.76
1885–'86.	9.70	9.15	0.55	+ 6.01	9.44	9.22	0.22	+ 2.26
1886–'87.	9.20	9.42	0.22	— 2.34	11.01	9.74	1.27	+13.04
1887–'88.	9.45	10.44	0.99	— 9.48	10.12	11.01	0.89	— 8.08
1888–'89.	9.69	9.60	0.09	+ 0.90	10.84	10.68	0.16	+ 1.49
1889–'90.	10.04	10.52	0.48	— 4.57	12.01	11.55	0.46	+ 3.98
1890–'91.	10.07	9.14	0.93	+10.17	8.84	7.48	1.36	+18.18
1891–'92.	8.33	7.21	1.12	+15.53	7.43	7.13	0.30	+ 4.21
1892–'93.	8.12	9.47	1.35	—14.26	7.59	7.63	0.04	— 0.52

The smallest error in the above table is thirty-two hundredths of one per cent., and the greatest 18.18 per cent. The comparison between the ten years, 1870–77 and 1880–83, and the ten years, 1883–93, shows no particular tendency towards greater accuracy in the later decade. The actual variation is somewhat less, but reckoned in per-

[1] The prices calculated are only approximately average prices. The quotations given by Mr. Dana are the highest and lowest for each week. These prices have been averaged to get the price for the month. In the case of the later statistics the average of four days, the first quotation, the tenth, the twentieth and the last have been taken as an average for the month. It is believed that any error in such a method would not be sufficient to affect the result. The quotations given by Mr. Dana are in eighths and sixteenths, but are changed into decimals for convenience of comparison.

centages little improvement is shown. Using the rough method of averages it appears that the average error in the October price was for the first period 6.647 per cent., for the second 7.496 per cent., and in the May price for the first period 8.845 per cent., for the second 7.25 per cent. It may be added that out of the forty cases seventeen show an error on the minus side, and twenty-three on the plus side.

For wheat similar figures are available only for a shorter period, from 1884 to 1895. These hardly give opportunity for comparison by years, though it may be noted that the later years show no more accurate prediction. The comparison is made, as in the former table, between the price of May wheat in January and the spot price in May, and between the price of September wheat in June and the spot price in September.[1]

Year.	Average Jan. price of May Wheat.	Average Spot Price in May.	Diff. cts.	Per Cent. of Error.	Average June price of Sept. Wheat.	Average Spot Price in Sept.	Diff. cts.	Per Cent. of Error.
1884....	100.1	104.	3.9	— 3.75	90.2	79.5	10.7	+13.46
1885....	85.4	88.6	3.2	— 3.61	93.2	81.4	11.8	+14.49
1886....	86.	76.2	9.8	+12.86	76.8	74.6	2.2	+ 2.95
1887....	85.1	85.	0.1	+ 0.12	79.5	69.3	10.2	+14.70
1888....	83.5	84.	0.5	— 0.60	83.	93.5[2]	10.5	—11.23
1889....	102.2	80.9	21.3	+26.32	75.5	78.	2.5	— 3.20
1890....	81.	92.8	11.8	—12.71	89.9	99.5	9.6	— 9.64
1891....	96.9	104.6	7.7	— 7.36	92.6	96.2	3.6	— 3.74
1892....	92.4	83.	9.4	+11.32	81.3	72.2	9.1	+12.43
1893....	78.2	71.2	7.0	+ 9.83	71.7	65.4	6.3	+ 9.63
1894....	64.9	56.5	8.4	+14.86	60.3	53.5	6.8	+12.59
1895....	56.7	68.	11.3	—16.62	77.3	59.5	17.8	+29.90

[1] These figures are compiled from the yearly quotations of futures in the reports of the Chicago Board of Trade. They go back only to 1884. The average prices are reckoned from the average prices for four dates, as in the case of cotton, and the quotations are changed into decimals for convenience.

[2] For 1888 the September price in the table is calculated on the basis of the first three weeks. In a test of the accuracy of prediction the corner prices of the last week of September may be fairly omitted.

The prices of the different qualities of grain, and of grain for delivery in different months, are usually expressed in terms of the ruling option. Thus in August, when the sales are chiefly for September delivery, the price of wheat to be delivered in November will be quoted as perhaps "seven-eighths over." In the same way a superior grade may be quoted at "three cents over," or a poorer grade at "one and seven-eighths under," meaning in each case over or under the price of "contract wheat" for the ruling option.

It is sometimes maintained that the effect of speculation is to lower the price of other grades in comparison with the contract grade. This was strongly urged before the German Imperial Commission as an evil effect of the grade system.[1] Similarly *Bradstreet's* (Nov. 19, 1892) in discussing the anti-option bill said: "Instead of depressing prices speculation tends to hold them up. Illustrative of this is the fact, that No. 2 hard wheat, which is worth nearly as much as the speculative grade, has been selling at five cents to six cents below it." It was stated by President Baker, of the Chicago Board of Trade, in his inaugural address of 1895,[2] that prices were kept apart in another way by "most brazen manipulation" on the part of the elevator interests: "A year ago they were selling Spring wheat at 5 or 6 cents premium; now they are selling Winter wheat at a like premium." On the other hand, any such influence is denied by many traders. In the case just cited, for example, there was an actual lack of Spring wheat in one year, and of Winter wheat the next. It is probable that any premium of one grade over another is due to an actual difference of milling or exporting demand; in other words, that the spot price of all grades is determined by their quality.

It is interesting to note in this connection, that Gres-

[1] See *Bericht der Borsen-Enquête-Kommission*, p. 120.

[2] See *Report of the Board of Trade*, 1895, p. LXXI.

ham's law and the action of a double standard are well illustrated in the case of wheat contracts. In Chicago, No. 2 Spring and No. 2 Red Winter are legal-tender delivery on all contracts not specifying the contrary. The result is that the grade which is most abundant and cheapest in any one year always becomes the contract grade, and the other is only delivered at a premium.

Reference has been made thus far only to the effect of time-speculation on prices. As already shown, time-dealings were preceded by a form of speculative trade which aimed to secure a profit from the differences in price in different places. Such business is to-day known as "arbitrage."[1] To buy where goods were cheap, and to sell where goods were dear, was of course an essential part of the trader's business. This place-speculation, however, was not separable from ordinary trade under the earlier conditions of imperfect and uncertain means of communication.

Modern arbitrage business is a far different thing from this earlier form of trade. The great point of difference is that the prices in both the selling and the buying markets are known at the same moment. Consequently prices in different localities can vary but little before being at once equalized by purchases in the lower, and sales in the higher, market. This equalization is more difficult in grain or cotton than in stocks, since to really alter the price may involve all the trouble of making actual shipments. In the case of securities the cost of transportation is so small that there is to-day but one price for any active stock in all markets.

Arbitrage between international markets, as, for ex-

[1] "Les opérations d'arbitrage reposent toutes sur le principe suivant; acheter une marchandise, une lettre de change, une valeur de Bourse, une monnaie, *etc.*, sur un marché où le prix actuel offre un bénéfice contre le cours d'une autre place, sur laquelle on se propose de réaliser la transaction." Ottomar Haupt. *Arbitrages et Parités*, p. 1, Paris, 1887.

ample, between London and New York, is very closely connected with the whole business of foreign exchange.[1] Securities are a familiar means of making international payments, and a foreign exchange-house must know at every moment whether the greatest profit comes from the remission of gold, or bills, or securities.[2] The moment a security in London, for example, is higher than in New York by a sufficient amount, an exchange dealer, who wishes to remit, may sell that security in London, buying at the same time here, and using the debt of the London purchaser to settle the account for which he desires to remit. International arbitrage dealings may be carried on by any one, but in New York the business is chiefly in the hands of a few houses, since the greatest profit in it comes from its use in connection with foreign exchange, a subject beyond the limits of the present discussion.[3] The ordinary speculator does not figure in this field.

The extremely narrow differences in price which prevail between different markets well illustrate the suggestion made above, that perfect speculation destroys itself. Arbitrage business can probably never greatly increase (except as international payments increase), and can never be more than an adjunct to the great mass of time-dealings. It has found its limits in its success. Indeed arbitrage, at least in the case of securities, is not speculation at all.[4] If both prices are actually known at the same moment, to buy at one price and sell at another is not to take a risk, and so is not speculation. It is trade. Transatlantic arbitrage has scarcely reached this point as yet, and in any case the

[1] See Lexis, in Schönberg's *Handbuch*, Vol. II, pp. 850–855.

[2] Ehrenberg says such dealings began among the bankers of Genoa and Florence in the 14th century. See *Handwörterbuch der Staatswissenschaften*, article, *Arbitrage*.

[3] The standard work on the practical workings of arbitrage is that of Haupt, *Arbitrages et Parités*.

[4] *Cf. Handwörterbuch der Staatswissenschaften*, article, *Arbitrage*.

nice questions of exchange made the calculation of profits uncertain except to the expert. But the old form of arbitrage dealings between the New York Stock Exchange and the Stock Exchanges of Boston and Philadelphia was a perfect case of non-speculative trading of a quick kind. Private wires between the cities, telephones in the exchanges, and operators quick to translate and transmit the signals of the brokers on the floor, constituted an effective machinery for operations of a very interesting kind. By means of these devices the same man was practically trading in Boston and in New York at the same time. A change in price in either place was known by the broker on the floor of the other within less than thirty seconds. This was trade reduced to its finest point. It is not necessary to point out how completely such dealings bring about a uniformity of price. The New York Stock Exchange in 1894, however, put an end to such dealings by requiring communications from the floor to the telephone to be sent by a messenger. This made the two markets no longer identical, because of the longer time for communication. This action was taken solely for the practical purpose of bringing the business of other centres to the New York market, and to maintain commission rates more strictly. It was a backward step from the economic point of view, and, on the practical side as well, the opinion is not uncommon that it diminished rather than increased business.

Practices of a very similar kind occur in the case of produce. The simplest transaction is that of buying grain in the market where it is low, selling it at the same time for forward delivery in a high market, and then making a shipment to fulfill the contract. But advantage may be taken of variations between markets without the use of actual transfers. The speculator may buy futures in one market and sell futures in the other, and, instead of making shipment, may close out each contract in the market where it

was made. The opinion of the speculator may have no reference to the question of whether the prices of his commodity in general are either too high or too low. Whatever his opinion on this point, he believes that the width of the margin between the two markets is excessive. If his judgment is correct, and the markets come nearer together, he will cover his short contracts and sell out his long holdings, and will make a profit from one set of transactions greater than the loss from the other. The prices in both markets may move up or down without affecting his position so long as they move in a way to narrow the margin between the two. Thus, if the Minneapolis price of September wheat in July is 58 cents and the Chicago price is 61 cents, suppose the transaction begun by a purchase in Minneapolis and a sale in Chicago. If in three days the Minneapolis price is 60 cents and the Chicago price is 62¾ cents, then suppose the contracts to be closed out. Two cents a bushel is the profit in Minneapolis, and a cent and three-quarters the loss in Chicago, netting one-quarter cent profit, disregarding charges. If, on the other hand, the prices fall to 56 cents in Minneapolis, and to 58¾ in Chicago, the margin between them is still narrowed, and a quarter of a cent profit secured. All such transactions exert a regular arbitrage influence, the purchases in Minneapolis raising the price there and the sales in Chicago reducing the price there, thus bringing the two markets together.[1] This practice is sometimes called "spreading" or "straddling" the markets.

[1] The same kind of dealings can be made in the case of different delivery months. If the width of the margin between different options seems temporarily great, a speculator can in the same way buy one and sell the other exactly as in the case of a divergence of markets. Or an undue divergence between two grades of a commodity may lead to dealings of this kind. A still more exact arbitrage can be undertaken in the case of two securities of the same government (say a 3 per cent. and 4 per cent. bond) which in the long run must sell in proportion to the interest rate. *Cf.* Raphäel-Georges Lévy, *Mélanges Financières*, p. 16, Paris, 1894.

The theory of uniform prices by means of arbitrage dealings is, however, never completely illustrated in practice. Even in the case of those commodities in which speculation is most common, small divergences are sometimes surprisingly constant. The complaint is heard in New York that the Chicago market is "out of line" for considerable periods of time. The same complaint is made in Western markets. In theory we should expect this to be corrected by an increased shipment to Chicago, the higher market, and a consequent fall in price there. But it is said that such results do not follow, that in fact the difference between New York and Chicago may continue for some time to be less than the cost of transportation. At such times to buy grain in Chicago, sell ahead in New York and make shipment accordingly, is to incur loss. This divergence must be due to some kind of economic friction which keeps goods from accumulating at that particular center in sufficient quantity to reduce the price.[1] Furthermore the conditions may not always be as they seem. When it is said that Chicago is "out of line with the seaboard," it may be that the statement is true as based on nominal freight rates, but that cut-rates to some particular ports make shipment profitable. In any case the amount of comment and complaint which is brought out by a market's being slightly out of line, and the fact that the condition is so widely recognized, are striking evidence of the tendency shown by speculative markets to come to uniform prices. If the rule were not very general in its application, the occasional exception would not cause so much comment. Goods follow prices, says Kohn,[2] by a kind of economic gravitation. But the economic gravitation does not mean

[1] It will be seen that in case of a divergence in markets, which is expected to last any considerable time, the method of "spreading" described above is impracticable.

[2] *Der Getreideterminhandel*, p. 137.

that goods always go to the highest market, any more than physical gravitation means that bodies always fall to the ground. In both cases there may be resisting forces. In both cases the law states only a tendency.

The failure of arbitrage transactions to control extreme prices at critical times is due to the fact that transportation is still far from instantaneous. Sales can be made by telegraph, but the contract can be met only by shipment. In consequence the price of some article occasionally reaches an abnormal point in a single market without much effect being felt in other markets. If, for example, there is a short interest in May wheat still out at the very end of the month, the contracts must be covered before the last day, and a squeeze may put the price up to a point limited only by speculative conditions. In this case arbitrage transactions between exchanges are impossible, because no one dares to sell short, and because shipment cannot be made from other points in time to meet the May delivery. The high price is entirely abnormal, and has no relation to the supply of the wheat outside of the single market and the immediate movement. The morning of the first of June the price drops back, and after the usual convulsion of reaction the normal course is resumed. In the famous Chicago corner at the end of September, 1888, while the price in Chicago rose more than a dollar in few days, in New York the rise was only a few cents.

Just the opposite of this order of things is an abnormal and curious example of arbitrage on the floor of a single exchange. At certain times different prices are made on the same floor at the same instant. The point has a peculiar interest in the question it raises as to what constitutes a market. It is repeatedly said that the effect of improved communication and of the speculative system is to create a world market, since a market includes all buyers

and sellers who are in communication, affected by the same conditions, and fixing a single price. And yet in the very center of this great market there occur at times two distinct markets for the same security or commodity. It sometimes happens that in the excitement of a "flurry" in some security two or more prices are quoted at the same time. This is of course due to the same cause which makes two markets of two places miles apart, lack of communication. Brokers on one side of the crowd are ignorant of the offers made on the other side, which they can neither see nor hear. A good illustration of this was given in the peculiar flurry in Sugar on the New York Stock Exchange in March, 1894, already referred to, when the stock jumped eight points in three minutes, and sales were made at conflicting figures at the same instant. To take advantage of such a divergence in price is as much arbitrage in nature as though the markets were separated by an ocean between.[1]

III.

The foregoing somewhat detailed account of the influence of speculation upon prices was undertaken, it will be remembered, in order to show the directive force of speculation in commerce and industry. It is because production, consumption and investment are controlled by speculation only in so far as speculation controls prices and the markets, that the subject of speculative prices has occupied so large a portion of this chapter.

[1] For a specific example, the writer was told by a Wall Street operator of an experience of his during a flurry in the stock of a big Western railroad a number of years ago. Meaning only to watch the excitement, he mounted a chair on the outskirts of the crowd just in time to hear a thousand shares offered at 67 on his right hand, and 69 bid at the same instant on his left. Crying "taken" and "sold" almost in a single breath, to his right and his left, he had made his double transaction with a profit of two thousand dollars. In this case the operator's profit was due to a knowledge of different prices in different places, which is of the essence of all arbitrage.

Thus in the field of consumption, if there is a probability of a shortage of some particular crop, it is the part of a prudent people to husband its supply. How will it do so? Until the socialistic dream is realized, the ultimate interest of the community is not necessarily the immediate interest of the individual, and a prevalent impression in regard to the shortness of the future supply will cause no concerted economy of consumption. The speculator is sometimes supposed to come in at this point (as Joseph did), accumulate large stores because of his greater foresight, and furnish the people with the required commodity at a later day, while securing a fortune for himself. In these days, however, the speculators may, and generally do, produce this result without storing large quantities themselves. If the supply is to be small, the price is to be high, consequently the commodity is a "good buy." This is the sole reasoning of the speculator. The bulls are active in the market, and the commodity rises in price now, because the decrease in supply is expected later. What the speculators have done, is to raise the price, and by raising the price to stop consumption.[1] Owners of supplies, in a rising market, also hold on for a probable profit. It is the effort of the speculator to make a profit which makes the rest of us husband our resources. As Lexis has admirably expressed it, in the time of a scarcity it is the individual hope, not the general fear, that causes contraction.[2] Large purchases from a present surplus on the part of the speculators act in the same way. In the case of the cotton crop of 1891–92, for example, which was the largest for years, and far in excess of the consumptive demand, the

[1] If, as is perhaps the fact, no considerable lessening of consumption is noticed in this country as wheat and flour go up in price, the same result is brought about by the decrease of exports. As prices go up foreign consumption is lessened, exports diminish, more wheat and flour are kept on the home market and are carried over at lower prices than would otherwise prevail.

[2] "Handel," in Schönberg's *Handbuch*, Vol. II, p. 876.

outside speculators bought enormous quantities and carried a good deal of it for a considerable period. If it had not been for this speculative buying, the price would have fallen even lower than it did. In this case it was not the work of speculation to force economy in the face of a coming scarcity, but to prevent needless waste in the midst of unprecedented abundance. It was done in the same way, however, by raising the price. On the other hand, if indications point to an increased supply, the action of the operator is to sell, since the present price is in advance of the anticipated price of the future. This reduces the present price, and, with a lower price, consumption is presumably increased. Speculation, then, tends to equalize consumption over a long period by causing economy in anticipation of a shortage, and free use in anticipation of bountiful crops. In the same way the purchases each year at time of harvest, which maintain prices, depend upon the speculative market.

It may be that the knowledge regarding future conditions is the property of a very few. In this case the profits coming to the few are perhaps large, but, if they put the price at the most advantageous point for the community, their profit should not be grudged them. In 1892, for example, it was the general opinion that crop news regarding wheat was "bullish," and that a rise of price was due. In the face of this opinion a single large speculator in Chicago sold enormous quantities of wheat short, and kept the price below what was generally thought to be its fair value. When the operator came to settle, however, it was found that there was plenty of wheat, and he had no difficulty in making good his contracts. Doubtless he delivered actual wheat on very few of them, but it was only because there was enough wheat on hand for him to make easy delivery that he was able to settle on such good terms to himself. In other words, the prediction of

the operator, whether it was due to real foresight or to the most reckless luck, proved to be more accurate than that of most statisticians. There was more wheat than had been generally anticipated, and the price had been put where it should have been in order to equalize consumption.[1]

The grinding of wheat, the spinning of cotton, the importation of coffee, and many other lines of business, are all directed to a certain extent by the speculative market. The miller and the manufacturer are the chief direct consumers of the raw products. The extent of their purchases, and more particularly the times at which they are made, are determined by the course of prices. In the main, of course, the price of the raw material is reflected in the price of the finished product, and the real control of consumption is that exercised by the consumers of the manufactured article.

The speculative markets regulate the consumption of goods in place as well as in time. If the need of a commodity for use in different places is measured by the comparative prices in the different markets, then arbitrage dealings with the consequent shipments result in a satisfaction of these needs according to the degree of urgency. Under the attraction of prices the supply rapidly flows to meet the different demands. This is the test of an efficient economic organization.

Theoretically the same influence of speculation would be looked for in the field of production. From this point of view an ideal use of the speculative system would be an intelligent arrangement of production in response to anticipated prices. In the case of the production of raw materials, however, this is far less feasible than in the case of manufacture or of trade. The farmer does not plant his crops according to the prices of futures. Such prediction as speculation is able to make is little heeded by him, and

[1] See Stevens' "Utility of Speculation," *Political Science Quarterly*, VII, p. 425.

in most cases is perhaps useless to him. In the first place, in the case of grain it is not to be supposed that he can get any very direct information from the speculative market. The growth of grain is a slow process, and the quotations of futures, at the time of planting, do not reach ahead to the period of harvest. Furthermore the accuracy of the speculative prediction is in inverse ratio to the length of the future period. In the next place, agricultural production in this country is still in the hands of small holders who are slow to take quick advantage of market conditions, while they are led by force of custom to plant the same crops in the same proportion year after year. Under these conditions the speculative market neither does nor can furnish a direct guide to production.[1]

The case of cotton is a little different from that of grain. The futures are quoted farther ahead, regularly for ten or eleven months, and a certain amount of the growing is in the hands of large planters, a few of whom are said to be guided somewhat by the prices of futures. At the same time, the mass of Southern planters are as much held in the ruts of custom as the grain producers. Nothing that has been said above is meant to imply that the production of either grain or cotton is not ultimately guided by prices. Any such statement would be very inaccurate. But the prices which do guide such producers are the prevailing prices over a period of years, or else the spot prices of the moment, and have little to do with the predictions of the speculative market.

A considerable indirect influence of speculation on production, however, is perhaps felt. In the first place, if speculative prices guide any portion of the producers in their planting, the effect is felt by all. In the production

[1] Kohn (*Der Getreideterminhandel*, p. 131) goes so far as to instance this direction of the farmer's production as one of the benefits of the quotation of "futures." It is only in theory that such benefit appears.

of staples there must be under all circumstances great supplies to meet certain fixed needs, while to meet other less certain needs only a small portion of the production needs to be elastic. It is this surplus in the case of grain or cotton which fixes the price of the whole, and even the guidance of a small number of producers in the amount of their acreage by speculative prices would have its effect on all. This consideration, however, is of slight importance. In the next place, future conditions do determine the spot prices fixed in the speculative market, and these to a considerable extent, perhaps, are influential in regulating production. If a farmer changes his crop from wheat to corn because the spot price of wheat is low, he is acting upon the speculative prediction which helps determine the spot price. It may be said, therefore, that while speculative prices largely determine the direction of commerce and of manufacture, they also influence to some extent the production of the raw material.

The directive influence of speculation is felt in the same way in the investment of capital. This, however, is denied by some students of the subject who readily admit the speculative control of the use of commodities. In Germany, for example, such men as Lexis and Eschenbach, after a careful study of the influence of the Bourse, have declared the produce exchange to be a necessary institution, but the stock exchange, all things considered, an unnecessary and injurious one.

That the evils of speculation in stocks are sometimes as great as such critics maintain, can hardly be denied. It is unscientific, however, to emphasize one's disapproval of such conditions by minimizing the true service of the stock exchange. The critic often considers only the speculation that takes place in a few notorious securities, which form in every exchange the basis for reckless and sometimes scandalous dealings. Waiving for the moment a discussion of

these dealings, a fair consideration should be given to the rôle of the speculative market in the matter of ordinary investment.

Since the exchanges of this country do not deal in foreign securities, the question of speculation in government securities of a doubtful nature may be disregarded in this inquiry. United States bonds are dealt in on the New York Stock Exchange, but more largely perhaps in the outside market, and recently a more active speculation has occurred in them than for a long time. If our credit is a matter of doubt, our bonds will be a subject of speculation, and it is significant evidence in support of the claim that speculation is a result, not a cause, of fluctuating prices, that speculation in United States securities only arises when their real value is questioned by the business world. With this exception and that of a few State securities, the stock exchanges of this country deal only in the stock and bonds of private corporations.

The development of the resources of this country has been largely the work of the corporation. Little needs to be said in illustration of so familiar a fact. The construction of great railroads, and the building up of vast industrial undertakings, depend upon contributions of capital from a wide public. The individual capital of a small group of organizers is no longer adequate for the great enterprises which they carry on. The savings of the whole country have first to be collected into various organizations and then employed under the management of the few. This is effected by transferable bonds and shares of stock, which in this way have come to be a very common form of investment. Under such conditions the problem is, what fields of enterprise shall be exploited, into what channels shall all this capital be turned? This question is answered by the individual investor, each for himself, and his decision takes effect in his purchases.

Securities are goods which may be bought and sold, and the demand for a particular security marks the amount of capital which seeks investment in any particular enterprise. Capital to-day finds countless chances for employment, of every degree of safety. Securities of all kinds are available to the purchaser. What is his guide? Prices, of course, as much as in the case of commodities. He will buy that security which, for the price, assures the largest return and the greatest degree of certainty. Hence the market that fixes the prices for securities has become the controlling influence in the matter of investment.

The stock exchange provides this market in an organized form. Most of the important securities which come into the market at all are here dealt in under the rules described in the previous chapter. Prices are here made by the transactions of professional speculators, who make it their business to know the industrial conditions which affect the value, that is, the earning capacity of each security. Lassalle[1] maintained that, whatever investigation was made, the sum of the unknowable circumstances bearing on price would always exceed the sum of the knowable conditions. Whether the statement is true or not, and it is greatly exaggerated in the case of most investments,[2] the importance of knowing as much as possible is no whit lessened. Eschenbach,[3] on the other hand, gives as one reason why speculation in stocks is less necessary than in produce the fact that stocks are not of the same uncertain supply. It is, however, as important to guide the flow of capital from industry to industry, as to guide the distribution of commodities in time and

[1] *Kapital und Arbeit*, p. 28, Berlin, 1865.

[2] Ehrenberg, *Die Fondsspekulation*, p. 1, endorses Lassalle's statement, so far as *Spekulationspapiere* are concerned, perhaps with justice. Such securities, however, are a small minority.

[3] Conrad's *Handwörterbuch*, article "Zeitgeschäfte."

place. And though they are fixed in amount, the earning capacity of securities is in many cases as uncertain as the conditions of harvest. The same keen investigation is necessary to foresee all possible industrial or political events that may affect this earning power, and so the value of the security. The conditions affecting the safety of an investment, as well as its immediate profitableness, are equally complex, and equally need the most careful watch. The profits of the speculators depend upon their securing the best information concerning all these factors. New undertakings and old undertakings are alike the object of expert investigation.[1] This intelligent examination of the prosperity of a great corporation is utterly beyond the power of the small investor. If there were no registration of prices by the transactions of professional speculators, the investor would have no knowledge of the safety of any money placed in a great undertaking. Not only would his investment be less intelligent, but the necessary capital for new enterprises might not be forthcoming at all. Lexis says that in the case of *Spielpapiere* there is little study of real conditions, but that the market follows the manipulation of the big operators. This is only partly true. Some of the most active stocks follow actual external conditions in their fluctuations, and the extensive operations in them are the result of a genuine criticism. Others, it is very true, are manipulated by speculative managers, and price fluctuations mean little or nothing in their cases. Lexis seems to think these the most important, for he says that the genuine fluctuations of a small kind in safe securities are of no importance as a guide to investment, and that the speculative market is of little use to the mass of steady investments.[2] This is the attitude also of Eschen-

[1] *Cf.* Michaelis, *op. cit.*, p. 63.

[2] Lexis, in Schönberg's *Handbuch*, Vol. II, p. 880. Elsewhere, however (*Handwörterbuch der Staatswissenschaften*, article, "Spekulation"),

bach,[1] whose chief criticism is directed against the dishonest operations of the banking-houses which "promote" enterprises for the speculative profits. It is wrong, however, to interpret the part played by speculation by reference to its connection with the most risky securities. It is easy in considering these doubtless great evils to forget the mass of steady securities which fluctuate little. There are millions of dollars in securities listed on the stock exchanges of which nothing disreputable is ever heard. Some idea of the vast amount of property represented on the New York Stock Exchange may be gathered from the following figures of the listings for recent years (including both re-issues and new issues):[2]

	Stocks.	Bonds.		Stocks.	Bonds.
1885....	$56,913,116..	$197,259,000.	1890....	$437,992,330..	$684,867,879.
1886....	329,469,350..	238,097,690.	1891....	188,914,954..	287,645,700.
1887....	270,053,550..	343,477,321.	1892....	237,036,105..	317,866,000.
1888....	248,228,275..	511,002,218.	1893....	198,245,261..	288,803,400.
1889....	259,649,774..	389,720,000.	1894....	251,193,003..	259,804,600.

The nominal value of the shares quoted each week by *Bradstreet's* under the heading "Active Shares on the New York Stock Exchange," is over three and a half billion dollars. The total stocks and bonds of the railroads of the United States were, in 1895, $9,603,014,204.[3] The great majority of these are listed on some exchange.

Lexis, in speaking of speculation and prices in general, says that the chances are in favor of a correct fixing of prices, for if there are no indications to go on, the bulls and bears will probably maintain an even balance, while if there are any indications, the chances are that they will be rightly interpreted. If we except *Spielpapiere*, there is no reason for not applying this reasoning to securities.

[1] See the article on "Zeitgeschäfte" cited above, and *Zur Börsenreform*, Berlin, 1892.

[2] Figures from the *Commercial and Financial Chronicle*, Jan. 4, 1890 and Jan. 12, 1895.

[3] Statistics of Railways in the United States, 1895, Interstate Commerce Commission, Report of the Statistician, p. 43.

It is a great mistake to think that the steady securities are independent of the speculative market. It is true enough, as often urged, that there is little speculation in the securities of many first-rate corporations that are listed on the exchanges. But this is no evidence of their listing being merely nominal. The very lack of activity in those securities shows their character. If there were great chances for gain from the fluctuations, the ticker would tell a different tale. But the opinion of the exchange is none the less important because it is to the effect that these securities form a good steady investment at an unvarying price, that they offer no chances of either great gain or great loss. It is inconsistent to maintain that a good security does not need the speculative market, and then to assert that we know it to be a good security because it is not an object of speculation. If these securities were not listed their values would be by no means so certain. Under such condition the management might adopt any policy and the investor be none the wiser. But let an inactive listed stock become subject to any extraordinary developments, and it quickly jumps into speculative prominence.

Furthermore many of the quiet securities of to-day have been active enough in the past. Each new enterprise must stand the test of criticism, and unless unusually sound will be the subject of active speculation. Its ups and downs follow the changes of opinion, until gradually a continuous flow of dividends of moderate amount show the stability of the real value (or lack of dividends show the valuelessness) of the security, and speculation ceases. The particular investment has been put through the ordeal and come out whole. It then becomes a field for the private investor. Many of the more active stocks of to-day may run the same course, and fall into the honorable obscurity of certainty.[1]

[1] The statement made by Lexis (see Schönberg's *Handbuch*, II, p. 880),

Even the stability of governments is brought to the test in the same markets. On the Stock Exchange the effect of government action on wealth, regardless of other and perhaps more patriotic motives, is inexorably registered. A recent wave of belligerent feeling which swept the country in response to a presidential message was met by a

regarding the benefit of stock speculation, is so admirable that, in view of his different final conclusions, it is worth quoting in full. He says: "Bei der enormen Ausdehnung und Verbreitung, welche die reellen Kapitalanlagen in Effekten in der neueren Zeit erhalten haben, ist die Existenz eines stets offenen Marktes für dieselben ohne Zweifel volkswirtschaftlich zweckmässig. Dieser Markt aber wird um so leistungsfähiger sein, um so leichter und bequemer die Möglichkeit des Kaufs und Verkaufs jeder beliebigen Quantität irgend eines Papieres darbieten, je grösser das auf demselben stets verkehrende Publikum ist, mag dasselbe auch hauptsächlich aus Spekulanten bestehen. Auch zur Unterbringung neuer Staatspapiere und Aktien leistet ein Markt, wie ihn die Effektenbörse darbietet, eine wirksame Beihilfe. Die Spekulation nimmt das neue Papier vorläufig auf und hält es so lange in einem flottierenden Zustande, bis es gelungen ist, dasselbe mehr oder weniger vollständig zu klassieren, d. h. in die wirkliche Anlage überzuführen. Als einen nützlichen Dienst der Börse führt man auch an, dass sie eine unausgesetzte Kontrole über die Kurse der Papiere im Verhältniss zu ihrem inneren Werte ausübe und dabei auch die Aussichten der Zukunft so weit wie irgend möglich abschätze. Je mehr Spekulanten sich mit einem Papier befassten, um so mehr Personen hätten ein Interesse daran, die wirkliche Lage des betreffenden Unternehmens oder Staates zu ermitteln und alle in Betracht kommenden Chancen abzuwägen. Die Privatpersonen aber, die ihr Geld in Effekten angelegt hätten oder anlegen wollten, erhielten auf diese Art eine wertvolle Aufklärung über den wirklichen Zustand und über die richtige Verwaltung ihres Vermögens."

So clear a statement of the argument in behalf of speculation on the part of Dr. Lexis, makes his conclusion that despite these advantages, speculation in securities does more harm than good, carry only the more weight. At least, he is not blind to the strength of the opposite opinion. Some dissent from the conclusions of Lexis has been expressed in the text in anticipation of a discussion of speculative evils. The main point which it is desired to emphasize is that regarding the utility of the speculative market in the case of good securities. Lexis says: "Ebenso ist unzweifelhaft, dass wirklich aussichtsvolle Aktienunternehmungen der Beihilfe der Spekulation nicht bedürfen." The argument of the text, on the other hand, is that it is the stability of such securities in an organized speculative market that proves their character to the investor. This is too frequently overlooked.

quick fall of prices in the stock market, just as a similar wave of national enthusiasm in November, 1861, was met by a fall in stocks then.[1] Proudhon, in a brilliant passage, traces the course of prices during the later Napoleonic days and the Restoration, and shows how, in the midst of enthusiastic patriotism on the part of the people, the Bourse felt a rise of prices with every victory of the allies. In the judgment of the Bourse, the success of Napoleon did not make for the material prosperity of France.[2]

Finally, it should be remembered that the most uncertain and risky security is always the favorite of the speculator. The wider the fluctuations the greater his opportunities. This is the essence of speculation, to seize upon the uncertainties of value. It is easy, however, in observing the course of such securities, to make the mistake of confusing cause and effect. The security does not fluctuate wildly because of the great amount of speculation, but it gives rise to this active trading, because of the complete uncertainty regarding its soundness. Speculation is a result, not a cause, of fluctuation.

That this directive influence of speculative prices is of genuine importance follows from the fact of the widespread ownership of stock-exchange securities among the

[1] The New York *Evening Post* (semi-weekly ed., Dec. 23, 1895), commenting on the Venezuelan incident, said: "It is the stock market which at moments of popular delirium tells the truth. Plenty of men are alive to-day who will recall the wild decline in values in the dreary December market of 1861. That inexorable judgment followed swiftly on the outburst of jubilation at Faneuil Hall, at Cooper Union, and at Tammany Hall, over Capt. Wilkes' shots at the English steamer. What the stock market meant then was what sober history now records as the meaning of the situation; that we were face to face with the most fearful crisis in the history of the nineteenth century. Last week's stock market, with its eye, as always, on the possibilities of the distant future, meant little else."

[2] "Vingt francs de hausse ou de baisse font la légitimité ou l'illégitimité des pouvoirs, déterminent leur stabilité ou leur chute. *Qu'aurait pensé de cela Blaise Pascal?*" *Manuel du Spéculateur à la Bourse*, p. 25, 5th ed., Paris, 1857.

classes of moderate means. In thousands of cases the total savings of an artisan, or a professional man of small income, take the form of one or two bonds or a few shares of stock. So active a stock in the speculative market as that of the Western Union Telegraph Company sometimes proves to be was held in August, 1896, by 8,120 investors, while there were 4,085 shareholders of companies whose lines are leased to the Western Union Co., in all 12,205 joint-owners of the Western Union property, exclusive of the bondholders. The transfer books of the New York Central, June 30, 1896, showed 12,680 stockholders of that company. Such figures as these show how widely representative stocks are distributed among small holders. In view of them the idea that only the rich capitalist is concerned with the prices of the stock exchange becomes untenable. The price-list is of importance to every small holder of a listed security, and is carefully watched by thousands who have no desire to speculate. Stock-exchange securities furnish the best available investment for a large portion of these holders.

Other classes of investors find an even greater benefit in the stock exchange. These are particularly banks, trust companies, insurance companies, and the like. To these may be added the whole class of trustees, who wish above all else a safe investment. Much of the investment of these companies takes a form different from the purchase of stock-exchange securities, but there is always a surplus to be invested according to the prices of the speculative market. However much of the deposits of a savings bank or the funds of an insurance company may be put into mortgages or loans outside the stock exchange, they must have some emergency investments which can at any moment be turned into cash. Such are found chiefly in securities of the stock exchange. Essential to national banks especially is this quality of immediate convertibility in the securities held. All of these investors

know that there is a continuous market for these properties, and a class of speculators ready to buy at the market price. The value of one's property under such circumstances is always known. This makes all sacrifice sales unnecessary.[1] This is equally true of the individual as of the bank. Any one who has tried to realize suddenly on a security not dealt in on any exchange has experienced the difference which such a market makes in the value of his shares. However good they may be in themselves, there is no certain price for them. Hence he can sell them to a banker or broker only at a heavy discount from their real value, and the reason almost invariably given is that, since the stock is not listed, a large allowance must be made for risk.

For the same reason stock-exchange securities form an ideal collateral. Their importance in this connection is very great. Indeed, it is hard to conceive of the credit system and the money market of to-day existing without the stock exchange. That they would undergo decided modifications and be greatly hampered in their operations without its existence, is beyond question. The whole financial system which centers in Wall Street has become dependent upon the easy flow of capital and quick convertibility of securities, and both of these are largely the result of the speculative market.[2] The advantage to the ordinary investor is of the same kind. His property is a basis for easy borrowing, and enables him to get eighty per cent. of his property, or even more, in a loan, while on real estate, in which there is no speculation, he is glad to get half its real value.[3]

[1] Reference is here made to sales by the investor. The most disastrous sacrifice sales of all are those of the manipulator who has gone beyond the limit of his capital.

[2] *Cf.* Struck, *Die Effektenbörse*, p. 106.

[3] The advantage of the Stock Exchange in making a ready market for "call" money is important to the "street," if not more specifically to society as a whole. The daily borrowings of money against stocks and

In closing this section it may be repeated that this guiding principle which speculation affords in the economic world is its response to new conditions of production. A hundred years ago the individual traders and producers were the directors of the course of production and of the employment of capital. The industrial revolution of the last century began the change which the commercial revolution of this century has completed. The risks are too great, the conditions too complex, the *Konjunktur* too powerful, to be met by the old guides. The answer to the change is the new guide in the speculative market. The fact is sufficiently striking in connection with socialistic criticism. It was the standing and doubtless powerful charge of Lassalle, that modern industry is without order, anarchistic, that production is carried on independently of the consumer's demand, that it has become an end and not a means; hence the periodical awakening to the vast and useless expenditure and the consequent crisis and panic. The truth contained in this charge is perhaps, more than any other thing, responsible for the intelligent converts to the theory of socialism. The solution offered by socialism is production in response to needs through control by the State, which is itself to be sure of industrial harmony by means of elaborate statistics. But theorizing apart, it is to be expected on the ground of experience, that some tendency toward correcting these evils of modern industry will show itself. Is it not appearing in the guise of organized speculation? To the socialists from Lassalle down, the Bourse has been the object of extreme vituperation, and yet the socialist has been nearer right than many individualists in recognizing the Bourse as a symbol of modern commerce, as the center of the vast industrial

stocks against money in the settlements on the New York Stock Exchange, and the continuation dealings of London and the continent, create an active market for a vast amount of capital that would otherwise lie idle.

system which he denounces. It is there that he finds the essence and consummation of all the commercial evils. And it is there that he would also find, were he not blinded, the essence of all the advantages of the modern system. The good as well as the evil is here brought to focus, and the cure as well as the malady is perhaps here disclosed. It would be a dramatic reply to the socialist if the object of his special horror, the Exchange, were to perform in part the important directive function of his economic state.

IV.[1]

It remains to examine briefly the particular way in which the speculative market performs its second function, the assumption of risks. The trader is primarily concerned with getting a profit from differences of price in different markets. He buys in the producer's market and sells in the consumer's. In a sense the same is true of the manufacturer. He buys material and labor, and attempts to sell his product for something more than the cost of production. This difference between markets is constant and normal, and constitutes the reward for the services of the middleman and manufacturer. To ensure such normal profits, their desire is to escape the risks of fluctuation within the *same* market. This, to a large extent, the speculative market enables them to do. In the first place, the holder of any commodity may sell it to a speculator, if he fears a coming fall in value, or a buyer can buy of a speculator for future delivery the actual commodity he needs, if he fears a rise. But the speculative market affords a better method of insurance by means of "hedg-

[1] A large amount of heterogeneous information regarding the relation of the speculative market to actual trade has been collected in the testimony in regard to "options and futures" taken before the Senate Committee on the Judiciary, and the House Committee on Agriculture in February, 1892, and in the Report of the Committee on Agriculture and Forestry on *Cotton Production and Consumption*, 1895, 53d Congress, 3d Session, Sen. Rep., 986.

ing" transactions. Under this method, for every trade transaction a corresponding transaction of the opposite kind is made in the speculative market. If a man buys for trade purposes, he sells short on the exchange an equal amount, and covers this short line as soon as he disposes of his first purchase. He has made two equal and opposite transactions, and if the price moves either way he loses on one and gains on the other. In this way he makes himself largely independent of speculative fluctuations. The details of this practice may be seen from a hypothetical case, which, though simpler than many actual transactions, admirably illustrates the principle involved:[1]

"A New York merchant buys 100,000 bushels of No. 1 hard wheat at Duluth, and orders it shipped by vessel to Buffalo, to go thence to New York by canal. He does this not because he 'wants the wheat for his own use,' but as a merchant who believes that the Duluth price and the cost of getting the grain to New York, in view of known or apparent market conditions or of anticipated requirements abroad, will enable him to sell the grain in New York at a profit. With a more primitive view, he would ship his grain, wait until it arrived, look for a purchaser and, finding one, sell the wheat at the price current at date of arrival—say three weeks after he bought it. If at a profit, well and good; but if the price had declined he would sustain a heavy loss, owing to the size of the shipment. Thus, when the world's requirements are for large available stocks, and the movement of grain must be in large lots, the future contract comes in to protect the handler. The New York merchant, therefore, sells 100,000 No. 2 spring, September delivery, at Chicago at the date of his Duluth purchase, in August. When the wheat reaches Buffalo the price has advanced and millers there want some No. 1 hard wheat. He sells them 25,000 bushels and buys 25,000 bushels of No. 2 spring wheat at Chicago, September delivery, to make good the original quantity purchased. By this time he has also sold at New York 100,000 bushels, September delivery, to an exporter and bought 100,000 bushels more at Chicago, relying on the 75,000 bushels on the way and his ability to get 25,000 bushels more before it is demanded, to keep his engagement. When the 75,000 bushels of No. 1 hard spring wheat reaches New York the price has declined fractionally, and the owner is enabled, in consequence, to purchase 25,000 at a slightly better price, relatively, than he had paid in Duluth, selling 25,000 bushels coincidently at Chicago for September delivery. He lost on his Duluth purchase and

[1] Quoted from "Futures in the Wheat Market," by A. C. Stevens, *Quarterly Journal of Economics*, Vol. II, p. 50.

on the 25,000 and 100,000 bushel purchases at Chicago, and on the 25,000 bushel purchase at New York. But he made rather more than corresponding gains through his sale, spot delivery, of 25,000 bushels at Buffalo, including profits on his sales of 225,000 bushels for September delivery at Chicago and New York, so that he gains on sales of 250,000 bushels and loses on the purchases of 250,000. The transaction as a whole is not very profitable, but millers at home and abroad get wheat at the lowest market prices at dates of purchases, the grain is moved from Minnesota elevators to Buffalo and New York and the Glasgow mill, and the merchant whose sagacity, energy and foresight led him to aid in the undertaking, even when price conditions were unfavorable, is able to protect himself from excessive loss without depressing the price to the original holder, who represents the grower, and without having an incentive (not to mention the ability) to unduly advance the price to the consumer, as represented by the miller."

The same method is adopted by the elevator men, the exporters and the manufacturers. The big elevator companies in the central markets are among the largest purchasers of wheat. Curiously enough, the development of the elevator system, which began as a separation of the functions of trading and storing and looked toward a more complete division of labor, has resulted in an opposite tendency. The big elevators once constructed could not remain empty, and their owners perforce turned buyers in order to utilize their capacity and earn storage. It is clear that these enormous holdings, for long periods, would under the old method involve tremendous risks. Imagine an elevator company holding 5,000,000 bushels of wheat against the fluctuations of the market for several months. Conservative business would be impossible. Now, however, these risks are all thrown on the speculative class.

The same is true of the millers. Millers own large stores of wheat in country and terminal elevators, which are insured by the same process. As soon as the miller buys in the country, or elsewhere, for grinding purposes, he sells an equivalent amount by telegraph on some exchange. Then when he disposes of his flour, he covers at the same moment his hedging sales by corresponding purchases. Since flour in the main fluctuates with the value of wheat,

this affords nearly complete protection. The manufacturer of cotton, on the other hand, usually protects himself by purchases. Spinners do not hold such large stocks of their raw material as do the large millers,[1] and often sell their product for delivery at home or abroad at some future time, while not in possession of any cotton at the moment. Immediately on placing such an order, purchases of the required amount of cotton may be made on the Cotton Exchange, and as soon as the spot cotton for manufacture is secured, the long interest on the exchange is sold out. The spinner is insured by his purchases, as the miller by his sales.

This practice of hedging is now universal in the trade in grain and cotton. Not to hedge, is considered the most reckless kind of business among large dealers and millers. That is, the man who keeps out of the speculative market is said to be a speculator. The spinner, however, uses the "future" market much less than the dealer or miller. Dealers and exporters hedge all their purchases. Nine-tenths of the cotton shipped to Liverpool is hedged there or in New York. Probably over ninety per cent. of the great wheat holdings in the elevators of Duluth and Minneapolis are sold against in this way. Some of the most prominent elevator men of Chicago claim that every bushel which they buy for storage is invariably protected by a hedging sale. It may be that the men who control the elevator companies are independently "plungers" in the market, but this has nothing to do with their regular elevator business. Some millers or elevators may also carry a small amount, as a legitimate speculation; but in the main the rule of the trade is, to insure everything at all times and under all circumstances. It may be that in ex-

[1] Some millers, especially those with insufficient capital, carry little wheat and buy from day to day. If they sell flour ahead they insure in the same way as the spinner.

ceptional cases insurance is impracticable. For example, a miller who grinds an unlisted quality of wheat grown in so small an area that it fluctuates independently of contract wheat, may not be willing to insure for fear of losing at both ends of the transaction. This is perhaps still more true of the spinner using particular qualities of staple. For such persons the speculative market is of doubtful advantage.

Under these conditions the ultimate profits of the dealer or exporter depend both upon the prices in his hedging transactions and the prices in his trade transactions. In the first place he finds he can buy his wheat or cotton at a certain price; then he must choose the best market in which to hedge. This is his first calculation. In the case of cotton, it may be in New Orleans or New York or Liverpool. In the case of wheat it may be in New York or Chicago or St. Louis, or the Northwestern markets, or even in Liverpool.[1] When now he comes to sell his real commodity, he must cover his short sale in the market where it was made, but he may sell his commodity in any market at home or abroad entirely apart from any exchange. Here comes in his second calculation. Spot markets are always varying a little in price, due to differences of local demand, changing freight rates and so forth. These factors all determine the place of ultimate sale and the amount of profit. In any case this profit is now purely a trader's profit. The chance of speculative gains or losses from wide fluctuations has disappeared. It may be that instead of making more on one transaction than he

[1] This possibility of hedging in distant markets shows the futility of comparing the amount of sales in a single market with the stock held there. The sales in Chicago represent wheat transfers all over the world. It is the great hedging market, the world's clearing-house for grain. An exporter sending wheat from Odessa to Liverpool may protect himself in Chicago. The same is true of the New York Cotton Exchange. The actual buyers, domestic and foreign, are more and more going directly into the Southern markets, and every transfer may be represented by a sale in New York.

loses on the other, the reverse may be true, in which case, however, the loss is a trader's, not a speculator's loss.

A difference of quality may be important in determining profits. An exporter may buy cotton for delivery at Memphis, and hedge in New York. If he meets with a demand from some European spinner for that particular grade, he may sell to him at a good figure, while perhaps covering his New York contract at a low price for Middling. If there is no good market for his grade at the Southern ports, or abroad, he may find it better to ship to New York and deliver on what were originally intended for hedging contracts. Particularly is this true when his cotton proves to be of an inferior quality.[1] In the same way, when elevator companies have sold against their wheat in the market where it is stored, they will either deliver on their sales, or cover and sell later for cash, according to the conditions of spot and future prices at the moment.[2]

The transfer of hedges from market to market, according to the particular advantages offered at the moment, results in a genuine arbitrage with a strong leveling tendency. This is an important part of the arbitrage business in produce, while "scalping the markets" in this way furnishes at times a considerable part of the profit of the great holders of wheat, especially the elevators. The same kind of business goes on in cotton between New York and New Orleans. Hedges are constantly renewed, and every fluctuation taken advantage of. This renewal of hedges is

[1] In the classification of cotton for futures the character of the *staple* is disregarded. In spot prices it is important. Hence whatever grades come to New York, the cotton is generally of indifferent staple.

[2] Their action in this regard is also largely determined by the nearness of the delivery time to the crop movement. For example, Northwestern elevators usually switch their December contracts into some other month, but may meet May and July contracts by delivery.

necessary if wheat, or cotton, is long held. The way the miller or dealer avoids the danger of being squeezed on his short sales is by always keeping his hedge in a distant option. If as the option approaches he is still holding his wheat, he shifts his hedge to some other month.

With the complete shifting of risks of violent fluctuations to the shoulders of the speculative class, the margin of profit between producer and consumer has become very much narrowed. Under the old methods of forty years ago the trader had to allow a margin of five or ten cents or more a bushel on wheat to cover a possible fall in value. To-day traders will carry wheat on a margin of a fraction of a cent, and the allowance for risk is practically nothing. Indeed sometimes a dealer will buy wheat in the country at the same relative price at which he makes his simultaneous sale on the exchange, trusting to the later transaction for his profit. In the same way the margin between wheat and flour has been reduced from more than fifty cents to less than ten cents a barrel. The cotton dealer and the exporter will now buy within fifty cents per bale of the price in the central market where formerly a margin of $2.50 or $3.00 per bale was required. Sometimes cotton is even bought in the South and hedged in Liverpool at the same relative price. This reduction of the middleman's margin inures to the direct advantage of either the producer or consumer, or of both.

It may be said then that the broad result of the speculative system to the manufacturer, the trader and the exporter, who insure themselves in this way, is to minimize their risks, and at the same time to diminish their profits. No line of business can long maintain big profits without taking big risks. Under this method of insurance, the grain and the cotton trade, together with the manufacturing of these raw products, have become far less subject to risk of great loss than almost any business of equal

magnitude.[1] In calculating profits to-day, however, every fraction must be counted and every possible saving made. The smaller fractions in the quotations for cotton and wheat are significant of this condition.

In view of such considerations it is the declared opinion of some traders and millers that the future system is an injury to trade, and that the old method were better adopted anew. The forces, however, which have brought about the existing system are far too strong to be turned aside by any desire for greater profits. And in any case it is the success with which the future market has performed its function that is the cause of the complaint. It is a choice between safety and profits, and there are some who believe that the reduction of profits is too high a price to pay for the increased safety. It should not be overlooked, however, that, under the new conditions of a world market, the fluctuations and uncertainties of trade without the future system would be far greater than ever before. All trade in these commodities would be speculation.[2]

Finally, the effect of the speculative market on the facilities for borrowing may be noted. The value of wheat receipts, if margins for fluctuations are kept good, is a practical certainty. Consequently they are the best collateral

[1] Henry Hentz, Esq., of New York, in a communication to the Senate Committee on Cotton (*op. cit.*, vol. I, p. 475), writes: "Before the 'future' system was inaugurated the credit of cotton people was generally poor, in consequence of the violent fluctuations and losses. There has not been an important failure in cotton in New York or Liverpool, barring those of Morris Ranger and Mr. Steenstrand, of Liverpool, for many years past, simply because people can 'hedge' their operations by futures and stop their losses."

[2] Kohn, curiously, asserts that without speculation the merchant would be a mere transmitter of goods, while under speculation he is the director of commerce (*op. cit.*, p. 162). The facts are exactly the reverse,—without the guidance furnished him by the speculative market, the directive functions of the merchant would be increased.

in the market. Warehouses are bonded, which insures the holder against fraud; while the desire to maintain the reputation of their receipts at times leads elevator companies to assume all loss from shrinkage. Hence credit is greatly facilitated by the speculative market, and money can be secured on wheat receipts, when all other collateral is doubted. It is hard to see how the crops could be moved to-day without this system. The great purchases by the elevators, for example, require large amounts of capital, and the first receipts are used to get money for the next purchases, and so on. A dealer can borrow within ninety per cent. of the value of his receipts.

An interesting question in this connection is the extent to which the farmer uses the speculative market to avoid risks of changes in value. It has been seen that as the trading class took over much of the risk of the producer, the speculative class arose in turn to relieve the trader of his most dangerous risks. Hence it is not to be expected that the direct advantage of the speculative system to the producer will be as great as to the trader. Theoretically, however, he may make use of it in the same way, that is, he may sell his crops ahead (while still growing) whenever a good price offers, and thus free himself from the danger of falling prices. Doubtless some such selling takes place. Figures were presented before the Senate Committee on the Judiciary in the evidence concerning "options and futures" in 1892,[1] showing the answers received to a circular letter, sent to representative farmers and grain men in various sections, in which letter this question was asked, "What proportion of the farming community sell their grain for future delivery?" Of 413 answers, 156 answered none; 210, one-fourth; 27, one-half; and 20, three-quarters.

Too much weight should not be attached to such fig-

[1] P. 84.

ures, since even so simple a question as that in the above letter is variously interpreted by different correspondents. Assuming them to be correct, however, it is not to be supposed that the selling for future delivery referred to there means selling on the exchanges. Only a few large farmers can sell their crops in the speculative market. The difficulty of trading at a distance and through brokers, the impossibility of predicting the size of the crop or the grade which it will attain, all these things make it difficult for the average farmer to make any such transactions. Furthermore, the sales on the Chicago Board of Trade are in 5000-bushel lots, and the majority of the farmers are unable to command such quantities for a single sale. So far then as the farmer sells for future delivery, excepting a few large farmers perhaps, it is by an informal arrangement with his local dealer to take the crop at a certain price, with due allowance for grade and the like. Such dealings, however, cannot attain very large proportions, since the dealer runs the risk of a non-fulfilment on the part of the farmer in case of an advance in price.

Although these sales are not made in the speculative market, it should not be forgotten (as is so frequently done) that they depend on that market and could not be made without it. It is only because the dealer knows for just what price he can himself sell to the speculators for future delivery, that he is able to make a price for the farmers. In the main, however, these sales are not of very great importance. It is fair to say that, as a class, the farmers do not sell for future delivery. The most common practice is to bring the wheat when harvested to the nearest elevator and sell for cash and at once. The farmer is as little likely to pay storage charges as to sell for future delivery.

In the case of cotton a better opportunity for using the future market is afforded the producer. He may sell on the exchange without specifying any grade, while the large

planter finds it possible to sell in the prescribed quantities. So far as such sales are made by the large grower, and they do occur to a considerable extent, they are not as a rule fulfilled by delivery, but are used, as by the trader, only for insurance. The actual cotton is sold in the local market. The majority of cotton growers, however, do not use the future system at all.

The farmer sometimes comes into the speculative market in quite another way. He always hopes for better prices for wheat, or cotton, or whatever his crops may be, and an advancing market often tempts him, not only to hold his stock, but to buy on margin. This is purely speculation and is utterly bad for the farmer. It is generally believed that the Southern cotton growers lose large amounts in this way. The farmer is entirely incapable of judging wisely concerning the future price of his own products, a price determined by world-wide conditions. That he is foolish enough to try, like any other little speculator, to "play the market," should not be charged against the future system. As a farmer he has no business to buy wheat or cotton. If he is able to sell ahead on a good market to insure his actual crop against a fall in price, he makes a legitimate use of the speculative market.

If, however, the producer derives little direct benefit from the future system, he derives much indirect benefit. The lessening of the charges of the middlemen, gives him a price much nearer to the consumer's market, in fact nearly identical with it, except for cost of transportation. Furthermore, speculation increases the activity of the market, and an active market increases the demand. There must be a large basis of actual wheat in the speculative centers, while the increased safety of the trader's business makes him a much more confident buyer. Without the possibility of hedging, the uncertain condi-

tions of wheat and cotton buying would at times cause a complete cessation of actual traders' demand. Nothing is so effective in doing away with gluts as the continuous market in which the dealer may always dispose of his holdings to speculators if he fears a fall. In fact, it is because they believe that without the speculative market they could buy, during harvest, at better rates, that some millers and spinners are opposed to the future system. But better rates to the manufacturer mean poorer rates to the producer. It is also true that the chance of temporary high prices from a local scarcity has gone, but this is not so much the work of speculation as of the railroad and telegraph.

Finally, the speculative market is the cause of the ease with which the farmer gets credit. He does not own warehouse receipts for collateral, but the existence of the continuous market for his product enables him to borrow readily against his crop. The trader advances money freely against the crops, but only because he can keep himself hedged. With the shiftless farmer, especially the small grower in the South, this form of borrowing has proved ruinous. But in this case, as in many others, what is an evil for the incompetent, is a boon to the industrious.

CHAPTER V.

SOME EVILS OF SPECULATION

THE tendency of speculation is to lessen market fluctuations and to establish prices which correspond to actual conditions of demand and supply in all places. On the other hand its activity depends upon the existence and continuance of fluctuations. The personal interest of the speculative class is not advanced by the increasing steadiness of the market. In the case of each speculator at any particular moment, the movement of price in one direction, regardless of the ultimate value of the property, is essential to his success. Consequently there are in the speculative market counteracting forces which sometimes seriously obstruct its normal influence on price. The evils of speculation which receive the largest amount of comment center about this fact.

If a speculator has sold property short he wishes the price to go down; if he has bought, he wishes the price to go up. It is popularly supposed that he can make the price go in the direction he chooses by means of "manipulation." Manipulation, however, is not a mysterious process, but rests on intelligible economic laws. Confining the discussion now to the market for produce, it may be said that a speculator can influence price in only two ways. He must either buy or sell the commodity himself, or he must persuade others to buy or sell. In the committee hearings on the recent anti-option bills a distinguished senator attempted to prove the depressing influence of short-selling on prices by reiterating the questions: (1) If a man has sold short, will he not wish the

price to fall, and (2) if so, will he not use all his power in this direction? But the short-seller has already exerted his influence by his sales. If he wishes the price to fall further, he must still continue to sell at constantly lower prices, or must start a selling movement among others.

It is true, however, that with sufficient capital a speculator may be able to bring about such a result. He may at times sell a commodity in such enormous quantities as to reduce the price. The question is whether he will be likely to attempt it. The first difficulty is that his covering purchases are the same in amount as his original sales, and that they exert the same influence in raising the price which the sales exerted in depressing it. In this case the average of his purchasing and of his selling prices may about agree, and his risk have been taken for nothing. The same is of course true of the attempt to raise the price by heavy purchases and then to liquidate with profit. But it may be that the action of the operator brings about a general movement in the desired direction. If a decline is started by heavy sales, the public may become excited and enter the market to sell. Most effective of all, those who are already long in the market may get panic-stricken in view of the fall, and unload their holdings at almost any price. In this case, too, the attempt to cover later may frighten the short-sellers in turn, and an upward movement may result, as abnormal as the earlier decline. Nevertheless it sometimes may occur that a big operator, or group of operators, temporarily succeed in putting the market down and in making the covering purchases so quietly and skilfully that the price is not materially raised. The mistake is in thinking that a successful operation of this kind can be easily or frequently accomplished. It requires immense capital, coolness and courage, and the greatest practical skill. To put out an enormous short line and cover it without causing a " bulge," is a remark-

able feat of manipulation. Indeed it may be doubted if such an operation can ever be successful without the favor of luck, such as the appearance of unexpected crop conditions, to support the manipulator at the end.

This element of crop conditions introduces the second great difficulty in the way of such manipulations. Not only is it difficult to cover successfully after a factitious fall, or to liquidate after a factitious rise, but the original movement is equally difficult. There are both bulls and bears in the market, and any attempt to force the price one way or the other will be at once opposed by the sales or purchases of those who believe that the incipient movement is contrary to the actual conditions of crop or of consumptive demand. Speculators are equally ready to profit from a rising or a falling market. They know that in the end the conditions of actual demand and supply determine the price, and are not induced to forego acting on their opinions because of large transactions on the other side. A price movement may prove to be incorrect, because the speculative judgment is fallible, but such a movement must, in the main, represent the real market opinion on the condition of demand and supply.[1]

A particular form of manipulation, which has excited far more adverse comment than, from the economic point of view, it deserves, is the "corner." The indignation which it arouses is a part of that deep-rooted feeling against any combination to raise prices which has come down from the time of the old statutes against engrossing and regrating. The modern corner results from an "oversold" market. If a syndicate is formed to buy all the offerings of the short-sellers, and can so control the supply that the sales of the shorts exceed the amount of the commodity available for delivery, it is evident that the price can be put up to almost any extent. The shorts

[1] *Cf. Report of the Chicago Board of Trade*, 1891, p. xvii.

are forced to purchase from the syndicate. This kind of corner is much more effective than the old method of engrossing the actual supply and raising the price to the consumer. The consumer can postpone his purchase; the short-seller must buy to deliver within the stipulated time, or default. At the same time the speculative corner is temporary and, so to speak, incorporeal. In the speculative market it is not wheat that is cornered, but "September wheat" or "May wheat." It is necessary only to control the supply till the short-contracts mature. Consequently the price remains high only for the last few days of the delivery month, while in other markets the price is little affected. It has already been noted that during the September wheat corner in Chicago in 1888, the New York price rose only a few cents. The consumer, then, is not perceptibly injured. The only direct loser is the speculator, but indirectly trade is temporarily disarranged by the abnormal condition of the market.

A successful corner is of very rare occurrence. Most attempts in this direction have miserably failed. Furthermore, such attempts are becoming more and more infrequent, and success more difficult. It is a common saying in both the grain and cotton markets that the corner is a thing of the past. The difficulties of getting hold of the wheat supply or the cotton supply even in a single market, for a few days, are enormous. The invisible supply always proves larger than was anticipated. It pours out from small holders in all quarters, while enormous shipments can be made from central points. If it be known a week or ten days before the end of the month that a corner is on at Chicago, the wheat of Minneapolis and Duluth and St. Louis can be poured into that market with astonishing rapidity.[1] At least two attempted

[1] The way in which the actual commodity accumulates in the market where a corner is attempted, is sufficient answer to the charge that these

corners in Chicago have been broken by the sales of the North-western millers. Furthermore, if the heroic remedy of short-selling is adopted, the cornerers will be obliged to take not only the real supply, but the "fictitious" supply as well. This, of course, is dangerous for the shorts, but it may prove the only way of breaking the corner. Under these conditions it becomes a contest of capital and nerve.

Besides all these difficulties besetting any attempt to control the supply for purposes of a corner, the lessons of the past have made the short-seller more wary about getting caught in an oversold market.

In the case of cotton, a corner is made more difficult by the fact that on short contracts several grades are deliverable. In the case of wheat, grades higher than the contract grade may usually be delivered, but only at the contract price. It has been suggested that other grades be made deliverable, with allowance in the price for differences in quality. This might cause great inconvenience to millers and traders wanting a particular quality of wheat, unless allowances were so fixed as to permit of such deliveries only in case of a speculative "squeeze."

It is not in the big movements, but in the half corners or "squeezes," that manipulation is most effective, and the same is true of bear manipulation on the other side of the market. When such manipulations do take place, it is due to the force of capital on one side, and a temporary lack of courage or of capital on the other.[1] The cure for manipulation in either direction is manipulation in the other. The more active the market is, the more probably an operator will find himself opposed by vigorous trading

movements involve nothing but "wind" or "contracts." In the attempted wheat corner of 1887, in Chicago, the storage capacity of Chicago was utterly inadequate for the supply. *Cf.* A. C. Stevens, *Quarterly Journal of Economics*, II, p. 56 *et seq.*

[1] *Cf.* Eschenbach, *Zur Börsenreform*, p. 5. Eschenbach, however, greatly exaggerates the power of capital in this direction.

the other way. The fact that so few cliques have made money in attempting to force the market in one way or the other shows the difficulty of the undertaking.

It may be said that, if big manipulations are seldom successful, there is a countless succession of small movements up or down due solely to speculative conditions. This is true enough. In a sense all speculation is manipulation. There is always more or less effort to affect prices by purchases or sales, but the equilibrium of all these forces registers the opinion of the market as a whole.

So far reference has been made only to the employment of honest methods in the attempts to turn the market. Other methods of a far different nature are not unknown. Among the most common of these is the spreading of false intelligence. In the desire to start the public buying or selling, false rumors of events affecting values may be circulated. Such conditions are not unknown in the produce market, but the stock exchange affords an easier field for this and other evil practices. This is due to the fact that in the place of a half-dozen products of wide production and universal demand, the stock exchange presents a large number of securities of different kinds. The facts of crop supply, though they may be more accurately known by a few, are yet to some degree open to the scrutiny of all. But many of the numerous events that may change the value of a particular security can be known only to the insiders. Hence the temptation to spread false rumors is very great.[1] The very sensitiveness of the market to every event which really affects values makes it equally sensitive to every rumor. Every

[1] Probably nothing new has been learned in the art of spreading false intelligence since the earliest days of speculation. Those were the days, above all, of the political rumor. See the instances cited in *The Anatomy of Exchange Alley* (1719). *Cf.* also Francis, *Chronicles of the Stock Exchange*, chs. ii and iii.

possible occurrence is seized upon as an excuse to stimulate a new movement on the part of the public. Perhaps the evil is inseparable from the good, and in the main the stock exchange discriminates between false and true rumors more quickly and effectively than any other body. Nevertheless the power of such operators to deceive the public is productive of much harm. *Bradstreet's*, writing of the stock market, says:[1] "All of its votaries are not equally skilled in discovering the quality of any piece of news, or supposed news, nor are the rules of the game so stringent that the operator who can mislead his fellows or opponents without resorting to downright falsehood, is frowned upon with any severity . . . Something of the same kind might be said about every successful operator who ever graced Capel Court, Wall Street, or the Frankfort or Paris Bourses. These examples, however, refer to the misuse of intelligence on a large scale—wholesale deception it might be termed." It may be added that the operator does not stop at "resorting to downright falsehood." The fact that the financial columns of some newspapers are purchasable for the insertion of such "news," blackens still more the nature of these operations.

Another method that may be resorted to is that of "wash sales," or "washed sales." If an operator wishes to make false prices on the floor, he may employ one broker to sell to another broker at prearranged prices. The price stands as a quotation, though the transaction is entirely fictitious. Such conduct, it is needless to say, is economically and morally indefensible. Wash sales are forbidden by all the exchanges, but, except in flagrant cases, it is very difficult to detect them. In the case of a clique operating together, some members may sell to others and accomplish the same result. Similar practices occur without the collusion of brokers, that is, one set of

[1] "Rumor Mongering in the Stock Market," *Bradstreet's*, Jan. 29, 1893.

brokers may be employed to sell and one to buy the same security in open market. The chances are that they will make their transactions together, in which case the operator has accomplished the same result as before. This is also a convenient method of giving a false appearance of activity to the trading in new securities in order to induce speculation or investment by the public.[1] In such cases the conduct of the broker may be blameless, despite the tricky device in which he is made to take part.

There is one evil of stock speculation which is impossible in the case of produce. The value of wheat, or of cotton, depends upon conditions which are entirely beyond the control of a few men. The value of a security, on the other hand, depends largely upon the policy of a group of directors. If they wish to speculate in the shares of their own companies, they are in a position of extraordinary advantage. By means of one line of policy or another, combined with the use of false information to the public, they may move the price to suit their private purposes. It may be that they will wreck the company in order to secure a permanent control of the property at a low price; or that they will destroy its credit in order to cover their own short sales; or that generally they will manipulate the price back and forth with a view to alternate profits.

Speculations of this order constitute the worst evil and the most flagrant scandals of the stock exchange. They have occurred in various securities, most openly in recent years in some of the industrials of the "unlisted department." The New York Stock Exchange admits to its "list" the stocks and bonds of a corporation, after an examination of its nature and status. The examination is fair, but it aims only to prove the legality of the organization, that it has a basis in fact, that the securities are legal and properly guarded against fraud, *etc.* Once

[1] *Cf. Bradstreet's*, April 4, 1896.

listed, no further examination is required. The fact of listing is in no sense evidence that a company is financially sound. Not content with this easy method of getting securities on its list, the New York Stock Exchange has established an "Unlisted Securities Department." Securities may be admitted to this department without being subjected to any examination at all. They may, however, be bought and sold, be quoted, and admitted to clearing like any other security. If the Stock Exchange is to make any pretense of examining securities for "listing," its unlisted department is utterly anomalous. It can hardly be said, however, that any practices are possible in unlisted securities which have not been used in the case of those of the regular list. The "industrials" on the regular list have not all been above reproach, while the scandalous operations in "Erie" in past years, show what may be done in the way of railroad "financiering." But whether or not the unlisted department affords a greater chance for dishonorable promoters and managers to prey upon the public, it has helped to bring the Stock Exchange itself into disrepute.[1] This is most regrettable. An institution which is the center of the financial life of the country, and which fixes the value of properties for many thousands of innocent investors, should stand high in the public estimation. The members of the Exchange cannot now be heard to say that the public has no concern with its practices or position. It has become a quasi-public institution, and as such it has public duties and is a proper object of public criticism, perhaps even of corrective legislation. Referring to the earlier nature of the Stock

[1] The avowed purpose of the establishment of this department was to afford a market for "Trust Co. receipts" of securities lodged with them pending reorganization. This process was then comparatively new, and experience was necessary to determine the best means of affording a market to the holders of securities of roads in default. In view of the subsequent history of the department, many members regret its original introduction.

Exchange as a private association of small importance, *Bradstreet's* says:[1]

"All these conditions have now changed, but though the business in which the Exchange engages has an enormous and direct effect upon the general financial prosperity of the country, the institution steadily adheres to its old-time position in many things where a more liberal view of the inherent obligations to the public would certainly strengthen the standing of the Exchange itself.

"In nothing does this appear more clearly than in the admission of corporation securities to the 'lists' of the Exchange, or their retention thereon. At present, as in the past, the board assumes no responsibility for the character of the concerns in whose stock or bonds it deals. It simply requires that when a stock is listed its officers shall show that the company is duly organized, has a proper transfer office, and that the certificates are engraved and issued under restrictions which prevent forgery or over-issue. Beyond this it refuses to go, leaving it to the public to decide whether it will deal in the securities or not, and what degree of misfortune or positive misdoing will destroy the market for a corporation's stock or bonds.

"It is of course impossible for the Exchange or for any other body to charge itself with the supervision of a multitude of 'companies,' or to maintain a close watch upon the doings of their managements. Nevertheless it would certainly have the support of public opinion if it required every corporation whose securities were on the lists (either railroads or industrial concerns) to furnish to the Exchange and the public periodical statements of their financial operations and condition. Public sentiment has already exacted this from nearly all the railroads, but the lesson of the Cordage Company's collapse is that if the Exchange had done its duty and adopted regulations which would have forced such concerns to periodically exhibit their balance sheets, it would have been known in time that one of the apparently most prosperous organizations did not possess an adequate working capital.

"Even more obviously is it the duty of bodies of this character to take care that the facilities which they present are not misused to the detriment of the public. A recent occurrence in connection with the manipulation of the stock of the Distilling and Cattle Feeding Company (usually called the 'Whiskey Trust') gives point to this. The stock of that concern has been the occasion of more or less scandal ever since it appeared in Wall Street, and was admitted to dealings on the board. When, however, as in the present instance, it is alleged that 'insiders' are 'short' of the stock, and alleged news that the concern is to be disrupted is put forth—the inference which the whole street draws being that it was done to facilitate the covering of these 'short' contracts—it is certainly time for interference from somebody. In this or similar cases the duty seems to rest on the New York Stock Exchange to ascer-

[1] "Stock Exchange Duties," *Bradstreet's*, May 27, 1893.

tain whether the management of such a corporation is governed by methods or morals which justify the Stock Exchange in allowing the stock to remain upon its lists."[1]

Nothing is more needed in the speculative market than that the highest standard of honor and good faith in the membership of the Stock Exchange should find expression in its policy, and that the duty of the Exchange to the investing public should be recognized as more important than the volume of commissions.[2] It is interesting to note in this connection a recent experience of the New York Stock Exchange in its attempt to force a prominent industrial trust to make a statement of its condition. The request was refused by the directors, and the matter was quickly allowed to drop. At the time the securities of the trust in question furnished to the members a large part of their business. To have removed these securities from the board would have seriously cut commissions, while other exchanges might have profited by the change. Such considerations were more powerful than the desire to maintain the dignity of the Exchange.

It would, doubtless, be very undesirable for the Stock Exchange to take such a stand regarding securities listed as to lead the public to consider the fact of listing as in any way a guarantee of their safety for investment.[3] It

[1] *Cf.* The London *Economist*, Nov. 1, 1890.

[2] The London *Economist* (March 5, 1892,) says: "The position which the Stock Exchange Committee have persistently maintained in regard to the rules they have to enforce, is, in our opinion, wholly indefensible. They hold that the 'Rules and Regulations' which have been drawn up for the 'conduct of business' in the 'House' affect the members alone, and the public practically have no more to do with them than they have, say, with the regulations of a private club. But the Stock Exchange is something very different from a club, for it not only enjoys a species of monopoly, but holds, in consequence of its relations with the public, a position of an almost quasi-official nature." *Cf. Economist*, Nov. 30, 1889.

[3] Cohn (*Beiträge zur deutschen Börsenreform*, p. 21) suggests some kind of official examination of the condition of certain companies for the benefit of the public. Some such scheme is in fact carried out in the new

is the business of the speculators themselves to determine values. But however poor a security is admitted to trading, the Exchange should at least make greater efforts to protect the public against dishonesty and fraud.

Even where no use of dishonorable methods is made, there is greater opportunity for manipulation by means of capital in the case of securities than in the case of produce. The market for a single security is so much narrower than for one of the great staples that determined buying or selling by one operator is much more effective. It is easy, however, to exaggerate conditions here. Many of the most active securities represent a capital of such enormous proportions, and so widely distributed, as to make individual control (without speculative management) practically impossible. No corner, for example, could occur in such securities. On the other hand, the experience of the past has taught bears to be wary about selling any security of small amount. In fact, a corner on the stock exchange is about as improbable an occurrence as on the produce exchange. Even in the past, successful corners have been very few. The difficulty of making them successful is that even if the "cornerers" catch the shorts they are left with a vast amount of stock bought at high figures which they seldom can unload without loss. It is too dangerous an experiment to lead many to attempt it.[1]

In the case of floating new enterprises of a fictitious nature, by which a few promoters profit at the expense of

German statute, following the recommendation of the Commission of 1893. For any state official to undertake such a task would be extremely dangerous. The public does not discriminate between an opinion and a guarantee.

[1] "In general we conclude that the importance often attached to these syndicates is greatly exaggerated. . . . Their power is exercised at great risks to themselves, does not upset any general laws, and does not interfere with the general levels of price which these laws tend to establish at different times." Giffen, *Stock Exchange Securities*, p. 59.

the public, it is believed that conditions are also improving. "Such operations can be successful," says the *Commercial and Financial Chronicle*,[1] "only so long as the public stands ready to take the securities emitted. In other words, the co-operation of the public is necessary to carry out such schemes. Twelve or fifteen years ago it was possible to float almost anything. . . . But the situation has now completely changed. In the interval since then the public has had some bitter experience and has learned some painful lessons. . . . Therefore the undertakings for the issue of fictitious capital now lack one of the main elements to their success. As a matter of fact the operation described has not been carried on to any important extent in recent years. It belongs to a past era."[2]

In the matter of new enterprises the conditions in the United States have always been better than in England, both because of different legislation regarding organization, and because of the different methods of introducing the securities to the stock exchange. On the London Stock Exchange this is done by means of "dealings before allotment."[3] The stock of a new company may be bought and sold for future delivery before it is distributed to the subscribers at all. This is a prolific source of evil. The promoters may bid up their own shares and cause a premium in the market in order to induce the investor to subscribe more readily. On the other hand, a rival concern may bear the stock of a new company and keep it from getting the necessary subscription to provide capital. If the promoters can catch a considerable short line out they may allot the shares in such a way that the shorts cannot secure them, and thus effect a corner.

[1] June 29, 1895.

[2] *Cf.* the London *Economist*, Sept. 30, 1893.

[3] The subject of dealings before allotment formed the chief point of inquiry of the Stock Exchange Commission of 1878, and is very fully treated in the Report and Evidence.

These dealings have been the cause of great scandals on the London Exchange, and their abolition was recommended by the Stock Exchange Commission of 1878.[1] A special settlement is granted for new securities after a certain amount of such dealing; and by its right to refuse such a settlement, and thereby to annul all outstanding trades, the Stock Exchange Committee has some power over the most flagrant cases. But in some instances this remedy merely aggravates the evil it was meant to cure.

The evils which have been above enumerated are confined to a few securities. At one time they are prevalent in one group, at another time in another group. Sometimes it seems as if most of the active securities were open to some such charges. But as compared with the great mass of securities dealt in on the exchange, they are very few. Doubtless any benefit that comes from speculation in these stocks is much more than offset by its evils. It is wrong, however, to take these as a basis for judgment on stock speculation as a whole. Disregarding these stocks, it may be truly said that the prices of the stock market represent the opinion of the market on the real value of the property in question. Even in the case of "gambling stocks" there is no need for the *bona fide* investor to be injured. His investment may be made elsewhere. The direct losses in the matter of these securities are borne by those speculators among the public who are foolish enough to tamper with such fraudulent schemes. Hence the economic evil is not great. The moral evil which results from the fact that such operators go unrebuked is of far greater consequence.

The attempt is often made to separate transactions according to their form as "legitimate" or "illegitimate,"

[1] The Stock Exchange Committee itself passed a rule in 1864 forbidding them, but this was repealed. (Report of 1878, p. 17.) It must be admitted, however, that there are some decided benefits in dealings before allotment in the matter of starting new enterprises. *Cf.* Struck, *Die Effektenbörse*, p. 64 *et seq.*

as if a definite meaning could be given those words apart from the preconceptions of the individual. In the hearings on the "anti-option" bills a few years ago, not a few representatives of the produce exchanges stated that they had no objection to that part of the bills which applied to "options," or what in this essay have been called "privileges." A "put" or "call" is in itself, however, entirely defensible. Just as a real estate dealer secures a bond on a piece of property for a certain period, so a wheat dealer may secure the right to a certain amount of wheat. The privilege is sometimes used in this way for insurance. If, for example, an order comes after the close of exchange hours, the dealer may insure himself against an unfavorable opening on the following day by buying a call for twenty-four hours. The speculator may use privileges for the same purposes. Protection may also be secured by selling privileges. If, for example, an operator is short to a large extent he may sell puts; if the price falls he will receive the commodity to cover his short contracts; if the price rises he receives the "put-money," at least. The influence of privileges on price is slight because of their small amount. They may serve to indicate the course of the market, and may have their influence the following day on option. On the other hand, the fact of a large amount of privileges having been sold may lead to some attempt at manipulation. It will be for the interest of those who have sold puts, for example, to keep the price from falling low enough for delivery to be made; consequently active buying may come in for this purpose at the end of the day. So far as it goes, it is a leveling influence on price.

In the main, however, privileges are used for the purposes of those speculators who have not sufficient means to carry the risks of ordinary trading. That is, they are used by the least desirable element in the market and

largely for "gambling" purposes. For this reason they are generally denounced, despite their possibilities for better purposes. Business opinion is not framed on nice distinctions regarding the nature of transactions; but in such a case business opinion may be relied on. The privilege may safely be regarded as an unnecessary and undesirable form of contract. It is forbidden by the chief exchanges, and the more stringent enforcement of such rules is greatly to be desired.

Another distinction sometimes attempted is that between *bona fide* trading, and trading for differences.[1] The latter are supposed to be "illegitimate." It has already been shown that the form of contract is the same in both cases, and that the settlement by difference is merely a matter of convenience after the contract is made. Almost all exchange transactions are so settled.[2] The whole account of the function of speculation in the previous chapter refers to speculation for differences. To do away with this is to do away with the speculative market altogether.[3] It is not that these dealings are an adjunct to real speculation; it is not that they influence or, as is

[1] For a suggestive discussion of difference dealings, see Brückner, *Der Differenzhandel.*

[2] It is impossible to say to what extent the different forms of settlement are used. Mr. Alfred Shepperson of the New York Cotton Exchange makes the following interesting calculation: Taking the amount of cotton for which certificates were issued by the inspection department of the New York Cotton Exchange for the six years ending August 31, 1893, 644,026 bales, and comparing it with the volume of futures sold in the same period, 177,090,000, he says: "As the transferable orders for the cotton actually delivered upon 'future' contracts passed through many hands (by transfer), probably averaging fully 25 transfers upon each order, it follows that during the six years mentioned, contracts to the extent of 16,100,600 bales were settled through the delivery of cotton, while contracts for 160,989,400 bales were liquidated by 'direct settlements' and 'ring settlements.'" (Report of Senate Committee on Cotton, above cited, Vol. I, p. 459.) This calculation, however, assumes that the same cotton figures in only one transferable order.

[3] *Cf.* Brückner, *op. cit.*, pp. 48–49, 53. "Sonach bildet der Differenzhandel die Seele des Terminmarktes."

sometimes said, that they intensify, or magnify prices.[1] They make prices. They are *bona fide* offers to buy or sell, and their original nature is not affected by the manner of their settlement. Furthermore, the methods of insurance used by the dealer and the manufacturer would be utterly impossible without the continuous market and settlement by differences.

Are all such difference-dealings, however, desirable? Is it desirable that speculation should be so wide-spread? Here appears the greatest evil of speculation, the moral evil of a reckless participation in the market by the outside public. The possibilities of making quick and large gains from fluctuations in prices lead thousands into the speculative market, who have no knowledge as to its condition, and no real opinion as to the course of prices. They depend chiefly upon chance for their success. Such speculation is the merest gambling in spirit. The evil is still further increased by the "margin" system. The speculator need not have capital enough to make his purchase, but only enough to "put up a margin" of five or ten per cent. with his broker. Thus with a capital of $10,000, he can buy, or sell, $100,000 of securities (one thousand shares), and win or lose the amount of fluctuation in the value of the whole one thousand shares. The danger is correspondingly increased, since an unfavorable movement may "wipe out" his margin altogether. In other words he is playing for higher stakes.[2] Added to the natural tendency to gambling, are all the attractive and alluring circulars and advertisements put out by commission houses which are regardless of how many men they may lead to ruin, so long as commissions are forthcoming.[3] The amateur speculator, moreover, often goes

[1] *Cf.* Lexis, in Schönberg's *Handbuch*, II, p. 878

[2] *Cf.* Hadley, *Economics*, p. 107.

[3] Members of the London Stock Exchange are not allowed to advertise. There can be no doubt that the methods of advertising employed by some

in beyond his means, and resorts to credit to retrieve his position. The money of others is drawn into the reckless trading; embezzlement and ruin too often follow.

It is unnecessary to dwell here upon the disastrous moral results of such practices. In one sense, the economic and the moral effects cannot be separated. Moral evil has its economic result. The fostering of the gambling spirit is always at the expense of industry. The lowering of the moral standard injures all trade relations. The instability of fortunes discourages perseverance and economy. Such indirect economic losses it is hard to estimate. There are, however, direct ecomomic effects of speculation by the outside public of a somewhat different kind. The most apparent of these is the unsteadiness of the market in times of speculative excitement. The larger the number of irresponsible persons involved, the more does trading at such times partake of the unreasoning nature of all crowd action. Furthermore, where so many are "margined" to the full extent of their available capital, any sudden movement in price may threaten their solvency and necessitate a rush to cover or to liquidate. Hence prices rise rapidly under the force of enthusiasm, and then fall suddenly under the fear of panic.

It is wrong, however, to attribute these results entirely to organized speculation. Periods of inflation and panic are due to more far-reaching causes than the stock exchange. At such times stocks and produce go up or down in price together with all other property. In the case of stocks, the speculative mania is almost universally a result of new industrial conditions. As confidence in prosperity rises, new industries are undertaken and new companies are formed, regardless of their real chances of

brokers in the United States, by which the most preposterous statements are made regarding the chances of speculative profit, are prolific of much harm. Similar conditions are causing much complaint in Germany.

success. The speculative activity of the stock market follows after the speculative increase of securities. The periods of extreme speculation in railroad shares have nearly always followed the periods of most rapid and excessive building.[1] Nor is the rapid increase of speculative enterprises only possible because of the stock exchange. The investing public take up, outside the exchange, with hundreds of companies which are more skilfully advertised than managed. Even those cases which are most purely speculative are often independent of the exchanges. The Panama mania in France has been cited as a result of the participation of the public in speculation,[2] but it is wrong to attribute such a movement to the exchange. Panama speculation was chiefly outside the Bourse, and, as said by Leroy-Beaulieu, it was the Bourse which throughout was most skeptical of the soundness of the enterprise.[3]

It is true that the exchanges afford every facility for increasing the inflation. Whatever makes purchasing easy at such a time increases the force of the movement, and in this matter the exchange plays much the same rôle as the whole credit system.[4] Furthermore, these opportunities occasionally lead to speculative crises that are little connected with industrial conditions, and the effect of which is more closely confined to the market for securities.[5] At the same time it should be remembered that in times of inflation the exchange is first to call a halt, and that at the end of a panic the market receives strong support from the necessary covering by the shorts.

[1] *Cf.* Ehrenberg, *Die Fondsspekulation*, pp. 65–69.

[2] *Cf.* Lexis, *op. cit.*, p. 881.

[3] *L' Économiste Français*, Jan. 28, 1893.

[4] "The gambling in no case is possible without credit, and where there is credit, while human nature remains as it is, there will always be undue credit." Giffen, *Stock Exchange Securities*, p. 43.

[5] *Cf.* Lexis, *op. cit.*, p. 882.

In the long run, however, the influence of the public in speculation is not that of inflation or of panic. It cannot be said, as is sometimes done, that the public bring any great degree of intelligence or fitness for investigation to the market, and so increase the chances of a foreseeing of all conditions which may affect values. The participation of the public, however, does increase numbers, and in normal times numbers themselves are a steadying influence in the market.[1] The more buyers and sellers the less likelihood, in the long run, of wide fluctuations. Every movement of price has a more powerful body of opinion to resist. Furthermore, manipulation in a wide and active market is probably more difficult than in a narrow market.[2] The public learns little by experience in these markets, but it furnishes capital and courage against fictitious movements, not because of its knowledge, but because in an active market the two sides will be of more nearly equal strength.[3] It is often said that the outside public forms no independent opinion as to the course of prices, but tamely follows the lead of the big operator. It is this theory which in the past has brought some of the greatest to ruin. The public may be unintelligent; but the stock exchange can boast but few who have been able to oppose it with impunity.

More than this, the speculation of the big operators depends upon the speculation of the public. Those hopes

[1] "But the Stock Exchange gambling will not, any more than the legitimate Stock Exchange speculation, materially affect general prices. It tends necessarily to equalize prices, like the legitimate trading it imitates, and it favors a panic whenever anything unexpected happens." Giffen, *op. cit.*, p. 43.

[2] Ehrenberg's claim, *op. cit.*, 206–8, that the influence of outside speculation is bad because of the lack of knowledge on the part of the public, overlooks the power of mere numbers to steady values.

[3] If it be said that some of the most daring and successful cases of manipulation took place when speculation was more active than now, it may be said that industrial conditions were not then entirely normal, and secondly, "there were giants in those days."

for reform are chimerical which look to a system in which only large speculators, of wide experience and knowledge, shall carefully investigate all price-determining factors, and fight out the battle of prices among themselves, while the public refrains from speculation altogether.[1] Such a condition of things is highly desirable, but the big speculators are not prepared to maintain a market of this nature. If it be said that the price-making benefits of speculation come, not from the number of outsiders, but from the activity of those best qualified for speculation, it may be answered that the activity of this latter class depends upon the participation of the former. Furthermore, the opportunity of the trader and the manufacturer for advantageous hedging is greatly curtailed in a narrow market. Profitable trade depends largely upon active speculation. Indeed, the opinion is expressed among grain merchants that their difficulties in recent years have been partly due to the absence of the public from the market; that for their purposes, there has been not too much, but too little speculation.

It will be seen then that speculation by a wide public has its advantages, but that these advantages are secured at an enormous cost. The widening market is simultaneously the cure of some evils and the cause of others. The former are mainly economic, the latter moral. Neither should be disregarded nor minimized. The difference in the nature of these evils makes comparison difficult. Professor Cohn begins a recent essay[2] on speculation with the assertion that business methods cannot escape the test of moral judgment. No one to-day will question the truth of such a statement. Yet one may well pause before the difficult problem of determining at just what point the evil of public speculation becomes too high a price to pay for the advantages of the active market.

[1] *Cf.* Eschenbach, *Zur Börsenreform*, pp. 12, 52.

[2] *Zur Börsenreform.*

CHAPTER VI.

SPECULATION AND THE LAW

I.

In the middle ages speculation, if the word may be used for the transactions of that time, was always for a rise in price. This, as already seen, was because speculation for a fall in prices is only possible with the modern machinery of classified grades and transferable warrants. Hence the earliest effort at legislative control of speculation is to be found in the ordinances and statutes against all attempts to enhance prices. To the minds of the middle ages high prices, especially for food products, seemed an unmixed evil and, furthermore, were usually regarded as the result of some conspiracy or unfair combination of merchants.[1] The attempts to prevent such fictitious prices took the form of the familiar statutes against forestalling, engrossing and regrating. The first general statute of this nature for the benefit of the subjects at large, as distinct from the king, was one of the reign of Edward I, though local ordinances in this direction were common before.[2] Under Edward III, and later under Edward VI, such statutes were frequently enacted; but in the reign of Elizabeth legislative activity in this direction began to decline.

It is impossible in the limits of the present discussion to

[1] Cunningham, *English Industry and Commerce*, Vol. I, p. 484; Vol. II, p. 497.

[2] See Cunningham, *op. cit.*, Vol. I, pp. 243, 295; Vol. II, p. 91; and Ashley, *Economic History*, Vol. I, § 20.

consider this early legislation in detail, and, in any case, it bears only an indirect relation to the attempts to control the organized speculation of to-day. The real successors to the early enactments against engrossing are found in modern statutes against combinations in restraint of trade, against monopolies and trusts. It may be noted in passing, however, that the idea of value, which was at the basis of much of the early struggle to control prices by law, is entirely inconsistent with the conception of value which gives speculation its sole justification. The returns which come to the legitimate speculator constitute a reward for risk. No such claim was admitted in earlier times. Cunningham says:[1] "English merchants were not to forestall wine in Gascony, or buy it up before the vintage, and the time of the common passages; nor were they to charge high for the wine on the pretense that they ran risks. Cost of carriage was a charge that could be checked, and this might, doubtless, be allowed for when sale was made in London; but remuneration for risk was obviously regarded as a mere excuse for arbitrary demands on the part of the merchant, and these were not to be permitted at all."[2]

Such legislation as was enacted in later years, after the advent of stock speculation, was not due to the theory which underlay the enactments against engrossing, but, in part, to the opposite idea that speculation reduced prices. Every fall in the funds was attributed to the machinations of

[1] *Op. cit.*, Vol. I, p. 294.

[2] In view of the instances in recent years where, in the matter of actual trade, the speculative market has given one city an advantage over another without such a market, it is interesting to note the case of a local ordinance given by Cunningham (Vol. I, p. 296), which was directed against the hostelers of Yarmouth in 1357, to prohibit their forestalling the goods of the fishermen before they came into port. The ordinance naturally put upon the fishermen the burden of disposing of their own fish as well as the burden of catching them, with the result that "the fishers were thus prevented from bringing their fish to that port at all." A repeal was necessary within four years.

the short-sellers, and the necessity of preserving the public credit seemed to demand their suppression. Still more strong in many cases was the moral motive to stop public gambling. The first act in England affecting the Stock Exchange was in 1697, an act to restrain the numbers and ill practices of brokers and stock-jobbers.[1] It was due to the speculative mania which broke out after the Revolution, and it was allowed to lapse after ten years. In 1733 was passed the famous Sir John Barnard's Act "To prevent the infamous practice of stock jobbing."[2] This act forbade bargains for "putts or refusals;" also "the evil practice of compounding or making up differences;" and furthermore prohibited all sales of stock by parties not owning the same, under penalty of $500 for each such transaction. This act had absolutely no effect in stopping speculation, and was repealed in 1860 by 23 Vict. c. 28. Leeman's Act of 1867 declared all sales of bank-stock, without a specification of the share numbers in the contract, void. This has also proved a dead letter.[3]

Only one attempt has been made by Congress to suppress speculation. As soon as the paper currency of the Civil War became depreciated, speculation in gold became active, and the ups and downs in the price of gold, in other words the fluctuations in the amount of discount on the greenbacks, were regarded with the same indignation with which European governments had in former years viewed the fluctuations in the value of the public stock. In both cases the evil was attributed solely to the machinations of the speculator. In 1863 an act[4] was passed which placed a tax of one-half per cent. on all sales of gold for delivery after a period exceeding three days; and provided that any loan

[1] 8 and 9 Will. III, ch. 32. [2] 7 Geo. II, ch. 8.

[3] For an account of these English acts see *Report of the Stock Exchange Commission*, 1878, App. I.

[4] *Statutes at Large*, 1863, ch. 74.

of currency against gold coin in excess of the amount of coin should be void. The Anti-Gold Act of 1864,[1] was passed June 17. It was entitled "An Act to prohibit certain Sales of Gold and Foreign Exchange." It forbade all contracts for the sale or purchase of gold coin or bullion for delivery on any day subsequent to the day of the contract, also all contracts for the sale of gold which was not actually in the possession of the seller at the time of contract. Contracts in violation of these provisions were declared void; and such violation was made a misdemeanor with a penalty of fine or imprisonment. The act also forbade all sales not made at the ordinary place of business of one of the contracting parties. This provision was in order to close up the Gold Room where this trading was done. The expectation of Secretary Chase and of Congress, that this act would abolish the premium on gold, was not fulfilled. Gold jumped from 198 to 250.[2] On July 2d, two weeks after its enactment, the statute was repealed.[3]

In New York an act was passed in 1812[4] declaring all contracts for the sale of stocks or bonds void, unless the seller at the time was actual owner or assignee thereof, or authorized by such owner or assignee to sell the same. All contracts for a wager on prices were void, and money paid on any such contracts was recoverable. This statute was repealed in 1858,[5] the act of that year providing that no contract should be void because the property sold was not at the time in possession of the seller. This affirmatively legalized short-sales. A similar act was passed in Massachusetts in 1836, and a recent act, 1890, provides for the recovery of money on contracts where there is no intention

[1] *Statutes at Large*, 1864, ch. 127.

[2] See White, *Money and Banking*, p. 161, Boston, 1896.

[3] *Statutes at Large*, 1864, ch. 209.

[4] *Revised Statutes of New York*, 1829, ch. xx, Title 19, secs. 6–8.

[5] *Laws of* 1858, ch. 134.

to deliver, and admits short-selling as *prima facie* evidence that no such intention exists.[1] In Pennsylvania, by the act[2] of 1841, short-selling, for delivery after five days, was made a misdemeanor, with a fine of from $100 to $1,000. This law was repealed in 1862.[3]

In Illinois there is a statute[4] to the following effect:

"Whoever contracts to have or give himself or another the option[5] to sell or buy at a future time any grain or other

[1] *Acts and Resolves*, 1890, ch. 437. [2] *Laws of* 1841, p. 396.

[3] 17 P. L., 540. [4] *Statutes of Illinois*, ch. 38, sec. 130.

[5] It is difficult to tell just what is meant by the word "option" in the Illinois statute. The act reads at first glance as if it referred to a "privilege," in the sense in which the word has been used in the foregoing chapters. It was so held in Pixley *vs.* Boynton (79 Ill., 351), where the Court referred distinctly to "puts and calls;" and in Schneider *vs.* Turner (130 Ill., 28), where the question is treated with admirable clearness. The statute also applies to such optional contracts outside the exchange. A *bona fide* purchase of 150 cars of coal with a clause in the contract giving the purchaser the privilege of taking 250 cars more at the same price, was held illegal, as to the second clause, under the statute, Osgood *vs.* Bauder (82 Iowa, 171). This is evidently in line with Pixley *vs.* Boynton, and is a natural interpretation of the statute; for as the Court said in a similar case (Corcoran *vs.* Lehigh Coal Co., 37 Ill. App., 577): "A statute radical as this cannot fail to uproot many transactions, but for the law, customary, usual, and innocent." But in a number of recent cases, where the question of wager has been involved, the regular future has been held an "illegal optional contract," when the understanding has been that it should be settled by differences. [See Pearce *vs.* Foote (113 Ill., 228), Carroll *vs.* Holmes (24 Ill. App., 453), Miles *vs.* Andrews (40 Ill. App., 155), and others.] These rulings have been on the ground that the party had an option of either delivering or settling by differences. If the statute is to receive this broad interpretation, nothing is gained by confusing it with the conception of an option contract which appears in Pixley *vs.* Boynton, and Osgood *vs.* Bauder. These cases interpreted the statute to refer to "privileges." According to the later cases an "option" exists where the party may elect to deliver or may elect to pay differences. The strict option, or privilege, is where the party may elect to deliver or not to deliver. But if he elects not to deliver there is no transaction and no payment of differences. Should he elect to deliver he may either pass the property or settle otherwise according to the subsequent arrangement with the other party. It is probable that some of the interpretations of the statute are due to a lack of knowledge of the real nature of exchange transactions. At least, if an "option" is held to be

commodity, stock of any railroad or other company, or gold, or forestalls the market by spreading false rumors to influence the price of commodities therein, or corners the market, or attempts to do so in relation to any of such commodities, shall be fined not less than $10 nor more than $1,000, or confined in the county jail not exceeding one year, or both; and all contracts made in violation of this section shall be considered gambling contracts and shall be void."

A law passed in Ohio in 1882 is almost identical in language with the Illinois statute, but adds a clause that the provision in the statute applies only to such contracts where the intent is not to deliver the commodity sold, but to settle by differences.[1] A very stringent law "to prevent gambling in grain, stocks, petroleum, wool and provisions," was passed in 1885, making it a criminal offense to buy or sell futures, or on margin, where either party meant not to deliver. But this provision did not apply to transactions on regular stock and produce exchanges. The law was repealed in 1889.

In California a clause has even been put in the constitution in prohibition of futures. Article IV, Sec. 26, reads: "All contracts for the sale of shares of the capital stock of any corporation or association on margin, or to be delivered at a future day, shall be void, and any money paid on such contract may be recovered. . . ." This provision was the result of the wild speculation in securities which occurred just before the adoption of the constitution.[2]

a contract by which the parties have the option of making actual delivery or of settling merely by the payment of differences, the statute in that case (as suggested by the Court in Schneider *vs.* Turner) is superfluous, since such transactions are void at common law.

[1] *Revised Statutes of Ohio* (1896), sec. 3934 a.

[2] For recent cases under this section of the constitution, see Cashman *vs.* Root (89 Cal., 595); Kullman *vs.* Simmens (104 Cal., 595).

Futures are prohibited by statute in Georgia, and a curious reason is embodied in the statute itself:

"A bare contingency or possibility cannot be the subject of sale, unless there exists a present right, in the person selling, to a future benefit; so a contract for the sale of goods to be delivered at a future day, where both parties are aware that the seller expects to purchase himself to fulfill his contract, and no skill or labor and expense enters into the consideration, but the same is a pure speculation upon chances, is contrary to the policy of the law and can be enforced by neither party."[1]

Mississippi enacted a law in 1882, providing that "if any person shall deal in contracts commonly called futures, or shall, by himself or his agent, directly or indirectly, buy or sell any future contract, he shall be guilty of a misdemeanor," the penalty being fine or imprisonment. The following section makes the same declaration regarding any person who buys or sells commodities without intending to deliver them.[2] A Tennessee statute[3] declares all futures in stocks, grain, or any produce, "where either of the contracting parties, buyer or seller," is dealing simply on margin with no intention of making actual delivery, gambling; and fixes a punishment of fine or imprisonment for any such contract.[4] The Arkansas law of 1883 is still more direct: "The buying or selling, or otherwise dealing in futures, either in cotton, grain, or anything whatsoever, with a view to profit, is hereby declared

[1] Georgia *Code*, sec. 2638. Certain clauses of the statute might make one hesitate as to its true meaning, but the courts hold that an ordinary exchange "future" is void under the statute. Augusta National Bank *vs.* Cunningham, 75 Ga., 366; Lawton *vs.* Blitch, 83 Ga., 663.

[2] *Laws of* 1882, p. 140; also Miss. *Code*, secs. 1120, 1121. A mutual agreement of non-delivery on the part of both parties is, however, necessary to invalidate the contract (Clay *vs.* Allen, 63 Miss., 426.)

[3] *Acts of* 1883, ch. 251.

[4] See under this act Snoddy *vs.* Bank (88 Tenn., 573).

to be gambling." Such dealing is made a misdemeanor, punishable by fine or imprisonment.[1] Texas passed a law in 1885 making it a misdemeanor to deal in futures or to "keep a produce exchange," or bucket-shop, for such dealings, where no actual delivery is intended.[2] In South Carolina all sales of stocks or produce not owned by the seller are void unless there is a *bona fide* intention of both parties that there shall be actual delivery.[3] Michigan[4] and Iowa[5] have made sales of commodities without intention of delivery a misdemeanor.

The Missouri law[6] of 1899 applies to shares of stock or bonds of any corporation, petroleum or provisions, grain, or agricultural products whatsoever, and makes unlawful all sales of such commodities "without intention of receiving and paying for the property, or delivering property so sold;" also options made with similar intention. A fine is fixed for such offences of from $300 to $3,000. The act furthermore provides that "it shall not be necessary, in order to commit the offense defined in the preceding section, that both the buyer and seller shall agree to do any of the acts above prohibited." A mere offer to buy or sell in such way, whether accepted or not, constitutes the offense.[7]

[1] Mansf. *Digest*, secs. 1848, 1849.

[2] *Laws of the Nineteenth Legislature*, ch. 94.

[3] *Statutes of* 1883, No. 306.

[4] *Public Acts of* 1887, ch. 199.

[5] *Rev. Code of* 1886, p. 959 a.

[6] *Missouri Rev. St.*, secs. 3931–3939.

[7] This clause in the statute is due to certain decisions, which, following the leading case of Kent *vs.* Miltenberger (13 Mo. App., 505), held that a mutual intention between principals was necessary to constitute wager. Even before the act was passed the courts had begun to move away from this position, as is shown by Crawford *vs.* Spencer (92 Mo., 498) and Hill *vs.* Johnson (38 Mo. App., 383). As between broker and principal, however, the broker may recover commissions, *etc.*, even under the statute, where he is not cognizant of the unlawful intention of his principal, Mulford *vs.* Caesar (53 Mo. App., 263).

II.

In turning to the law of exchange transactions as developed by the courts, only one of the many problems which arise in regard to such transactions will be considered at this point, the question as to the validity of the speculative contracts made on the exchanges, from the point of view of both principal and broker. This question, together with many others relating to brokers and exchanges, has been discussed in several learned treatises.[1] In view of the material there found, the treatment here is confined chiefly to recent cases, only certain leading cases of the earlier years being referred to by way of comparison.

In the first place it may be said that contracts for future delivery are now very generally accepted as valid.[2] "It is well settled that contracts for future delivery of merchandise or tangible property are not void, whether such property is in existence in the hands of the seller, or to be subsequently acquired." (Bibb *vs.* Allen, 149 U. S. 481). Since the ruling of Lord Tenterden in Bryan *vs.* Lewis, (Ryan & Moody, 386), in 1826, was set aside in Hibblewhite *vs.* McMorine, (5 M. & W. 462), in 1839, this proposition has been generally admitted and is affirmatively stated in most cases.

The conditions under which such a contract is held to be void are thus stated in Irwin *vs.* Williar (110 U. S. 499): "A contract for the sale of personal property, which the vendor does not own or possess, but expects to obtain by purchase or otherwise, is binding if an actual transfer of property is contemplated. . . . If, however, at the time of entering into a contract for the sale of personal property

[1] See Dos Passos, *Law of Stock Brokers and Stock Exchanges*, New York, 1882; Biddle, *Law of Stock Brokers*, Philadelphia, 1882; Dewey, *Future Contracts*, New York, 1886; Simonds and Bisbee, *Law of the Produce Exchange*, Chicago, 1884.

[2] See Dos Passos, *op. cit.*, pp. 440, 452.

for future delivery, it be contemplated by both parties that, at the time fixed for delivery, the purchaser shall merely receive or pay the difference between the contract and the market price, the contract is a wager and nothing more." In Flagg *vs.* Baldwin (38 N. J. Eq., 219) the court in holding that actual buying of such a kind is legal, but that a contract to pay differences is not, said: "This proposition is sustained by all the cases, without an exception, that I can discover. The only disagreement relates to the application of the doctrine."

The principal question is as to a previous mutual understanding between two parties regarding a settlement without delivery. Such understanding doubtless makes a contract void, but the decisions show a disagreement as to who constitute the parties, what constitutes a mutual understanding, and what constitutes delivery. This disagreement is due partly to the fragmentary nature of the evidence on crucial points in many cases, and to the peculiar interpretation often given to the evidence because of the lack of knowledge on the part of the judiciary regarding exchange transactions. In the leading case of Clark *vs.* Foss (7 Biss., 540) the court truly observes: "I cannot help thinking, in looking through the cases on the subject, that more discrepancy and confusion have crept into them, from a failure to determine precisely the facts, than from any essential difference of opinion upon the abstract propositions of law applicable to them."

If it be the fact that two principals contract together and agree not to deliver, the contract is void. This principle is not questioned. In a suit between principals this understanding must be mutual to invalidate the contract. If either party intended a *bona fide* contract, he can recover. This, in the absence of any statute, is recognized in all the cases. Very few cases, however, are actions between principals. Most of them are between brokers and princi-

pals, and many of them are the suits of brokers to recover commissions or losses due to the transactions made in behalf of the principals, or suits on notes given for such commissions or losses. The actual trading contracts are made on the floor of the exchange, under the rules of the exchange, and by members; and suits between the buyer and seller seldom arise. Consequently the proposition that an agreement between the principals (by themselves or their agents) not to deliver on the contract invalidates it, is based on an assumption of facts which, so far as exchange dealings are concerned, almost never occur.

In a suit by a broker against his principal in which the defence of wager is made, that is, that there was a mutual agreement not to deliver, the preliminary question is, who are the parties between whom such agreement, if any, was made? Since the suit concerns contracts of buying and selling, the natural inference might seem to be that such an agreement must be shown between the parties to those contracts.

This view finds strong support in certain leading cases of a comparatively early date; see Lehman *vs.* Strassberger (2 Woods, 554), Clark *vs.* Foss (7 Biss., 540), Sawyer *vs.* Taggart (14 Bush, 727), and Kent *vs.* Miltenberger (13 Mo. App., 505). In Clark *vs.* Foss, the court said: "The substance of the contract itself is what must control. The intent that it should be a mere betting upon the market without any expectation of actual performance must be mutual and constitute an integral part of the real contract, in order to vitiate it. Furthermore, supposing it had been the mutual intention of S. D. Foss & Co. (brokers) and the bankrupts (principals), that these contracts were not to be performed, I do not see that that would make them illegal, so long as the other parties to the contract did not participate in that illegal intention. S. D. Foss & Co. and C. B. Stevens & Sons (principals) did not constitute the parties to the con-

tract. As between them the relation existed of principal and agent, and there is no evidence whatever to show that those other parties had any notice or knowledge of the gambling intent."

The case of Lehman *vs.* Strassberger was an action brought by the broker to recover from his principal, and the defendant pleaded that it was the understanding between him and his broker that he was not to receive or deliver except where he should so elect. The court said: "If he reserved the option to receive or deliver, the contract was legal in all respects, even though he might have had a purpose in his own mind not to receive or deliver, and had communicated that purpose to his agents. The question is, did he communicate that purpose to the parties not named with whom he contracted? There is no evidence that he did. On the face of his contract, he binds himself to deliver cotton, and the other party binds himself to receive it. Now what effect can the mental purpose of Strassberger to pay or to demand differences instead of delivering the cotton, have upon the contract, when that purpose is unknown to the other contracting party? Here is no bet or wager."

The rules here stated have been followed in other cases, and Dewey lays down the general proposition that where a broker on the order of his principal makes contracts in his own name which may be enforced against him, he is entitled to his commissions and disbursements and may maintain an action therefor.[1] Recent cases between broker and principal, however, show an increasing tendency to treat the nature of the contracts made by the brokers on the exchange as immaterial. In many cases this question is not directly presented; the nature of the contract between brokers not being distinguished from the mutual expectation of broker

[1] See Dewey, *Future Contracts*, p 232, and cases there cited; and Dos Passos, *op. cit.*, p. 478.

and principal that delivery will not be made. But in some cases the court has expressly noticed and considered the relation of the one contract to the other.

One mode of solution of the question is by assuming the doctrine that where an understanding exists between broker and principal a new contract is constituted, in which the "broker" and "principal" are vendor and vendee, and the "principal" is really not a party to the contract on the exchange. This seems to be the ruling in Flagg *vs.* Baldwin (38 N. J. Eq., 219), and Beadles *vs.* McElrath (85 Ky., 230). Where the understanding is sufficient to permit the court to find the contract between broker and principal one of sale without intention to deliver, the law is as clear as in the cases of such a contract between any two principals.

In most cases, however, either the facts or their interpretation by the court have not allowed of such finding. But even where the relation existing is that of broker and principal, the contracts made on the principal's account have often been held to be immaterial in determining the question of wager as between the broker and his principal.

The Pennsylvania courts have generally taken this position.[1] In Fareira *vs.* Gabell (89 Pa. St., 89) it was held that "it does not necessarily vary the legal aspect of the case, that some, or the greater number, of the persons with whom Fareira [the broker] dealt on Gabell's account were actual buyers and sellers and did not intend to gamble." In a more recent case, Phelps *vs.* Holderness (56 Ark., 300) Phelps, a commission merchant, brought suit against his principal, Holderness, for disbursements made on certain cotton transactions in the New York market. The plaintiff claimed that the contracts he had made on defendant's account were valid and enforceable against him. The court ruled that the "the assumption that there is no proof of the vendor's par-

[1] See *infra*, p. 214, foot-note.

ticipation in Holderness' illegal design, and the conclusions deduced therefrom, are foreign to the controversy. The controversy does not arise between the supposed vendor and Holderness, but between the latter and Phelps." The court, however, said that it would not go so far as Flagg *vs.* Baldwin (*supra*), and declare Phelps the vendor.

The same is held in Wheeler *vs.* McDermid (36 Ill. App., 179), Scott *vs.* Brown (54 Mo. App., 606) (in which case an instruction that an understanding between principals was necessary to constitute wager was refused), Mohr *vs.* Miesen (47 Minn., 228), Miles *vs.* Andrews (40 Ill. App., 155), Griswold *vs.* Gregg (24 Ill. App., 384), Dows *vs.* Glaspel (4 N. D., 251), Beadles *vs.* Ownby (16 Tenn., 424), Dwight *vs.* Badgley (75 Hun., 174), Sprague *vs.* Warren (26 Neb., 326).

In the case of Conner & Hare *vs.* Robertson (37 La. An., 814) the opinion contains a very clear statement of the nature of the contracts made on the New Orleans Cotton Exchange, and holds that, in the absence of evidence showing that both parties to the exchange contract were agreed on a settlement by differences, the knowledge on the part of the broker that his principal was to settle in this way did not invalidate his claim against him.

In a recent case in the Supreme Court of New York, Dwight *vs.* Badgley (75 Hun., 174), it was held that the understanding by the agent of the principal's intent so to make his contracts that they could be settled by differences showed a mutual understanding to wager. The court did not expressly rule out the contracts made between the brokers (which in themselves appear valid), but that this is implied is shown by the fact that the validity of the contracts on the exchange is made the basis of Judge O'Brien's dissent. In his dissenting opinion he said that if the question had been solely as to defendant's (the principal's) intent, the evidence showed the case should have gone to the jury; that it

was necessary, however, to show the intent of both parties, but plaintiff and defendant were not parties to any contract.

In most of the above cases no attempt was made to show a separate and definite contract between broker and principal as the real contract in suit. Such a contract may make a decided difference in the ruling. The point is expressly discussed in a recent Massachusetts case, Harvey *vs.* Merrill (150 Mass., 1). This case was referred to an auditor, whose report showed two facts here in point. In the first place, the broker, as directed by his principal, made *bona fide* and valid contracts on the Chicago Board of Trade for the purchase and sale of pork. In the second place the broker made a contract with his principal that the principal should in no case be obliged to receive or deliver the goods.

The suit was brought by the broker to recover commissions and disbursements made in the course of the exchange contracts. In the trial court, Mr. Justice Holmes declined to submit the case to the jury, and instructed the jury that the plaintiff was entitled to a verdict upon the auditor's report. The case being carried up on exceptions, the exceptions were sustained. In the opinion of the court the facts were stated thus: "The peculiarity of this case, according to the findings of the auditor, is that, while the contracts which the plaintiffs made on the board of trade must be taken to be legal, the plaintiffs have undertaken to agree with the defendants that these contracts should not be enforced by or against them, except by settlement according to differences in prices. If such an agreement seems improbable, it is enough to say that the auditor has found that it was made." The court held that in the contracts made on the board of trade the plaintiffs acted as brokers, but that in the agreement with the principals they acted for themselves as principals, and that this contract between plaintiff and defendant was "open to all the objections which lie against wagering

contracts." "The position of the plaintiffs towards the defendants is no better than it would have been if the plaintiffs had been employed to make wagering contracts." Embrey *vs.* Jemison (131 U. S., 336) is cited and is in point. That case was an action brought by a broker to recover the amount of certain notes given for commissions and disbursements made in transactions conducted for the defendant on the Cotton Exchange. The defendant filed a plea of wager, alleging a distinct agreement between the parties, the broker and the principal, that the principal should not be called on to deliver or receive actual cotton. To this plea the plaintiff demurred, and the demurrer being sustained below, the judgment was reversed by the Supreme Court, which thus held that such an agreement between broker and principal would bar a suit for commissions, *etc.*

In these cases the problem is illumined by the appearance of the theory of a peculiar contract between the broker and his principal, distinct from the contracts upon the exchange. The suit is held to be on this contract and hence to be decided by the nature of this contract, whatever the nature of the exchange contracts. This seems a simple solution, but there may be doubts of its correctness. The only ground upon which these decisions are placed is the wagering nature of the contract between broker and principal. No other fault is found with it. The only parties to this wagering contract are the principal and his own broker. The parties to the contracts made on the floor of the exchange by this broker for his principal, are not parties to any wager, for the validity of those contracts is not denied.

But a wager or wagering contract presupposes two gamblers. Here, assuming the good faith of the parties *inter sese*, there is only one, the principal. The other party (the broker) can neither win nor lose. In neither case was it found that the broker was trading in stocks or grain *with*

his principal. Assuming his good faith, he was trading solely *for* his principal. He was only to receive the usual commissions. Under the decisions, however, the gambling party avoids his debts and losses, while the other party is said to have no claim even for his commissions.[1]

Where it does not appear that a binding agreement existed between broker and principal, that the latter should not be bound on the contracts made in his behalf, but merely a mutual understanding, on the part of both parties, that they meant to make the contracts so as to enable offsets and settlement by differences; and where this is held to constitute wager, regardless of the intention of the other parties to the contracts made on the exchange; in such case not only does the difficulty regarding a wager by one party appear, but it also follows that what is lawful for a party to do himself may become unlawful when performed by an agent. If A, as member of an exchange, makes valid contracts on the exchange, fully intending to arrange them so as to avoid any "actual delivery" on his own part, by setting one against the other, he is making valid contracts, because the other parties are not privy to his plan. But if he employs a broker to make these contracts for him, and tells the broker the plan he has been following and intends to pursue, the transactions become invalid. In Kent *vs.* Miltenberger (*supra*), this point was made in order to show that the agreement between principal and broker was immaterial. Referring to the validity of a contract made by the principal himself, if the other party was a *bona fide* purchaser, the court said: "What he may do by himself in this respect he may obviously do by the agency of another."

[1] The case of Peck *vs.* Doran (46 Hun, 454), was similar to Embrey *vs.* Jemison, in that an allegation of an agreement between broker and principal that there should be no delivery was demurred to, and the demurrer being overruled below, the judgment was affirmed. In his dissenting opinion, Landon, J., pointed out that the broker was not a party to a wager unless he could win or lose on it.

In some cases the rulings concerning the necessity of an understanding between principals or between broker and principal depend upon the statute. For instance, in Missouri the statute, as cited above, declares that the intention of one party alone is sufficient to constitute wager. This statute, however, has been held not to apply to a broker not cognizant of the illegal intent (Mulford *vs.* Caesar, 53 Mo., App. 263). Before the enactment of the statute, leading cases held that the mutual intention must exist between the two principals.[1]

Another point on which there is divergence in the decisions is that as to what constitutes an understanding between the parties that there shall be no fulfilment by delivery. The decision of this point leaves play for all the individual differences among judges in the interpretation of the evidence presented. As said in Wharton's note to Melchert *vs.* Am. Union Tel. Co. (11 Fed. Rep., 193), the decisions in this matter reflect very largely the particular economic theories of the judge in question. In view of the nature of the evidence on which such decisions are based, it will be well to repeat once more certain matters of fact stated in the foregoing chapters, reference being made only to such dealings as occur on regular stock and produce exchanges of good standing. In the first place, except for "puts and calls" which constitute a very small part of the total dealings, all contracts read for the absolute delivery of property at some particular time. The fact that this time of delivery extends over a considerable period, the precise moment of delivery therein being at the option of one party, does not alter the nature of the transaction either in fact or in law. Either party may demand the delivery of the property under the terms of the contract, and failure to deliver or receive under such circumstances constitutes default.

[1] See cases cited above, p. 199, foot-note.

No contracts are made which in their terms stipulate or imply that settlement can be made only by differences. On the other hand, if a broker has made two contracts for the same delivery, one to sell and one to buy, he can fulfill both contracts at the same time by arranging for his vendor to deliver to his vendee; but the only reason why he can thus settle the one contract without himself receiving or delivering the property is because he has made the other contract. In the case of each contract he acquired actual property rights and incurred actual property duties. But the obligation which he incurred on one contract is taken over by another party under the terms of the second contract. This practice, which is in itself thoroughly legitimate, affords every facility for carrying on extensive speculations for differences in prices without the necessity of handling the actual property. The greater the number of transactions, the easier it becomes to arrange offsets. The clearing process, with payment of differences to and from the clearing-house, comes in to complete the machinery.

The result of the whole matter is, that, if any one wishes to so arrange his contracts as seldom to have actual receipts, or securities, come into his hands, he can do so. So far as the transactions themselves are concerned, the vast majority of them are thus settled by differences. Under these conditions it is beyond question that the great mass of these dealings are entered into with the expectation of so settling, and brokers are entirely aware, not, perhaps, of the intention of the individual customer, but of the fact that most of their customers have this intention. To a mind familiar with modern commercial methods there is nothing in this inconsistent with the fact that all these contracts are actual contracts for the purchase or sale of property, are all enforceable according to their strict terms, and are all based on the final right of actual delivery. The peculiar nature of these methods of settle-

ment, together with various outside arrangements of another sort between broker and principal, furnish, however, an occasion for conflicting interpretation of evidence.

Some of the circumstances which appear as perhaps showing cognizance on the part of the broker that his principal means to conduct his transactions without delivery are: the occupation of the principal, his financial means compared with the amount of his transactions, the general policy pursued in his contracts, *etc.* These matters have been more or less exhaustively treated in the works already referred to. It only remains to examine some of the recent cases on these points.

Some of these take radical ground. In almost every case the form of contract implies validity, the question being as to what attendant circumstances may make it void. In Miles *vs.* Andrews (40 Ill., App. 155) it appeared that "in every instance the direction or order given to appellants (the commission house) was in form for the purchase of the quantity and for the delivery stated unconditionally;" and it also appeared that "in all cases the purchase was transferred by sale, also through them, of the same amount for the same delivery before the time appointed for its delivery." Apparently these were cases of ordinary exchange speculation. But it appeared that, though the principals were small grain dealers, they were not in a position to want the grain bought themselves, that they lived at a long distance from Chicago where the purchases and sales were made, that they merely advanced margins, and that their purchases were always offset by sales before delivery time. On one occasion when May wheat had been bought, the broker came to the principal and said: "May is coming along and I don't want this wheat delivered to me." The principal was equally unwilling to receive it, and ordered it to be sold. Such evidence was held to prove the principal's intention

to gamble and the broker's knowledge of it, which made the contract void. In Carroll *vs.* Holmes (24 Ill., App. 453) the fact that large transactions were made by a principal who had small means, and was only able to advance a margin, and the fact that these contracts were all closed out by contra transactions before the time of delivery, so that the principal (or his broker) was not obliged to take in the property in any case, were held as evidence of gambling intent on the part of the principal, which must have been apparent to the broker. Other cases in line with these in Illinois, in which state the decisions are most numerous, are Griswold *vs.* Gregg (24 Ill., App. 384), Brown *vs.* Alexander (29 Ill., App. 626), Watte *vs.* Costello (40 Ill., App. 307). In Wheeler *vs.* McDermid (36 Ill., App. 179) the language of the court was especially vigorous, and reads more like an anti-option speech than a judicial opinion. Here a clergyman of moderate means carried on some large transactions through his broker. The instruction of the lower court was that if sales and purchases, by agreement of the broker and the principal, were always made to balance before delivery, and were yet lawful contracts in themselves, the whole series were lawful. In the upper court this instruction was disallowed and was criticised as self-contradictory, since these contracts could not, with the cognizance of the broker, be made to balance and yet be lawful. In Mohr *vs.* Miesen (47 Minn., 228) the statement of facts showed ordinary dealings on the Milwaukee Chamber of Commerce, contracts being closed out by counter orders and settled by differences. The lower court refused to instruct that to constitute wager it was not necessary for the principal to state distinctly to his broker his intention to close out his sales without delivery. The appellate court ruled that such instruction should have been given, and admitted the matter of the residence, the business

and the financial standing of the principal as evidence of the real nature of the transactions he was making, and as sufficient notice to the broker of his illegal intent. In Sprague *vs.* Warren (26 Neb., 326) the court quotes at length from the deposition of one of the members of the brokers' firm, where it appeared that, in the matter of certain wheat receipts which he had held, he did not remember in what elevators the wheat had been stored, and that, when he bought May wheat for defendant and sold it before delivery, no receipt came into his hands. The court said, "if the grain had been purchased *bona fide* as being in one of the elevators in Chicago, a warehouse receipt, or some written evidence issued by the warehouse company, would have been delivered to the purchaser." And yet the court had stated that the May wheat had been sold out before May arrived. These facts, together with the testimony that losses were settled through a ring, and the fact that the principals were young clerks of small means, were accepted as evidence proving that the contract was a wager and void. This case was followed by Watte *vs.* Wickersham (27 Neb., 457). In Phelps *vs.* Holderness (*supra*), the willingness of the broker to deal for the principal without knowing much about his financial status, so long as margins were forthcoming, and the fact that, when margins failed, the broker, instead of making offer of delivery, sold out the principal's long line, were held to be evidence of gambling intent sufficient to invalidate the contracts. Dows *vs.* Glaspel (4 N. D., 251) is very radical in the same direction.

See also Scott *vs.* Brown (54 Mo., App. 606); Beadles *vs.* McElrath (85 Ky., 230); Lester *vs.* Buel (49 Ohio, 240); Gaw *vs.* Bennett (153 Pa. St., 249); Billingslea *vs.* Smith (77 Md., 504); Floyd *vs.* Patterson (72 Tex., 202); McGrew *vs.* City Produce Exchange (85 Tenn., 572).

These cases follow more or less closely the rules estab-

lished in some of the early cases, for example Beveridge *vs.* Hewitt (8 Bradw., 467); Lyon *vs.* Culbertson (83 Ill., 33); *Ex parte* Young (6 Biss., 53); Melchert *vs.* Am. Un. Tel. Co. (11 Fed. Rep., 193). This ground has been taken by the Pennsylvania court in many decisions.[1]

Many of the decisions above cited are based on a misconception of the real nature of exchange dealings. The fact that the principal and his broker intend to settle by differences the contracts made on the exchange, is confused with the idea that the contracts were not meant to be fulfilled. Some of the earlier opinions show a much clearer understanding of these matters. In Sawyer *vs.* Taggart (*supra*), it was said by the court: "Although the Hamiltons did not intend to receive the goods, they intended to resell them, and having done this, their vendees became bound in their stead to receive the goods and pay for them." The fact that in no case were the goods received by the defendant was held immaterial, since in every case they were resold before delivery. And it should be evident that the fulfilment of the first contract is provided for by the making of the second. In Kent *vs.* Miltenberger (*supra*), the court said: "It appears that delivery is always contemplated, not as a thing which will be necessarily insisted upon, but as a thing which the purchaser may insist upon. It sufficiently appears that this is the one thing that gives vitality to such contracts." In Sawyer *vs.* Taggart, again, it was said, "the material matter is that the contract shall be

[1] In view of the sharp criticism which has been made upon the Pennsylvania decisions (see Dos Passos, p. 423; Dewey, p. 109; Biddle, pp. 305, 317), it is of interest to notice a recent Pennsylvania case, Peters *vs.* Grim (149 Pa. St., 163), in which Mitchell, J., who dissented in Gaw *vs.* Bennett (*supra*), said: "In dealing with stock transactions falling within, or in any way connected with, wagering contracts, the law of Pennsylvania is of exceptional, and for myself I would say of illogical and untenable, severity in its interference with the business contracts of parties who are *sui juris*, and entirely competent to manage their own affairs." See also Hopkins *vs.* O'Kane, 32 Atl., 421.

such that its performance can be enforced." See also Clark *vs.* Foss (*supra*).

Under these rulings, the facts of large transactions on small margins, of a whole series of contracts off-set without the party in question himself receiving or delivering, the incapacity of the principal to pay for his purchases, and the omission of the broker ever to call for money except as margin, and other similar items of evidence, become immaterial. In many recent cases specific reference is not made to the instances cited in other cases, and, hence, it is impossible to say how far such evidence was allowed. Where the court's preconceptions are in the line of holding constant settling by differences and the like to be evidence of wager, much weight is given in the opinion to such occurrences. In other cases the court fails to find the existence of a wagering contract, without considering at all the validity of the lines of evidence discussed above. In Whitesides *vs.* Hunt (97 Ind., 191), the evidence showed that the principal intended to gamble, that his transactions were carried on a small margin, that the broker knew little about the principal, and never called on him to receive or deliver, but only to keep his margins up. On his failure to do so the broker sold him out, without waiting for orders. The court affirmed the judgment below for the broker. In Edwards *vs.* Hoeffinghoff (38 Fed. Rep., 635) the court said that the fact of large transactions on a small margin was no sign that the transactions were not *bona fide*, and that, "When it comes to a purchase upon speculation, it is of no sort of consequence in determining upon the validity of the transactions, whether the purchase be large or small; whether the speculator be keeping within moderate bounds, or whether he is running wild, actuated by his hopes and fancies."[1] See also Hatch

[1] Neither the mere fact of a subsequent settlement by differences, nor that of the deposit of a margin, are evidence of wager in themselves. (See

vs. Douglas (48 Conn., 116); Bibb *vs.* Allen (149 U. S., 481); Conner & Hare *vs.* Robertson (37 La. An., 814).

The effect of the clearing system has been distinctly noted in a recent case, Dillaway *vs.* Alden (88 Me., 230). Some earlier decisions, especially those of the Pennsylvania courts, admitted the process of clearing as evidence of gambling; and in Dickson *vs.* Thomas (97 Pa. St., 278) the court refused to let the case go to the jury, on the ground that the defendant's own account of the settlement through the clearing-house of the Philadelphia Stock Exchange was proof of the wagering nature of the transactions. In Sprague *vs.* Warren (*supra*) the process of settling by "ringing up" (*sic*) was admitted as evidence of wager. But Dillaway *vs.* Alden shows a clearer understanding of the real nature of exchange transactions, and seems to state the true theory. After describing the methods by which transfers are made and differences are settled, the court said: "These devices of the brokers to facilitate their transactions may bear to the superficial observer the appearance of jugglery rather than of regular buying, selling and delivering; but a deeper and longer look will discover that they are appropriate means for the quick and economic transaction of large volumes of legitimate business. All through the various deals is the intention to finally strike a balance, and liquidate it by an actual transfer of stock certificates. At the end, when the deals or transactions are finally closed and the balance is struck, the broker is ready to deliver the requisite stock certificates on his principal's order." This case accentuates the important fact that the outcome of all these offsets is a final delivery of the balance.

Dewey, pp. 108, 170, and citations; also, in connection with Illinois decisions above, Benson *vs.* Morgan (26 Ill. App., 22) and Ware *vs.* Jordan (25 Ill. App., 534). The question raised in the text is as to the evidence afforded by the extent of the transactions compared with the amount of margin and by the fact of a continuous settlement by differences.

Inasmuch as all contracts upon an exchange go through the same clearing-house where nothing is known of individual parties, or of their intentions, but where contracts are interpreted as they read, and actual off-sets are made, how can it be determined which were *bona fide*, and which were wagers? In the case of produce exchanges such off-sets are made outside the clearing-house without altering their real nature. It should also be borne in mind that under the modern clearing methods, differences are paid on actual delivery as well as on off-sets. Delivery and a payment of differences are regarded as antithetical in many decisions; whereas, in fact, every party who receives or delivers the property gets or pays a difference to the clearing-house.

It will be seen that there is considerable divergence in the application of the general principle that a transaction in the form of a contract to buy or sell, where a mutual agreement exists that there shall be no delivery of the property, is wagering and void. The principle not being questioned, the attempt is often made to reconcile one opinion with another on the ground of a different finding of facts. The facts of course must be accepted as found by the court. But, given the same testimony verbatim, different courts will interpret such testimony as evidence of different facts.

If it be held that the intention of the principal to settle in every case by differences and a knowledge of this intention on the part of the broker constitute wagering, then a large number of the contracts on all the important exchanges must be declared void. Under such a ruling most "hedging" sales may be illegal. The Southern planter who plans to sell his cotton in the local market, and merely to hedge on the exchange, settling differences in the quickest way, and so informs his broker, may find the transaction condemned by the courts.[1]

[1] Two recent cases held hedging sales valid, but only on the ground

In regard to those contracts in which there is no absolute agreement by words or in writing between either the two principals, or between one principal and his broker, that in no case will delivery be made to, or demanded of, the principal, and yet, according to the mutual expectation of the parties, settlement is made by "ringing out," the courts must either hold them all valid, or all invalid, or assume the difficult task of saying in each particular case how far the means and position of the principal justified his being engaged in speculation. As said by the court in Kent *vs.* Miltenberger, any other rule than that, to show wager, there must be a binding agreement that no delivery shall take place, "remits the whole subject to the loose discretion of juries, and puts it entirely at sea."

The same difficulties have presented themselves in the courts of other countries. Evidence of settlement by offsets, of excessive trading on margins, *etc.*, was interpreted now in one way, now in another. The confusion resulting has led to the enactment of statutes which put the whole matter at rest. The new German statute, discussed below, makes provision for the registration of all persons dealing in futures under the rules of the Exchange, and declares that, in the case of contracts so made, the defense of wager shall not be allowed. Futures of this nature made by other parties are more easily invalidated on the ground that the parties are not registered. In Austria a statute of 1875 excluded the defense of wager in the case of contracts duly executed on an exchange, and a similar law was enacted in France in 1885.[1]

that the principal meant to ship the goods sold against for delivery on the hedging sales, but for some reason changed his mind. (Morissey *vs.* Broomal. 37 Neb., 766; Douglas *vs.* Smith, 74 Ia., 468.)

[1] *Cf. Handwörterbuch der Staatswissenschaften*, article, "Börsenspiel," and Courtois, *op. cit.*, p. 296.

III.

The statutes of the various states, as given in the first section of this chapter, have failed to reduce in any material degree the speculation in stocks and produce, or to improve its nature; and no sufficient remedy for its evils has been found in the common law. The desire to secure more stringent control over these operations has led in recent years to some determined efforts at federal legislation. In the last three Congresses bills known popularly as the "anti-option bills," have been introduced for such purpose. In the 51st Congress a bill[1] was introduced by Mr. Butterworth of Ohio and is known by his name.[2] The bill, however, never came to a vote. Since the more important bill of the next Congress included its important features, it is not necessary to discuss the measures which it proposed.

In the 52d Congress bills were introduced by Messrs. Hatch[3] of Missouri, Alexander[4] of North Carolina, and Brosius[5] of Pennsylvania. These were all referred to the Committee on Agriculture, which committee reported[6] back a new bill as substitute,[7] April 4, 1892. This was the important bill on which the discussion in both House and Senate centered.

The bill was entitled, "A Bill defining 'options' and 'futures,' imposing special taxes on dealers therein, and requiring such dealers and persons engaged in selling certain products to obtain license, and for other purposes." The first of the objects of the proposed legislation as enumerated in the report of the committee was "to obtain

[1] 51st Congress, 1st Session, H. R. 5353.

[2] The bill was introduced in the House January 20, 1890, was referred to the Committee on Agriculture, and was reported back April 8, 1890. H. Rep., No. 1321.

[3] 52d Congress, 1st Session, H. R. 2699 and 6012.

[4] H. R. 3870.

[5] H. R. 394.

[6] 52d Congress, 1st Session, H. R. No. 969.

[7] H. R. 7845.

revenue." This designation of the bill as a revenue measure was not even pretended to be more than a cover to its real object. The first section of the bill defined "options," the word being applied to the forms of contract called in this essay "privileges." The second section defined "futures," as contracts for future delivery where the seller was not at the time in possession of the property contracted to be sold, and had not acquired a right to the same. It also provided that no provision of the act should apply to any contract made with the government of the United States or the government of any state or municipality, or to a contract made by a farmer or planter to deliver the specified commodities at a future time, such commodities being in his possession or in process of growing at the time of contract. Section three specified the commodities to which the foregoing sections related, "raw or unmanufactured cotton, hops, wheat, corn, oats, rye, barley, grass-seeds, flax-seed, pork, lard, bacon, and other edible product of swine." Section four imposed taxes as follows: an annual license fee of $1000 on every dealer in options or futures (that is, on every person or association making such contracts for self or others); a tax of 5 cents per pound on every pound of cotton, hops, pork, lard or bacon, and 20 cents per bushel on every bushel of the other commodities specified, sold under such contracts. The remainder of the bill, which covered twenty-one pages, was made up chiefly of the details of regulation to ensure the collection of such taxes. Since the taxes were on their face prohibitory and were never meant to be collected, it would be useless to recount these provisions. It may be noted that every dealer was to make application to the collector of internal revenue for a license, and every application was to be registered and a book containing such applications to be kept by the collector; the dealer was to give a bond to the amount

of $40,000; every "options" or "futures" contract to be in writing, and entered in a book kept by the dealer, and sworn returns of all such contracts to be made to the collector each week. The aim of the act may be expressed briefly as the suppression of professional speculation through a suppression of short-selling. The second section defining "futures" did not include sales for future delivery where the seller possessed, or had a right to, the property; and, somewhat inconsistently, provision was made later for dealers to be authorized to make such contracts, under a license fee of two dollars.

The bill was fully debated in the House, and finally passed that body June 6, 1892, by a vote of 167 to 46. In the Senate two bills of a very similar nature had already been introduced by Senator Washburn of Minnesota,[1] and one by Senator Peffer of Kansas.[2] These, however, were allowed to drop when the Hatch bill came up from the House. This bill was referred to the Committee on the Judiciary. The committee reported it back with a majority report, doubting its constitutionality, and a minority report in its favor.[3] Senator Washburn stood sponsor for the bill in the Senate. It was debated with much ability on both sides, and passed with amendments, January 31, 1893, by a vote of 40 to 29. From the point of view of the real issue involved, the amendments were of slight importance, with the possible exception of the inclusion of flour in the articles enumerated in section three. The bill was returned to the House and referred to the Committee on Agriculture, which reported it again the following day.[4] On the motion (by Mr. Hatch, March 1st) to suspend the rules and take up the bill and concur in the

[1] 52d Congress, 1st Session, Sen. Bills 685 and 1757.
[2] Sen. Bill 1268.
[3] 52d Congress, 1st Session, Sen. Rep. No. 893.
[4] 52d Congress, 2d Session, H. Rep. No. 2421.

Senate amendments, the vote was 172 to 124, less than the two-thirds necessary for the suspension of the rules. Congress expired March 4th, before the bill could be reached in order.

In the 53d Congress a bill was again introduced by Mr. Hatch,[1] and referred to the Committee on Agriculture, which reported[2] back a substitute, entitled "A bill regulating the sale of certain agricultural products, defining 'options' and 'futures,' and imposing taxes thereon and upon dealers therein."[3] In this bill some decided changes were made in order to meet the criticism urged against the former bill, that short-selling was often a necessity in *bona fide* business. The new bill defined the "future" merely as a contract for the delivery of the specified products (about the same as in the Hatch bill of the previous Congress)[4] at some future time. Possession by the seller was not considered in the definition. It was then provided that the original contracts were to be made in writing; that, when terminated by the "absolute sale and actual delivery" of the property, a bill of sale was to be executed, specifying all conditions; and that, when the contracts were otherwise terminated, "the cancellation, clearance, settlement, acquittance, contango, backwardation, privilege, waiver, ringing out, or other agreement or arrangement," by which this was done was to be executed in writing. All of these instruments were to be in duplicate. Taxes were then laid as follows by means of stamps to be attached to these various instruments: on every contract and its duplicate one cent for every 1,000 bushels of grain, and for every 10,000 pounds of the other commodities

[1] 53d Congress, 2d Session, H. R. 5653.

[2] H. Rep. No. 845.

[3] 53d Congress, 2d Session, H. R. 7007.

[4] In the amended bill of the Senate, the word "flour" appears in the section defining options, but nowhere else in the bill.

specified; the same on every transfer of such contract; on every bill of sale and its duplicate two cents; and on the original and duplicate of the instrument of every "cancellation, clearance," *etc.*, by which the contract was terminated otherwise than by "absolute sale and actual delivery," for every bushel of wheat three cents, of all other grain two cents, and for every pound of other specified commodities one cent.

The bill passed the House June 22, 1894, by a vote of 150 to 89, not voting 114. It was sent to the Senate and referred to the Committee on Agriculture and Forestry, and was reported back, but never came to a vote. The debate on the bill was not so vigorous or extended as in the case of the earlier bill.

It is unnecessary to discuss here the advisability of the measures proposed. To do so would be but to repeat the main points of the earlier chapters. If the bill of 1894 had passed, the whole question as to what constitutes "absolute sale and actual delivery," would necessarily have gone to the courts, and the phrase might have been so construed as to defeat the purpose for which the measure was framed. It was avowedly meant to stop the process of "ringing out," and was intended to reach the great mass of dealing for differences as described above. The taxes, though lower than before, were made prohibitory.

The more specific arguments of the advocates of anti-option legislation have been elsewhere discussed.[1]

IV.

The statutes enacted in the various states, and the recent suggested legislation by Congress, show the American tendency to interfere with business only so far as it may appear desirable to forbid outright, or to destroy by taxation, par-

[1] See "Legislation Against Futures," *Political Science Quarterly*, March, 1895.

ticular practices. No attempt has been made to correct the evils of the speculative market through governmental supervision and control of the exchanges. The legislation of continental countries, on the other hand, though sometimes aimed at an outright supression of speculation, has in the main looked rather toward a far-reaching regulation of exchange transactions. Here it is necessary only to consider briefly the most recent and ambitious effort in this direction, the new German statute of 1896.[1]

The large failures of 1891, which followed the speculative activity of the two previous years (some of which were attended by circumstances of fraud and dishonor), led to a vigorous agitation among the public and in the Reichstag for some legislative interference with the Bourse. The upshot of this agitation was the appointment of an imperial commission in 1891 to investigate the whole question of exchange business, and to evolve some method of reform. The appointment of this commission was a new departure in German parliamentary methods, being the first important attempt to adopt the English practice of commissions of inquiry. The commission as finally constituted had twenty-eight members, including bankers, merchants, manufacturers, state officials, land proprietors, economists and jurists.

The work of the commission began in April, 1892, and was concluded in November, 1893. Ninety-three sittings were held and a large number of witnesses examined, including representatives of all the lines of trade and manufacture directly connected with the speculative market. The commission published a report, four volumes of evidence, a volume of statistical investigation, and some other matter.[2]

[1] For European legislation in regard to speculation, see the works of Ehrenberg, Jacobson and Courtois, cited above.

[2] See *Bericht der Börsen-Enquête-Kommission*, and the accompanying documents, Berlin, 1893. The proposals of the commission are given

In the report of the commission the important questions in the whole field of inquiry are discussed at length, and the arguments on both sides of each question fairly presented. The results are given in the long list of proposals for legislative reform supported by the majority of the commission. Since these formed the basis for the legislation which followed, the most important of them may be best considered in connection with the law as passed. In general it may be said that, though not a few of the recommendations were of a very stringent nature, the report of the commission as a whole showed an appreciation of the real importance of organized speculation, and a desire to correct its evils without destroying its benefits. When it came to legislation, the bill which was presented to the Reichstag went farther in its proposals for governmental interference than did the report of the commission; while the amendments adopted by the Reichstag itself were more extreme. The result is, that, though the law as it stands follows the report of the commission in many details of the proposed regulation, its most important and far-reaching sections are utterly opposed to the views of the majority of the commission.[1]

The bill framed by the representatives of the Federal States, on the basis of the commission's report, was presented to the Reichstag, December 3, 1895, and with amendments became law, June 22, 1896. With the excep-

by Cohnstaedt, *Die Vorschläge der Börsen-Enquête-Kommission*, Berlin, 1894. An admirable discussion of the results of the testimony taken may be found in Pfleger and Geschwindt, *Börsenreform in Deutschland*. See also Prof. Cohn's essays in *Beiträge zur deutschen Börsenreform*.

[1] The text of the law, with notes and introduction, has been edited by Dr. Max Apt, *Das Börsengesetz*, Berlin, 1896. The text is also given, with a critical discussion, in Conrad's *Jahrbücher*, September, 1896, "Das Börsengesetz," by Dr. Adolph Endermann. See also the *Bericht der Reichstags-Kommission zur Vorberathung des Entwurfs eines Börsengesetzes*, Berlin, 1896, and Tiessen, *Der Börsengesetzentwurf*, Berlin, 1895.

tion of a few clauses which were to become of force earlier, the law is to go into effect January 1, 1897.

The first part of the law contains the general provisions regarding the exchanges and their organizations. The exchanges are to be under the control of the governments of their respective States, which may put the immediate supervision in the hands of local commercial organizations (*Handelskammern, kaufmännische Korporationen, etc.*)[1] These bodies may in turn appoint particular officers for this purpose. Regulations for each exchange are to be established by the different governments, which are to prescribe rules for the organization and conduct of the exchange, for the admission to exchange privileges,[2] *etc.* Some of these rules are provided in the act itself, especially a provision that in the governing bodies of produce exchanges the agricultural interest and the milling interest shall be represented.[3] In the main, however, the formation of rules is left to the government in each state. These governments appoint state commissioners to represent them in control of the exchanges. This official is a new institution so far as German exchanges are concerned. His duties are to keep watch of the whole course of business on the exchange, to inform its officers of any evils to be corrected, and to keep the government fully cognizant of the conduct of the exchange.[4] He is empowered to sit at the meetings of the governing committee.

[1] As seen above, p. 14, the Prussian exchanges, as they exist to-day, are under such governmental control, while the exchanges of Hamburg and Bremen are under the control of the merchant corporations of their respective cities. The more power is assumed by these bodies under the new law, the more will the control be left in the same hands.

[2] In this matter the law goes only to the extent of excluding certain classes, especially bankrupts. Some positive recommendations were made by the commission of 1893, looking in the direction of a close membership, as in the stock exchanges of New York and London.

[3] § 4. [4] § 2.

This commissioner is closely associated with another new institution, a special court (*Ehrengericht*) composed of members of the exchange, which sits in judgment upon members accused of irregular business conduct. The commissioner can initiate proceedings before this court, take part in all hearings, and no case can be dropped without his approval. The commissioner or the accused can take an appeal to a higher tribunal appointed by the Bourse Commission described below.[1]

The foregoing provisions are along the lines laid down in the report of the commission of 1893, though there are differences in some respects. The state commissioner, for example, was intended by the commission to be merely a government representative to see that the law was carried out by the special court, but he has become instead an inquisitorial police officer.

Besides the powers of the different governments and their representatives, more general powers are vested in the Bundesrat of the Empire to secure uniformity among the exchanges where uniformity is necessary. The Bundesrat may establish rules for the official determination of prices and for the admission of securities to trading. It may forbid entirely exchange trading (*Börsenterminhandel*) in particular securities or commodities. In pursuance of these duties the Bundesrat has the appointment of a Bourse Commission (*Börsenausschuss*), which practically is its representative and makes reports to the Imperial Chancellor. This Bourse Commission is to consist of at least thirty members, one half elected on the nomination of the particular local bodies, or officials, which have supervision of the exchanges, and the other half from representatives of agriculture and industry.[2]

The second article of the statute provides an elaborate machinery for the official registration of prices. A special

[1] §§ 9–28. [2] § 3.

class of sworn brokers for quotation purposes (*Kursmakler*) is established, and only their dealings are necessarily considered in making up the prices of the day.[1] These brokers can deal for their own account only so far as necessary to the performance of this function. This official registration of price, however, is optional on the part of the individual exchange, except in the case of an order to the contrary from the Bundesrat.[2]

The third article of the statute contains stringent rules in regard to the admission of securities to trading on the board. They are to be first submitted to examination by a committee, one-half of whom must be persons not entered in the *Börsenregister*, that is, not professionally connected with the trade in securities.[3] The Bundesrat may make special rules at any time in regard to listing, and may specially forbid the listing of particular securities. Promoters are made liable for any false statement in the prospectus, and for the omission of any statement necessary for a correct understanding of the nature and condition of the enterprise, when such omission is the result of wilfulness or gross negligence. This liability is to all holders of the securities issued under the prospectus in question, and may be discharged by a re-purchase from the holder at the price of his purchase or at the price at the time of listing.[4]

The most radical and important article is the fourth. This defines the "future dealings" referred to in the statute (*Börsenterminhandel*) as dealings for future delivery made under conditions fixed by the exchange, and for which there is an official determination of prices. Before a commodity can be dealt in on any exchange, a hearing must be given to representatives of all branches of industry directly interested; and admission is finally granted only on the approval of the Imperial Chancellor.

[1] § 30. [2] § 29. [3] § 36. [4] §§ 43–47.

So far this article is in accord with the proposals of the commission of 1893. The next section of the article forbids future dealing in the securities of all mining and industrial companies, and in grain.[1] This clause evidently overshadows all the rest in importance. It is utterly opposed to the commission report, and was fought by the sponsors of the original bill. It was adopted as an amendment in the Reichstag, and represented a victory for the agrarian party. The agrarian attitude is that of the anti-optionist, and at the bottom of this provision was the same belief in the depressive influence of short-selling on price.

Two more provisions may be noted. Future dealings are forbidden in the securities of all companies with a capital of less than twenty million marks[2]—a clause incorporated in the statute in the belief that the chances for fraud and manipulation in the case of small issues outweigh any possible advantage of the speculative market in regard to them. Secondly, all persons who desire to carry on exchange dealings must be registered in the *Börsenregister* and pay a small license fee.[3] Contracts between parties, either of whom is not so registered, are void. As already said, contracts between registered parties, made under the rules, do not permit of the defense of wager. The provision for a register of all persons buying or selling futures was recommended by the commission of 1893, but to apply only to the market for produce. The Reichstag here, as elsewhere, took the more radical ground. The motive for the enactment of this section was the desire in some way to restrict the participation of the public in reckless speculative trading.

It is unnecessary to discuss the arguments for and against the particular provisions of the law here recited. This minute regulation of Bourse affairs by the govern-

[1] § 50. [2] § 50. [3] §§ 54, 55.

ment, and the presence of government officials on the board to watch all proceedings, are utterly foreign to American conceptions. In Germany also there is much doubt as to the practicability of these regulations. It has been pointed out that hitherto state control has in no way lessened speculative evils. Berlin is not freer from them than Hamburg, nor Paris than Berlin.[1] The provision for the registration of all persons who trade or speculate in futures cannot fail to prove most difficult of enforcement. Of chief interest, however, is the action against futures in grain. Will such speculation cease? If so, will the grain trade of Germany dwindle as speculation moves to other markets? Will the law in this regard be simply disregarded? These are some of the questions which the workings of this act will answer. However disastrous such legislation may prove within the country where it is in force, it cannot fail to be of great value as an object-lesson to all other countries in showing two things—the effect of stringent governmental control of exchanges, and the effect of a law forbidding all exchange speculation in grain. Each attempt has been made before; never, however, with such show of force as here.

[1] *Cf.* Thorwart, *Zum Börsengesetz*, Berlin, 1896.