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THE INDUSTRIAL STATE 1870-1893

BY ERNEST LUDLOW BOGART AND CHARLES MANFRED THOMPSON UNIVERSITY OF ILLINOIS



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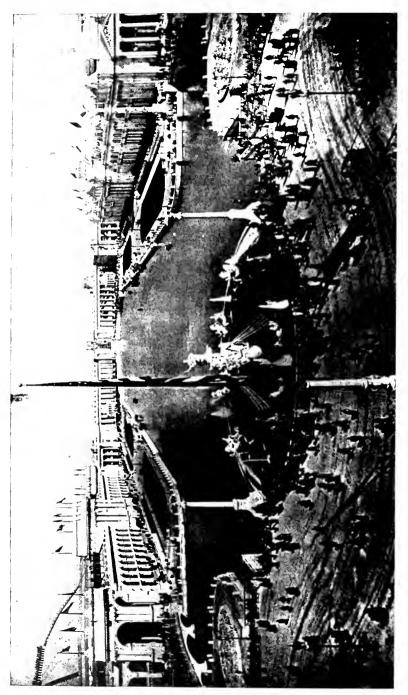
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VIEW OF WORLD'S FAIR, CHICAGO, 1893

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PREFACE

THE period between 1870 and 1893 has probably been equaled by no other period of equal length in our history for the magnitude and far-reaching importance of the economic changes that occurred within its span. Until this time Illinois had ranked as an agricultural state, standing high among the states of the union in almost every branch of farming. Its expansion along these lines still went on apace. But in addition to agriculture the state began now to develop concurrently other lines of industry. The coal fields of southern Illinois began to be tapped and the mining industry began to be developed. At the same time manufactures were built up along lines for which the state was peculiarly suited by reason of the presence of the necessary raw materials. Industry was thus diversified, cities were established, and the interests of the people of Illinois expanded and broadened. Important social and political results accompanied these economic changes.

Partly result and partly cause of these movements was the enlargement and transformation of the transportation system. This period saw a vast extension of the railway and a corresponding decline of water transportation. Traffic now passed from west to east and no longer from north to south. The diversion of freight from the Mississippi river and its tributaries to the railroads was definitely consummated. The mechanism of credit and exchange also underwent the same expansion as did the machinery of transportation, and was fitted to the needs of a growing industrial state rather than of one purely agricultural.

Not only in Illinois, but throughout the United States as a whole, this period was one of extraordinary economic expansion, of exploitation of natural resources, and of unbridled competition. It offered rich rewards to the energetic, the daring, and the far-sighted business man. In spite of a temporary interruption of prosperity as a result of the panic of 1873, the period was marked by notable material achievements. But to the laborer it did not always promise equal advantages. Trade-unionism was striving to establish itself and in this era of struggle made large use of the strike and similar methods incident to the early stages of the labor movement. Uncertain as to its objective, the movement was sometimes diverted into political channels, as by the greenback party, or became discredited by the excesses of the extreme radicals, as in the case of the anarchist aberration. Of labor legislation there was as yet practically nothing. Opposed by men of capital, the labor movement seemed at times to have become real industrial warfare. All in all, however, the period was one of solid and enduring progress.

The authors desire to express their appreciation of valuable assistance which has been rendered in the preparation of this volume. The writer of the chapters on economic development wishes to note the aid given by the following research assistants in the preparation of preliminary studies and reports on special phases of the subject. These were Yetta Scheftel, manufactures; George H. Newlove, agriculture; Clare E. Griffin, railroad transportation; Walter Prichard, road and water transportation; E. B. Mittelman, labor. For the use of this material, however, and for any errors of fact or judgment the author alone should be held responsible. Because of the author's entrance into war service, Miss Nellie Barrett of the Illinois State Geological Survey staff was engaged to write chapter eighteen on mining.

The author of the political chapters was called to the work much later than were the other authors of the Centennial History and has, therefore, been forced to lean for support on others. During the period of research he was ably assisted by Miss Anita Libman and received courteous help from Mrs. John A. Logan and others; but to Mrs. Agnes Wright Dennis must be given the credit for the final form of the chapters, for the author, caught in the meshes of war work, was compelled to place in her charge the complete revision of the manuscript. The author's acknowledgments to this brilliant young woman

PREFACE

have become a sad duty. On July 13, 1919, she and her husband were drowned in the Cedar river, Iowa. With the cordial indorsement of the editor-in-chief the name of Agnes Wright Dennis is placed as author of chapter eight, for her thorough revision made it her own.

In closing, both authors desire to express their sense of indebtedness to the editor-in-chief of the Centennial History, on whose shoulders has fallen unavoidably much more responsibility for this volume than he had reason to expect. We fear that we have added unduly to his many perplexities and anxieties.

Ernest Ludlow Bogart, Charles Manfred Thompson.

URBANA, September 1, 1919.

THE INDUSTRIAL STATE 1870-1893

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I. THE CONSTITUTIONAL CONVENTION, 1869–1870

THE quarter century following the year 1870 saw radical changes in the life of the people of Illinois. A period of industrial expansion began on a scale hitherto unknown in this country: manufacturers enlarged and combined their plants; railroad companies extended their lines in every direction through building and consolidation; cities grew as if by magic. Here were the real beginnings of modern industry with its enormous capital, its monopolistic features, and its widespread economic influence. Politically, the period saw a deep-seated unrest, which manifested itself in the organization of new parties; greenbackers, liberal republicans, and other types of independents divided with the older political parties the attention of the people. Time and again the republicans met the bitter attacks of their opponents, yet not until the very close of this period were they forced to hand over the state administration to their old enemy, the democrats.

One of the most significant events of this period was the making of the constitution of 1870, which, with slight alterations, has served for almost fifty years as the organic law of the state. Demands for alterations and changes, and even for a thoroughgoing revision of the constitution of 1848, were almost as old as the constitution itself. No sooner had that instrument been adopted than it was seen that several of its provisions were inadequate and even pernicious; during the next two decades its shortcomings became more and more apparent. The greatest specific evil under the constitution of 1848 grew out of the authority conferred on the legislature to enact private laws. Every session of the general assembly saw the legislative calendar crowded with bills designed to favor individuals or localities with little or no regard for the welfare of the state as a whole; the time and attention of the lawmakers were consumed by duties which should have been performed by administrative officers acting under general laws. Moreover, the practice not only permitted but it invited corruption on the part of the members of the legislature and instilled in the minds of the people a suspicion that state laws and bribery were intimately associated if not inseparable.¹

In general the constitution was too inelastic for the needs of a growing commonwealth; its designers, in attempting to meet the needs arising from rural conditions, had not prepared for urban problems relating to the judiciary, to police and fire protection, to sanitation, and to government. Moreover, the inadequacy of the constitution was demonstrated in many other ways. Salaries, for example, were so low that in the case of the governor the legislature usually voted "expense money" for maintaining the executive mansion and grounds; to other state officials additional sums were voted, usually, as in the case of the judiciary, for additional services rendered the state in some unimportant or even trivial capacity. Whatever the justification for violating the letter of the constitution, the practice was a dangerous precedent, bound to create dissatisfaction and distrust in the minds of the people.

The first response to the insistent demand for a constitution better adapted to the needs of the new era in midwestern American life was the constitutional convention of 1862; its labors, however, owing to the complexity of the political situation, to the unsettled condition of the times, and to several obnoxious provisions contained in the proposed constitution,

¹ Illinois State Register, April 15, 1870.

were abortive.² During the next few years the republican press of the state kept the subject of another constitutional convention constantly before the people; and in 1869, after the submission of the question to the voters, the legislature ordered an election of delegates to a new constitutional convention.³

In December of that year, eighty-five delegates assembled in convention in the old statehouse at Springfield "to revise, alter, or amend the Constitution of the State of Illinois."⁴ These men varied greatly in nativity, in educational training, and in distribution among professions and occupations. Only eleven of the entire body were native Illinoisians, only five were naturalized foreign born, while the great majority were natives of the older states lying to the east and to the south.⁵ Some of the members had enjoyed scarcely any school training, while others were graduates of the best colleges and academies of the east or of leading professional schools of the country. The widest variety of occupations was represented; along with two blacksmiths, one minister, and one editor were six doctors,

² See Centennial History of Illinois, 3: 267-272.

³ Chicago Tribune, January 1, 7, 16, 1867; Illinois State Journal, January 3, 1867; Aurora Beacon, January 17, 1867; Canton Weekly Register, January 18, 1867; Carthage Republican, January 24, 1867, December 3, 1868; Belleville Democrat, February 21, 1867, December 3, 1868; Rockford Gazette, June 25, November 12, 1868; Ottawa Republican, October 29, 1868; Rushville Times, November 26, 1868; Joliet Signal, December 8, 1868.

⁴ During the period of the convention four delegates died and one resigned; three places were filled by special election; thus the total number of delegates that sat in the convention was eighty-eight. For list of names of delegates see Blue Book of Illinois; Debates and Proceedings of the Constitutional Convention, volume 1.

⁵ Of the foreign born elements the absence of both German and Irish, so powerful numerically in the state, is to be noted; of the five foreign born members, two were from England, two from Scotland, and one, Joseph Medill, from Canada. Sixteen states were represented. Twenty-one members were natives of New York; nine of Kentucky; nine of Ohio; five of Maine; four of Pennsylvania; four of Vermont; four of Tennessee; three of Massachusetts; three of Virginia; two of New Hampshire; two of Maryland; two of Indiana; and one each from New Jersey, Connecticut, Missouri, and Rhode Island. New Englanders and New Yorkers came chiefly from the northern counties, and the Kentuckians and Tennesseeans from the southern and central section. four merchants, three bankers, two manufacturers, and, outnumbering all others almost two to one, were fifty-six lawyers.⁶

Although a correct political classification of the members appears difficult, since several of them insisted that they were independent in politics and as such had been elected to the convention, yet in the practical outcome they divided along the lines of their old party affiliations. As a result, only one delegate, Elijah M. Haines, may be considered a real independent; and of the eighty-eight members, forty-four may be classed as democrats and forty-three as republicans. The entire delegation from southern Illinois, with the exception of Charles F. Springer of Edwardsville and William H. Underwood of Belleville, was democratic, as were also the members from the Military Tract; the republicans came from the northern and central counties and from the counties along the Indiana state line. Thus the sectionalism that had characterized Illinois politics for years persisted in the selection of members for the constitutional convention: the southern and western counties in one political camp; the eastern, central, and northern in the other.7

⁶ An interesting correlation between age and occupation is here apparent. Of the twenty-three members fifty years of age or over, only eleven were lawyers; but of the thirty who were forty or less all but five were lawyers. Thus the convention was not only dominated by lawyers, but, more important, by young lawyers. Of the seven members from Cook county only three were lawyers, while two were bankers, one was a manufacturer, one was an editor. An entirely different situation existed in the southern counties, which sent, with the exception of two farmers, a blacksmith, and a miller, an entire delegation of lawyers. No doubt such differences may be accounted for on the ground that ambition for political preferment and interest in legislative and constitutional development was confined in the latter section more exclusively to the legal profession than was the case in urban communities, such as Chicago and other places in the north. This entire analysis is based on Moses, *Illinois*, 2:787-790; Bateman and Selby, *Historical Encyclopedia of Illinois*; various newspapers for the period of December 1 to 15, 1869; county histories; questionnaires sent out to county clerks, relatives and friends of the delegates; but more especially on an autograph album kindly loaned by William K. Fox (son of Jesse C. Fox, delegate to the convention, 1869-1870).

⁷ Illinois State Register, May 10, 1870.

When the hour for organizing the convention arrived, John Dement of Fayette county, well known for his services as state treasurer and receiver of public moneys, was, after a sharp skirmish, elected temporary president. Then began a longdrawn-out wrangle over the wording of the oath which the members of the convention should take before a permanent organization could be effected; the republicans contended that they should swear to support the state constitution, and the democrats that it was the height of absurdity to swear to support that which they had come together to destroy. For three days the debate raged with ill-feeling on both sides. When the republicans charged the democrats with a desire to usurp too much authority --- drawing an odious comparison between their attitude and the attitude of those southern secession conventions which had given the people no chance to express themselves in the matter of disunion --- the discussion at once became sectional as well as political. Fortunately, some of the more influential members recognized that the convention, if it continued to dispute over such nonessentials as the definition of words, would soon be discredited in the minds of the people; and late on the third day of the convention the delegates adopted by a vote of forty-four to forty a compromise resolution offered by Orville H. Browning of Adams which provided that the members should swear to support the constitution of the United States and the constitution of Illinois so far as its provisions were compatible with and applicable to each one's position as delegate.8

This resolution did not, however, settle the oath question. Dissatisfied with the decision of the majority, some of the members at the opening of the session on the fourth morning proposed that each delegate be permitted to frame the oath

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⁸ Controversy over the content of the oath is found in Debates and Proceedings of the Constitutional Convention, 1:7-49.

which he himself should take. To this proposition the convention refused to agree. Judge Samuel H. Treat of the United States district court then administered "to such of the delegates as appeared at the bar of the Convention" the oath agreed on by the majority. After more wrangling, in which at least one member withdrew in anger from the floor of the convention,⁹ it was voted to allow as many delegates as desired to subscribe to the oath which the legislature had stipulated in the act authorizing the election of delegates — practically the oath for which the republicans had been contending; thereupon those members who deemed it their duty to swear to support the state constitution were sworn by Judge Treat; and the convention was finally ready for permanent organization.

Before the nominations for president could be made, it became apparent that the delegates were divided into two camps. Practically all the republican members favored a plan to organize the convention along political lines. The democrats, however, on account of the independent tendencies of some of their number, could not hope effectively to organize their majority in this manner. Along with a few independent republicans, therefore, they opposed the drawing of party lines in the organization. Consequently, the independents, who were largely from Cook county, held the balance of power. One of their number, William F. Coolbaugh, secured the floor and, speaking for the independent nonpolitical faction, nominated one of his colleagues, Charles Hitchcock, a republican, for president. Immediately Laurence S. Church of McHenry, as spokesman for a party candidate, arose and nominated the well-known newspaper man, Joseph Medill, another republican, for the same office; in doing so, he attempted to placate the opposing faction by pointing out that since Medill had received the unanimous indorsement of the voters of his dis-

9 E. M. Haines of Lake county.

trict irrespective of political affiliations, he now stood not as the candidate of any one party but as the representative of all parties.

The issue was not to be thus clouded; it was quite clear that the republicans were pushing Medill as a party candidate, and in this they were opposed by a few of their own number as well as by the democrats. The few "willful" republicans agreed with Samuel S. Hayes of Cook, who declared that he felt it to be the wish of his constituents that he vote "for the 'independent' candidate - and republican - the gentleman from Cook [Hitchcock]." 10 When the vote was cast every member in the convention participated; with two exceptions the entire Cook county delegation supported the candidacy of Hitchcock, who also received the support of all the downstate democrats; as a result Hitchcock received forty-five votes to forty for Medill. The election was therefore a victory for Chicago, for the democrats, and for the independents. Victory for the so-called nonpartisan combination - they further succeeded in electing an equal number of democrats and republicans for the remaining permanent officers of the convention ---rested on the fact that since the convention was not organized politically it was under the domination of no political organization.

With the election of permanent officers out of the way, the convention was ready to settle down to a serious consideration of the state's needs and of the best and most efficient ways of meeting them in the new constitution. Yet, despite the intelligence and integrity of the members, much time was wasted in airing sectional animosities and in quibbling over details too trivial for the consideration of men selected to draw up an organic law for the government of one of the most important commonwealths in the American republic. As the convention

10 Debates and Proceedings of the Constitutional Convention, 1:50.

proceeded with its deliberations the delegates, subjected to long sessions, heavy committee work, and bitter discussions, became exhausted and easily irritated; consequently, day by day the practice of squandering valuable time in debating trivial questions increased - the matter of providing postage stamps and stationery was a prolific source of contentious debating in which hours and even days were wasted. Frivolous propositions over which the convention had no control received extended attention. One such proposition, which came up again and again, had to do with the removal of the federal capital from Washington City to Illinois. Nauvoo and Warsaw, both in Hancock county, each desired to be the seat of the new capital, while the supervisors of Whiteside county offered to "cede to the federal government all authority of law held or exercised by said board of supervisors in or over said county. . . . Provided, said federal government locate said federal capitol within said county."11 The most senseless debate during the entire sitting of the convention was on the question of asking the state geologist, Amos H. Worthen, to publish in his next annual report an essay entitled, "Origin of the Prairies," written by Judge John D. Caton.

The practice of debating resolutions introduced primarily for the purpose of embarrassing state officials also consumed a great deal of time. The secretary of state, Edward Rummel, came in for criticism on numerous occasions, as did Newton Bateman, superintendent of public instruction, who was charged with being interested in the publication and sale of schoolbooks and with having illegally accepted money from the various state educational institutions for performing duties that clearly fell within his own office; nothing came from these veiled accusations of dishonesty except the loss of valuable time and of cordiality among some of the members.

¹¹ Debates and Proceedings of the Constitutional Convention, 1:180.

The animosity toward Chicago was displayed on numerous occasions by many of the downstate delegates; some, under the pretense of saving a principle, condemned every proposition advanced in the interest of Cook county. They professed to believe that Chicago was a hotbed of political corruption and hence a standing menace to democracy. The most passionate expressions in this respect came from delegates who represented the eastern side of the state and the tier of counties along the Wisconsin line, two sections that had felt the weight of competition from Chicago industry.

The chief source of dissension in the convention was political, yet political discussion as such occupied surprisingly little time, considering the bitter feelings of the time over reconstruction and the fifteenth amendment. Apparently the leaders among the delegates recalled the result of dragging political animosities into constitution making, for it had been that very factor which caused the convention of 1862 to be discredited and its labor to be rejected by the people. So careful were they in this respect that Governor Palmer's name appears never to have been mentioned on the convention floor, while President Lincoln was referred to but once; and then his name was coupled with that of Stephen A. Douglas in a resolution expressing the pleasure of the convention in seeing the portraits of the two illustrious men hanging on the walls of the convention hall. Now and then, however, the hot-heads on either side broke away from restraint; on these occasions the republicans usually twitted their political opponents about the defects of the old constitution, while the democrats retaliated by criticizing the extravagances of state administrations since 1860. Once only did the discussion take a more serious turn, when Elijah M. Haines of Lake, the staunch independent and "antimonopolist," held President Grant up to ridicule

Despite these many digressions which caused the people over the state to suspect the honesty of the delegates and to fear that the constitution was a product of intrigue and corruption, the convention did give itself to a serious examination of the needs of the state, as the instrument they framed bears witness. The delegates spent long hours in open debate after having considered carefully every measure in its appropriate committee. Of these measures six have had, and continue to have, an important bearing on the history of the state. The first related to the purchase and lease of the Illinois-Michigan canal; a second to the franchise, in which the whole question of suffrage in its relation to aliens, Negroes, and women was discussed; another to minority representation, which, it was hoped by its sponsors, would break down political sectionalism within the state; a fourth to the regulation of railroads in general, with special reference to the power of the state over the Illinois Central railroad; a fifth to the judiciary of the state, but more especially to the kinds, number, and jurisdiction of the courts in Cook county; while a sixth related to education and religion.

One of the first proposals which the convention took up seriously related to the Illinois-Michigan canal, which had been opened to navigation in 1848. Not only in revenue from tolls but also in opening up to settlement the sections of the state in which it was located, the canal, alone of all the vast system of internal improvements undertaken in the thirties, had been a fair success.¹² For that very reason, however, in the minds of many people the canal was no longer a state enterprise, operated for the benefit of all, but rather a local one benefiting only those living in its vicinity. Hence the sections of the state remotely removed from the route of the canal either manifested little interest in its success or came out boldly

¹² See Centennial History of Illinois, 2:194 ff.

against it, denouncing it as a sectional enterprise. Previous legislation, uncertain as to the canal's ultimate success as a highway of commerce and unwilling to formulate policies that might be unpopular, had followed a halting policy in dealing with the canal. It is little wonder then that although the delegates felt the necessity of making some definite provision for the canal's future, yet in formulating these provisions a spirit of sectionalism should arise among them.

On January 19, 1870, the standing committee on canals and canal lands reported its first constitutional section, which provided that the canal and "any addition or extension" which might "be made thereto" should "never be sold, leased or otherwise disposed of, to any person or corporation whatever," but should "remain forever the property of this State and under its management and control."¹³ An identical section was offered by the standing committee on internal improvements, and the two were considered as one. A week's debate ensued,14 downstate members referring to the canal as a "running sore;" they objected to turning the Chicago river into the canal-to making "the State . . . the scavenger of Chicago." The animus of the opposition was aggravated by the desire of certain downstate members to embarrass Chicago in its efforts to secure adequate constitutional provisions for governing a rapidly growing urban community. The "shrieks of locality" filled the air: the distribution of the state school fund, the number of Cook county criminals in the penitentiary, the treatment accorded downstate visitors by Chicago hotel keepers, the wealth of Chicagoans both individually and as a group-all were ramifications of the canal debates.15

When on January 27, 1870, the article was finally taken up in the committee of the whole the opposition used three main points of attack. Silas L. Bryan of Marion county asserted that the canal expenditures up to that time had been a poor investment and hence that the legislature should not be prohibited by the constitution from leasing or selling the canal, should it ever be advisable to do so; James C. Allen of Crawford contended that the management of all such state enterprises was lamentably weak and especially so in Illinois; a third somewhat indirect argument asserted that if the state as such desired to engage in transportation it should build railroads, for it had already been conclusively demonstrated that as routes of travel and transportation they were far superior to canals.¹⁶

Friends of the proposal, in addition to denying the validity of the argument that all state controlled enterprises, such as canals, were poor investments and invariably managed at a loss, took the high ground not only that the state should maintain the canal but also that it should enlarge it and by operating it check, if possible, the tendencies of railroad rates to increase; the state should never allow the railroads themselves to gain control of the canal-as rumor had it about the convention they meant to do-with the idea primarily of abandoning it. Medill, in support of the proposed article, made a distinction between leasing and selling; while he was willing to grant to the legislature the authority to lease it, he was unwilling to grant a similar authority as to its sale. At once southern members charged Chicago with a desire to maintain its hold on the canal, which in their opinion would be easier to accomplish provided the legislature had no power to sell it; furthermore, they charged that the prohibition relating to lease would not affect the arrangement between Chicago and the

¹⁸ Debates and Proceedings of the Constitutional Convention, 1: 310-320.

state, which had been entered into under the old constitutions.¹⁷

For days the debate went on. Substitute after substitute and amendment after amendment were offered in an effort to change the meaning of the original article submitted by the two committees. On account of the uncertainty of the outcome no group demanded a vote, and no group manifested any willingness to postpone debate. Finally, on February 4, Browning of Adams county offered an entirely new article, which in a simple and common sense way provided that the canal should "never be sold or leased until the specific proposition for the sale or lease thereof" should first have been submitted "to a vote of the people of the State at a general election, and have been approved by a majority of all the votes polled at such election."¹⁸ The committee of the whole indorsed the Browning amendment and accordingly reported it to the convention, recommending that it be made a part of the constitution. The convention adopted it by a vote of fortynine to eleven, the Cook county delegation, with the exception of one member, refusing to vote.19

Fully as bitter as the debates over the canal were those in which the franchise question was the issue at stake. The fifteenth amendment to the constitution of the United States was then up for discussion; the women of the state were active in demanding the right to vote; Illinois was rapidly becoming a center of a foreign born population. Four groups of inhabitants, therefore, demanded serious consideration: native white males, foreign born white males, women, and Negroes. Regarding the limits to which the franchise should be extended

¹⁷ In 1865 Chicago had leased the canal, the state agreeing, if the canal should revert to the state, to reimburse Chicago for any expenditures that might be made on it. In 1871 the state took over the canal. Andreas, *History of Chicago*, 2:123.

¹⁹ Illinois State Journal, January 31, February 2, 3, 4, 6, 1870.

by the constitution there existed obviously a wide difference of opinion; a storm of debate was precipitated when the committee on the right of suffrage, unable to agree among themselves, offered one majority and two minority reports to the convention.²⁰ Though these reports differed in several respects, that of chief interest concerned qualifications for voting. The majority report recommended that "every person who was an elector in this State on the first day of April, A. D. 1848, and every male citizen of the United States above the age of twenty-one years, who shall have resided in the State one year and in the election district sixty days next preceding any election," should be entitled to vote at such election.²¹

Six of the nine members of the committee signed the majority report, but of the six, four offered a supplementary report which provided that the voters of the state should be permitted to express themselves on the question of extending the election franchise to women. The minority report proper, which was signed by three committee members, all of whom were from the southern part of the state,²² proposed to restrict the franchise to white males, though willing that the voters of the state should decide whether or not the franchise should be withheld from Negroes. The issue then was not only the matter of franchise but also the question of permitting legally qualified voters of the state to decide what limitations, if any, should be placed on the privilege of both women and Negroes to vote.23

In the debate that followed, the fifteenth amendment was condemned, its supporters were criticized, and the question of the place of the Negro in American society and government

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 ²⁰ Illinois State Journal, February 26, 1870.
 ²¹ Debates and Proceedings of the Constitutional Convention, 1:856.
 ²² James M. Sharp of Wabash, William G. Bowman of Gallatin, and Charles E. McDowell of White county.
 ²³ Illinois State Register consistently opposed Negro suffrage. See issue of April 24, 2875.

April 15, 1870.

was thoroughly discussed.²⁴ Medill, however, took the position that the members of the constitutional convention had "nothing to do with the right of the colored man to vote," since he had "the same right to the suffrage as the white man," and it did not lie within "the power of this Convention to take it away from him."²⁵

Woman's suffrage received even more serious consideration, though its enemies in the convention vainly tried to stop debate on the ground that a mere discussion of the right of women to vote was degrading to womanhood. Then they resorted to ridicule; they charged that the woman's suffrage question was the product of unbalanced minds and that its adherents were chiefly "long haired men and short haired women."²⁶

The political status of unnaturalized adult males was also a source of prolonged debate. Under the constitution of 1848 a residence of one year within the state was the only requirement for voting, and the members of the convention generally desired to impose more stringent requirements on foreign born voters. They found it difficult, however, to agree on the nature and extent of these requirements; though some took the ground that it was highly inconsistent and indefensible to grant the franchise to Negroes and to withhold it from foreign born whites who had not yet been naturalized, the majority subscribed to a different view. Dement favored restricting the voting of unnaturalized inhabitants on the ground that any other course would give them privileges in directing the government without imposing on them corresponding obligations and duties. Referring to the experiences of the Civil War, he declared "that these foreign-born citizens [voters in Illinois] that had not naturalized under the laws of the country

²⁴ Illinois State Register, February 7, 24, March 17, 24, April 9, 1870.
²⁵ Debates and Proceedings of the Constitutional Convention, 2: 1290.
²⁶ Illinois State Register, March 10, 1870.

came in when there was danger of a draft and plead the protection of their sovereign, their allegiance to whom they had never renounced. . . . While the naturalized citizens and our native citizens were putting down the rebellion they were basking at home, protected by their allegiance to the sovereign of a foreign government." Dement concluded that: "If we enfranchise them, and should be so unfortunate as to engage in another war, it is doubtful whether we could draft these enfranchised foreigners into our ranks to fight for this government, that was so kind and liberal to them as to give them the right of suffrage and the right to elect the officers of our government."²⁷ Medill, in further support of this view, held that no state or nation was justified in extending the right of voting, nor could it safely do so to any one who still held allegiance to a foreign power. Their opponents, however, though evading the question of the inseparableness of rights and duties, contended that inasmuch as the unnaturalized foreigners, as a class, were men of intelligence and many had proved their loyalty to the union by enlisting in the northern army, reliance should be placed on their good will to support the government in times of stress, and they should therefore be permitted to participate in the direction of government.28

The result of this long-drawn-out debate was that the franchise was restricted to citizens of the United States, to all electors in the state in 1848, and to all foreigners who had "obtained a certificate of naturalization, before any Court of record" in Illinois prior to January 1, 1870.²⁹

The committee of the whole adopted the majority report which gave the ballot to Negroes and withheld it from women; but because one portion of the minority favored one minority report and another portion favored the other, it was impossible to say how many of the total negative yotes of eighteen were influenced by the woman question and how many by the Negro question. The friends of woman's suffrage, therefore, following the report of the committee of the whole, forced the direct issue by offering a substitute for the committee report; in the final vote, with twenty-seven members not voting, they mustered twelve supporters.³⁰

Another phase of the franchise question had to do with minority representation in the state legislature. Its advocates had in mind to decrease, if not to destroy, the intense sectionalism that had characterized Illinois politics since the settlement of the northern counties. Before the war southern Illinois, democratic in politics and southern in sympathies and extraction, was arrayed against northern Illinois, composed largely of New Englanders and New Yorkers with whig tendencies, while the central counties were divided both in politics and in sympathy. The war itself tended in a way to create a better understanding; yet in 1870 practically every legislative district in southern and western Illinois was democratic: while in the eastern and northern sections, though not to the same degree, the republicans predominated. As a result the legislators from each section held a political as well as a sectional bias; and much of the legislation was colored by national politics. Already methods for breaking down this sectionalism had been discussed both in the newspapers and on the stump, and it was the generally accepted opinion throughout the state that the constitutional convention would examine the matter.31

The first move came on December 17, 1869, when Robert P.

³⁰ Debates and Proceedings of the Constitutional Convention, 2:1281; Illinois State Register, April 16, 1870. ³¹ Ibid., January 4, 1870.

Hanna of Wayne offered a resolution which provided that the proper committee should consider the advisability of recommending to the convention some plan whereby the number of representatives in a district should be greater than the total number of votes allowed to each elector, thereby giving the minority party in each district a chance to elect its own candidate. Though creating little comment at the time, this suggestion was finally incorporated in the report of the committee on electoral reform³² and after some modification was pushed to the vote. The provision met the opposition of only the few members opposed to the principle of minority representation itself, so that when the previous question was moved and a vote taken the measure was adopted by a vote of forty-six to seventeen. This plan of cumulative voting, whereby "each qualified voter may cast as many votes for one candidate as there are representatives to be elected, or may distribute the same, or equal parts thereof, among the candidates," was so novel that it was decided to submit it to the voters of the state as a separate section.33

Even more revolutionary than the adoption of minority representation was the stand taken by the delegates regarding the regulation of railroads by legislation. At the outset, whenever the question of railroad regulation arose, the opinion was freely expressed that the only regulative principle possible was competition. "Build competing lines," said Hanna; "hold out liberal inducements for capitalists to come from every portion of the country and invest their capital and compete with them. When you have done this, the problem is solved, and the true and only relief furnished."³⁴ In this connection

³² Debates and Proceedings of the Constitutional Convention, 1:72; Illinois State Register, February 17, March 31, 1870. ³³ See letters of William M. Springer and Joseph Medill, *ibid.*, Septem-

ber 21, 1870; Debates and Proceedings of the Constitutional Convention, 2: 1878. For a further discussion, see Centennial History of Illinois, 5:294 ff. ³⁴ Debates and Proceedings of the Constitutional Convention, 1:577.

Medill pointed out: "It is easy for gentlemen in their wrath to declare that railroad extortion must be stopped by law. . . They must be governed by the same common and general laws, under which we all live and hold our possessions, and enjoy our rights. . . I am not able, with what investigation I have given this subject for years, and with all the light I have been able to extract from able and astute lawyers, to conceive of any adequate and sufficient means of checking railroad overcharges and rapacity, by statute law of this State."³⁵

This was the opinion held by a large majority of the delegates until the last few days of the convention, when Reuben M. Benjamin of Bloomington, an authority on constitutional law, began to advance arguments which took entirely different ground. Railroad corporations, he held, had been created for the public good; and inasmuch as they had been given power of eminent domain they were under control of the legislature; the lawmaking body had as much right to regulate rates on railroads as to regulate bridge and ferry tolls; further, the rights of private corporations ought not and could not stand in the way of public rights, despite any action of the legislature in creating corporations or in issuing charters. His arguments were so well supported, both in law and in fact, and he was so well able to substantiate them with case after case and opinion after opinion, that his contention began to effect a radical change in the attitude of the convention.³⁶

Consequently, when on May 3 the committee on railroad corporations brought in a report, which provided that the legislature might fix railroad rates, the weight of argument in the most scholarly debate of the session swung to the other side. Not only did the lawyer members feel safe in the niceties of a constitutional question, but the old guard had already succumbed to Benjamin's logic and with a right-about face were now advancing his arguments. When Medill spoke carefully and with good effect on the right of the constitution to authorize the legislature to control railroads, his reasoning was a complete reversal of that which he had used a few months previously. Then he had denied the existence of such a right; now he held to the exact opposite. His "investigation" extending over a series of years and the "light" he had "extracted" from numerous lawyers was lost. Speaking as a "layman," Medill set aside without serious consideration whatever claim of vested interests the railroads or their friends might make and took the position that any power the legislature might have conferred on the railroads to charge extortionate rates was clearly void and could be legally set aside. "I believe there is no remedy to be obtained in competing lines. . . . The real remedy is for the people, through this Convention and the State Legislature, to assert their sovereignty and supremacy over all the creatures of the Legislature, and declare what the law shall be in this regard. . . . It is within my recollection, sir, that decisions of the highest courts have been overruled and overturned by the uprising of the people-by the ground swell of the masses." ³⁷ During the debate, which extended over four days, the whole question of vested rights held by the railroads was threshed out and their claims thoroughly examined. Finally the convention agreed, though the vote was rather close, to restrict the rate making power of the railroads by lodging it in the hands of the legislature.

With the policy toward the railroads of the state settled, there remained the necessity of determining exactly what relation should exist between the state and the Illinois Central

³⁷ Debates and Proceedings of the Constitutional Convention, 2:1645.

railroad, which had been aided by the donation of public lands. Hitherto the road had paid a definite proportion of its receipts into the state treasury, in return for which it was exempt from taxes. Although a majority of the members of the convention favored a continuation of this policy, a radical minority urged that the road be placed on the same taxing basis as all other railroads in the state. For this, they advanced two chief arguments: first, they contended that with the property of the road exempt from taxation the counties in which the lines of the Illinois Central railroad were located were finding it increasingly difficult to raise sufficient funds by local taxation; second, they pointed out that since the road was compelled to pay large sums into the state treasury, it took advantage of that fact to charge higher freight and passenger rates than would otherwise have been the case.

The first argument Allen of Crawford met with a scathing indictment of the counties along the road of the Illinois Central. "They come here and whine and whimper to induce us to release them from the obligations they entered into with us when we made the contract with the railroad company, and they beg the other counties, 'for God's sake relieve us from the terms of that contract.'

"That is wrong. They have no moral right to ask it. They got all we contracted to give them when they got the Illinois Central railroad. They have all its advantages, while we in the other counties, for every mile of railroad we have built, have had to draw from our own pockets, and tax ourselves.

"Now they ask us to surrender the interest of the State in the seven per cent, that the people of counties on the road may not be burdened by this taxation. Burdened! Why, gentlemen, the Illinois Central railroad has made you rich. It has poured into the lap of those counties millions of wealth. It has built up large towns and cities all along its line, while the other sixty odd counties have not had one dollar's benefit from it, except as they have derived it from the taxes paid into the State treasury."³⁸

In the end the convention agreed to continue the seven per cent provision of the Illinois Central charter; and in order to prevent it from ever becoming an issue in the legislature they submitted to the people a separate section which provided that "no contract, obligation or liability whatever of the Illinois Central railroad company to pay any money into the State treasury . . . shall ever be released, suspended, modified, altered, remitted, or in any manner diminished or impaired by legislation or other authority."³⁹ This provision was indorsed by the people, with the result that under the constitution of 1870 the question of the liability of the Illinois Central railroad to pay a portion of its gross receipts into the state treasury has never been questioned.

A fifth series of debates was over the reorganization of the judiciary. All portions of the state felt the need of more speedy justice, but to Cook county it had become a matter of vital importance. The rapid congestion of population in Chicago had increased legal business of all descriptions; numerous land sales, the rapid multiplication of grain elevators, and the growth of the Board of Trade were among the factors which increased civil law cases; while the easy opportunity for robberies, thefts, and even murder among a dense and cosmopolitan population of a quarter million, multiplied the need of more criminal law machinery. Chicago, therefore, wanted more courts, and more and better paid judges; and, because this number far exceeded that which the same number of people downstate either desired or needed, the judiciary debates in the end concerned themselves chiefly with whether or not Chicago should attain its needs.

Various schemes were proposed for relieving the legal congestion under which not only Chicago, but, to a less degree, many other sections of the state suffered. One scheme favored several appellate courts made up of circuit court judges taken temporarily from the circuits within each appellate district; another suggested a court of common pleas, having concurrent jurisdiction with the circuit courts, to handle the less important cases that would ordinarily go to the circuit courts. The scheme which brought forth the most debate, however, provided that in the downstate circuits there should be ninety or a hundred thousand inhabitants for each judge, while in Chicago for each judge there should be fifty thousand or less. This proposal met the bitter opposition of many downstate members, not because their sections of the state needed more judges or because Chicago needed fewer; but because, as they said, in a constitution there should be no discrimination between localities.

As the debates proceeded and it became increasingly difficult successfully to deny the claims of Chicago, the opposition resorted to ridicule. "Now, the time was when the rural districts required more judges for the same number of inhabitants. It was at a time when there were a great many lawsuits growing out of the wild hog question; but in those rural districts there is no more mast-fed pork; and the result is, litigation has measurably ceased. [Laughter.] They are a quiet, honest and industrious people, and do not require a judge for every forty thousand, as they do in those cities where there are people who propose to live off of each other, by just peeling each other every time they pass upon the street."⁴⁰ Ridicule, however, was of no avail; the better

40 Debates and Proceedings of the Constitutional Convention, 1:117.

sense of the delegates overcame their prejudices, with the result that the constitution made provision not only for the increasing business of the courts downstate, but also, in a much more radical manner, for the peculiar interests of Chicago.41

In matters of religion and education the delegates considered the relation of church and state, the various types and kinds of religious organizations in their relation to the school system and to each other, and examine with considerable care the principle of free education in all its ramifications. "Separation of church and state" the delegates appeared to have clearly in mind; time after time in different debates, the members, while expressing their profound conviction that the wellbeing of the state of Illinois depended on its citizens giving their hearty allegiance to christianity, insisted that the new constitution should restrict neither by word nor implication the full and complete right of each citizen to hold whatever religious views he desired.42 William H. Underwood of St. Clair expressed the sentiments of a majority of his colleagues when he said: "The line between church and State in this country is clearly drawn. The duties to Almighty God are not touched in any manner whatever by human government. We have no jurisdiction of the subject. While our social relations and our duties to our fellow creatures are properly and legitimately the subject of human legislation, all efforts heretofore made in the old world and in this country to introduce religious tests or to incorporate in a Constitution or government made by all the people for all the people, any part of the creed or any one church, are, in my humble judgment, tyranny and despotism, and an abuse of the power of human government wholly unwarranted, which, in modern times, will not be submitted

⁴¹ See Constitution, article VI, section 23. For a full discussion of the subject, see Centennial History of Illinois, 5: 323 ff. 42 Constitution, article 11, section 3; Illinois State Journal, January 28, 1870.

to, and ought not to be submitted to by a free people who claim for themselves the sovereign right of religious liberty, and are equally determined to grant the same right and privilege to every other human being."⁴³

More difficult was the question of the place of the parochial school in the state's educational system. The members as a group stood for free elementary education, and a majority opposed any diversion of the school funds to the use of private schools; and, although great pressure was brought to bear on the convention for a provision in the constitution whereby school funds might be paid to "schools and other institutions of learning of classes of the people whose conscientious scruples prevent them from using the public schools, by appropriations to the extent of the school taxes paid by such classes," yet in the end it was decided to keep the entire school fund intact for the public schools.⁴⁴

Closely related to the proposition to appropriate a portion of the school funds to parochial schools was that to tax the real estate owned by church organizations but not used directly in worship. On the authority of Medill, it was stated on the floor of the convention that Chicago alone had twenty million dollars worth of such property, the exemption of which increased the taxes paid by other property owners at least fifteen per cent. Since no general rule, however, could be laid down for determining just how or when property was used for religious worship, the convention could not attempt to settle the matter.

Proposals to have the Bible read in the public school started a torrent of debate. James G. Bayne of Woodford, in starting the discussion, declared that the Bible "is the only book now extant in the world by which man can have any definite idea of his origin or of his creation."⁴⁵ William H. Snyder of St. Clair opposed the proposal on the ground that it would be an imposition on the Catholics of the state. "Has it ever struck our protestant fellow-citizens," he said, "who are the authors of this movement, what the consequences would be, if their position and that of our Catholic countrymen were reversed, and if Douay instead of the King James version of the Bible, were sought to be enforced by law upon the public schools of this State — if their hard earned means were wrested from them by the tax-gatherer in order that the doctrines of a hostile church and what they consider the most pernicious of errors, were about to be impressed forever upon the young and tender minds of their darling children?"⁴⁶ Snyder's view prevailed; the constitution went to the people with no reference to the use of the Bible in the public schools.

Public education occasioned even more debate than religion, for here again sectional interests were at play. Members from the northern counties, whose proportion of taxable property outran their proportion of school children, sharply protested the proposition to apportion state funds among the counties according to school population. Allen of Crawford and other southern members argued, with effect, that the well-being of children was the concern of the state rather than of individual counties, and this larger aspect was the decisive factor in formulating the decision of the members.

In all the debates, divisions of opinion among the delegates merely reflected similar divisions among the people; for that reason the convention deemed it advisable to submit to the voters for their special consideration such articles as might endanger the indorsement of the constitution proper. Accordingly, the voters were asked to adopt or reject, in addition to the constitution, eight separate articles: those in relation to corporations, warehouses, removal of county seats, minority representation, canal, Illinois Central railroad, municipal subscriptions to railroads or private corporations, and an article entitled "counties." All were indorsed by large majorities, the closest vote being on minority representation, which was 99,022 to 70,080. The proposed constitution was therefore indorsed *in toto* by the people.⁴⁷

⁴⁷ Debates and Proceedings of the Constitutional Convention, 2:1296. Sec Centennial History of Illinois, 5:190 ff., for a full analysis of the contents of the constitution.

II. SOME ASPECTS OF SOCIAL LIFE IN ILLINOIS. 1870-1876

THE early seventies in Illinois marked a period of growth, characterized by the changing aspect of the school and the pulpit, by the incorporation of new ideas, and by the widening outlook on life. Awakening social consciousness brought conflict -- political, social, religious, racial. "We are fallen upon a time of agitation," commented the Chicago Tribune. "There is a general shaking up of the virtues, and the vices, and the pools of society are being vigorously stirred by the angels of reform."¹

That lowering of the moral tone, public and private, which reflective men had noticed so markedly in the latter sixties, still left its shadow over the land; it was a gloomy picture that editors painted in New Year summaries. "The world of morality has little to boast of. Crime has increased rapidly. Corruption has left its taint all over the land. Public and private trusts have been betraved in a reckless manner. Defalcations, embezzlements, frauds, murders, swindles, violence, riots and thefts are and have been the order of the day and the prospect does not brighten any with the advent of the new year." Cairo gained the reputation of killing one man per week, while Chicago increased its notoriety for gamblers, "bunko ropers," confidence men, and murderers.²

"A clearing out" was advocated in Springfield on the ground that that city was "infested with an unwholesome

¹ Chicago Tribune, February 26, 1874. ² Ibid., January 1, 1875; Illinois State Register, September 8, 1873, June 30, 1874; Ogle County Reporter, December 17, 1874; Chicago Tribune, May 28, 29, 1875.

debris consisting of bullies, strumpets, vagrants, and sneak thieves." On one occasion, Christmas eve, 1873, "the city was practically in the possession of a gang of drunken vagabonds. A negro was beaten on the street, ladies were insulted, men assaulted, a religious festival interrupted, and various other acts of ruffianism perpetrated."³

To the public generally the "Williamson county war" was the most flagrant example of untrammeled lawlessness. This "war" had originated in a fued between two Williamson county families "growing out of some trivial cause" and had attained such huge proportions that within two years the vendetta had reaped the toll of twenty-seven murders, a number which rumor swelled to as high as forty. Journalistic comment unmercifully lashed the participators in the feud, the county officials, and especially Governor Beveridge for allowing the "reign of terror" and "carnival of blood" to continue in Williamson county. The Chicago Tribune scored its "Napoleonic governor" for permitting "KuKluxism in this State," while the State Register urged the governor to "wake up," and to cease being "as dumb as an oyster," and "as actionless as a post."⁴ It was only by the trial of the bandits under the Ku Klux law, however, that the vendetta was finally checked.

By far the most terrific social and economic calamity of the period was the great Chicago fire. Like many western cities, Chicago had grown so rapidly that at this time almost all the 56,000 buildings within the city limits were of pine construction.

During the summer of 1871 the whole country had suffered

³ Illinois State Register, May 16, 1871, December 27, 1875. ⁴ Illinois State Register, May 25, 1875; Chicago Tribune, August 6, 9, 19, 1875. For typical journalistic comments and press dispatches on the feud, see ibid., December 18, 1874, May 25, July 1, August 2, 6, 9, 20, 1875; Cairo Evening Bulletin, August 3, 1875, Clipped in Illinois State Register, August 6, 1875; Chicago Tribure Mon e August 5, 2009, 2009 Tribune, May 25, August 9, 10, 18, 1875.

from a severe drought, and in Chicago almost no rain had fallen. Owing to its situation that city is exposed to sweeping winds from every side; those from the lake are generally wet, but the hot, dry winds from the southwest were the ones the city feared. They passed over acres of flimsy frame buildings, leaving them as dry as tinder, before reaching the more substantial business section within the fire limits. "Chicago, then, had for years been exposed to a destructive fire. All that was required was the concurrence of certain circumstances . . . a long continued dry season; a fire starting among wooden buildings on the West Side; a negligent or worn-out Fire Department, and a gale of wind strong enough to carry the fire-brands across the South Branch and the river. On the 9th of October they happened together."⁵

Even after the fire was well started in the west division, no general alarm was felt, for the river was considered sufficient protection to the south and north division. But the "fire was accompanied by the fiercest tornado of wind ever known to blow here, and it acted like a perfect blow-pipe, driving the brilliant blaze hundreds of feet with so perfect a combustion that it consumed the smoke, and its heat was so great that fireproof buildings sunk before it, almost as readily as wood." When the fire jumped the river the whole city lay at its mercy. Soon "billows of fire were rolling over the business palaces of the city, and swallowing up their contents. Walls were falling so fast that the quaking of the ground under our feet was scarcely noticed, so continuous was the reverberation. Sober men and women were hurrying through the streets from the burning quarter --- some with bundles of clothing on their shoulders; others, dragging trunks along the sidewalk . . children trudging by the sides or borne in their arms. Now and then a sick man or woman would be observed, half con-

⁵ Chicago Tribune, October 9, 1872.

cealed in a mattress doubled up and borne by two men."⁶ Carts, wagons, carriages dashed through the streets while men still frantically sought for some conveyance to bear them away. Nearer the disaster "people were mad. Despite the policeindeed the police were powerless-they crowded upon frail coigns of vantage, as fences and high side walks propped on wooden piles, which fell beneath their weight, and hurled them, bruised and bleeding, into the dust. They stumbled over broken furniture and fell, and were trampled under foot. Seized with wild and causeless panics, they surged together backwards and forwards in the narrow streets, cursing, threatening, imploring, fighting to get free. . . Everywhere dust, smoke, flame, heat, thunder of falling walls, crackle of fire, hissing of water, panting of engines."⁷ To make the helplessness of the city more complete, the great pumping stations were disabled by a burning roof falling upon them, so that not enough water could be lifted from the lake to quench a bonfire; the tearing down and blowing up of buildings was found to be almost the only method of stopping the flames.

The total area of the burnt district covered 2,024 acres on which 13,500 buildings were consumed; the dwelling places of 100,000 citizens were destroyed, 92,000 persons being rendered homeless. It was estimated that 250 people lost their lives, while the financial loss reached the sum of \$187,927,000. Relief poured in from other states and even foreign countries to an amount little short of \$5,000,000-the nine railroads entering Chicago could hardly furnish cars to transport the provisions and clothing that came in.8 The state legislature, called into special session by Governor Palmer, was powerless to render direct aid to the stricken city; it passed, however,

⁶ Letter of W. B. Ogden, quoted by Andreas, History of Chicago, 2:704; ibid., 734. ⁷ Chicago Post, October 18, 1871. ⁸ Koerner, *Memoirs*, 2: 532.

an act redeeming the canal from the lien thereon for the cost of its improvement by Chicago, and the amount of \$2,955,340 was thus constitutionally placed at the disposal of Chicago.

Individual lives and fortunes had in a great many cases suffered irreparable misfortune, but the city itself now seemed to come into quicker and fuller life. Within two years the bare ground on State and the streets parallel with it was worth more than land and buildings were before the fire, for the entire destruction of the old business section had cleared the way for all sorts of improvements.

Brick, stone, and later steel buildings were erected in the place of the earlier frame buildings, and within four years after the fire it was estimated that nearly \$18,000,000 had been expended for stone and brick construction.⁹

If the fire did not check the material growth of Chicago very seriously, neither did it, for more than a season or so, banish those arts of living which that city had so early shown a desire to cultivate.¹⁰ Chicago had long been favored with good opera and plays of the better type. During the winter season of 1875 the Italian Opera Company playing in Chicago included "La Traviata," "Lucia," "Faust," and "Lohengrin" in its repertoire, theater-goers were afforded the opportunity of seeing actors like Edwin Booth and Clara Morris in "Richelieu" and "Camille," while Sunday night concerts at

⁶ Chicago Tribune, July 20, 1874. Strange as it may seem, the city did not at once take adequate precaution against future fires; and it was not until a fire in 1874 destroyed \$4,000,000 worth of property and exacted \$2,381,400 from insurance companies that the board of underwriters and the withdrawal of insurance companies forced remedial action. A popular mass meeting of the board of underwriters demanded a reorganization of the fire department; extension of fire limits; organization of a force of sappers and miners; increase of the capacity of water pipes and plugs; protection of the business section from the frame buildings in the southern, western, and northern parts of the city; and removal of the lumber yards to a more remote section. On July 22, the mayor signed an order extending the fire limits to the outer boundaries of the city, and other improvements were not long after made. Chicago Tribune, July 18, 20, 22, October 9, 1874.

¹⁰ See Centennial History of Illinois, 3:436 ff.

the Chicago Academy of Music and recitals by the Liederkranz and other societies were again offering their attractive programs.¹¹ The first reception at the Fine Arts Institute after the fire Chicago had heralded in 1874: "Time was, before the fire, when art receptions were notable events. . . . Then came the fire and burned up the galleries and many of the pictures, and drove the artists here, there, and everywhere, so that they no longer had local habitation or name. As the new city, however, began to rise out of the ashes, one after the other they began to return again, and now there are more artists here than there were before the fire." 12

Other cities of the state were neglecting neither music nor art. In 1875 Springfield indulged in a three-day carnival of music when, at its invitation, twenty-two singing societies signified their intention of attending the sängerfest on the twentyeighth and twenty-ninth of June.¹³ At Jacksonville, an art society was organized in 1875 and conducted an exhibit of the five "pieces of art owned in the city"-an effort which the Chicago Tribune approved as showing "a remarkable evidence of æsthetic culture." The Illinois Industrial University was the proud owner of a "grand collection," said to be "the largest west of New York;" the art gallery there was formally opened January 1, 1875, with four hundred pictures and four hundred pieces of sculpture on exhibit.¹⁴

Libraries and lecture courses still furnished an important element of culture. At a lecture course in Sterling, Senator Carl Schurz, Professor Swing of Chicago, Schuyler Colfax, "Eli" Perkins, Mrs. Scott-Siddons, the Boston Quintette, the Camillo-Urso Troupe, General Banks, and Lillian Edgerton

¹¹ Chicago Tribune, January 2, 14, 16, 18, 1875.

Gregory. Ibid., January 2, 1875.

offered their various talents during the winter of 1875. In Chicago, Sunday lectures, literary societies, classes in English literature, and the extensive use of libraries indicated a conscious effort at improvement.15

The diversions of rural life changed but little during the Exorbitant railroad rates still largely forbade seventies traveling, so that occasional visits to the neighboring town to see Barnum and Company's circus or to attend the county fair were the only trips that took the average farmer and his family out of their accustomed environment. A pioneer mail order firm offered its customers only croquet, playing cards, dominoes, chess, and cribbage boards, though occasionally an agricultural paper would advertise "Chivalrie, The New Lawn Game." 16

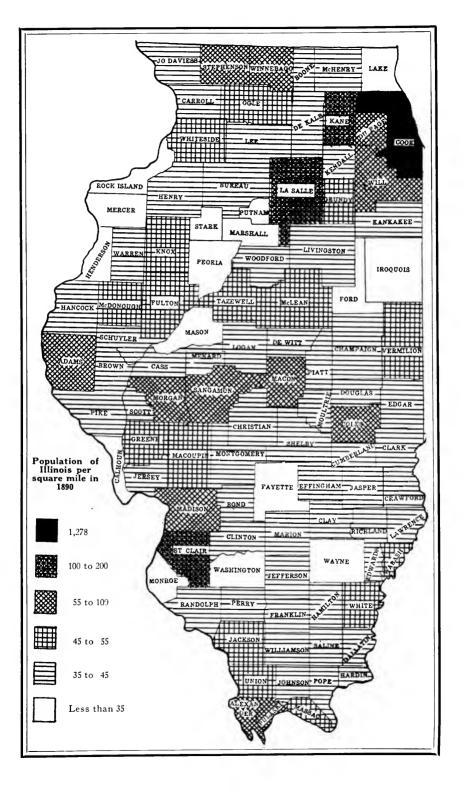
For reading matter, in addition to the family Bible, which in most homes was the only book the house afforded,¹⁷ there was sometimes a community or metropolitan newspaper, but for mental stimulus the entire family depended upon the agricultural paper, which found its way into almost every home. Within its few pages was combined a wide variety of matter; political news of interest to farmers; progress of the state granges; scientific and popular articles on agriculture and its new developments; labor-saving devices on the farm and in the home; fiction and poetry for children; occasional love stories or extracts from diaries of farm women; poetry, puzzles, anagrams, enigmas-these were a few of the varied items to be found in a typical agricultural paper of the day.¹⁸

If rural life afforded little in the way of formal amusement, it was growing richer in organized social life. The serious business of fighting the railroads had led to the forma-

¹⁵ Chicago Tribune, January 8, May 13, 1875, February 21, 1876. New York Post clipped in the Chicago Tribune, January 2, 1875.

¹⁶ Prairie Farmer, June 20, 1874. ¹⁷ Catalogs of Montgomery Ward and Company for 1874, 1876, and 1878 advertised no books.

¹⁸ See volumes of Prairie Farmer, 1870-1876.



tion of farmers' clubs, and of local and state granges. Women were admitted on an equal footing with men, and consequently when business was over the session took on the air of a festive gathering. Local granges often provided for picnics and excursions; and delegates to grange conventions listened to programs where poetry as well as papers on cheaper transportation played a part.¹⁹ 1184657

One of the most marked evidences of social growth in the state was the broadening scope of education. During these years, kindergartens were inaugurated, schools for deaf-mutes and feeble-minded were established, night schools were opened, while industrial education and optional studies in the curriculum had their beginnings.²⁰ In 1872 compulsory education began to be seriously advocated; in February a teachers' institute adopted resolutions declaring that not only is compulsory education necessary to the school system, but upon it rests the "foundation of liberty and good management," and in October of the same year, similar resolutions were even proposed at the regular republican convention. Two years later a compulsory education bill was introduced into the state legislature; it provided that children between the ages of nine and fourteen should be compelled to attend school at least three months a year; it stipulated the subjects to be taught during that time and imposed fines in case of violation of the law.²¹

The Chicago Tribune hailed the proposed bill as a salutary measure which, if carried out, would by lessening ignorance tend to lessen crime as well. To the Chicago Times, however, the proposed bill created "by force of statute a new crime, to-wit: the crime of liberty in education. It declares it to be

Prairie Farmer, March 28, July 4, July 11, 1875; Chicago Tribune, August
 1875, September 12, 1876; Proceedings of the State Grange of Illinois, 1875.
 20 Ottawa Republican, February 15, 1872, July 31, 1873, July 15, August 19,
 December 23, 1875; Chicago Tribune, January 1, 29, 1874, February 10, 1875,
 October 6, 1876; Illinois State Register, July 3, 1875.
 21 Chicago Tribune, February 15, October 2, 1872, January 21, 23, 1874.

a crime for parents to be the educational guardians of their own children." 22 The bill was killed in the senate and the State Register records its defeat as being "among the many good acts of the adjourned session." 23

Signs of educational growth and change did not appear without strong opposition, and democrats in particular found much to criticise in the school system as a whole. The State Register fought the public schools on the grounds of unwarranted expenditures, too extended a curriculum, and general mismanagement. "Our schools, as now conducted, cost the people of the state over \$9,000,000 per year and the result is absolutely nil. . . . The only way to save the public school system from extirpation as a nuisance is to reform it. If the general assembly will pass a bill restricting the studies in all public schools to the English branches, excluding all and singular flub-dubs and fribbles . . . it will be a grand reform." 24 High schools were claimed to be "tax-eating monopolies" and "instead of being schools to furnish all children a good common school education are quasi colleges, where dead and foreign languages are taught, and children are turned out expensive blockheads without even the rudiments of a common school education."

Democrats were ably seconded in their criticism by Catholic journals. "All the stock arguments hashed and rehashed up from time to time by the Protestant press in favor of our common-school system have been answered and refuted centuries ago," said the Western Catholic of Chicago. "The corollary to be deduced from the general principles stated is, that the denominational system of education is the only sound one. It is just as economical as any other. The injustice of

 ²² Chicago Tribune, January 22, 1874; Chicago Times, January 22, clipped in Chicago Tribune, January 26, 1874.
 ²³ Chicago Tribune, March 24, 1874; Illinois State Register, April 3, 1874.

²⁴ Ibid., March 23, 1875.

Protestantism is singularly exemplified by its permitting the Catholics to pay for two systems, as they are compelled to do under the present order of things. They are taxed for the common schools, which they cannot use, and they have to support, in addition, their own educational establishments."25 Democrats, however, disdained the charge that their criticism might be based on sectarian grounds. "The Journal insists," commented the State Register, "that no one is displeased with the present perverted public school system but Roman Catholics. This is an unworthy, puritanical charge, and is as mean . Scores of Protestants of the strictest as it is false. . . sect, demand that the High School be abolished, the grades of all the schools raised, and that the city furnish common school educations, and not make sickly and expensive attempts at collegiate courses, contrary to the original intention of the common school law. The most radical persons we have met on this subject belong to the Methodist church." 26

The question of admitting Negroes to common schools roused great political and sectional bitterness. It was urged that the admission of Negro pupils was unwarranted, unconstitutional, unnecessary; that it exposed Negro children to ridicule; that to have Negro children thrust into the schools was unfair to white pupils. Springfield was the seat of a decidedly heated controversy over the so-called "public school outrage." The *Illinois Journal* claimed that the fourteenth amendment practically bound them to open schools to Negro children, that it was the constitution and the law which were to blame, if the members of the school board opened the schools to Negroes in a conscientious discharge of their duty. The *State Register* answered that the fourteenth amendment "is not violated by the establishment of separate schools for colored children. . . If the negro race were the equal or even the superior of the white race, we should still be opposed to the mixing of white and black children in our public schools for the reason that such intermixing of children tends to establish social intimacies, which will result in intermarriage and amalgamation."²⁷ Many of those who opposed admission of Negro children began to look about them for private and other schools in which to place their children. On October 20, 1873, "eighteen negro children" of Springfield "were admitted to the Fourth ward school;" the following day several prominent protestants began to arrange "with the Christian Brothers of the Roman Catholic church for the establishment . . . of a school embracing the various grades for boys."²⁸

Chicago supplied a bone of contention for educators when by the action of the school board a unanimous vote dropped Bible reading and the Lord's Prayer from school programs. Protest and commendation at once greeted this action. The resolutions of a public mass meeting condemned the action of the school board; the Chicago presbytery strongly deprecated it, while Methodist ministers petitioned for the rescinding of the action. Other members of the clergy, however, indorsed the change; the Reverend E. F. Williams, a congregational minister, thought it "unwise to insist upon Bible-reading as an exercise in the public schools," believing it to be "a violation of the conscientious convictions of many good citizens, and in this way a species of tyranny and oppression which ought not be countenanced by a Government professing to be republican in form." 29 Dr. Samuel Fallows, a Reformed Episcopal rector, argued for the entire separation of church and state,

while the Reverend C. L. Thompson, a Presbyterian clergyman, claimed that since schools were supported by taxation from all, it was unfair to compel "children of Romanists and Jews to engage in a form of worship which they do not believe."³⁰

The impartial spirit that led such men to a stand which would probably have been impossible to ministers of the foregoing generation was significant of the general broadening that was coming over the religious world. That it was an age of transition was obvious to all; the awakening scientific attitude was affecting the life of the spirit. In some pulpits fear of the new dispensation took the form of a puritanical reaction against any form of current amusements. The Methodists expressed officially their "cause for apprehension concerning another growing evil, - the fondness of social and public amusements. . . . We do not refer to the theatre, the circus, the ball room, or the wine-party. These confessedly lead to spiritual death." They frowned upon the practice of laymen reading Sunday papers, pronounced against Sunday trains, and denounced the Sunday meat market, though such restrictions were laughed down by many laymen.³¹

The years 1874 and 1875 witnessed a great upheaval of the revival spirit. When before overcrowded halls and tabernacles evangelists wrestled with the demon sin and showed their audiences how to down him, they met with whole-hearted popular response and effected many conversions. At Joliet, where a great revival was in progress, four hundred conver-

³⁰ The school board took the latter stand, and by a vote of ten to three refused to rescind their action. *Chicago Tribune*, October 4, November 13, 1875. ³¹ *Ibid.*, January 1, 12, 1875. When resolutions embodying such pronunciamentos were passed by the Rock river conference the *Chicago Tribune* scoffingly remarked that when such measures could be passed "in this good and centennial year of grace, railroads, telegraphs . . . [it] must give us cause sufficient to rub our eyes and see if there is not some old woman hanging from the telegraph-pole, or some erring brother branded with a scarlet letter for eating unsanctified beans for his Sunday dinner." *Chicago Tribune*, October 19, 1876.

sions were reported in a few weeks, and a revivalist at Bloomington in two weeks converted 1,000 persons. A camp meeting in progress at Sulphur Springs near Carlinville had 5,000 people in attendance, while Kankakee was a close second with an average daily attendance of 4,000 people.³² But in Chicago, the "godless" city, the revival wave reached its height. It was rocky soil that confronted the great evangelists, Moody and Sankey, but their enthusiasm did not blench; the first meeting was held at eight on Sunday morning-an hour which put "the zeal of the good people of Chicago to a rather dangerous strain, but the result fully justified the measure, for when he [Moody] came to his preaching desk exactly at the hour he found awaiting him an audience of 7,000 people." The afternoon service of the same day was attended by over 8,000 people. During the whole time that the revival labors were being carried on, the people of Chicago flocked to his tabernacle in great numbers, and "the signs of a great awakening" were in evidence.

The old and new forces in the formal spiritual life of the day found direct expression in a bitter war between orthodoxy and latitudinarianism. To many the crying need of the period was some faith to bridge the gap between scientific discoveries and old religious traditions; where such an atmosphere prevailed it was natural that pulpit preaching should change. The sermon of "physical hells, actual devils, bona-fide infernos, and all sorts of sulphurous horrors," passed away, and the exposition of "harsh and vindictive dogma" was being "avoided by most ministers." He who attempted much latitude of interpretation, however, was liable to the charge of

³² Illinois State Register, February 10, 1873, September 1, 1875; Ottawa Republican, February 19, 1874; Chicago Tribune, September 1, 1875. Oue Chicago preacher pointed out a singular connection between financial panics and revivals of religion, since panics produce demoralization, and "demoralization has invariably been succeeded by a profound and universal religious upheaval."

heresy; the Reverend Mr. McKaig of the Ninth Presbyterian church stood trial for heresy charged with making utterances which would "seem to imply that some of the portions of the Bible are not inspired, by representing it as containing 'incongruous admixtures,' 'strange stories,' . . . 'bad science,' . . . 'jarring dates,' 'historical discrepancies.'" 33 The Reverend David Swing, another Presbyterian preacher of Chicago, who had been hailed as a thinker able to harmonize scientific discoveries with religious perceptions, was also tried for heresy. It was charged that Swing had delivered a lecture in the aid of a Unitarian chapel "and thereby aided to promulgate heresy;" that he had used "unwarrantable language with regard to Penelope and Socrates," that he had eulogized John Stuart Mill, "a well-known Atheist;" and that he differed from some of the vital points affirmed by Calvinism. Professor Swing was acquitted by the trial court but resigned before the appeal of the prosecution was taken further. The members of the synod were said to have attended the special session "for the simple purpose of showing by their votes that they will not sanction any latitudinarianism in the Presbyterian Church, or the faintest departure from the Standards."³⁴

Such trials were merely the signs of the restlessness which was stirring the people, and accusations of heresy often served to transform doubt into action. After his trial Swing left the presbytery and established an independent "central" church where he preached to immense crowds. The celebrated trial of the Reverend Charles E. Cheney of Chicago had been followed by one of the most significant secession movements in religious circles - the organization of the Reformed Episcopal church of America, which by 1875 embraced thirty-five

⁸³ Chicago Tribune, January 12, December 20, 1875, September 12, 1876. ⁸⁴ Ibid., April 15, May 23, October 17, 1874, September 12, 1875. The Tribune saw in the charges not the indictment of one man but the "outbreak of Old School Presbyterianism against New School."

church organizations with a membership of about four thousand communicants.³⁵

The movement for independence expressed itself only when some crisis precipitated an issue. When all over the state it could be said that "Evangelistical churches show themselves extremely restless under the yoke of their various creeds. Their members are yearning for a more cheerful view of life and of God," it was not surprising that the formation of independent churches was frequent. At times merely the desire for tolerance and a broadening of the points of view seemed to instigate change; in the little town of Henry a new church was organized which was "broadly and mutually independent, the pastor being free to preach what he likes so long as he sticks to the New Testament as his 'basis of authority,' while his hearers are equally free to believe him or not, just as they prefer." ³⁶

The new social consciousness which was influencing education and religion in the seventies found in the temperance movement a concrete issue upon which it could lavish its energy. The temperance question was by no means a new one in the politics of the prairie state. In ante bellum days it had been a force to be reckoned with; and after suffering an eclipse it had again appeared in church resolutions and on the banners of "radical reformers;" once more it became a subject of heated discussion on the debating forum and was thundered forth from lecture platforms. When temperance men, not content with mere agitation, insisted upon entering practical politics with their own candidates in the field, old-time politicians looked askance. Republicans were at first inclined to assure "an educated, practical people, Germans and Americans, composing the republican party," that the republican ³⁵ Chicago Tribune, May 13, December 6, 1875; Centennial History of Illi-

nois, 3:425. ³⁶ Chicago Tribune, May 26, 1874, January 8, 1876.

candidate was "as good a Champion of Temperance Principles As Any Man Can Desire." 37 One wing of the republican party, however, soon came out openly for temperance, but the democrats steadfastly refused to temporize with the issue. When the Bloomington Democrat heard that not only a temperance candidate was in the field but that the republican nominee had taken a temperance stand, it ejaculated: "If both these candidates are monomaniacs on this subject, which is a thread-bare hobby, we trust the congressional democratic . will bring out a man whom all sensible convention . . and will support." 38 This attitude the people can democrats consistently maintained, and it began to worry republicans somewhat; when John V. Farwell was nominated for congressman-at-large by the prohibitionists, he declined, declaring, "I am a Republican in my political convictions, and I can see no practical result to follow the nomination of a temperance ticket at the present time but the weakening of the Republican party for the advantage and benefit of the Democratic party. I cannot be an instrument in producing such a result " 39

The definite goal at which the temperance forces were aiming was the enactment of a law which would adequately express their attitude toward the liquor traffic and which would "provide against the evils resulting from the sale of intoxicating liquors in the State of Illinois." They formulated a measure which required a licensee to give bond for \$3,000, with two good sureties, conditioned that he would "pay all damages to any person or persons which may be inflicted upon them, either in person or property, or means of support, by reason of the person so obtaining the license." Moreover,

³⁷ See Centennial History of Illinois, 3:421; Illinois State Journal clipped in Illinois State Register, August 16, 1870.

³⁸ Ibid., August 27, 1870.
³⁹ John V. Farwell to the Chicago Tribune, September 16, 1870.

members of the family who had been injured in person or property or means of support by an intoxicated person could require damages, conjointly from him who sold or gave the intoxicating liquor and from him who owned the property from which the liquor was dispensed. Other stringent provisions regarding Sunday closing and further indictments and penalties insured the fiercest opposition to and the most dogmatic championship of the proposed bill. Before the opposition forces fully realized how strong the temperance wave had become, however, their agitation, meetings, pleas, and persuasion culminated in the passage of the temperance bill of 1872. It was approved by Governor Palmer on January 13, 1872, but, since it was not to go into effect until July 1, the intervening months gave opportunity for a sharp battle.

The forces backing the temperance bill claimed to have all the elements of morality, decency, and honesty arrayed with them. The churches, indeed, had taken a decided stand in favor of temperance. In Chicago, during the first weeks after adoption, enthusiastic meetings were held in many churches. At one meeting early in February, hundreds were turned away. When the Reverend Dr. Fowler spoke on the new temperance law, he praised the law as the best that could be obtained and wanted it enforced "even at the point of the bayonet." In opposition to such support the Ottawa Republican listed three classes — "the keepers of low groggeries, the owners of hovels in which these groggeries are kept, and that despicable class of small politicians who court and depend upon the influence of the groggery element."⁴⁰

The opposition did not expend their energies in vain invective, but immediately after the passing of the bill organized themselves to bring about its repeal or defeat its execution.

⁴⁰ Ottawa Republican, February 29, 1872; Chicago Tribune, February 12, 1872.

In Chicago, and indeed wherever there was a large body of German citizens who felt their personal liberty to be endangered by this development, opposition was particularly spirited. Early in February, meetings of protest were held by Germans to oppose the law in so far as it applied to the sale of beer and wines. At Quincy, on January 29, a huge mass meeting of Germans gathered together at which prominent citizens denounced the law as unconstitutional and illiberal and as intended to operate especially against the foreign population. At Peoria, on February 12, the "antis" organized to prevent the law's enforcement. On the ninth of March, the Chicago Wholesale Liquor Dealers' Association decided to make a concerted effort to secure the repeal of the law.⁴¹ Finally, "in consequence of action in the central part of the state," on the fourteenth of March the opposition called an antitemperance law convention at Springfield. It was heavily attended by Cook county and downstate Germans, who were, for the most part, brewers and liquor dealers. After effecting a permanent organization under the imposing title of "state association for the protection of personal liberty," resolutions were adopted, which, claiming to "abhor habitual drunkenness and the habitual drunkard as much as any so-called temperance men," opposed "the so-called temperance law because, while it hypocritically affects to be in the interests of an advanced morality, it is only a species of class legislation in behalf of the wealthy and against the poorer, but equally worthy citizens; giving the former power to poison, (as alleged), while

⁴¹ Chicago Tribune, February 13, 16, March 9, 1872; Illinois State Register, February 2, 1872. The Illinois State Register, February 29, 1872, hailed this development with enthusiasm: "We are rejoiced that the law is to be tested, for the questions involved are such as interest every man in the community, and for the reason that the law will obtain in the courts a dispassionate scrutiny, a calm discussion, and a fair argument, which it seems not to obtain anywhere else." In striking contrast to the attitude of the Germans was that of the Swedes; in Kane county they pledged themselves to vote only for such municipal candidates as favored the temperance movement. Chicago Tribune, April 12, 1872.

the same is refused to the latter."⁴² Pro-temperance advocates seemed little impressed by this move of the opposition; they were inclined to dismiss the whole convention as a "demonstration of the bummers, saloonkeepers, and balance of power parties," where "the low groggery element largely predominates."⁴³

In the end, the temperance forces were triumphant in preventing the repeal of the law, and on July 1, 1872, it went into effect. It was another matter, however, to enforce it. Opposition on the part of the German element made it especially difficult to enforce the measure in Chicago and in other of the larger cities. From the first, republican leaders were doubtful as to the attitude of this group toward prohibition. When, on October 10, 1872, the mayor of Chicago "issued an order to the Police Commissioners for the closing of all saloons, public bars, and other places where intoxicating liquors are sold on Sunday," the Chicago Tribune raised the question "whether lager-beer comes under the designation of 'intoxicating drinks," arguing that since lager beer does not produce intoxication, "though it may, if taken in sufficient quantities, produce stupefaction," an exception might logically be made in favor of that beverage. The mayor's orders were enforced, however, and "there was a grim feeling among the Germans." 44 Again the Tribune made the plea in behalf of the disgruntled element that "Beer is the national beverage of the German. He has drank it daily from youth up. It is the bread and meat of the peasant, and as indispensable to him as water to the American laborer. . . . The enforcement of the law in such a manner as to stop the German from drinking beer is not only foolish as invading his personal

⁴² Illinois State Register, March 15, 1872.
⁴³ Ibid., March 18, 1872.
⁴⁴ Chicago Tribune, October 11, 21, 1872.

rights . . . but it is foolish, also, because it threatens the public with new dangers and serious disturbances of the peace. It will tend to provoke riots, and perhaps bloodshed."⁴⁵ In spite of anything the *Tribune* could say, now that enforcement of the law was bringing disagreeable results, the fact remained that the republican party had stood back of the measure in the first place; many Germans began to show serious disgruntlement with the party to which they had long given full allegiance. This fact and the anxiety of republican leaders, the democrats gleefully seized upon. "The action of the Germans and others who oppose the law," commented the State Register, "has quite taken these political gentlemen by surprize, for they were quite sure nothing would induce the Germans to leave the Republican party." Where now was the assurance of a republican leader who declared that "the Dutch couldn't be kicked out of the republican party?"

German opposition finally went so far that the Illinois Staats-Zeitung urged its readers to vote for no man, irrespective of party affiliation, who was not pledged to vote for the repeal of the existing temperance and Sunday law. Whereupon the Chicago Tribune, alarmed at such independence, solemnly declared that the Zeitung had come "very near overstepping the line which separates a truly loyal paper from a traitorous Copperhead sheet."⁴⁶ But the break had now become real, and during the next two years there was a marked exodus of Germans from the republican party. Because of their accession to the democracy, German politicians like Antone Hesing and John Lieb advocated the reorganization of the democratic party. A meeting purporting to accomplish this was held by democratic editors, at which "Mr. Hesing strongly advocated a reorganization of the party, saying that the Democratic party was the only one which could keep down the puritanical element and guarantee the peculiar freedom the Germans demand."⁴⁷

Despite all opposition, the temperance enthusiasm continued and during the next two years its advocates plied agitation with unabated energy. All over the state temperance clubs and organizations were greatly in evidence. There was the "Prohibition Party," the "Good Templars of Illinois," the "Women's Christian Temperance Union," the "Chicago Temperance Alliance," "Sons of Temperance," the "Chicago Total Abstinence Union of Illinois," and the "Women's Temperance Association of Illinois," of which Miss Frances E. Willard was president. At Peoria the churches held meetings and listened to discourses upon the subject. In many towns appeared such typical notices as that in the Ottawa Republican, March 12, 1874: "Temperance noon-day prayer meetings will be held every day until further notice at the rooms of the Academy of Sciences, Cheever's block."

Friends of the law and its enforcement gathered at the Methodist church at Ottawa and adopted resolutions indorsing "the fundamental principle in our State Temperance law." "Rousing meetings" were also held at the Ottawa Catholic church,⁴⁸ where great impetus was given to the prohibition movement in that locality.

The year 1874 stands out in the temperance movement as the year of the "woman's temperance crusade," an organized attempt made by Illinois women to effect state wide temperance. Using some church as a local center, the women would gather and divide into two bands—some starting out on the active mission of reforming saloonkeepers, "while their co-workers

⁴⁷ Chicago Tribune, May 28, 1874, January 7, 1875. The Chicagoer Neue Freie Presse, a prominent German paper, opposed this "bold scheme of Hesing and Lieb to democratize the Germans."

⁴⁸ Chicago Tribune, February 13, 1872; Ottawa Republican, March 5, 12, 1874.

in the cause remained behind to invoke the Divine blessing upon the work." 49 The crusaders met with varying success; at Springfield, "the prevailing sentiment was altogether favorable to the new movement-prayer and entreaty with the saloonkeepers to give up the traffic, and with the bibulous to give up their tippling habits." At Yorkville fifteen women "went in a body to Sullivan's and Beck's saloons, this being their second visit. Mr. Sullivan talked pleasantly with them, and signified his intention of quitting the business. The ladies indulged in song and prayer." 50 Not always, however, did the crusaders meet with such a flattering reception. "The scene which occurred on Saturday night in front of Rayburn's saloon was not calculated to aid morality or to inspire reflection," asserted a Springfield item. "The facts are that the temperance crusaders having agreed to pay Mr. Rayburn, the alleged value of the liquor in his saloon, proceeded to carry out bottles, demijohns, and barrels, and destroy them in the presence of an excited crowd. Some of the lookers on tried with rough good humor to seize the bottles and with these the ladies struggled. When a religious hymn was being sung, the crowd shouted and yelled, and when Rev. Mr. Reed . . . mounted an empty whisky barrel to address the crowd, he was received with shouts of derision."

The women sometimes extended their labors into other fields. When recruits for the pledge were sought, a committee of young ladies was organized to call on the clerks of Springfield, and there to "use all their pretty devices and winning ways to induce them to sign" the pledge. On one occasion when the general assembly was in session "the temperance crusaders raided both houses of the legislature for signatures

⁴⁹ Illinois State Register, March 18, 1874; Ogle County Reporter. April 16, 1874. ⁵⁰ Chicago Tribune, March 5, 1874; Illinois State Register, March 13, 1874. to the pledge. The senate . . . promptly took a recess to allow the ladies to get their autographs. When the house was reached, however, the yeas and nays were called to determine whether its members would 'quit drinking' or not, and was decided in the affirmative and a recess was taken, during which all the members 'took the pledge,' and all will go home sober." 51

After several weeks of this campaign, the Chicago Tribune remarked that "the fervor of the intemperate temperance women is abating, dying; and yet . . . saloons are as numerous; the number of drunkards about as great. . The volume of orisons made a momentary impression on the air, excited the ridicule of the anti-religious world, awakening regret in the breasts of those whose religion is not wholly irrational and sensational-and these are the only results which have been produced by 'praying women.'" More tangible results, however, were pointed out. On April 20, the bells were ringing for a temperance victory in Bloomington, while in May came a call to the temperance element of Illinois, that "in view of the unprecedented successes of the temperance cause within the past few months," a state jubilee should be held; further activities along the same lines were proposed, and the motto "throttle the wretch, and down with the dramshop '' was advocated.52

During the temperance campaign the anxious eye with which politicians regarded German opposition afforded an instance of the great influence wielded by the foreign element in the political life of Illinois. They were always courted by political bosses, for, with the coming around of election day the "nationalization mill began to run rapidly," with new citizens ground out sometimes at the rate of one hundred per

evening.⁵³ Moreover, they had a greater strength than mere numbers might insure, for in Chicago and other cities the foreign population of artisan and laboring classes had already attained a group solidarity which commanded respect. They were organized into German, Polish, and Scandinavian branches of the International Workingmen's Association. Since the business meetings were conducted in the native tongue of the members, English-speaking craftsmen were barred from membership and American workingmen were years behind foreigners in the development of such organization. One of the problems which campaign organizers faced was the difficulty of meeting the demand for German, Irish, Bohemian, or French speakers; they constantly heard the cry that one or the other of these would do more good in a given locality than all the English speakers that could be sent.54

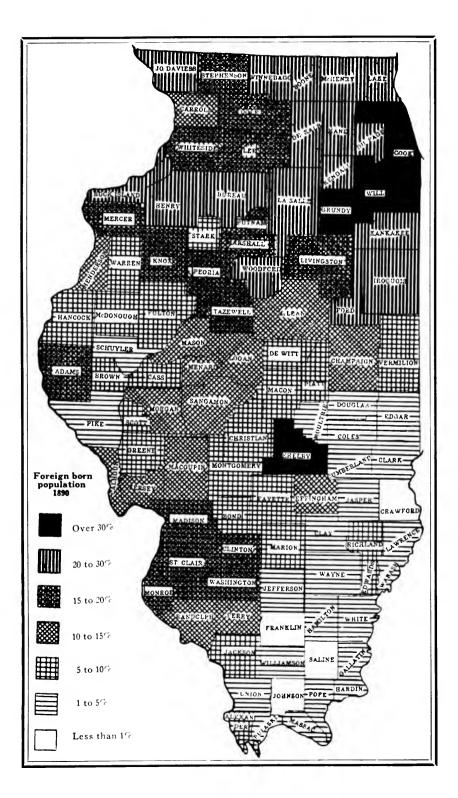
The deference which was accorded foreign groups afforded fuel to old know nothing fires among the native Americans which in turn aroused a species of foreign know nothingism. The Swedish citizens of Henry county in a mass meeting at Galva protested at the charge that they had "been petted, deferred to, courted and fooled round long enough" and that they were after "all the offices and fat places." In spite of protestations against such charges, accusations grew steadily more direct. "But HESING and LIEB, controlling two newspapers printed in German, having long been personal enemies, have united and organized an exclusively foreign ticket, and placed it before the people of this country for the sole purpose of excluding persons of native birth from office. They have united the Germans, Irish, Scandinavians, Hollanders, Bohemians, French, Poles, Austrians, and all others of foreign

⁵³ Chicago Tribune, January 22, 1872. ⁵⁴ Ibid., June 16, 1874; Burford to Goodell, October 16, 1876, Cowa to Goodell, October 30, 1876, Guertin to Democratic Central Committee, November 5, 1876, Berry to Goodell, November 6, 1876, in McCormick manuscripts.

excluding all persons of native origin," nativity . . . while the charge is further extended to the effect that this foreign party has for its object the "political disfranchisement of Americans." 55 The Chicago Tribune was especially indignant over an incident that took place in the city council. "In his search for a proper man to fill the place of City Marshal, the Mayor selected a gentleman who happened to be American by birth. The Foreign Know-Nothings in the Council ascertained the Mayor's purpose . . . and simply resolved that they would not receive the nomination. Is not . . . this thing gone far enough? . . . We began to object when the Foreign Know-Nothings refused to build a Court-House unless an 'Irishman' or a 'German' were appointed as architects. We object still more now that the stand has been taken that no American shall be appointed Marshal. It is past all endurance that American nativity should become a political ban. Is this the idea of 'Home Rule,' about which the Irish patriots are so fond of airing their eloquence?" 56

The Irish indignantly denied the imputation of know nothingism, and indeed more than once threw their influence against its appearance. The Irish were prominent at a meeting in Springfield in April, 1874, held by "foreign-born citizens to express disapprobation of any attempt, real or imaginary, to revive the spirit of know nothingism." The Irish seemed to discern the basic insidiousness of the appeal as when one of their number thus expressed himself: "You know, and every thinking man knows, that when a party asks the support of the Irish people for a man on account of his nationality that they are reviving the old know nothing principles which every true Irishman has been fighting for twenty years past, and which

⁵⁵ These Swedish people adopted resolutions declaring that although they had always been good republicans, they had held only one office in eighteen years. *Chicago Tribune*, January 22, 1872, November 2, 1875. ⁵⁶ Ibid., July 21, 1875.



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they will continue to battle against while there is a trace of it left, whether it be native or foreign. . . . We vote for men, not for nationalities." 57

57 Illinois State Register, November 1, 1872, April 1, 1874.

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III. LIBERAL REPUBLICANISM, 1870-1872

THE political history of the state of Illinois during the I quarter century following 1870 was characterized by the rise and decline of third-party movements. The first of these was liberal republicanism — a general protest against the policies and acts of the regular republicans as a party, with special emphasis on the administration of President Grant. This movement was short-lived, its organized activities ceasing with Grant's reëlection to the presidency in 1872. During the next three years, the center of the political stage was held by the farmers, who had as a common aim the elimination of railroad abuses and other injustices to their class. As soon as it became apparent, however, that the state government could and would regulate railroad and warehouse rates and services, the farmers' movement, in so far as it was a separate political phenomenon, quickly disintegrated. Immediately the greenbackers entered the running as a third party, and for a decade their aims and policies affected the politics of the state. This movement, like the one carried on by the farmers, in time found the ground on which it stood cut away by the disappearance of the particular abuses that had called it into being; with the successful operation of the resumption act and the disinclination of a majority of the voters to expand the note currency, the reason for the further existence of the greenback party vanished. Long before the greenback movement had run its course, however, the silver question began to press for answer; like its immediate predecessor, the new issue was the outcome of an insistent demand for more and cheaper money.

The various movements clearly indicate a political unrest

that sprang from a deep dissatisfaction with economic conditions, aggravated by the problems arising from the Civil War and reconstruction. The readjustment of industry to meet the needs of peace was no simple matter; the tariff needed to be revised, prices must be adjusted to conditions of peace and to the gold level, capital and labor shifted from war to non-war industries, and production speeded up to make good the losses occasioned by the war itself. Such readjustment necessarily created confusion and entailed hardships on individuals and sections. Moreover, the disappearance of the frontier line during the seventies, the rapid growth of population and wealth, and the rapidly increasing stream of immigrants from Europe combined to intensify political unrest.

Between the movements of protest and the democratic party there was, generally speaking, a feeling of sympathy. Several times this sympathy developed into open coalition on the state ticket, while local fusion was a common occurrence. The republicans, on their part, viewed every sign of political unrest with disfavor, for they as a party had everything to lose and little to gain by new and strange political alignments.

In 1870 the republican party could look back over ten years of increasing power and prosperity; and, still pointing to its exploits during the years of civil strife, it demanded continuance in power as the party of justice and freedom. The decade, however, had brought changes within republican ranks; the austere idealism of 1860, when the cry of justice and freedom had rallied able men and powerful leaders to its standard, had in 1870 become the laxness of prosperity; able men and powerful leaders were becoming restive at the contented mouthing of once stirring phrases. They demanded positive action—pacification of the south, revision of the tariff, reform of the civil service; but their demands went unheeded by the "radicals" in power, and there was a growing conviction that no heed would be given under the administration of President Grant.

The constitution of 1870 raised no problem in Illinois which could crystallize this discontent; nor did the campaign of 1870 offer issues which would make concrete the dissatisfaction which was in the air. The democrats offered no constructive program to raise any questions, but merely contented themselves with redoubling their ridicule of Grant and with denouncing the republican party as sectional, corrupt, and inefficient. In reply, therefore, the republican press expressed satisfaction with the national administration. The Chicago Tribune, which had already been showing symptoms of political independence, now straightened its face, claiming that the pledges made by the party platform of 1868 to institute economy in government expenditures and to reform the collection of taxes had been redeemed by Grant; even so, however, it could not forbear expressing the belief that the president would wreck the party if he continued, as in the San Domingo affair, to carry on his administrative policies without reference to the cabinet.1

In the state convention at Springfield in September the republicans attempted to carry through a thoroughly loyal party program. They unanimously adopted a platform which viewed with pride the record of the party in its relations to the homestead law, to the Pacific railroad, to emancipation, to the Civil War, to reconstruction, and to the Mexican situation. They indorsed Grant's administration, calling it honest, economical, and efficient, and condemned the democrats for their attacks on the policies of the president. All these eminently proper party sentiments, however, were entirely at variance with the revolutionary tariff plank; therein they definitely set their faces against their eastern

¹ Chicago Tribune, July 8, August 15, 1870.

colleagues by emphatically declaring that it was "wrongful and oppressive for congress to enact revenue laws for the special advantage of one branch of business at the expense of another," and that the "best system of protection to industry is that which imposes the lightest burdens and the fewest restrictions on the property and business of the people."²

If the state party platform could not entirely conceal the dissatisfaction of one wing, lack of harmony was more fully revealed in the bitter contests for the republican nomination in the Peoria and Springfield congressional districts. In the Springfield district one of the four contestants was finally nominated only after disgusting the better elements of leadership and discrediting the nominating convention in the eyes of the people by flagrant wirepulling and political swapping.³ The Peoria district, warned by the Springfield situation, took precautions against a similar outcome in its nominating convention by adopting the Crawford county system of primaries. When a victory for Eben G. Ingersoll was announced, however, several of the most important republican newspapers of the state declared their intention to support the independentdemocratic candidate, Bradford N. Stevens.⁴ Then followed one of the most bitterly contested congressional campaigns ever held in the state, in which Ingersoll was beaten by a coalition of regular democrats, various independent groups, and the dissatisfied elements in his own party.⁵ Despite these evidences of disintegration, the republicans elected, though by

⁴ Peoria Review, Galesburg Free Press, Princeton Republican.

⁵ See Illinois State Register, September 28, 1870; Ottawa Republican, October 13, 1870.

² Chicago Tribune, September 2, 1870; Moses, Illinois, 2:796. Compare this plank with the tariff plank of the Indiana republican state convention held on February 22, 1870. Chicago Tribune, February 24, 1870. ³ Ibid., July 29, 1870; Illinois State Register, July 29, 1870; Illinois State Journal, July 29, 1870. See Chicago Tribune, August 4, 1870; Illinois State Register, August 4, 1870.

a reduced majority, the entire state ticket, including the one congressman-at-large, while they carried eight of the thirteen congressional districts.⁶

With the election out of the way, republican leaders who felt that the policies of the party ought to be revised and restated began a campaign for reform. On November 12, the *Chicago Tribune* declared that: "The general result of the recent elections indicates that the issues growing out of slavery . . . are settled; that the mere platform of 'economy and reform,' without specifying by what measures these glittering generalities are to be put in practice, is as available to one party as another, and, consequently, is not available as the special platform of any party; and that, on the present living issues, as to the proper mode of laying taxes and tariffs for the support of the government, the two old party organizations can no longer be relied upon for their full party vote."⁷

Coming from an influential republican newspaper with independent tendencies, this declaration attracted nation wide attention and by stating concisely what thousands were vaguely thinking gave the first impulse toward an independent political organization. In Illinois four general causes made for such an organization: industrial conditions were unsatisfactory; leaders as well as many of the rank and file in the republican party could not become reconciled to the methods used in reconstructing the late confederate states; the national administration was under suspicion of being corrupt and nepotistical; and relatively large groups of leaders, who had come from the democratic party of the time of the Kansas-Nebraska split over slavery, felt that the spirit which had drawn them from

⁶ Republican majorities: 1878 (president) 51,159 majority; (governor) 50,099 majority; 1870 (congressman-at-large) 23,610 plurality.
 ⁷ Chicago Tribune, November 12, 1870.

their old allegiance had now passed from the republican party.

Times were undeniably hard. Illinois farmers complained of the low prices which they were compelled to take for their grain and meats. Land values were low and fluctuating; farm mortgages difficult to meet in the face of low prices; and the feeling prevailed among the farmers that they were being literally robbed by the railroads and kindred interests. Even the report of the Chicago Board of Trade cautiously admitted that "the year just closed [1869] has been, in some respects, an unfortunate one, at least so far as the business of dealing in the products of the earth are concerned; and, in fact, all branches of trade have, to a greater or less extent, shared the general depression."⁸ The farming classes were not alone caught in the net of industrial maladjustment; laborers, both skilled and unskilled, complained of low wages and of the exactions of the employing classes; and their discontent was beginning to take form in strikes and boycotts. The Chicago Tribune attributed what it called "stagnation in business" to "the paralysis of production, the want of employment for labor, the locking up of capital because it cannot find remunerative use."9

But many had a more direct explanation to offer; they felt that the national government was being administered not only inefficiently and on a partisan basis but also in the interest of favored classes, particularly eastern manufacturers and the stockholders of national banks. Even the Chicago Tribune, which up to this time was in thorough accord with all republican policies except the tariff, expressed the belief that the national government was favoring the east in the matter of financial

⁸ Report of the Trade and Commerce of Chicago, 1869, p. 1.
⁹ Chicago Tribune, February 8, 15, 1870; Tazewell County Register clipped in Illinois State Register, December 12, 1870.

legislation. "We believe that in the organization of national banks and in the distribution of the currency partiality has been shown to the East."¹⁰

To this dissatisfied group may be added those led by Senator Trumbull, who stood out against the methods employed by congress in reconstructing the southern states. Nearly all of them had been democrats, who, being out of sympathy with the "squatter sovereignty" doctrine of Douglas, had first formed the nucleus of the anti-Nebraska wing of the democratic party and then had gone over to the republicans. They had played as important a part as the old whig leaders in electing Lincoln in 1860 and in supporting his policies during the war. Now, however, they were entirely out of sympathy with the post bellum policies of the party. To their way of thinking, the republicanism of Lincoln and Yates had ceased to exist, with the result that they, standing where they had always stood, were no longer within its ranks. Trumbull's changing position in the republican party is typical of this group. "He agreed with Lincoln's plan of Reconstruction, embodied it in the Louisiana Bill, reported it favorably from the Judiciary Committee, tried to pass it in the closing days of the Thirty-eighth Congress. . . . He ceased to be the leader of the Senate as he had hitherto been, on this class of questions, and he became a reluctant follower. . . . This course he pursued until the Anti-Ku Klux Bill was agreed to, by the Judiciary Committee, in 1871. . . . Trumbull did not change his principles, but he made an error in common with his party and he corrected it as soon as he became convinced that it was in error."¹¹

This group also found immediate cause for dissatisfaction in the administration at Washington; indeed, whether a man's discontent sprang from his dissatisfaction with economic adjustments, from lack of pacificatory measures toward the south, or from the corruptness of the civil administration, both local and national, the conviction was rapidly growing that no redress could come under Grant.

The three years of his administration had seriously undermined the president's reputation among reflecting men and had shaken his popularity among the masses as well. His conduct of public matters was flavored by his private affairs; he rewarded his personal friends with political office and persecuted his political opponents. "His acceptance of large gifts while President, the appointment of numerous members of his and his wife's family, some of whom were wholly unqualified for the offices bestowed upon them, his waging a relentless war against those Republican members of Congress who had opposed some of his favorite measures, and the half-enforced resignation of some of the very best members of his cabinet had created deep dissatisfaction." 12 Consequently, those Illinois republicans who recognized that slavery as such was a dead issue, that war tariffs were no longer defensible, and that the democratic party had outlived the imputation of disloyalty, cast about for some effective means of expressing their sentiments.

The anti-Grant movement, which had been just perceptible during the campaign of 1870, rapidly gained headway in Illinois after the November election. The democrats from the first had been more than interested spectators; they eagerly fomented dissension in the ranks of the enemy, hoping thereby to regain some of their lost political control. In the first general assembly under the new constitution, the republican majority met sharp opposition throughout the state, even in the enactment of the necessary laws to comply with the new

¹² Koerner, Memoirs, 2: 518.

constitutional provisions. In the chief political event of the session, however, the election of the United States senator to succeed Richard Yates,13 disintegration within the republican ranks was apparent. To Logan, perhaps the most popular of the candidates, there were several objections; in the first place he had an unexpired term as congressman-atlarge, and his election to the senate would entail the expense of a special election to fill his place; moreover, "a great many Republicans could not overlook the fact that he was a rather recent convert to Republicanism and that he had been one of the most violent, dyed-in-the-wool, radical Democrats, not to say secessionists. He had now become as radical a Republican, just when a great many Republicans had adopted moderate and conservative views and were in favor of closing the gulf between the North and the South."¹⁴ This opposition, however, was more than counterbalanced by the influence which Logan wielded over the "boys in blue," for he was commander of the Grand Army of the Republic. The military reputation of Oglesby, the other principal candidate for the nomination, did not command anything like the following which was accorded Logan.¹⁵ For these reasons Gustave Koerner, backed by the German press and some other leading republican journals, as well as by influential and dissatisfied republicans throughout the state, was induced to enter the field.

Before the legislature convened, Logan had left his seat in congress and had returned to Springfield to direct his cam-

¹³ See Chicago Tribune, January 4, 5, 10, 11, 12, 14, 16, 1871; Ottawa Republican, January 12, 1871; Illinois State Register, January 6, 10, 12, 1871. In comparing the candidacy of Logan with that of Oglesby the Chicago Tribune of January 16, 1871, remarks: "General Logan, however, had the advantage from the beginning, not only by reason of having more patronage at his disposal, but also by virtue of superior activity and perseverance; and, what is perhaps of still greater importance, he had a forum for the exhibition and proof of his qualities as a member of the National House of Representatives."

14 Koerner, Memoirs, 2: 519-520.

15 Ibid., 520-521.

paign in person. He took "possession of two large rooms on the ground floor opposite the bar of the principal hotel, crowded constantly with his friends and admirers, and extended great hospitality. Mrs. Logan held her court in one of the ladies' parlors, and carried on the campaign for her husband most vigorously." Such tactics were severely criticized. "If, as reported, in all the newspapers and denied by none, Mrs. Gen. Logan keeps reception rooms at the Leland House in Springfield, and is daily and hourly using the arts and blandishments of her gifted tongue and pleasant, plausible nature in the interest of her distinguished husband, that sort of audacity deserves a square and substantial rebuke at the hands of this Legislature." Logan, however, had better calculated the effect of the alleged audacity, for "many of the rural members of our Legislature, after calling on her, left thinking that they were much bigger men than they thought themselves before they entered her presence."¹⁶ And, by the time the legislature convened, so sure was Koerner that the Logan following was larger than that of his and Oglesby's combined that he desired to withdraw from the contest. Oglesby and his friends, however, professed to believe otherwise, assuring Koerner that the Oglesby strength, which was bitterly opposed to Logan, would be thrown to Koerner in case the republican caucus came to a deadlock. Koerner, as it turned out, had more accurate perception, for Logan had largely won over the uninstructed members of the legislature upon whom Oglesby had counted;¹⁷ these votes tipped the balance and Logan was named the party candidate, thus assuring his reëlection at the hands of the legislature.

¹⁶ Koerner, Memoirs, 2: 521, 522; Ottawa Republican, January 12, 1871. ¹⁷ Both Logan and Oglesby had during the summer of 1870 adopted the then novel practice of canvassing the state to get the indorsements of local conventions or the promise of support from legislative nominees; this action had been severely condemned by some republican newspapers. Chicago Daily Journal, September 26, 1870.

His victory widened the republican breach; in the bitter contest for his successor as congressman-at-large, the dissatisfied republicans united with the democrats against the regular republicans. The republican convention in nominating John L. Beveridge of Cook county apparently attempted to placate their disaffected colleagues by a series of resolutions favoring a more liberal policy toward the late leaders of secession, a modification of the tariff law, and a reduction of the public debt; they "Resolved that the . . . time has come when the enmities engendered by the war must yield to the friendship of peace . . . that the continuance of the political disabilities imposed for participation in the rebellion longer than the safety of the republic requires not only tends to perpetuate feelings of unkindness among the people, but is incompatible with the principle of political equality which lies at the basis of the Republican creed . . . that the large surplus remaining in the national Treasury calls for a still further reduction of the public burdens."¹⁸ The disaffected, however, had apparently become suspicious of fair words; and when the democratic state convention, besides nominating S. S. Hayes of Cook county, adopted a liberal platform it attracted the attention of every discontented republican element in the country, who very generally were supporting the democratic nominee. Even so, however, Hayes was beaten, Beveridge being elected by a majority of twenty thousand.

Illinois but shared the general republican unrest that was sweeping the country. At Washington prominent senators— Sumner, Cox, Fenton, Forney, and Schurz as well as Trumbull—had become open enemies of the administration. That Horace White and Joseph Medill were rapidly transforming

¹⁸ Chicago Tribune, September 21, 1870; Illinois State Journal, September 21, 1870.

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the Chicago Tribune into an independent journal was merely typical of the republican press throughout the country; Horace Greeley of the New York Tribune, hitherto the chief organ of the republican party, had become openly opposed to Grant, while the Philadelphia Press, the New York Evening Post, the Springfield Republican, the New York Nation, and the Missouri Democrat showed the same tendencies. It was in Missouri that the revolt, sharpened by local conditions, first reached an articulate stage; and the disaffected republicans, adopting the name of liberals, in January called a mass meeting; they adopted resolutions advising reconciliation with and a general amnesty to the south, recommended a reduction of the tariff, denounced the use of presidential patronage, and advocated civil service reform. They further proposed a great mass convention of all liberal republicans in the United States to be held in May at Cincinnati. Throughout the northern states this move met with hearty approval, but nowhere did it meet prompter or more enthusiastic approbation than in Illinois.

In March a number of prominent republicans of the state sent an address to the Missouri liberals, declaring that: "We, Republicans of Illinois, wish to express our concurrence in the principles lately set forth by the Liberal Republicans of Missouri. . . We believe that the time has come when the political offenses of the past should be pardoned, that all citizens should be protected in the rights guaranteed by the Constitution; that federal taxes should be imposed for revenue, and so adjusted as to make the burdens on the industry of the country as light as possible; that a reform of the civil service should be such as to relieve political action from public official patronage. . . And we also believe that at this time a special duty rests with the people to do away with corruption in office, with the hope that the movement begun in Missouri

will spread through all the States and influence every political party."¹⁹ County conventions throughout the state soon adopted the Missouri platform, while republican state officials, including the secretary of state, the auditor, superintendent of schools, attorney-general, and even the chairman of the state central committee, were numbered among the advocates of the new movement. Its most influential leaders, however, were John M. Palmer, governor of the state, Lyman Trumbull, just finishing his third consecutive term as United States senator, and David Davis, associate justice of the supreme court of the United States. Davis, a genial, amiable man, was personally very popular in Illinois. He had been a thoroughgoing whig of the old school and, influenced by his intimate friendship with Lincoln, had joined the republican party but had always remained in its most conservative wing. He was a tariff man, sound on all questions of currency; as a judge, he had set his face against arbitrary arrests in states not in rebellion and had discharged prisoners arrested under the habeas corpus act. Trumbull, once the radical antislavery leader in congress, had long since been left in the rear by the present radical vanguard in the senate; now, in contrast to his vindictive colleagues, he represented a most conservative point of view, "pacification of the south."

Despite Palmer's position as governor of the state and his radical republicanism from 1861 to 1865, he had not hesitated incisively to condemn the corruption in state government. Long continued power had seemingly impregnably intrenched the "Springfield ring," and Palmer felt that only sweeping changes could oust the administration henchmen who flaunted their graft at the state capital. To Palmer the need of civil service reform was imperative. He had, indeed, cherished the hope that these reforms might be attained within the party and had

¹⁹ Koerner, Memoirs, 2: 536, 537.



John the Paenin

[From photograph in the possession of Mrs. Jessie Palmer Weber, Springfield]

so expressed himself in an interview in the Chicago Tribune for March 22, 1872. Less than a month later, however, Palmer addressed a letter to the editor of the Carlinville Democrat in which he declared that the republican state convention, which had been called to meet in May, would be packed in support of Grant's candidacy for reëlection; and, since the national administration had neither the inclination nor the ability to enforce economy and reform in the government, he argued that civil service reform, which the people were demanding, should be carried out by the state. The action of the president in authorizing General Sheridan to employ troops to police Chicago after the fire had brought about a sharp collision between the two executives,20 in which Palmer, referring to his ample power to raise and equip a militia, had firmly resisted the employment of federal aid supplied by Grant. In this letter he further criticized the president's action in that affair, declaring that "if the powers claimed and acted upon by the President in these instances exist in him, the State of Illinois is but a dependency of the Government at Washington, and the lives and liberties of the people are subject to the will of the President."

This letter, forecasting as it did Palmer's break with Grant and his backers, did more than any other single thing to concentrate public attention in Illinois on the liberal republican movement. Even the most unobserving and least concerned must have felt that a governor of the state would not break with his party without good reason. In an attempt to minimize the significance of his action the republicans ridiculed Palmer, while the more partisan newspapers called him an ingrate and characterized him as a traitor to the cause of republicanism.²¹

During this period very few leaders had any idea of presenting nominees for president and vice president at the liberal republican convention at Cincinnati. "The general idea was to organize the Liberal party, recommend State conventions to assemble that should appoint regular delegates to a national convention, to be held after the administration Republicans had held theirs. In all probability, the regulars . . would be terrified, and not nominate Grant, but some distinguished man of reformatory tendencies; and they had several such amongst them. The Liberals might then endorse the regular nominee. But as it became manifest that the Cincinnati Convention would be very numerously attended, and by very many prominent Republicans, some of whom were amongst the founders of the Republican party, the idea of making no nominations was soon given up." 22 Each of the three Illinois leaders had a strong local backing for the Cincinnati nomination, but since Palmer was less well known nationally than either of the others, Davis and Trumbull received stronger support. Trumbull's chief strength lay in Chicago and its vicinity, and the Chicago Tribune led in the Trumbull movement. "We ask the delegations from each to . . . unite upon one who shall be State . . . recognized at once throughout the country as a thorough Liberal statesman, whose record shall indicate at once national views, experience, vigor, breadth of mind, honesty, success, and thorough sympathy with, and leadership in, the present reorganization of parties. . . . If Mr. Trumbull's record were subjected to the closest scrutiny of a party canvass, it would be found that no American statesman had ever stood so nearly midway between the violence of fanaticism on both sides." 23 The Chicago Journal, on the contrary, bitterly

²² Koerner, *Memoirs*, 2: 538. ²³ Issue of April 26, 1872.

opposed the efforts of Trumbull's friends to secure the nomination for him; "Trumbull [when he voted to acquit President Johnson] had a little scheme, which he held on to with anxious persistency. He wanted to be a ku-klux president riding into political Jerusalem on the foal of a ku-klux ass." 24 Trumbull himself appears to have stood unaffected. In reply to the solicitation of personal friends he neither affirmed nor denied the rumors that he desired the Cincinnati nomination. On the twenty-seventh of April he wrote to Koerner: "I think the nominee for President will be taken from Illinois, unless the rivalry between the friends of various candidates from that state prevents it. . . . I do not wish to be nominated as the result of any combinations or arrangements between rival interests, nor unless there is a general feeling, not manufactured for the occasion, in my behalf." A little earlier he had declared: "I am in earnest in this movement, believe it can be made a success, and I am willing to abide by the action of the Liberal Republican Convention, so its nomination falls upon any good Liberal Republican."²⁵

Davis' strength lay in his personal popularity, for not much capital could be made of liberal decisions from the bench. The most outspoken Davis newspaper in the state was the *Chicago Times*, while "Long John" Wentworth, Jesse W. Fell, and Leonard Swett worked indefatigably in his behalf. "They organized meetings in the central and northern parts of the State, which appointed numerous delegates instructed for Judge Davis; besides this they called on the friends of the Judge to repair to Cincinnati to swell the crowd. Free passage was given to anyone who would go, without much reference to his party relations."²⁶

²⁴ Chicago Daily Journal, February 12, 1872.
²⁵ White, Life of Lyman Trumbull, 375; Koerner, Memoirs, 2: 543-544²⁶ Ibid., 544.

The day before the opening of the convention, the Illinois delegation, numbering between four and five hundred, met in Cincinnati for the purpose of deciding on some policy of action and on the method of presenting this policy to the convention. It was determined after considerable debate that the number of delegates from Illinois should be forty-two, divided among Davis, Trumbull, and Palmer in the ratio of one-half, onefourth, and one-fourth respectively; a later arrangement, however, gave the Palmer following to Trumbull.27

The platform which the Cincinnati convention adopted clearly reflected the liberal republican conviction that first and foremost the personal régime of Grant, with its mass of alleged corruption, must be ended, and that secondly the gulf of hatred between the north and south must be closed by the immediate and complete removal of political disabilities. The urgency of these first two needs had swung into their ranks men whose views were at opposite poles on the tariff question; the liberals, therefore, deemed it expedient to leave a clear-cut policy in that direction to a more propitious time. Horace Greeley formulated the action finally taken; as a result the tariff plank merely stated the situation and left the people to decide by their choice of congressmen what course the future should pursue.

Sanguine as were the hopes raised by the adoption of this sound and loyal document, the liberals realized that their fate really hung upon the selection of an available presidential nominee. "The hopes of success had turned on the selection of a candidate who first of all, by a record of political strength and sagacity, should divert Republican votes from Grant, and then, by a record of sympathy with some article of the ancient creed of the Democrats, should make it easy for them to follow him in dropping the issues of the war." 28 When the voting

²⁷ Cincinnati Commercial, May 1, 1872. ²⁸ Dunning, Reconstruction Political and Economic, 197.

began Charles Francis Adams, David Davis, Lyman Trumbull, and Gratz Brown were leaders whose possible nomination was regarded with equanimity by the liberals, but the rapidly developing strength of Greeley was ominous. Soon it was clear that neither Illinois candidate could measure strength with Greeley or Adams. Horace White, a Trumbull lieutenant, had seen as soon as he arrived at Cincinnati that the chances of his chieftain were slim. Davis, strongly favored by the democrats and at first sharing with Adams the brightest chances for the nomination, met violent objection from the Adams men. "They charged his friends with bringing a great body of hirelings from Illinois, and with attempting to 'pack' the Convention, --- with resorting, in short, to the alleged practices of the Republicans who were still opposing the Democratic party. They announced that even if Judge Davis should be nominated they would not sustain him." Moreover, Davis was objectionable to the "editorial fraternity who resolved that they would not support him if nominated, and caused that fact to be made known." 29 This influential and unvielding opposition was fatal to Davis, and as his star declined that of Greeley rose. For five ballots the forty-two Illinois delegates stood equally divided between Trumbull and Davis; then, since it was clear that either Adams or Greeley would get the nomination, Koerner, in order, if possible, to swing the Trumbull and Davis vote to Adams, asked leave for the Illinois delegation to withdraw for consultation. Koerner writes of this conference: "I urged the delegation with all my power, as Trumbull had no chance, to drop him and to unite upon Adams, saying that Greeley's nomination would drive thousands of Liberals from our ranks. I was supported by Horace White and other prominent delegates.

Messrs. Swett and Dexter, being considerably hurt by our opposition to their favorite Judge Davis, refused to fall in. I proposed a vote, and although twenty-eight votes went for Adams as against fourteen for Greeley, the Davis men would not be bound by the vote, and upon returning to the convention I announced the vote accordingly amidst tremendous applause. But it was too late. If we had been able to make the announcement ten minutes sooner, it might have changed the result." 30

The nomination of Greeley was a bitter disappointment ---on the floor of the convention "were curses loud and deep." Greeley's name had not been seriously considered previous to the convention; and his selection was out of the reckoning of those founding the liberal party. As the liberal candidate he had a double disability; how could the democrats welcome their old enemy? How could the free traders welcome their bitter opponent? "The blow falls very heavily upon the free-traders of the West. They were the originators of this reform movement. To them it meant almost first of all, tariff reform, and they struggled long and earnestly to put their ideas on this subject in the front. But . . . they have lost everything.

"The tariff plank resolution is practically and almost in words Greeley's compromise and the candidate is the one man in all the country who believes most sincerely in protection and fights its battles most ably." ³¹ In the west the task of winning support to a platform which had compromised on the tariff was difficult enough; could they now hope that the free traders would vote for the great protectionist? Koerner, speaking for Trumbull, would not consider the latter's nomination for

³⁰ Koerner, Memoirs, 2: 555. ³¹ Ibid., 556; Springfield Republican, May 4, 1872; Blaine, Twenty Years of Congress, 2: 524.

vice president — in the heat of the moment declaring that "a man cannot swim with a mill stone around his neck."

Despite the dissatisfaction at the nomination the liberal republicans proceeded with their plan of campaign. By this time, indeed, there was no hope of success against Grant except through Greeley. The democrats, who had encouraged the revolt in the hope that some moderate republican whom they could cordially accept would receive the nomination, were at first in a dilemma. Yet the die was cast-it was to be Grant or Greeley. So clearly was this realized that the democrats of Illinois immediately indorsed the nomination of the Cincinnati convention, even though there remained the possibility that the regular democratic convention, which had been called to meet in Baltimore, in July, would not declare for Greeley. The St. Louis Republican quoted William R. Morrison as expressing the opinion that "the democracy of Southern Illinois are almost unanimous in support of Greeley and Brown, and will not vote for a straight-out democratic ticket if nominated." Two days previously the Elizabethtown Democrat had declared its intention to support Greeley and Brown. Soon similar action was taken by such democratic sheets as the State Register, the Bloomington Democrat, and the Carlinville Enquirer, the Effingham Democrat, and the Carmi Courier, while on June 4 Daniel Cameron, editor of the Chicago Times and president of the Democratic Press Association, sent word to Greeley that "the Democratic press of this State stands at this time 57 in favor of Greeley to 4 opposed; and that the Convention soon to assemble in this state will be overwhelmingly in favor of the indorsement of Mr. Greeley at Baltimore." Cyrus McCormick, later chairman of the liberal democratic forces, assured Greeley that "comparatively quiet as matters seem to be yet, the good work is going forward gloriously, and will burst forth in a volcanic blaze when the Baltimore Convention

pronounces for 'Greeley & Brown.'" 32 The Chicago News vainly set itself against this tide. "Until the assembling of the national convention," declared the News, "no democrat is authorized to speak for it. Should Mr. Greeley then be taken up, it will be proper to hoist his name; but meantime it is the duty of democrats to keep themselves free from all entangling alliances." 33 The State Register, however, took the stand that the convention owed its existence largely to the encouragement which the democratic party had extended to the liberals. "We protest that the Register, by putting up the names of Greeley and Brown has placed the democracy in a false attitude. Such false attitude can only be assumed by going back on its encouragement of the liberal republican movement." 34 Republican newspapers, for their part, exerted themselves to spread the belief that the acceptance of Greeley by the Baltimore convention would mean an indorsement of protection by the democratic party.35

The national republican convention, which met at Philadelphia June 5 and 6, unanimously nominated Grant for president. The anxiety with which their leaders had watched the growing strength of the liberals had very largely been dispelled by the nomination of Greeley. They confidently calculated that the democrats alienated by Greeley—their implacable enemy for thirty years—would outnumber the republicans won over by him. "If the Democratic convention should refuse to indorse Greeley, the opposition to Grant

³² See Chicago Tribune, May 6, 14, 17, 1872; Illinois State Register, March 8, May 7, 1872; Ottawa Republican, May 16, 1872; St. Louis Republican, May 10, 1872. In May the executive committee of the democratic state central committee resolved, "that, should the democratic national convention endorse the nominees of the Cincinnati convention we pledge our hearty support of the ticket." Chicago Tribune, May 9, 1872; McCormick to Greeley, June 4, 1872, McCormick manuscripts.

33 Chicago Daily News, May 7, 1872.

84 Issue of May 8, 1872.

85 See Rochelle Register, May 25, 1872.

would be divided and powerless; if the convention should give its indorsement, the problem of defeating Horace Greeley as the nominee of the Democracy seemed ridiculously easy of solution." 36 The platform, aside from the eulogies usually pronounced by the party in power, shrewdly appealed to the sectional prejudices of the north; it revived the war spirit and, with the cry of treason and rebellion, rallied northern sentiment to the old war chief. It defended the severity shown the south by the president and congress; and, though cleverly avoiding offensive phraseology, it took a clear-cut stand for protection, declaring that "revenue . . . should be raised by duties on importations, the details of which should be so adjusted as to aid in securing remunerative wages to labor, and promote the industries, prosperity and growth of the whole country."

The democrats in convention at Baltimore July 9 were confronted by anathema in both presidential candidates; they were, however, too far committed to the liberals to withdraw, and, moreover, of the two they would rather have seen their old enemy Greeley in office than to have Grant continued another term. Therefore, they indorsed both the candidates and the platform of the Cincinnati convention. This action, which definitely acknowledged defeat in the dead issues of war and reconstruction, was interpreted by republicans as a surrender on the part of the democratic party of the principles for which it had stood for half a century. "Dead! Dead! The democratic party met in national convention in Baltimore on Tuesday last for the sole purpose of declaring to the world that as a political organization it is without hope and practically dead." 37

⁸⁶ Dunning, Reconstruction Political and Economic, 199. ⁸⁷ Rochelle Register, July 13, 1872. In September those democrats unwilling to support the liberal republican movement nominated a ticket of their own.

The national contest thus assumed a clear-cut appearance; on one side were the regular republicans, well organized and strong in eleven years of federal control; on the other, the dissatisfied republican elements, loosely allied with the democratic party. In the Illinois campaign national issues were taken over bodily to the exclusion of state problems. The regular republicans echoed and reaffirmed the national platform and headed the state ticket with the names of ex-Governor Richard J. Oglesby and John L. Beveridge.³⁸ Palmer's espousal of the liberal republican cause had made Oglesby the only logical candidate for the republican nomination, though democratic and liberal republican newspapers charged that his real political designs were directed toward Senator Trumbull's seat in the United States senate, which would become vacant in 1873.³⁹

Even before the assembling of the national democratic convention, which alone had the authority to pass on the question of indorsing the liberal republican national ticket, the democrats in Illinois had come to the conclusion that their only hope of defeating Oglesby and the rest of the state ticket lay in uniting with the liberal republicans. Accordingly, on June 26 the two parties met in separate convention in Springfield. Governor Palmer presided over the liberal republican, James C. Allen over the democratic convention. A conference committee unified the actions of the two conventions, candidates for state officers being chosen from both parties. The governorship by common consent was to go to the liberals; Palmer at once declined to be considered for the nomination, while Trumbull, learning that he would probably be nominated, frankly declared that if the liberals were successful he preferred

³⁸ Illinois State Journal, May 23, 1872; Chicago Tribune, May 23, 1872;
 Rochelle Register, May 25, 1872.
 ³⁹ Chicago Tribune, April 11, May 25, 1872.

being returned to the senate. Gustave Koerner, high in the counsels of the liberals, was then nominated.⁴⁰ Though he had enjoyed an honorable political career in his adopted state, his influence over the German vote was his greatest claim to availability; the Germans were known to be hostile to Greeley; and it was hoped that their countryman would counterbalance this antipathy.⁴¹

When the nominations were agreed upon the two conventions met for a joint jubilee meeting, and, "as thousands of people had gathered outside, a mass-meeting had been arranged on the public square. Trumbull addressed the crowd on the east, C. M. Clay on the west side. All Springfield apparently had come out. Calcium lights and fireworks were let off, and the hurrahing and speaking lasted until midnight. The so-often abused saying that the people were wild with excitement, was here literally true. On a smaller scale . . I could not compare this night with anything else but the one after Lincoln's nomination in Chicago in 1860."⁴²

The high prospects of hearty democratic coöperation were quickly clouded; the opposition of the old "Bourbon" democrats was to be expected, but within the state executive committee itself a petty quarrel arose which for months paralyzed

⁴⁰ Other nominations were: lieutenant governor, John C. Black (democrat); secretary of state, Edward Rummel (republican); auditor, Daniel O'Hara (democrat); treasurer, C. H. Lanphier (republican); attorney-general, Lawrence Walden (democrat). Because Koerner and Rummel were both Germans the cry arose of "Too much Dutch" on the liberal ticket. *Illinois State Register*, July 5, 1872.

July 5, 1872. ⁴¹ The Germans did indeed align themselves generally for the liberal republican ticket; it was expected that the German vote would decide the election. The *Illinois State Register* optimistically stated that "of the 40,000 in the State who have heretofore voted the Republican ticket we have the most trustworthy evidence that six-sevenths are for Greeley and Koerner. Five thousand more German Republicans in Chicago will vote the same ticket," October 12, 1874. In contrast to the liberal persuasion of most Germans the *Chicago Daily Journal* estimated that "a careful canvass shows that 10,000 of the 11,000 Norwegians, Swedes and Danes in Chicago are for the re-election of President Grant." Ottawa Republican, August 15, 1872.

⁴² Koerner, Memoirs, 2: 563-564.

democratic activities. In July, Lyman Trumbull wrote that the liberal republicans were "actively at work" and urged that these "bickerings" of the democrats be not permitted to interfere with the prompt and active work necessary to carry the state; in August the quarrel had not yet been settled, and Horace White declared that the whole story seemed "so pitiful and small that I could hardly keep my patience. . . . The idea of stopping *now* to have a quarrel in our own ranks is so absurd and vile that I refuse to believe you can entertain it for a moment."⁴³

It was not until September that the democrats got actively to work. The confidential circular sent out from the national democratic headquarters, July 25, outlining the plan of campaign, was not responded to by Illinois until late in September, when the difficulties were finally settled and the liberal republican and democratic committees consolidated. Then the chairman, Cyrus McCormick, on September 20 sent out a tardy spur to county and precinct organizers. "We are of the opinion that every person entitled to vote should be seen, and a record made of him. . . Our prospects look well for this State, but we have a determined foe with a perfect organization to combat. Pure zeal must be opposed to the zeal of the Army of officeholders --- Postmasters, Assessors, and the like. They are an interested party; we are nothaving nothing but the good of the Country at heart. It is not enough to elect Greeley; we must rebuke Grantism. Let us endeavor to do this by securing not a mere majority, but an overwhelming one. Call on every honest and good man to come to your aid. Canvass the County thoroughly. Canvass by precincts and by wards. Organize Ward and Precinct Committees. Urge all to do this work thoroughly,

⁴³ Trumbull to McCormick, July 22, 1872, Horace White to McCormick, August 1, 1872, in McCormick manuscripts. and do you send in at the earliest moment full and complete lists." 44

Throughout the campaign, republican orators and newspapers defended the administration, advocated a protective tariff which would make everybody prosperous, and pleaded with the voters to secure the fruits of victory in the Civil War by voting for Grant and Oglesby.⁴⁵ The liberals had an imposing array of orators in the field; among them were Trumbull, Palmer, Schurz, Leonard Swett, "Long John" Wentworth, and Governor Blair of Michigan. They bitterly denounced the corruption of the Grant administration, insisted on thoroughgoing civil reform, held up the republican party to scorn for its insistence on the force bill and its treatment in general of the late confederate citizens, and called on the citizens of the state to forget the past.46

The liberals were failing, however, to advance any specific inducements to the farmers, who now comprised the most discontented element in the state. The farmers themselves could see no particular advantage in turning out the republicans under whom had occurred whatever advance the state had made in regulating railroads and warehouses; what assurance had they that a liberal republican state administration would be able to handle the railroad and warehouse situation better than had the republicans?⁴⁷ Moreover, the Cincinnati

44 Horace White to McCormick, September 20, 1872, in McCormick manuscripts.

⁴⁵ Chicago Tribune, July 20, October 23, 1872, March 15, 1872; Ottawa Republican, September 5, 1872. Senator Logan, among other Grant speakers, even plumed the administration upon the sale of \$6,500,000 worth of arms from the arsenals of the United States; this disclosure of open violation of federal and international law they represented as a great financial stroke - could you expect military officers to be lawyers? Koerner, Memoirs, 2:573. ⁴⁶ Chicago Tribune, July 30, 1872. ⁴⁷ The farmers had expected great things of the railroad and warehouse

commission and failed to appreciate the fact that it possessed no power which would work revolutionary changes. Many farmers suspected Koerner, who was chairman of the commission, of being too lenient in his official dealings with the railroad interests; and for this reason his candidacy created less enthusiasm than the liberals had expected. convention had evaded the tariff issue; and the liberal republicans, as a national party, had skillfully avoided its discussion. Many of the Illinois republican farmers, therefore, who might have broken their party ties to vote against protection, supported republican candidates or remained away from the polls.

In overlooking the fact that their program was not particularly attractive to the farmers, liberals also miscalculated the prejudices of the great body of voters; appeals for reform and for pacification proved to be poor politics. It was too soon to ask that the dead past bury its dead; the rank and file when reminded of the military exploits of the general forgot condemnations of the president. The discontent which had spurred the leaders had never vitally reached the great mass of the voters. Moreover, whatever inherent elements of weakness might have inevitably militated against them, the leadership of Greeley was fatal to success. "The qualities of head and heart for which he was notorious justified the common remark among Republicans that to turn a knave out of the White House for the purpose of putting a fool in was hardly worth while; and the discovery of any single expression, in all his writings of thirty years, signifying aught but contempt for whatever pertained to Democracy was a task beyond the power of himself or any of his friends." 48

The rank and file of democrats felt no obligation to go to the polls to support a man they desired so little. "If there had been a chance to beat Grant, they argued, we should have voted for Greeley, but as there is none we will not vote at all, for he has heretofore been our strongest and lifelong Illinois returns, with this stay-at-home policy of enemy." 49 the democrats markedly evident, were typical of the landslide that defeated Greeley. The whole republican ticket was

 ⁴⁸ Dunning, Reconstruction Political and Economic, 197.
 ⁴⁰ Koerner, Memoirs, 2: 574.

successful. Though Grant's vote was slightly less than it had been in 1868, never before had a presidential candidate carried the state by such a large majority; despite the fusion the Greeley vote was almost ten thousand less than the democrats alone had cast for Seymour four years previously.⁵⁰

⁵⁰ Official vote: Grant electors, 241,936; Greeley electors, 184,884; election returns from the secretary of state's office, Springfield.

IV. THE FARMERS' MOVEMENT, 1872-1875

THE failure of the liberal republican-democratic state ticket rested largely on the fact that the platform on which it made its campaign was not especially attractive to the farmers, the most discontented element in the state. What the new party dwelt upon was political reform, and the farmers' hopes were primarily concerned with economic improvement. Charges of extravagance and mismanagement against Grant and his administration stirred them less than did the extortionate demands and the discriminating railroad rates. One was remote and capable of various interpretations, the other, immediate and definite: it was to the excessive commission charges of the middlemen and to the exorbitant freight rates that the farmers attributed the low prices of farm products and the high prices of manufactured goods.1 "Poverty, if not bankruptcy, now stares us in the face. In the midst of such overwhelming abundance as to choke the marts of trade, and while the consumers on the seaboard and across the waters are hungry for our products, we cannot realize enough to pay our taxes and labor. Unless some remedy be found, our lands must greatly decline in value, agricultural labor yet more reduced in price, rural improvement must suffer a blight, and general poverty cover the land, and thus dwarf and wither every interest dependent upon the farmer's prosperity."²

¹ Chicago Tribune, December 30, 1872; Chicago Inter-Ocean, February 20, 1873; Prairie Farmer, March 22, 1873; Ottawa Republican, April 17, May 8, 1873. The Illinois State Register, November 18, 1872, analyzes the expense of sowing and of shipping corn to the New York market.

² From an address of L. D. Whiting delivered before a state meeting of farmers. *Prairie Farmer*, January 25, 1873. The secretary of the Illinois State Farmers' Association described the hovel-like home of the typical Illinois

His acute realization of his hardships led the farmer to a new evaluation of the railroad. Prior to this decade the railroad had been regarded as a blessing which magically bestowed prosperity wherever it passed. Incidental evils, it was believed, could be remedied by competition, and the demand was steadily for more railroads. The railroads, however, by consolidations and agreements had easily nullified the effects of competition; they regarded their trade as a private business with transportation as a commodity to be sold "at the best rates that could be got from the individual customer. The big shipper got the wholesale rate; the small shipper paid the maximum. Favoritism, discrimination, rebates, were the life of the railroad trade." ³ But the hardships that such methods entailed upon large groups of people were evolving from them the new idea of regulation by the state; and, once articulate, the demand for legislative regulation became insistent. The dominant republican party, however, manifested no inclination to accede to so far-fetched a departure. It was then sharply borne in upon the farmers that so long as they protested as individuals, the managers of railroads and warehouses had little cause to consider their complaints seriously; even their representatives in the legislature had little to fear from neglecting their interests. Organization would put a different face on the matter. It would then become only a question of time before opposition to the conduct of public enterprises after the manner of private concerns would have to be taken seriously into account, both by the corporations themselves and by the lawmakers.

On account of its influence and its widespread activities the Order of Patrons of Husbandry was, during the seventies,

farmers "with barely room to stand up in, with never a flower or shrub near, without the kindly shade of a tree; a bare, black, wretched abode, fit for nothing but the squalid and the pigs." *Prairie Farmer*, August 30, 1873.

S Paxson, The New Nation, 70.

the farmers' organization attracting the most attention. The order had its conception in the mind of O. H. Kelley, an employee of the department of agriculture at Washington; he had an abiding conviction that unsatisfactory conditions among the farming classes, both north and south, were due largely to a lack of organization. Accordingly, in 1867, he set on foot a movement which had as its aim the betterment of farmers everywhere through organization in local "granges." These granges, professedly nonpolitical, were intended to serve as forums where all sorts of economic and social questions affecting agriculture might be discussed. To that end the order provided for the admission of women, and as time went on they were given more and more authority and responsibility in the organization.

The first Illinois grange was organized in April, 1868, in the office of the Prairie Farmer. Growth during the next three years was slow; up to the beginning of the year 1872 only eight local granges had been organized. During that year, a period filled with the activities of liberal republicanism, sixtynine more were organized. Then, with the reaction against the political movement which had offered little or no relief to the farming classes, there came an intensification of the feeling among the farmers that organization alone could gain for them some relief from railroad, warehouse, and kindred abuses. The grange movement, in so far as the organization of locals was concerned, reached its greatest prosperity during the years 1873, when 761 local granges were organized, and 1874, when 704 new organizations were formed. These two years saw the most intense struggle between the public and the corporations for ultimate control of the railroad rates. When the struggle was keenest the number of local granges inaugurated was almost twenty times as great as the number organized during the previous four years; correspondingly, when the

foremost aims of the farmer were attained the number of new granges fell to fifty in 1875, and in 1876 to twentyseven.⁴

The method of organizing local granges was simple. Any number of persons "engaged in agricultural pursuits, more than nine, and not over thirty," could form a grange. Charter members paid initiation fees of three dollars for men and fifty cents for women; other members paid four dollars and two dollars respectively. Dues paid by the locals to either state or national organization were relatively small. "After the charter is full there is sent to the State Grange one dollar for each male member and fifty cents for each female member initiated in all the degrees. None of this goes to the National Grange. A monthly due of ten cents for each member is collected, and six and a quarter cents of this is sent to the State Grange each quarter, or twenty-five cents annually for each member. A small portion of this, ten cents per annum for each member, is sent to the National Grange, and this is all the National Grange receives after the first payment of ten dollars."⁵ When the organization became stronger in numbers, the dues paid into the national treasury were reduced to five cents per member.

The founders of the grange provided for national, state, and local units. In working out the details of their organizations they drew upon many sources; they had a ritual similar to that of a leading American secret society and provided for advanced degrees to which both men and women were admitted. The total number of the degrees was seven, four of which the local grange had the authority to confer under certain restrictions. Each degree bore a name; those for men were known

⁴ For a history of the grange movement in Illinois see Buck, The Granger Movement; Paine, The Granger Movement in Illinois; Martin, History of the Grange Movement.

⁵ Prairie Farmer, January 4, 1873.

as laborer, cultivator, harvester, and husbandman; for women, they were maid, shepherdess, gleaner, and matron. The fifth, or Pomona (Hope) degree, the state grange could confer on masters and past masters of local granges and their wives. The national organization alone could confer the sixth, or Flora (Charity), and the seventh, or Ceres (Faith) degrees, and then only to a select few. Only members of the fifth degree were eligible for the sixth, while the seventh was made up exclusively of members of the sixth who had served one year in that capacity.

This elaborate organization, with all the appeal of secrecy and ritual, never lost sight of the grim reasons which had called it into being. With considerable straightforwardness, the grangers went forth to meet the problems of the farmers; until political changes could be wrought the railroads stood out of their reach, but might they not outmaneuver the merchants, bankers, and middlemen who had victimized them? The farmer had long since lost all assurance that his products once in the market would be honestly handled by the broker or commission merchant, while at the same time he was put to a great disadvantage in buying. Since he had little ready cash, he was often compelled to buy on credit; and the price of "credit" goods was exorbitant. It was purposed, then, that granges should secure coöperation among the farmers in selling their products and in buying their supplies, particularly farm machinery.

The evils of the credit system, and the lower cost of large scale production, furnished the keys to effective action. The grange leaders undertook to educate the farmers to the desirability of paying cash for supplies and equipment and of concentrating their buying power. They then arranged with the manufacturers of agricultural implements, usually through the grange's state purchasing agent, to make special prices to members.⁶ The results were gratifying; prices fell, in some cases as much as one half. "Reapers for which the middlemen charged \$275 were secured by the granges for \$175. Threshers were reduced from \$300 to \$200, wagons from \$150 to \$90, sewing machines from \$75 and \$100 to \$40 and \$50, and other articles in like proportion."⁷

The saving in the purchases of machinery and tools caused the farmers to cast about for further fields of action. Farsighted business men, eager to gain the trade of this group with its growing class consciousness, launched various schemes to meet their demands. They advertised their establishments as being especially fitted to take care of the farmers' trade and backed up their claims with large stocks and low prices.

It was this endeavor that produced mail order houses, which eliminated the middleman. In 1872 Montgomery Ward and Company of Chicago introduced this system "to meet the wants of the Patrons of Husbandry." As the "original grange supply house," backed by the recommendations of the national grange, the company soon built up a thriving trade. "We

⁶ The Cyrus H. McCormick Company regarded these developments with some anxiety, for as a company it had yielded very little to grauger demands; the company finally sent out questionnaires to its agents, endeavoring to ascertain whether it would have to accede to the demands. The answers are interesting as giving an intimate, if prejudiced, point of view.

"So far as my acquaintance extends among the Grangers," declared John H. Shaffer of Kankakee, "I am free to say that the best men in the County will not have anything to do with them. The principle men who are grangers are that class of men . . . who do not like to get right down and work but who are in hopes of getting a living by some Hook or Crook without labor. In short, they are faultfinders, agitators, men who aspire to some political position. . . My plan is to let them severely alone unless they purchase of us the same as other men do."

"My opinion is," wrote William F. Carr of Freeport, "any policy favoring 'Grangers'... will be highly suicidal not only to your interests but to the entire manufacturing interests of the Nation." E. K. Butler of Sterling was succinct. "You cannot serve two masters. No more can you make terms with Grangers and deal with white men too." "Extracts from Agents' Letters on the Subject of Farmers' Granges," in McCormick manuscripts; Chicago Tribune, January 30, 1874. For an argument against the method of pooling purchases see Rock Island Union, March, 1874, passim; Ottawa Republican, March 26, 1874. ⁷ Paine, The Granger Movement in Illinois, 40.

don't pay Forty Thousand a year Rent. . . . We don't sell Goods to Country Retailers on six months' time. We buy for Cash and sell for Cash. . . . We don't employ any middlemen to sell our Goods" were the slogans which, combined with "the power of the Grange," in four years "saved the Consumers millions of dollars by breaking up monopolies and forcing dealers to sell their goods at fair prices." Montgomery Ward catalogs advertised a wide variety of dry goods, furniture, cutlery, and groceries; their customers bought through written order only; goods were sent by express, "and each consignee is, by express contract, authorized to open the package of goods, examine them, and if not satisfied, can decline taking the things sent him. . . . In no event is he in any way obliged or compelled to take the goods, or pay therefor, except by his own volition." In order that the farmer might still further escape the services of the middleman, this company would receive consignments of all sorts of grain and seeds: "All Grain consigned to us will be sold at once and returns made the day of sale, unless otherwise directed. We charge one cent per bushel for handling Grain, and 25c per car for inspection."8

The farmers themselves often took the initiative in organizing stores and warehouses for their own benefit. Here and there they formed local stock companies on a coöperative basis, usually with the idea of eliminating the middleman; coöperative fire insurance was also undertaken. Some of these enterprises were successful, but on the whole they were much less profitable than their organizers had anticipated.9

Side by side with the grange there was growing up a large number of nonsecret and more or less independent farmers'

⁸ Chicago Tribune, December 24, 1873; Montgomery Ward and Company,

Catalog, number 11, p. 2, 3, number 17, p. 1, number 20, p. 3. Paine, The Granger Movement in Illinois, 43-45; Ottawa Republican, January 16, 1873; Prairie Farmer, December 12, 1874.

clubs which were not bound by the nonpartisan character of that organization. Overlapping the grange in aims and often in membership, these clubs differed in method; they were coming more and more to feel that the remedy for the graver problems of the farmer lay in legislative action. "They are down on railroads and rings, and conspiracies, and monopolies, and treason against the general welfare. . . . They say; If the war lasts for ages they intend to fight it out to the bitter end, and woe be to the politician who stands in their way to the end fought for."¹⁰ The influence that the grange acquired, as it came to personify the farmers' movement, these clubs converted into political pressure. As early as 1869 the farmers and their friends had succeeded in placing on the statute books of the state a law which was supposed to remedy conditions by preventing discriminatory rates and service. The law, however, was ineffective; and conditions continued very much as they had been before its passage. In the meantime the constitutional convention had been called, and the friends of regulation had finally been successful in embodying in the new constitution definite provisions for regulating both railroads and warehouses; railroads were declared public highways, and to the legislature was delegated ample power to regulate them.¹¹

¹⁰ W. H. Herndon in the *Illinois State Register*, February 19, 1873, continues: "They say it is too hard to give fifty bushels of corn (an acre of corn) for a pair of boots, simply to satisfy tariff monopolists. They say it is too hard to have to sell corn here (in your city) for twenty-two cents, and have to pay a dollar for the same corn in Chicago to feed the stock you take to supply the markets. . . . They demand free trade as opposed to high protective tariff. They intend to keep demanding till this iniquity — high tariff — shall be blotted from the statute book of the nation. . . I am requested to go to several places and organize other clubs. *I shall go* and do all the good I can to the farmers, gardeners, horticulturists, laborers and all others struggling to better their condition."

¹¹ The sections of chief interest in this connection are numbers 12 and 15 of article XI:

"Section 12. Railways heretofore constructed or that may hereafter be constructed in this State, are hereby declared public highways, and shall be free to all persons for the transportation of their persons and property thereon, under It was with keen interest that the farmers watched the convening of the first general assembly under the new constitution; what would be the forthcoming railroad legislation? Their interests were well represented; almost at once sixty-five members had organized a Legislative Farmers' Club, which had for its purpose the securing of legislation beneficial to the farming classes, but more especially of legislation that would curb the railroads. With such leverage it was comparatively easy to get a majority of the legislators to favor railroad laws.

Of the comprehensive and complex "railroad act of 1871" three provisions were of chief interest; charges for a long haul should never be equal to or less than charges for a shorter haul; handling and storage should be uniform; and no road could charge a greater mileage rate on one portion of its line than on any other portion. The legislators also attacked the problem of regulating grain warehouses, since the farmers charged that the warehousemen were guilty of discriminating in favor of individuals and of localities, and also guilty of falsifying their records in the matter of weights and grading.¹²

Enactment of laws to regulate railroads and warehouses

such regulations as may be prescribed by law. And the General Assembly shall, from time to time, pass laws establishing reasonable maximum rates of charges for the transportation of passengers and freight on the different railroads in this State."

"Section 15. The General Assembly shall pass laws to correct abuses and prevent unjust discrimination and extortion in the rates of freight and passenger tariffs on the different railroads in this State, and enforce such laws by adequate penalties, to the extent, if necessary for that purpose, of forfeiture of their property and franchises."

¹² Å suit to test the warehouse act of 1871 was instituted against a Chicago firm of warehouse men, named Munn and Scott, for not taking out a warehouse license as required by law. The lower court sustained the state's contention, declaring the defendants guilty. The defendants then appealed the case to the state supreme court, which in 1873 sustained the decision of the lower court. The case, widely known as Munn v. Illinois, was then carried to the supreme court of the United States. In 1876, that tribunal sustained the courts below, thus setting a legal precedent which had a far-reaching influence in the United States on legislation affecting warehouses.

was comparatively easy, for few legislators had either the desire or the hardihood to oppose legislation offered primarily in the interest of the most numerous voting class in the state; enforcement of these laws, however, was a different and more difficult thing to accomplish. In order in some degree to meet this difficulty, the legislature had authorized the formation of a railroad and warehouse commission, and with the appointment of three railroad and warehouse commissioners13 the first step toward enforcement was taken. This body was a unique one, Massachusetts being at this time the only state having a commission for railroad control, while the inclusion of warehouse regulation was without precedent. As soon as the new board had effected an organization, it directed the railroads in the state to report on earnings and mileage, in order that the commission might determine which of the legal passenger rates should apply to each road. The law went into effect on July 1, and during the next three months practically all the railroads reported, though usually under protest. They took the ground that the law under which the commission had called for reports was unconstitutional and hence not binding on the railroad companies. They were willing, however, to "furnish such information as the mode of doing our business makes reasonable and practicable."

The commission itself had little authority in the matter of fixing passenger rates, so that even though the railroads submitted the reports called for, that concession indicated no intention of obeying the state regulatory law, particularly as it had to do with passenger and freight rates. The farmers, therefore, felt compelled often to take the matter of passenger

¹³ The first three commissioners were Gustave Koerner of St. Clair, Richard P. Morgan of McLean, and David S. Hammond of Cook. For a discussion of the advisability of appointing a commission see issues of *Illinois State Register*, *Bloomington Pantagraph*, and *Elgin Gazette* for first two weeks of August, 1871.

rates into their own hands. It was not unusual for groups of them, especially when going to farmers' conventions, to board trains, offer the maximum fare stipulated in the state law and refuse to pay more. Sometimes they succeeded in carrying out their purpose, sometimes trainmen ran the train on a side track and refused to proceed. "The railroads of the State, in some cases, carry passengers free who will pay legal fare. In other cases such passengers are ejected by force. At Rantoul, the other day, a whole carload of legal fare passengers were switched off upon a sidetrack and left, while the engine and balance of the train went on." On one occasion the farmers, when the trainmen attempted to oust them from the cars, drew revolvers and bowie knives and repulsed the attacking party.14 The Illinois State Farmers' Association tacitly approved these vigorous methods of securing legal rights. On one occasion W. C. Flagg, president of the association, speaking before a large farmers' meeting in Champaign county, told with considerable satisfaction of how a club had been formed in McLean county "to ride according to the law; and the only thing that prevented them from doing so was their inability to make the conductor receive anything. They were obliged to ride for nothing." The association also "Resolved, That persons traveling on the railroads of Illinois, having tendered to the proper officers the legal fare, are in the line of their duty, and, having complied with the law so far as circumstances would permit, are entitled to and should receive the protection of the civil power of the state, and any interference with such persons by attempt on the part of an officer or employee of the railroad to eject them from the cars, for the reason that they have not paid the legal fare demanded, is a crime against the peace and dignity of the state-a violation of the rights of the citizen, and

14 Periam, The Groundswell, 297. Prairie Farmer, February 15, 1873.

should be summarily punished by exemplary fines and penalties."¹⁵

To the farmer his own direct action in enforcing the state law was preferable to the slow procedure of the court, though he, as an aggrieved passenger, alone had the right to bring suit. The railroad commission, however, held that no permanent settlement of difficulties could be secured by such methods, and by indirection it had several test cases instituted. One of these suits was begun in August, 1871, by Stephen H. Moore of Kankakee against the Illinois Central railroad, which, the plaintiff claimed, had charged him a higher passenger rate than the state law permitted. More than a year later the circuit court decided in favor of the railroad company.16 The case was appealed to the state supreme court, where after another twelvemonth the judgment of the circuit court was affirmed. The higher court decision, while it seemed to the farmers and their friends to favor the railroads, really left the issue exactly where it started, since on technical grounds it absolved the company from blame and refrained from expressing any opinion on the constitutionality of the law under which the suit had been brought.

In the meantime the railroad and warehouse commission had instituted in McLean county a suit against the Chicago and Alton railroad on the ground that it had charged, in open violation of the law, a higher rate on lumber for the 1 to miles from Chicago to Lexington than for the 126 miles between Chicago and Bloomington. Counsel for the defense contended first that the act under which the suit had been brought violated the rights guaranteed by the constitution of the United States; and second that the rate between Chicago and Lexington was reasonable, the one for the longer haul being maintained by

¹⁵ Prairie Farmer, January 25, February 8, 1873. 14 Illinois State Register, August 10, 1871.

the Chicago and Alton at a loss in order to compete with the Illinois Central. The commission and its attorneys took exactly the same ground occupied by some of the delegates in the constitutional convention in contending that any right which the legislature might have conferred on the railroads detrimental to the public welfare was void, since the legislature by so doing had exceeded its authority. The decision of the circuit court, which was handed down in November, 1872, sustained the contentions of the commission. The railroad appealed the case to the state supreme court, which in the January term, 1873, reversed by a unanimous vote the judgment of the McLean county circuit court. Speaking for the court, Chief Justice Charles B. Lawrence declared that the railroad act of 1871 was contrary to the state constitution but not to the constitution of the United States.

Indignation was intense among the great mass of farmers; such a decision was all that was necessary to coalesce the loosely organized farmers' clubs into an Illinois State Farmers' Association with the definite object of attaining their rights through political action.¹⁷ They would no longer wait for the support "of legislators or courts whose pockets are filled with free railroad passes."¹⁸ Almost the first act of the association was the adoption of a series of radical resolutions relating to transportation, wherein it asserted, "that the power of this and all local organizations should be wielded at the ballotbox, by the election of such and only such, persons as sym-

¹⁷ The association was built on broader lines than was the grange; it organized farmers into state, county, and community units and tried to coordinate and unify farming interests. It included in its ranks granges as well as other kinds of farmers' organizations; membership in state meetings was to "consist of delegates from the various Farmer Clubs, Granges, and other agricultural and horticultural societies of the State."

¹⁴ The *Prairie Farmer*, March 8, 1873, discreetly hid criticism of the decision; "the law being unconstitutional we are glad to know it at this early date," but, it said: "Let us now look to the legislature for the amendments recommended, and let us have these amendments at once." *Ibid.*

pathize with us in this movement." The state legislature was then in session, and the executive committee of the newly organized association issued a call for a state farmers' convention at Springfield, April 2, "for the purpose of attending to our interests in the legislature, and of giving that body and the governor to understand that we *mean business*, and are no longer to be trifled with; that while we have no disposition to infringe upon the rights of others, we demand that protection at their hands from the intolerable wrongs now inflicted upon us by the railroads, which they have a constitutional right to give us."¹⁹

The farmers realized that their fight would be won provided the legislature would enact an adequate regulative law not inconsistent with the state constitution, but the railroads were equally alert to that fact, and both sides brought all pressure possible upon the legislature. The railroads maintained hired lobbies, while the farmers and their friendsthrough their local granges and organizations and through several state meetings-impressed the lawmakers with their determination to carry on the fight until satisfactory railroad legislation had been enacted.20 In these meetings the argument that "cheap railroads and cheap ships are necessary to cheap freights" made the farmers take a decided stand against protection; and this was the first indication that the movement was to expand into the formation of an independent national party. In September a state farmers' convention went on record as favoring "the immediate repeal of the

¹⁹ Prairie Farmer, October 5, 1872, March 29, 1873; Turner Essays in American History, 142.

²⁰ The farmers' first significant victory came when, because of stout objections to his appointees on the railroad and warehouse commission, Governor Beveridge withdrew the names he had submitted and allowed the farming interests to dictate the nominations. *Prairie Farmer*, February 1, 8, 15, 1873; *Illinois State Register*, February 8, 9, 1873; *Ottawa Republican*, February 13, 1873. A complete account of a state meeting of farmers which convened on April 1, 1873, is found in *Prairie Farmer* of April 12; see also *Chicago Tribune*, April 3, 1873.

protective duties on iron, steel, lumber and all materials which enter into the construction of railroad cars, steamships, vessels, agricultural implements." In general, farmers were "opposed to protecting one class or kind of industry by legislation, at the expense of another, and declare for giving equal rights and exacting equal duties to and from all." Moreover, the farmers, feeling the pinch due to a scarcity of money, accused the banks, particularly the national banks, of being responsible in large measure for the hard times, since it was thought that these institutions had united to oppose the inflation of the currency by the issuance of greenbacks.²¹

The fight on the immediate political issue - railroad regulation -- continued for months in the legislature, with the farming interest steadily gaining the upper hand. In May, the legislature enacted the railroad law of 1873,22 much more radical and much more effective than any so far passed. For a long time the railroads refused to acknowledge defeat; they at once assumed an attitude of having been illtreated and began to interpose what obstacles they could to the administration of the law. The state cannot, declared the annual report of the Chicago, Burlington and Quincy railway, "abridge or take away the right of the Railroad Company to operate its Road, and to fix, adjust, and collect reasonable tolls and charges for transportation thereon. These rights, and the money invested in order to insure their use and exercise, are private property, and not to be destroyed or impaired by legislation without the consent of the owner." 23

ing upon perverted theories of constitutional law have arrogated to themselves

²¹ Illinois State Register, September 1, 1873. It is not to be supposed that the farmers were a unit in regard to inflation. Flagg, the president of the state association, strongly urged the opposite.

 ²² Prairie Farmer, February 1, 8, 15, 1873; Illinois State Register, February 8, 9, 1873; Ottawa Republican, February 13, 1873. For example of the influence of the farmers on the act see Illinois State Register, March 5, 1873.
 ²³ Chicago Tribune, April 23, 1874. Ex-Governor Palmer, in addressing a meeting of farmers, thus summed up the attitude of the railroads: "They rely-

But the tide was setting in strongly for the farmer; in every state and local election this or that candidate trimmed his sails to his particular demands: every candidate was the "farmers' candidate." The reaction of the two old political parties to the independent movement was, of course, dictated by self-interest; the democrats, who had everything to gain by weakening the republicans, generally encouraged the movement; while the republicans, their power endangered, condemned this attempt of an industrial group to gain their ends by political means. The State Register enthusiastically announced that it was "in favor of any nominations made by any body of men, called democrats or by any other name, who are opposed to the salary steal, railroad extortion, corporation monopolies of all kinds, and in favor of free trade and equal rights to all and special privileges to none. This is our platform, and the Register will only support candidates who stand on it." 24 The State Journal betrayed "radical" republican uneasiness when it sneered at the composition of the farmers' movement; "the efforts of democratic bummers and dead beats, all over the country, assisted by a few theoretical agriculturists, to convince the people of the absolute necessity for the organization of a 'new,' or 'farmers' party,' do not seem to be encouraging. We have yet to see the first republican paper, however vigorously it may be urging reform in the management of the railroads, that indorses the proposed movement." 25

a vested right to defy the popular will, as declared in the constitution and laws. And even yet it is apparent that they are defiant . . . railroad managers, have as yet shown no disposition to accept this law in the just spirit in which it was enacted. On the contrary, they have found in its passage a new pretext for extortion." Illinois State Register, March 3, 1874; Chicago, Burlington and Quincy Railroad Report, 1874, p. 24. 24 Illinois State Register, November 9, 1872, July 8, 11, 1873; Ottawa Repub-

lican, August 14, 1873; Chicago Tribune, July 11, 1874. 25 Quoted in Illinois State Register, July 11, 1873. See also Rochelle Register,

August 16, 1873.

As to how independent a step they should take, the farmers themselves were divided. The ones who openly advocated an alliance with one of the old parties were bitterly opposed to those who favored the organization of an independent party. "If those that see the necessity of this great movement being made political in order to accomplish the overthrow of the monopolies of which the farmers complain, should make the mistake of attempting to attach it to the democratic party, they will soon discover that they cannot accomplish their undertaking. The republican members of the Clubs and Granges will not, as a general thing, support the democratic party, and the republican party will thus be enabled to continue to rule the country in the interest of the giant monopolies." Tazewell county farmers went squarely on record against coalition by declaring that both old parties were the "tools of grabbers and monopolists." 26

The formal entrance of the farmers into politics as an organized body came in 1873 at the judicial elections. It had needed only the McLean case to convince many that the railroad interests controlled the judiciary; and that if any solid results were to be attained, the courts as well as the legislature must be renovated. As a beginning, therefore, it behooved the farmers to see to it that the judicial candidates should not be found wanting in a proper reaction to the railroad laws. In the fifth district, where the term of Chief Justice Lawrence, who had spoken for the court in the McLean case, was about to expire, this feeling was particularly strong. When Lawrence was renominated by means of the influence of the lawyers of the district, the farmers held a convention at Princeton, where they nominated Alfred M. Craig, who, in the constitu-

²⁶ Prairie Farmer, June 21, September 13, 1873. For opposing opinions on the significance of the farmers' movement as a political issue see the Nation, 1873; Harper's Weekly, 1873.

tional convention of 1869-1870, had shown himself favorable to railroad regulation. They further adopted resolutions demanding effective action from both the legislature and the courts in support of the railroad provisions of the constitution; they declared their intention of supporting no one not in accord with the farmers in these matters, and recommended that the "antimonopolists" of the state nominate their own candidates for the judicial positions in the various districts.

The farmers in the second district, the only other one where a supreme court vacancy was then occurring, and in eight or nine of the twenty-six circuits of the state adopted the advice of the Princeton meeting, while candidates in many other districts voluntarily declared their sympathy with the farmers' views. The election results revealed not only to the farmers, but to astounded politicians as well, the power which the new movement had gained. Nearly every candidate nominated or backed by the farmers was elected, even Judge Lawrence—in spite of a spirited campaign in his behalf being defeated.

Such victories promised well for the independents in the county elections that fall, and preparations were soon under way. A device which stimulated much enthusiasm was the celebration of a "farmers' Fourth of July." On that day the farmers of every vicinity gathered to listen to fiery addresses from their members, to discuss earnestly the political conditions of the day, and to hear a clever parody—"The Farmer's Declaration of Independence"—which succinctly set forth the farmers' cause.²⁷ The machinery of local clubs and organ-

²⁷ After a preamble, a statement of "self-evident truths," with the sins committed by the railroad, the declaration concludes:

[&]quot;We, therefore, the producers of this State, in our several counties assembled . . . do solemnly declare that we will use all lawful and peaceable means to free ourselves from the tyranny of monopoly, and that we will never cease our efforts for reform until every department of our Government gives token that the reign of licentious extravagance is over, and something of the

izations was everywhere set in motion, and county after county began to hold conventions and nominate farmers' candidates, until sixty-six of the one hundred and two counties had such "antimonopoly" nominees. Old party lines were completely ignored; for in some counties one and in some the other of the old parties refrained from making its own nominations and fell in with the independents. When the November returns came in they showed the farmers, or "antimonopoly" party, victorious in fifty-three of the sixty-six counties in which they had their own nominees; republicans carried sixteen, democrats twenty, and "independents" thirteen of the remaining counties.²⁸

Such results could not but stimulate the hope of a similar outcome in the state elections in the following year; indeed, with 1874 an "off-year," everything was favorable to the development of a strong state party. True, the railroad situation was no longer a menace, and other issues which had been rallying points for the granges, had passed away; but the agrarian organization, conscious of power, failed to recognize that the solving of those problems meant also the relaxing of the strong cohesive force which had held together the farming group. No other fundamental question had supplied a unifying issue; and consequently old differences of republicans and democrats, as well as newer differences of "hard" and "soft" money men, began to become active. The force of organization, however, largely concealed these disintegrating agencies

purity, honesty, and frugality with which our fathers inaugurated it has taken its place.

[&]quot;That to this end we hereby declare ourselves absolutely free and independent of all past political connections, and that we shall give our suffrage only to such men for office . . . as we have good reason to believe will use their best endeavors to the promotion of these ends; and for the support of this declaration, with a firm reliance in Divine Providence, we mutually pledge to each other our lives, our fortunes, and our sacred honor." *Chicago Tribune*, June 17, 1873.

²⁸ Buck, The Granger Movement, 82-89.

and, at the same time, brought into relief the demands for which the antimonopolists now stood. Their call to convention at Springfield in June, 1874, came from "the farmers, mechanics, laboring men, and other citizens of Illinois deeming it needful for the best interests of this state and nation that independent political action be taken by and in behalf of the producing, industrial, and other business classes, and in opposition to the corporate monopolies that are influencing and even controlling our legislatures, courts, and executives, and taxing and oppressing our citizens;" and they urged all voters of the state to unite with them in supporting the platform and nominees of the convention.²⁹ Representatives of all political organizations were present; ex-Governor John M. Palmer, John H. Bryant, Jonathan B. Turner, G. W. Miner, W. C. Flagg, and William B. Anderson were among the prominent members. Palmer made the principal speech, in which he spoke against "grinding monopolies" and reiterated what he had said two years previously about the uselessness of the two old political parties, declaring that they "had accomplished their work, and that it was time for them to give way. Whatever these parties might have been in the past, certain it was that they had outlived their usefulness." 30

That the government was extravagant and that the civil service law was being evaded, the agricultural classes were now convinced. Furthermore, they were dissatisfied with the way in which the government had extended aid to the Pacific railroads; they felt that they were being exploited by the banking interests and were becoming more and more distrustful of the protective tariff. Their platform had a salutary influence on subsequent political utterances when it demanded

²⁹ Chicago Tribune, June 11, 1874; Illinois State Register, June 11, 1874;
 Prairie Farmer, June 20, 1874.
 ³⁰ Chicago Tribune, June 11, 1874.

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retrenchment in government expenditures, strengthening of the civil service law, repeal of the national bank law, replacement of national bank notes by legal-tender currency issued by the national government, and revision downward of the tariff. The candidates nominated were David Gore for state treasurer and Samuel M. Etter for superintendent of public instruction.³¹

The republicans had watched this whole development with some anxiety; they asserted again and again "that there is no occasion, nor is there any principle involved, nor issue at stake to justify men who had been Republican, or Democrats, all their lives to set themselves up as an Independent Party." But in their convention a week later at Springfield, the delegates, still flushed with the rather easy victory of 1872, did not hesitate to squabble over issues and candidates. Thomas S. Ridgeway was finally nominated for state treasurer, and William B. Powell for superintendent of public instruction, while the *Chicago Tribune* dismissed the republican platform as "on the whole an apologetic and nerveless document, indicating unmistakably that the party does not know where it stands on the questions treated."³²

In the latter part of the next month the democratic state central committee, in pursuance of the power vested in it by the democratic convention of 1872, called a state convention to be held at Springfield on August 26. The committee invited all democrats, liberals, and all others opposed to the

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³¹ For an account of the convention see Chicago Tribune, June 11, 1874; Illinois State Register, June 11, 1874.

³² Chicago Tribune, January 18, 1874, January 4, 1875. The financial plauk of the platform consumed hours of discussion in committee, which finally reported to the convention, that it declared for a resumption of specie payments and against an increase in the volume of greenbacks. The first portion of the plank the convention adopted; the second portion, the one dealing with greenbacks, it rejected by the close vote of 298 to 234. In other planks of the platform the convention put the republicans of the state on record as favoring the national banking system, the election of president by direct vote of the people, and adequate laws for regulating railroads. For pre-convention comments on issues see Chicago Tribune, May 29, 1874, quoting from Sullivan Progress, Paxton Journal, Illinois State Journal, and Bloomington Pantagraph.

republican party to unite in sending delegates to the convention. That it was to take issue with the farmers over the currency was seen when it announced the purposes of the convention to be the restoration of gold and silver as the basis of the currency of the country, the speedy resumption of specie payments, and the payment of all national indebtedness in the money recognized by the civilized world. They further declared for free commerce, individual liberty and opposition to the sumptuary laws, the right and duty of the state to protect its citizens from extortion and unjust discrimination by chartered monopolies, the rigid restriction of the government, both state and national, to "the legitimate domain of political power by excluding therefrom all executive and legislative intermeddling with the affairs of society, whereby monopolies were fostered, privileged classes aggrandized, and individual freedom unnecessarily and oppressively restrained." 33

With the publication of the above call a bitter controversy arose over the prospective attitude of the convention toward the candidates already named by the independents. The independents themselves, though somewhat ambiguous in their attitude on tariff and the currency, had, on the whole, committed themselves to the greenback policy; the democratic party had now taken an uncompromising stand for resumption and specie payments. Still, the independents, with the exception of those who feared that indorsement spelled disintegration, desired the indorsement of the democratic convention for their candidates; this desire was shared by many democrats, particularly by those who placed the defeat of the republicans before the preservation of their party organization. A very large number of democrats, however, took the ground that the time had come for the democrats to stand squarely on their own principles and candidates. "The only way that the Democratic

33 Chicago Tribune, July 30, 1874; Illinois State Register, August 5, 1874.

party," declared the *State Register*, "can be true to itself and gain the confidence of the people is to honestly and boldly declare for Democratic doctrines on all questions and at all times, that the country may know in what we believe, and knowing, may either indorse or reject. The day of shuffling, subterfuges, and experiments is past."³¹

The platform as adopted demanded a tariff for revenue only; favored individual liberty, which in this connection meant opposition to temperance laws; denounced monopolies and class distinction, and declared that it was the right and duty of a state to protect its citizens against oppressive corporations. The only contest of importance over the adoption of a platform of principles concerned the plank dealing with "resumption." Two reports came from the platform committee, the majority urging speedy resumption; the minority proposing resumption when possible "without injury to the business of the country." 35 Led by William R. Morrison, the friends of the majority report pleaded with their fellow delegates to place the convention on record as opposed to any plan or policy that might be considered repudiation even in the slightest degree. William J. (Josh) Allen and J. M. Crebs headed the opposition, which took the ground that the majority report proposed "to establish one currency for the people and another for the bond-holders." During the debate a Cook county delegate offered an amendment to the minority report, declaring against inflation and in favor of the payment of the national

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³⁴ Chicago Tribune, August 12, 1874. Permanent organization was effected with ex-Governor Palmer in the chair, and his acceptance was the last step in his return to the democratic party after an absence of twenty years.

³⁵ Chicago Tribune, February 26, 1874. The differences of opinion among the democratic delegates over resumption and inflation were not confined to the members of that party, for even the republicans were not a unit regarding these questions. Despite the lack of a sharp party cleavage, however, they served as party issues, since President Grant's veto of the inflation bill had tended to array the republicans on one side and the democrats on the other. Chicago Tribune, April 24-30, 1874.

debt in the money of the civilized world. All day the delegates debated over the resumption plank. Finally the chairman, Palmer, took the floor, pleading with the delegates to support the "hard money" proposition in some form. The convention then adopted the minority report, declaring at the same time, however, against inflation. The convention nominated Charles Carroll, of Gallatin county, for treasurer, and indorsed the farmers' candidate, Samuel M. Etter, for superintendent of public instruction.36

In spite of the efforts of leaders to stir up enthusiasm in the campaign, it was a very quiet election -- "in Illinois there is nothing material at stake from a party point of view." Though old party issues were threadbare, the "standpat" voter too often lacked the initiative to find his place in this transitional era-and therefore remained away from the polls. Even the agrarian population, at the height of its power, shared this inertia. The Prairie Farmer, in its last issue before the election, urged that "it is the duty of every man in Illinois entitled to a vote, to be at the polls on Tuesday next. It is absurd for men to stay at home on election day and then grumble that the country is misgoverned, and that politicians are all scoundrels." 37 Already, however, farmers over the state were realigning themselves, with the struggle of 1876 in view; some were returning to the republican or democratic camps which they had left upon the formation of the state grange; and still others were coming more and more under the influence of the greenback agitators.³⁸

The results of the election indicated clearly that disintegration had not yet destroyed the antimonopolists; the agricul-

³⁶ For an account of the democratic convention see Illinois State Register, August 27, 1874; Chicago Tribune, August 27, 1874.

³⁷ Chicago Tribune, October 29, 1874; Prairie Farmer, October 31, 1874. ³⁸ As early as 1874, Willard C. Flagg, president of the Illinois State Farmers' Association, in leading an insistent minority had urged the adoption of an antiinflation resolution, which failed, however, to meet the approval of the majority.

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tural and working elements had beyond question secured the balance of political power in the state. Though the republicans elected their candidate for treasurer, they secured only six of the congressional districts; the fusion candidate for superintendent of public instruction easily triumphed.³⁹

Despite the fact that in the legislature the nine independents held the balance of power and that one of their number, E. M. Haines, sat in the speaker's chair, they left no distinctive impression upon the work of that body to mark their passing. The following year the "antimonopolists" were absorbed into and became a component part of the national greenback party, and that move ended the organized political life of the farmers in Illinois. But the influence of the "grange" was not so easily obliterated. Primarily a protest of the masses against aggregations of oppressive power, they had demonstrated the value of organization in making effective their political demands. Thus they established the power of the people to force forward vital issues evaded by old conservative parties. Above all, the "grangers" had evolved the idea of public control and regulation which, as yet a mustard seed, was to grow mightily and bring forth much fruit.

³⁹ The relative strength of these different organizations as shown at the polls was:

FOR TREASURER									FOR SUPERINTENDENT OF PUBLIC								
Republican									INSTRUCTION								
									Fusion								
Independent	•	·	•	•	•	•	•	75,580	Republican	·	•	•	•	•	•	•	166,984

- Manuscript election returns, secretary of state's office, Springfield.

V. GREENBACKISM AND DEMOCRATIC REORGANIZATION

IN THE west the economic unrest which, ever since the Civil War, had come more and more to affect the political life of the country, found in the currency question a tangible peg on which to hang its grievances. The laborer and the farmer, face to face with hard times and falling prices, with unemployment and small returns, had long been resentfully viewing the policy which the government was pursuing in regard to the greenbacks. This depreciated paper money, representing a portion of the war debt, the treasury had in 1865 begun to retire in favor of long-time bonds in order that the government might speedily return to a sound credit basis.

The greenbacks represented, however, not only a part of the national debt, but they had become almost the only circulating medium. Depreciated money such as this was bad money; but every greenback withdrawn reduced by just so much the circulating medium of the country, and there was always the fear that the volume of money would drop below the actual business needs of the country. As retirement of the greenbacks progressed, the circulating medium remaining had to work harder and harder — demand, and with it the market value of the "dollar," increased — with a consequent fall in the money price of all other commodities.

The west, new and growing, was a debtor country; its "boom" had commenced after the Civil War, and its indebtedness was coincident with depreciation. The creditor east could view with complacency the prospect of an appreciated dollar their selfish interests coincided with the desirability of returning to a sound money basis. But the western debt, which represented extensive farm improvements, besides the more aggressive merchandising and brokerage operations of the cities, had been accumulated in the legal-tender dollars of depreciated greenbacks. All the eastern forces demanding resumption of specie payment were conspiring to make the debt of the west a greater burden. "Had the East loaned gold to the West, and it was now proposed to substitute for gold a new and hitherto unknown and now depreciated legaltender, the complaint might have some force; but the creditor, having unloaded his 60-cent dollars on the West, can hardly object to being paid in the same kind of currency, worth now, however, 95 cents on the dollar."¹

The pressure from the west combined with other forces led congress in 1868 peremptorily to block any further contraction of the currency. But this, the west declared, was not enough; only more and more money would ease their difficulties. The panic of 1873 augmented the clamor for inflation. The president's veto of the so-called "inflation bill of 1874" and the passage of the resumption act of 1875 were sufficient to mark sharply the lines of cleavage that divided east from west within both parties and to insure the formation of a new national organization. Moderate inflationists were left to retain their old affiliations; but in May, 1876, an impressive number of extremists, regardless of party ties, gathered together at Indianapolis to form the independent or greenback party. Their standard bearers were Peter Cooper and S. P. Cary; and though the question of the currency made a narrow platform, it was a vital one.

Both republicans and democrats regarded the currency question with anxiety and uncertainty; with division within their own ranks they hesitated to commit themselves irrevo-

¹ Chicago Tribune, June 15, 1877.

cably either way. Republican leaders were well aware that their official stand against inflation was alienating large masses of voters; yet democrats feared the reaction, if they pressed too hard the charge that, despite their words, the republicans were slothfully delaying specie payment. Would republican waving of the "bloody shirt" or democratic cries for reform suffice in the face of the greenback appeal?

In Illinois factional division over the currency had so broken party ties that the greenbackers had been able to perfect party organization some time before the assembling of the national convention. Like all other groups, the farmers' or antimonopoly party of 1874 was far from being a unit on the greenback question; yet the majority, two years earlier, had been able to declare themselves as practically coinciding with greenback contentions. About the currency question clustered a periphery of banking, bond, land, and railroad issues that made the farmers' organization quite willing to merge itself into the greenback movement; they formed a lusty nucleus about which, in the eyes of the *Chicago Tribune*, the "reckless, broken-down speculators, and equally reckless, broken-down politicians, without any standing in the old parties,"² could rally a new party.

On February 16, the greenbackers called an "Independent" convention at Decatur. W. C. Flagg of Madison county presided over the 299 clamorous and insistent delegates — for the most part farmers and laborers — from sixty-five counties. Naturally, the chief plank in their program covered the financial question: "we demand the repeal of the Specie-Resumption and National Bank acts and the substitution of legal-tender paper money for the National Bank circulation; the perfecting of a monetary system based upon the faith and resources of the nation and adapted to the demands of legiti-

² Chicago Tribune, January 1, 1876.

mate business, which money shall be a legal-tender in payment of all debts, public and private, duties on imports included, except that portion of the interest and principal of the present public debt that is by the express terms of the law creating it made payable in metallic money; this money to be made interchangeable at the option of the holders with registered Government bonds bearing a rate of interest not exceeding 3.65 per cent per annum."³ Lewis Steward of Kendall county was chosen to head the ticket.⁴

If the convention and its platform drew support from the inflationists in both parties, it called forth, irrespective of party, the opposition of sound-money men. The *Chicago Tribune* alluded to the convention as a "gathering of sorehead nondescript log-rollers," called the supporters of inflation "bucolic nurses of the Rag-Baby," and ridiculed their measures.⁵ "The Decatur Convention of Independents, among other things, 'resolved' to 'demand the election of competent and honest men to all offices in the gift of the people.' After that they proceeded to assume that they alone constitute the 'competent and honest men,' and, consequently, they were entitled to all the offices in the gift of the people. Then they proceeded to put in nomination the standard-bearers of the Rag-Baby, some of whom are old political bummers and played-out partisan

³ Chicago Tribune, February 17, 1876. They further declared for honest elections — for reforms in the civil service, for improvements in water transportation — for equal rights for capital and labor, reform of legal procedure, for protection of laborers engaged in "mining, manufacturing and building pursuits," for state regulation of all corporations, and for a reduction of public expenditures.

⁴ The other nominees were J. H. Pickrell of Macon county, lieutenant governor; M. M. Hooton of Marion county, secretary of state; John Hise of Cook county, auditor; Henry T. Aspern of Champaign county, treasurer; and W. S. Coy of Ford county, attorney-general. The national greenback convention assembled in Indianapolis three months later indorsed a platform which condemned the specie resumption act, called for the payment of government obligations in greenbacks, protested against the further sale of government bonds to foreigners, and criticized the government for buying silver for subsidiary coinage. *Ibid.*, February 17, 1876.

^b February 16, 1876; Ogle County Reporter, February 17, 24, 1876.

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plugs, and others of them are about as intelligent as horseblocks, but all of them are inflationists and dilutionists of the most crazy description." 6

Meanwhile the republicans, secure in power, were content to follow the national policy in regard to currency and were chiefly concerned in determining which of their leaders was likely to make the strongest race for governor. Beveridge, who had succeeded to the governorship on Oglesby's election to the United States senate early in 1873, had not proved to be a popular leader; indeed, the new governor's advocacy of temperance had created so powerful an opposition within the party that he was out of the running. Elihu B. Washburne, an experienced politician and statesman, was strongly supported in Chicago, while Shelby M. Cullom was the choice of downstate interests.7 Cullom's ability as an organizer and his popularity as a legislator gave him an advantage over his opponent, which was increased by the fact that it was highly desirable to nominate a candidate from the central section of the state;⁸ therefore the republican state convention held in Springfield on May 24 selected Cullom by a vote of 387 against a vote of 87 for Governor Beveridge. The delegates adopted a platform in keeping with the policies of the national administration; besides praising Grant personally, the platform approved the currency legislation of the Grant administration, applauded the president for prosecuting the "whisky ring," condemned a democratic congress for discriminating against union soldiers in filling offices, and urged greater care on the part of the executive in protecting union men in the

⁶ Chicago Tribune, February 19, 1876. ⁷ Illinois State Register, March 18, 1876; Chicago Tribune, March 22, 1876. ⁸ For the twenty years since the presidential campaign of 1856 Cullom had been active in political affairs and almost continuously in office, either as a member of the state assembly or as a representative in congress. During the twenty-seventh and twenty-eighth general assemblies he had presided over the house, showing a marked ability to handle and direct affairs.

late seceding states. The convention, with enthusiastic Blaine and Logan supporters dividing the field, finally instructed the delegates to the national republican convention to support the candidacy of James G. Blaine of Maine for president; three weeks later, however, the national convention passed Blaine by and named as its standard bearer Rutherford B. Hayes of Ohio.⁹

The democrats were more cautiously weighing the situation. They were slowly regaining power in the state, and their anxiety was to play their cards so that they would not retard their growing strength. Four years before their alliance with the liberal republican movement and their indorsement of an impeccably sound and loyal program had gone far to remove among nonpartisan people-in spite of the still energetic waving of the "bloody shirt"-the stigma of opposition to the Civil War. With this new status, the national party was laying elaborate plans for the presidential campaign; and in June the nomination of Tilden had made "reform" unquestionably the battle cry of the national democracy.

In Illinois the issues growing out of the currency loomed high on the horizon; the consequences of the slow and vacillating policy of the government toward providing relief were more easily perceived than those of its maladministration. conspicuous as they were. Thus for weeks after the national convention had met democratic leaders still hesitated; were they strong enough to make a campaign alone or should they indorse the greenback candidates? The national platform had denounced "the financial imbecility and immorality of that party which, during eleven years of peace, has made no advance towards resumption-no preparation for resumption-but instead . . . has annually enacted fresh hindrances

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thereto. As such a hindrance we denounce the Resumption clause of the Act of 1875, and demand its repeal." It had also demanded a "judicious system of preparation by public economies, by official retrenchments, and by wise finances," which would restore the national credit before the world; and had also demanded resumption of specie payments on the legal-tender notes of the United States.¹⁰ Here was a rigorous attack on republican financial policy, and possibly the democrats might be interpreted as taking a "softer" stand than the "hard money" professions of their opponents, but by no stretch of interpretation could it be taken as greenbackism. Which, then, should Illinois democrats place first: a symmetrical party organization or the defeat of Grantism?

Over this question democratic leaders hesitated so long as to threaten dissension within their ranks; the Cairo Bulletin called the postponement "a piece of cowardice" and "an insult to the democracy."¹¹ On July 27, the democrats finally held their state convention in Springfield, and the advice of those who urged the wisdom of a "harmonious union of all the opposition elements" finally won the day;¹² they adopted the national democratic platform, indorsed two greenback candidates --- Steward for governor, and Hise for auditor --and named candidates from their own ranks for the rest of the state offices.

Their position decided upon, the democrats set systematically to work to organize their forces. The formation of Tilden reform clubs was the weapon against republicanism which the national committee was advocating-a club in every town

¹⁰ Campaign Text Book, p. 4, 8. ¹¹ Issue of March 17, 1876, clipped in Illinois State Register, March 21, 1876. ¹² McClernand to McCormick, July 28, 1876, in McCormick manuscripts. In this chapter, through the courtesy of the McCormick family and of Mr. Her-bert A. Kellar of the McCormick Agricultural Library, extensive use has been made of the great mass of papers and correspondence received by the democratic state central committee in 1876 and preserved by Cyrus Hall McCormick.

or polling place in every county of every state. In Illinois, Cyrus H. McCormick as chairman of the state central committee put his executive ability, business experience, and his personal force into the cause of reviving the democracy; and under his direction a vigorous campaign was initiated. Tilden clubs spread rapidly, preaching their gospel that with a thorough administrative reform business would revive and prosperity be restored.13 Sometimes they frankly proceeded on the practical assumption that to the voter suffering from hard times "bread & butter is more to them than Hays & Wheeler."14 To combat directly the "bloody shirt," an especial appeal was made for the soldier vote-one zealous worker "sent out 3000 of those soldier letters this week." 15 The crying need of reform had been set down in a campaign textbook of seven hundred and fifty pages wherein the sins of omission and commission of the republican party stood fully revealed. Letters, textbooks, together with poll books in which district organizers returned a complete canvass of the political standing of their neighbors, were carefully distributed over the state. By August the democracy was roused from Cairo to Chicago, the state central committee being in touch with seventy-five of the counties in Illinois.16

A special effort was made to secure the German vote, since, if the democrats could win this from the republicans, it would count doubly against their opponents. The temperance question and other local issues had tended to weaken republican control over the Germans, so that this was an auspicious moment to win them back to their first allegiance. Such reports as "Nearly All the Germans have turned over to

¹³ Confidential form letter from the chairman of the national democratic committee of 1876, in McCormick manuscripts.

¹⁴ Isaac B. Hymer to McCormick, September 11, 1876, ibid.

¹⁵ T. W. S. Kidd to Goodell, October 27, 1876, ibid.

¹⁶ Daniel Cameron to McCormick, August 23, 1876, ibid.

us & will vote for Tilden," raised high hopes of success; from their canvass and correspondence in September the state committee felt that "the German element may safely be counted as three-fourths for Tilden & Hendricks,-change enough of itself to almost secure the state." 17

Industrious democratic workers were found in every foreign group; some of the ablest speakers of the state were Irish, and were in great demand; Swedish, Bohemian, and French speakers, each armed with campaign literature in his own tongue, went out to proselyte among their peoples. Even in the southern counties, where the colored population, it was said, "vote solid against us" and "there is no prospect of obtaining a democratic victory," colored speakers were engaged in the hope of breaking up the solid republican phalanx.18

As always, naturalization played its part in securing the foreign vote. On September 20, the campaign committee of Chicago sent out a circular urging the importance of equipping those who possessed the legal requirements and "who favor the cause of Democracy and Reform with tickets that will entitle them to certificates of naturalization Free of Charge," Sometimes such efforts were handicapped by the determination of "dirty Black Republican" clerks to prevent the papers from being issued in time; 19 but on other occasions seventyfive men might be rounded up in one little town.²⁰

Popular response to this organization of the Illinois democracy had never, since the days of Douglas, been so enthusiastic.²¹ The feeling that "we have never before had

¹⁷ Daniel Cameron to McCormick, September 11, 1876, Hermann Lieb to Jim Cameron, November 1, 1876, Charles Parker to McCormick, October 19, 1876, ibid. ¹⁸ O. Edson to McCormick, October 28, 1876, ibid. ¹⁹ W. E. Cook to Goodell, October 31, 1876, ibid.

²⁰ James Braun to Goodell, November 3, 1876, ibid.

²¹ When Thomas Hoyne went to Oregon to speak he was met at the station by a delegation of enthusiastic young men. "My God," a correspondent reported

so good a chance"22 permeated leaders as well as the rank and file. Correspondence from all over the state indicated that, while there was no change of democrats to republicans, many republicans were going over to the democracy. The demand for campaign literature indicated a disposition to read and consider the political situation which was found highly encouraging. "The bands of party are broken in this state, and there is no need to resort to falsehood on our part. TRUTH properly presented is the most powerful weapon we can use." 23 Old-time "monster meetings" of ten thousand to fifteen thousand people, barbecues, torchlight processions with speeches, speeches, speeches filled the days. Trumbull, Palmer, James C. Robinson, John Farnsworth, Edward Vorhees and Thomas Hoyne talked in every corner of the state, and still telegrams poured into the state committee pleading for their services.

A democratic barbecue at Cairo drew crowds "from Missouri, Kentucky and Illinois by trains, boats, on horseback and on foot." A rally of the democrats and independents of Champaign county drew thousands from the surrounding towns. "An immense procession of between one and two miles long . . . with several hundred other horsemen and wagons and footmen, passed through the two cities and then adjourned " to listen to the speakers of the day.24 Moreover, the "bloody shirt" of republicanism began to show decided signs of wear, particularly when loyal democratic generals stumped the state, pitilessly exposing republican corruption.

The greenbackers were the uncertain element in democratic

him as saying, "how I wish Douglas had have lived. It warms me up and gives me encouragement, to see you young men take hold of the campaign." F. H. March to Daniel Cameron, October 27, 1876, in McCormick manuscripts. ²² Daniel Cameron to McCormick, August 23, 1876, *ibid*.

²⁸ Daniel Cameron to McCormick, September 11, 1876, ibid.

²⁴ Illinois State Register, October 28, 1876.

calculation; and as the unknown quantity, their importance tended to be magnified rather than minimized. Republicans professed to believe that their opponents' coalition would bring into sharper relief their differences, and their energy would thus be dissipated. In September, from reports received from all over the state, democrats estimated that Cooper would poll twenty thousand votes. The shrewder observers were not unduly alarmed at this showing, for it was believed that threefourths of this number had heretofore been republican and, therefore, "instead of hurting this will help the National ticket 10,000 votes." 25 Many democrats, however, manifested almost nervous concern over the greenback strength and sought opportunities to curry favor with these independents. As the campaign continued there grew up, in spite of the most reassuring reports from the field,²⁶ a prevalent feeling that the state democratic candidates should be withdrawn and independents substituted. As late as October it was being contended that the democrats on the ticket were men of straw-what then could be better than substitution of an entire greenback ticket, "if thereby we could solidify the opposition & by any possibility carry the State elect Tilden save our delegation in Congress & gain a senator or accomplish even a part of these results." 27 The opposition to such a move was sufficient to prevent it-John A. McClernand declaring "that it would be wrong in principle and a blunder in policy." 28

25 Daniel Cameron to McCormick, September 11, 1876, in McCormick manuscripts.

26 "At first Many Dem were for Peter Cooper but now not one Dem here in this whole county can be found who will waste his vote on Cooper but will vote straight for Tilden." Parker to McCormick, October 19, 1876, *ibid*.

27 H. Chrisman to McCormick, October 23, 1876; Power and Harl to Goodell,

October 31, 1876, *ibid.* 28 "I learn with regret that some of our political friends are countenancing State nomiand as I think very injudiciously, the substitution of the *democratic* State nomi-nees by so many independent nominees. This in my opinion would be an inglorious surrender of the *democratic* party, its *platform* and *presidential ticket*. Few discerned clearly that the influence of the greenbackers was on the wane. That deep-seated conservatism of the common voter, which operated to keep him safe within the established party fold whenever hope of attaining his desires was given him therein, was now sapping the life of the greenback organization. But the movement had inspired such wholesome respect that, even in November, fear of its possible strength sponsored the recommendation that "tickets headed Cooper & Booth with Tildan [*sic*] & Hendrics [*sic*] Electors at ev[cr]y precinct" would give the democracy ten thousand votes.²⁹

Throughout the campaign in the state, as in the nation, neither party had any real issue to proffer; the democrats cried reform and mercilessly attacked the republican administration for corruption, extravagance, and the patronage system; the republicans on the defensive denied these charges, ascribed the hard times to nonpolitical causes, preached retrenchment, and, while continually flaunting the "bloody shirt," endeavored to bring to light new as well as old sins of their opponents.30 With the injection of personalities the campaign became intensely bitter; nothing derogatory to a candidate's character escaped the "watchful eyes of the mud-heavers." The republicans had made little effort to conceal their disdain of the farming and laboring classes, and the democrats eagerly pounced on any slip of their opponents which might gain for them the support of those groups. "Cullom, the whisky ring candidate for governor," commented the State Register,

It would be in contempt of the authority of the democratic State Convention which to the extent of its *democratic* nominees, discriminate in their favor against rival independents. It would tend to chill the ardor of many old and true democrats whose zeal essentially centers in Governor Tilden. It would tend to repel the application of the Germans. It would be wrong in principle and a blunder in policy. I protest against it. I hope you will make a *stand* against it." McClernand to McCormick, October 27, 1876, in McCormick manuscripts. ²⁹ I. F. Fairman to McCormick, November 3, 1876, *ibid*.

30 Chicago Tribune, June 2, 8, 16, 17, 29, 1876.

"speaks of Mr. Steward, the democratic candidate, as 'The barn-yard' candidate. . . . The men of the shops and of the farms, the laborers of the cities and towns, in short, the workingmen, are the real owners of the country. They fight its battles in war and they support its revenues in peace; the man who works in his barn-yard has a better claim upon the suffrages of his fellow citizens than has the banker who clips off coupons and shaves notes." 31

As the campaign continued, excitement and enthusiasm became feverish. The republicans, strong in a powerful and well-organized machine, used much the same plan of campaign as did the democrats. In Chicago and downstate towns Haves-Wheeler clubs were formed, their members garbed as "minute-men;" in Rockford a Swedish republican club was organized, while in some instances colored republican clubs and German republican clubs stirred up enthusiasm among their brethren. Robert G. Ingersoll, John A. Logan, Carl Schurz, and James G. Blaine with dozens of lesser lights tried in vain to stamp out the fire of regeneration sweeping through the Illinois democracy. If they influenced many through their "borrowed ticket - borrowed crowd - borrowed guns," the democrats outmatched them in spontaneous enthusiasm. Sometimes two hundred speeches within a week would be made in a single district, and even a call of a meeting at a country crossroads brought hundreds of farmers.³²

By such leaps and bounds did democratic vigor rise and cut into republican supremacy that, when the election returns came in, the results were for a time in doubt; and both parties in Chicago held mammoth jollification meetings. When the votes were all counted it was found that though the republicans

³¹ Illinois State Register, October 25, 1876. ³² J. C. Black to Goodell, October 29, 1876, in McCormick manuscripts; Chicago Tribune, April-November, 1876.

had again carried the state, Cullom was elected only by about seven thousand against the fusion candidate, and Hayes by about twenty thousand plurality.³³

Before Illinoisians could draw breath over the outcome they were caught up in the hysterical excitement which swept . the country; was Hayes or Tilden elected-would Hayes or Tilden become president? The joy that possessed the democracy when the news went out that now at last they had wrested power from a party which they believed had long debauched the government changed to chagrin over the delay in according them full rights as victors. When republicans set about securing beyond peradventure the votes of the three doubtful southern states, their opponents first watched with unbelieving eyes, then with flaming wrath, determined to checkmate so high-handed a proceeding. Less than a week after the election both sides prepared to investigate conditions in the south, selecting for that purpose prominent leaders of the respective parties, who came to be known as "visiting statesmen." Among them were seven Illinois men: Charles B. Farwell, Abner Taylor, James M. Beardsley, and S. R. Havens, republicans; John M. Palmer, Lyman Trumbull, and William R. Morrison, democrats. The "visiting statesmen" did nothing to relieve the taut nerves of the nation-they only increased the conviction of the people that anarchy and chaos were upon them.

In Illinois, democrats at white heat and democrats in passive despair held county and state conventions to express their sentiments over the crisis. Republicans might with feigned complacency dismiss these "democratic war meetings" as "not very harmonious in their councils. While one faction was brandishing its tomahawks, the other was waving the white banners of peace — It was a competition between idiotic

³³ Chicago Tribune, November 6, 1876; election returns from the secretary of state's office, Springfield.

fury on the one side and calm sense on the other, in which the latter seems to have had the advantage;" but the situation for a while really endangered civil peace. "The people were in a warlike spirit. The idea that a man should be juggled into the office of President who had been beaten by a popular vote of more than a quarter of a million, and, if the white vote alone were counted, by one million two hundred thousand, seemed so preposterous to common sense and natural justice that perhaps ninety-nine out of a hundred Democrats thought it would be entirely justifiable to resort to another civil war."³⁴

Meanwhile the Illinois legislature had convened - a legislature in which the greenback independents held the balance of power. The first business was the selection of a United States senator to succeed Logan, whose term would expire March 4, 1877; and here the greenbackers held the whip hand. Logan and Palmer held the caucus vote of the two old parties; but since neither could hope to gain the prize without the support of the greenbackers, the contest resolved itself into a struggle on the part of the old party leaders to secure sufficient votes from the independents to elect their own candidate. Balloting began on January 17, and continued for a week without effecting a choice. The republicans finally shifted their support to Judge Charles B. Lawrence; thereupon the democrats, fearful of a republican victory, joined with the independents in the support of Judge Davis, who, on January 25, was elected to the United States senate.

Meanwhile, for two months and more after the election various schemes for effecting settlement in the national situation had come to nothing. The democrats were more than willing that the election of the president should devolve on the national house of representatives, which happened to be democratic. To any such plan the republicans would not agree.

86 Koerner, Memoirs, 2:616.

Finally, it was decided to submit the whole controversy to an electoral commission composed of five senators, five representatives, and five judges of the United States supreme court. Obviously, it was impossible to select men entirely without political bias and, just as obviously, neither party was willing that the other should have a majority on the commission. Consequently, it was planned to make Judge David Davis of Illinois the fifteenth member, on the ground that his whole political course had been as nonpartisan as anyone could expect of a public official. On the very day, however, of the passage of the electoral commission law the Illinois legislature elected Davis United States senator, thus eliminating him from the commission. Later, Trumbull appeared before the commission as counsel for the Tilden side, but his efforts were in vain, the commission deciding that the disputed returns should be counted for Hayes, who was inaugurated president in March, 1877.

The democrats were again defeated, but it was a defeat which presaged a return to power. Fear of greenbackism as a separate political organization had now largely passed, though in a different phase the currency question for twenty years continued to trouble the waters of Illinois politics.

VI. REPUBLICANISM AT THE WHEEL, 1876–1880

THE election of 1876 and the narrow margin by which republicans had retained state control was a crisis which seemed to consume the strength of their opponents and allowed republicans a return to peaceful power. Not that opposition was killed; but from the republican point of view the array of opponents plainly at odds and disunited, each seeking his own end rather than the common aim of defeating republicanism, could be viewed with equanimity, not to say satisfaction. To them it held no menace comparable to the distressing alliances of enemies which for several years had been able in places of power persistently to clog the wheels of the republican machine.

In previous years democrats, under the sting of conscious weakness, had for expediency's sake reluctantly espoused greenbackism; now, flushed with their return to recognition as the second great party, they attempted no concealment of the fact that they were in reality hopelessly out of harmony on that question. It was true that one faction sympathized with the greenback agitation; but others, scorning the "rag baby," cried for hard money; while some desired a reduction of the public debt, others opposed any reduction. The greenbackers girding up their loins for their last stand—for the resumption act would go into effect in 1879—heard the *State Register* calling greenbackers "Inflationists and Lunatics" and paper money "the invention of the devil."¹ To be sure, the *Salem*

¹ Illinois State Register, March 3, 27, 1878; Chicago Tribune, September 16, 1878.

Advocate held them in different esteem, declaring that "the strongest argument of the goldites, of the usurists, bankers and bondholders has been that 'congress has no power in time of peace to make the notes of the treasury a legal tender for private debts,' and this we are pained to see, is the lunacy of the State Register, the one excuse for being counted out of the party, and working for and with the Wall street financiers;"² but the more powerful party press as well as official democratic approval was withdrawn from such financial heresy.

Democrats and republicans regarded with equal disdain the new alliance into which the greenbackers had enteredthat with the workingmen. Old party leaders, still harking back to the ideals and issues which had animated them during war and reconstruction, regarded the whole labor movement with contempt and loathing. The consciousness of "labor" was a new thing-before the great railroad strike of 1877 "the large mass of our people contented themselves with the belief that in this great and free Republic there was no room for real complaint." The rapidity and spontaneity of that industrial mutiny revealed great unrest and brought to realization by the public grave labor problems. It became known that there existed a workingmen's party.3 The press was a little vague as to the component elements of the movement which was now seeking political expression, though "the new secret society of workingmen called the Knights of Labor," along with those of a communistic or socialistic persuasion, was usually cited.⁴ The press, regardless of party, condemned out of hand not only the theories but the specific demands of labor, holding it impossible that American workingmen could listen to the call of the communistic gods of France. When

² Salem Advocate quoted in Illinois State Register, March 27, 1878. ⁸ Schilling, "History of the Labor Movement in Chicago," in Parsons, Life of Albert R. Parsons. ⁴ Chicago Tribune, July 26, 1878.

the workingmen took a stand for the reduction of the hours of labor to eight, the abolition of child labor in all industrial institutions, the compulsory education of children under fourteen years of age, the inspection of food to the end that all impurities might be detected, the establishment of a national bureau of labor statistics, they met decided disapprobation. At times their demands were mildly but finally dismissed with "there is nothing in their platform that is connected in the most remote manner with the interests" of the community, while the public was assured that "there is no danger of an infection of the Americans . . . the Socialistic heresies are too foreign to our institutions and the American character to gain a foothold among us." In more heated moments, however, it was declared: "If the chief end of man is to become a lazy lout, a shiftless vagabond, a pestilent petrifaction, a brawling, long-haired idiot, a public nuisance, and an enemy of his race, let him turn Communist." 5 It was in the larger cities, particularly Chicago, that the labor agitators found an abiding place, and they were "mostly foreigners and many of them aliens," though there was a smaller English section. Such propositions as that "the means of labor should be National, whilst the result of labor should be personal . . . every man must make himself useful to the community; all his functions should be utilized to the benefit of the community," were dismissed as mumbo jumbo befitting an alien source.6

⁵ Chicago Tribune, August 22, 1877, March 24, 1879. ⁶ In the spring of 1879 Chicago was amazed to find that the socialists — or communists — had cast 12,000 votes for their candidate for mayor, and, in addition to the alderman elected in 1878, they now succeeded in placing three others beside him in the common council of Chicago. By November, however, the votes polled by "this pestiferous organization" had dwindled to four thou-sand, and internal strife soon split the socialists into opposing factions. "Good times" had relieved the labor situation, so that in 1880 the Chicago Tribune declared "a marvelous change" had been wrought in the condition of the working people. Chicago Tribune, March 24, October 14, November 6, 1879, November 28, 1880; Parsons, Life of Albert R. Parsons, XXI.

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The patent absurdity of the demand for a working day of eight hours and the "charlatan" impracticability of prohibition of child labor were bad enough in the purely economic field;⁷ but it was beyond the ridiculous to bring them as issues into the political arena. Now, because labor stood also against the retirement of the greenbacks, against the national banking system, and "against official barnaclism," it had joined hands with the greenbackers as the greenback labor or industrial greenback party. In the coalition, moreover, the greenbackers ceded "everything except the name. They promise to adopt the Workingmen's platform with slight variations. . . . The fatted calf, so to speak, is to be divided; the tail and hide, representing certain offices, are to be given to them [greenbackers], and for this concession they are truly thankful."⁸

To the public at large the greenback issue proper was being rapidly overshadowed by a new phase of the currency question. During the winter of 1877-1878 the silver discussion in congress aroused the country to the most intense excitement. A crime, so the public called it, had been committed by the demonetization of silver in 1873. The line between the east and the west, so characteristic of the greenback discussion, was in this case even more sharply drawn. No party alignment could be made in Illinois; republicans, democrats, greenbackers, and labor passionately took issue against the "evil conspiracy against the welfare of the American people." Chicago bankers might raise their voices in opposition to the silver bill, but their protests were drowned in the chorus of ardent support. Illinois was convinced that the "country could not prosper or recover from depression and curtailing markets while money continued to ascend in purchasing power and property, and wages to

⁷ Chicago Tribune, August 22, 1877, April 3, 1878.

^b Ibid., October 17, 1877.

descend. As the gold dollar rose, the weight of debt and tax rose with it, and wages and employment sank at the other end of the beam. . . . While the Shylocks waxed fat, bankrupts and tramps filled the streets. The Eastern gold-grabbers have acted the part of vampires, sucking the life-blood out of productive enterprise." ⁹ It was believed that the silver convention at Springfield --- to which Quincy alone contributed fifty-five delegates - expressed the feeling of "nine-tenths of the people" in regard to the "wrong and fraud which had been perpetrated in demonetizing silver;" the convention resolved: "We view with intense indignation the efforts now being made by the money-power of New York, and other cities of the East, to enforce public opinion in the West and South upon the question of silver remonetization. And . . . we say most emphatically that the honest convictions of the people of this section of the Union will never be surrendered at the dictation of greedy capitalists and bondholders, let the consequences be what they may."¹⁰ The state grange, then in session at Peoria, telegraphed a resolution expressing its hearty sympathy with the purposes of the meeting, and enthusiastic meetings at such places as Bloomington, Quincy, Peoria, and Princeton expressed "the sentiment of the great West on the vital question of the restoration of the dollar that was surreptitiously withdrawn from the currency of the nation in 1873."11 With remonetization successful, Illinois was exultant. "The victory is one of the people. It is a victory that was needed to remind the world that Wall street no longer controls and dictates national legislation. For the first time, perhaps since the War there has been legislation on a question of finance which has not been inspired by and in

 ⁹ Chicago Tribune, January 26, March 1, 1878.
 ¹⁰ Illinois State Register, January 16, 1878.
 ¹¹ Chicago Tribune, December 7, 22, 1877, January 16, 1878; Illinois State Register, January 3, 13, 24, 1878.

the interest of those who live by gambling in money and public securities." 12

The action of a republican congress in February, 1878, in passing the Bland-Allison bill over the president's veto, by which the United States was forced to purchase annually a large quantity of silver, added to the glory of that party in a state which had reacted so keenly to the silver question. Still, it was the disunion of their enemies, rather than enthusiasm for republicanism, that was decisive in the biennial election of 1878. With an independent vote four times as great as it had been two years before - more than sufficient to carry the state if combined with the democrats - the election of 1878 was a clean sweep for the republicans.¹³ The greenbackers themselves saw ultimate victory in their own defeat. They professed to see the beginning of "hard times," which would awaken the people to the necessity of voting the greenback "The coming years, instead of bringing better times ticket. than we have just been passing through, is going to bring 'honest' money and harder times than you have ever witnessed. God pity the poor !" 14

To the republicans the most pleasing feature of their victory was undisputed control of the legislature after a lapse of four years, during which independents of one stripe or another had held the balance of power. Again chief interest centered around the struggle over the senatorship, which would now assuredly go to a republican. The most prominent candidates were ex-Senator Logan and Senator Oglesby, whose

¹² Chicago Tribune, March 1, 1878. ¹³ Ibid., September 16, 1878. Official vote:

Edward L. Cronkrite 170,085 Samuel M. Etter 171,3 Erastus N. Bates 65,689 F. H. Hall 65,4	FOR TREASURER	FOR SUPERINTENDENT OF PUBLIC Instruction
Erastus N. Bates 65,689 F. H. Hall 65,4		
Manuaciat destinant and and from 1 (F. C. 1 C. 1)	Edward L. Cronkrite 170 Erastus N. Bates 65	1,085 Samuel M. Etter
¹⁴ National Greenbacker, November 16, 1878	- Manuscript election retu	arns, secretary of state's office, Springfield.

term of office would expire in March, 1879.15 Logan had failed of reëlection to the senate in 1877; and during the intervening two years his friends had carefully prepared the way for his election in 1879, hoping that it would be a steppingstone to the presidency in 1880 or in 1884. Logan, with an almost solid backing from the Grand Army of the Republic, had built up a powerful machine which insured the support of the rank and file of his party; and because of his dashing personality and brilliant military record, he commanded the support of many democrats. Oglesby, on the other hand, while popular, had not made the same brilliant record as a military officer, nor had he, as a member of the United States senate, measured up to the expectations of his supporters.¹⁶ Despite every effort of Logan's bitter enemies - for there was a growing restiveness under the yoke of political bossism within the republican party-on January 17, a republican caucus nominated him by a vote of 80 to 26 for Oglesby.¹⁷ When the democrats united on John C. Black, Logan's election was assured. He received 106 votes to 84 for Black, 14 being divided among several other candidates.

The following year the opposing forces lined up for the quadrennial fight over the presidency. With the return of the now reconstructed southern states to the party fold, the democrats were looking forward to contesting for national control on a better basis than they had known for twenty years.

¹⁵ During the campaign the friends of both candidates had endeavored with varying degrees of success to pledge the support of republican legislative candidates. This practice many of the republican newspapers opposed; but it appears to have had the sanction of the state committee, for that body had tabled a resolution which requested "local committees to refrain from pledging legislative candidates on the senatorial vote."

¹⁶ For contrary opinion see Chicago Tribune, December 10, 1878.

¹⁷ The Chicago Tribune declared that Logan "was opposed to all reforms in Government," that he was "the embodiment of the worst phase of machine politics." Illinois States Register, July 21, 1878, January 8, 1879; Chicago Tribune, January 7, 9, 1879; Nation, February 19, 1881; Senate Journal, 1879, p. 105. Within the state the result of refusing coalition with the greenbackers two years before had been to hand over undisturbed domination to the republicans; now again they looked favorably on fusing with the greenbackers or at least profiting by a large defection from the republican ranks due to the greenback movement. The greenbackers themselves professed to believe that the working of the resumption act— in effect on January 1, 1879—was so unsatisfactory as to force the expansionist elements of both parties into their own ranks.

In the republican situation both the democrats and the greenbackers thought that they saw a combination of circumstances which would cause the defeat of their enemy in the state as well as in the nation. Rutherford B. Hayes had been in no sense a popular president; furthermore, his decision not to become a candidate for reëlection caused a scattering of party leadership. A somewhat similar condition existed in the republican party of the state; Shelby M. Cullom was a successful executive, but he was compelled, though bearing the brunt of democratic attacks, to share leadership with Oglesby and Logan.

While the general political situation was in this fluid state it became evident that subtle influences were pushing Grant forward as a third-term candidate. His statement in 1876 that he would not accept a third term unless "such circumstances as to make it an imperative duty" should arise, had been seized upon by his managers, who now, violently waving the "bloody shirt," began to point to such circumstances specifically, the attitude and speeches of southern members in the last congress; there was "still danger to the country from the rebel Brigadiers." In 1878 the *Chicago Tribune*, disturbed by clouds "already considerably larger than a man's hand," had declared that "if we are to have trouble from

internal dissensions, either from the Socialists or from the Democratic party, a man of the Cromwellian breed and blood, like Grant, is needed at the helm. A great public crisis generally brings to the front the man that is wanted." 18 Now, in the spring of 1880, Logan, speaking in Chicago and elsewhere, was declaring that "there is danger, and great danger, to be apprehended to our country in the near future," and in general terms was affirming that "the evidence of this has been accumulating for some time, and thoughtful people have observed it." 19

Unfortunately for the consistency of this attitude, Grant, while his managers were crying wolf, wolf, was touring among erstwhile confederates and "eulogizing the good behavior of the men who wore the grey." On April 16, Logan was declaiming in Chicago about the "'great emergency' which would, in his estimation, excuse and justify a third term;" and in Cairo, Grant was applauding the good citizens of the south -- loyal to the union and devoted to the old flag.20 It was a bad setback for a boom, and it seemed apparent to many that the "bloody shirt" was too threadbare to prevail over the prejudice against the third term, while "Grantism" had of itself long ago won implacable enemies.

Logan was not discouraged; Grant's popularity in his state, combined with his own powerful influence, he deemed sufficient to win for Grant the Illinois vote in the national convention. Preliminary to an open campaign in the state, Grant's managers arranged for a visiting tour in which he should be received in several Illinois cities not as a presidential candidate but as the leading citizen of the state, a Civil War hero, and an ex-president. As such, even the democrats

 ¹⁸ Chicago Tribune, June 29, 1878.
 ¹⁹ Nation, February 26, 1880.
 ²⁰ Ibid., April 22, 1880.

were forced to receive him with open arms. At Springfield, on May 5, 1880, ex-Governor Palmer welcomed Grant and eulogized his acts in preserving the union, carefully refraining, however, from any mention of his service as president.

Evidence of a third-term enthusiasm continued slight, while anti-Grant and anti-third-term men became more outspoken. By April "the third term movement makes a feeble showing in Illinois. . . . Twelve counties with eighty-five delegates have elected only twenty-seven Grant men; and Sangamon county having sent a divided delegation. The sudden journey of General Logan homeward is understood to have had some connection with this impediment to the boom. The machine has now been put under a full head of steam, rumors have been sent out in every direction, and every possible effort is making to reverse the current of party opinion."²¹

Yet, notwithstanding every effort, when the state convention came together in May, Logan had been unsuccessful in subduing the independents; the convention was divided over issues, over candidates, and over methods of naming delegates to the national convention. Grant and anti-Grant forces contended for support;22 Cullom and Oglesby each had a strong following for governor; the leaders were anything but unanimous in the matter of national issues. The first fight began over the seating of delegates from Cook county; directed by Logan, it resulted in a victory for Grant. The convention next discussed the method of choosing delegates to the national convention. In previous presidential campaigns, each congressional district had chosen its own delegates and alternates, but the Grant forces proposed to abandon the plan, leaving the choice of the entire state delegation to a committee of the state convention. All day and far into the night the debate raged

²¹ Nation, April 22, 1880.

¹³ Illinois State Register, May 20, 1880.

over the proposed change. Finally, at two o'clock in the morning the convention by a vote of 389 to 304 indorsed the change, and by a still larger majority instructed the delegates to the national convention to support Grant's candidacy.²³

The success of the Grant men in the state convention threatened to disrupt it. It was charged that all anti-Grant and anti-third-term men were kept out of the convention. "General Logan is the state Boss, and has the usual Boss's control of the State Committee, and the State Committee has the direction of the organization of the Convention." 24 The convention adopted no regular platform, leaving that responsibility to the national convention. On the third day it took up the nomination of state officers. The first ballot showed the delegates divided among seven candidates. Governor Cullom and General John I. Rinaker leading. The first four ballots were taken without a choice, but with the fifth and decisive ballot, the contest narrowed to the two leaders. County after county which had been supporting one or the other of the weaker candidates went over to Cullom or Rinaker, with the result that the former was chosen, first by a majority vote and then unanimously, though under protest.25

As the success of the Grant men had torn asunder the convention, it now threatened to disrupt the republican party throughout the state. A mass meeting of Chicago republicans "declared that they would not submit to Boss rule; that they would not have a third term; that they would defeat the villainous attempt to deprive them of their liberties. . . . They drowned in groans a complimentary allusion to Grant."

²³ Chicago Tribune, May 21, 22, 23, 1880; Illinois State Register, May 21, 22, 23, 1880; Moses, Illinois, 2:862, 863.

²⁴ Nation, May 27, 1880.

²³ John M. Hamilton was nominated for lieutenant governor, Henry D. Dement for secretary of state, Charles B. Sweigert for auditor, Edward Rutz for treasurer, and James McCartney for attorney-general.

From Rockford, Bloomington, Freeport, Dwight, and Moline protests arose.²⁶

On June 2 the republican national convention met in Chicago, and there the struggle between the Grant and the anti-Grant factions in the state was renewed. Many of the congressional districts, unwilling to surrender to the state convention the privilege of naming delegates to the national convention, had selected their own delegates and alternates. The result was a contest for seats, in which the Grant forces were beaten. And in convention the Grant men worked in vain; on the thirty-sixth ballot the convention nominated James A. Garfield of Ohio, who as a delegate was helping to manage the candidacy of John Sherman. Thus both the leaders, Grant and Blaine, were defeated and the prize went to a dark horse.

A week after the republicans began their deliberation in Chicago, greenback delegates met in national convention in the same city. For president they nominated James B. Weaver of Iowa, and for vice president, E. J. Chambers of Texas. Several planks of their platform pointed the way to radical reform; one declared that "legal tender currency should be substituted for the notes of the national banks, the national banking system abolished, and the unlimited coinage of silver, as well as gold, established by law;" another, that it was the duty of congress to regulate interstate commerce in order that there should be secured for the people "moderate, fair, and uniform rates for passenger and freight traffic," and denounced as dangerous the efforts everywhere manifest to restrict the right of suffrage. They named Alson J. Streeter for governor, and A. M. Adair for lieutenant governor.

²⁰ Illinois Staats-Zeitung, May 24, 1880; Chicago Tribune, June 1, 1880. See in this issue disputches from Rockford, Bloomington, Freeport, Dwight, and Moline, which show opposition to the action of the state convention.

On June 10 the democratic state convention met at Springfield with S. S. Marshall presiding. The platform declared for reform in the civil service, for a "constitutional currency of gold and silver, and of paper convertible into coin," for better laws relating to the collection of wages, and against protective tariff laws. Lyman Trumbull and Lewis B. Parsons headed the ticket.²⁷

The Illinois delegates to the national democratic convention, which convened in Cincinnati on June 22, supported the candidacy of William R. Morrison of Illinois, though there appears to have been little enthusiasm for him in any other state. Winfield S. Hancock of Pennsylvania with William H. English of Indiana as his running mate became the presidential nominee. The platform, which declared against everything republican, resembled somewhat the one adopted by the greenbackers, though it was less radical and less constructive.

With all the candidates named and the platforms published, the campaign of 1880 began in earnest. The republicans had the advantage of official patronage and the optimism that went with twenty years of uninterrupted political power. They were handicapped, however, by the sore spots that went with the success of Cullom and the Grant men in the state convention and with the defeat of both Blaine and Grant in the national convention. Fortunately for the party, Garfield was proving to be popular, and it was hoped by the leaders that differences might be temporarily buried and a united front be offered to the enemy.²⁸

The democrats also received their presidential nominee

²⁷ John H. Oberly, secretary of state; Lewis C. Starkel, auditor; Thomas Butterworth, treasurer; and Lawrence Harmon, attorney-general. *Illinois State Register*, June 12, 1880. The same convention appointed Melville W. Fuller, John A. McClernand, S. S. Marshall, and W. T. Dowdall delegates-at-large to the national democratic convention. *Ibid.*, June 11, 1880; *Chicago Tribune*, June 11, 1880.

28 Ibid., May 22, 27, June 9, 1880.

with satisfaction, and the lack of internal dissensions among the state leaders gave hope of success. The long services of Trumbull as a republican in the United States senate, however, tended to neutralize his efforts to be elected governor of the state on a democratic ticket. The *Chicago Tribune* even accused him of appealing for republican support on the basis of his political activities while yet a member of that party. "Indeed, it is said that he goes so far as to remind Republicans not merely that he was part author and active supporter of the constitutional amendments and Reconstruction acts which the Democrats denounced as 'unconstitutional, null, and void,' and which they are now seeking to repeal, but that also, during his career in the Senate as a Republican, he procured certain offices and advocated the allowance of certain claims for Republicans."²⁹

The campaign as a whole appears to have been conducted by both parties on a somewhat higher plane than had been their custom, although personal attacks and slander were plentifully used. Republicans declared that the democratic platform was "mainly a condensation of the principles, purposes, and accomplishments of the Republican party during the past twenty years"-with the single exception of the "heresy of State-sovereignty, to which the Democrats cling." 30 They laid chief stress on the value of protection, pointing to the good times as conclusive evidence of its beneficent effects on industry. Both the other parties denied the existence of prosperity as best they could, while the greenbackers boldly called for the remonetization of silver and for the abandonment of the national banking law. The greenbackers, however, without the support of the democratic press, which had been accustomed during the previous two presidential campaigns

to give aid and comfort to the third party, were waging a losing battle.

As election day approached the democrats began to lose courage. Hancock, their candidate for president, by making his famous declaration that the tariff was a local issue, dampened the enthusiasm of the leaders and cut away the ground on which they were basing their arguments against protection. In October Indiana went against the democrats with the effect that many of the Illinois leaders of democracy gave up the contest.³¹

The election itself was a republican victory. Both Cullom and the republican electors carried the state by a comfortable majority, the greenback vote being actually less than one-half as great as it had been in the state election two years before.³² Of the nineteen representatives elected to congress thirteen were republicans and six were democrats. The legislature was also safely republican, thirty-two out of fifty-one senators and eighty-two out of one hundred and fifty-three representatives being members of that party.

The thirty-second general assembly, which convened January 5, 1881, found little constructive legislation either necessary or demanded. The *Chicago Tribune* took the ground that the legislature should confine itself primarily to a bill regulating trials before justices of the peace, to amending the landlord and tenant act, to the biennial appropriations, and to a new apportionment of the state based on the tenth census (1880).³³ The legislators themselves thought otherwise;

³¹ Palmer, Personal Recollections, 439. ³² Official results:

For Governor	FOR PRESIDENTIAL ELECTORS			
Cullom	5 Republican			
Trumbull				
Streeter	B Greenback			
- Manuscript election returns, secretary of state's office, Springfield.				
³³ Issue of January 5, 1881.				

they gave their attention to a great variety of legislation and undertook investigations that consumed weeks of time, dragging out the first session to the last of May. They passed laws dealing with the sale of deadly weapons, with the adulteration of food, drink, and medicine, with the practice of dentistry and pharmacy, with the inspection of tenement houses, and with the publication of annual reports of financial officers. They did not, however, pass an apportionment bill, and they refused to legislate for the Illinois-Michigan canal. The next year Governor Cullom called a special session, which sat from March 23 to May 6, 1882, to consider apportionment and the canal. The law relating to the cession of the canal was submitted to the people, and the state was reapportioned so as to give the republicans thirty-two senatorial districts and the democrats nineteen.34 Thanks to these gerrymandering activities, the republicans were able to retain control of the legislature with a majority of eleven in the senate and one in the house, thus assuring the election of a republican senator to succeed David Davis, whose term would expire on March 4, 1883.

Competition among republican aspirants to the senatorship increased with the convening of the thirty-third general assembly. Cullom, Oglesby, Thomas J. Henderson, and G. B. Raum were candidates. Cullom had the advantage of state patronage, an advantage which was somewhat neutralized by the feeling that he ought to complete his term as governor

³⁴ The special session of the legislature naturally gave an early start to the campaign of 1832; the republicans named John C. Smith for treasurer and Charles T. Strattan for superintendent of public instruction, the democrats nominated Alfred Orendorff and Henry Raab, and the greenback nominees were Daniel McLaughlin and Frank H. Hall. A fourth ticket, the prohibitionist, comprised John G. Irwin and Elizabeth B. Brown. The republicans narrowly escaped defeat. Smith was elected by a plurality of a little more than six thousand, while Strattan ran slightly behind his democratic opponent. Chicago Tribune, May 5, 1882; report of republican convention is found in *ibid.*, June 29, 1882; report of democratic convention is found in *ibid.*, September 8, 1882; Illinois State Register, September 8, 1882.

before asking for another office. The other three candidates were men of large political experience, and each of the three was entitled to be addressed as "general," an advantage not to be passed over lightly in political affairs. On the first ballot of the republican caucus Cullom lacked ten votes of a majority, being but five votes ahead of Oglesby. The fifth ballot saw Cullom victorious, with sixty-three votes to twenty-three for Oglesby, thirteen for Raum, and seven for Henderson. The democrats honored Palmer by choosing him as their candidate, though there was no probability that he could be elected. On joint ballot Cullom received one hundred and seven votes to ninety-five for Palmer.

Next to the senatorial election the most important act of the thirty-third general assembly dealt with the liquor business. For a dozen years or more the question of temperance had been a thorn in the side of local politicians. Both the old parties had studiously avoided for a time any definite stand, though it was generally thought that a majority of the people irrespective of political affiliation was opposed to any law intended to "regulate the social intercourse or the private habits of people." 35 Public men known to be in sympathy with the movement found their leadership imperiled, while those of the rank and file who held similar views were objects of derision and ridicule. Such a feeling in fact went far to hamper the administration of Governor Beveridge, who was known as a temperance leader, and made his renomination impossible. Hostility to the cause, however, did not dampen the enthusiasm of its friends. Some undertook the formation of a political party which should stand first and last for restrictions on the liquor business, but many more preferred to gain the same end through the parties already in existence. After

³⁵ Chicago Tribune, November 4, 16, 1872; Ottawa Republican, May 30, November 28, 1872. 140

their victories in 1872 and 1874, little additional legislative progress had been made. From time to time petitions asking for a constitutional amendment that would prohibit the liquor traffic in one or another aspect came before the legislature, only to be quietly killed in committee or tabled "until July 4 next." Even in 1879, when a huge petition containing 175,000 names was presented to the legislature, it produced no immediate effect.

In 1883, William H. Harper of Chicago introduced the "Harper high license bill," providing that the keeper of a dramshop should pay an annual license of not less than \$500, unless malt liquors only should be sold, and then the minimum license should be \$150.³⁶ Republicans lined up behind the bill; democrats opposed it. The vote in the house was exceedingly close and for a time its friends despaired of its passage.³⁷ It was openly charged that money was freely used by the liquor interests. The temperance forces, however, prevailed, and the Harper bill became a law. While it never accomplished as much as its closest friends had predicted, it was a step forward in state prohibition and undoubtedly gave courage to the friends of temperance to struggle for further advance.

Another act of the same assembly deserves notice. The state constitution had originally provided that the governor might not partially veto an appropriation bill, being compelled either to indorse it or to reject it in its entirety. Such grave abuses had arisen under the provision that the people were generally demanding its modification. Accordingly, the legislature, in conformity with the provisions of the constitution for amending that instrument, submitted an amendment for the consideration of the voters, which provided that if the governor "shall not approve any one or more of the items

²⁶ Laws of 1883, p. 92-93. ³⁷ House Journal, 1883, p. 995. or sections contained in any [appropriation] bill, but shall approve the residue thereof, it shall become a law as to the residue in like manner as if he had signed it."³⁸ This amendment the people ratified at the November, 1884, election; and on the twenty-eighth of the same month it was formally proclaimed a part of the state constitution.

88 Laws of 1883, p. 186.

VII. THE POLITICAL MACHINE IN OPERATION

I LLINOIS politics of the seventies and eighties were charac-terized by blind adherence to platforms and candidates, by extreme displays of enthusiasm at rallies and jollification meetings, and by the influence of the caucus and convention in choosing party nominees. It was the day of the "party man" when independent voting was regarded with more or less suspicion, of the torchlight procession with its fantastical costumes and its noise, and of the party manager with his swaps and trades and petty patronage. Though the typical voter continued firmly to believe in the sacredness of the ballot, yet it is doubtful if any other period in the state's history ever saw the professional politician so bold or his position so secure. Conventions and caucuses exerted a controlling influence in the determination of political policies and candidates, with the result that the individual voter was practically powerless to register his choice; usually, swept along by the tide of party fervor, it did not occur to him that there was any course open to him but to render blind allegiance to his chieftains.

One of the most reprehensible features of party politics was the fraud and corruption attendant upon elections. In the larger cities particularly, the densely populated districts afforded a rich field for unscrupulous "bosses," while the voting system itself had no safeguards against all manner of frauds. Through the seventies and early eighties abuses had continued so flagrant as finally to arouse a really determined hue and cry against ballot box stuffing, "repeaters," and falsified returns.

It was customary for each party to print its ballots privately

and to distribute them to the voters at the polls. A ballot was a small sheet of paper which usually read:

For (name of office) JOHN SMITH (name of candidate)

And since registration of voters was not required, to stuff a ballot box was not a difficult matter. Moreover, professional "repeaters," men who voted in several precincts, infested the polls. The Chicago Tribune dates the systematic use of this practice in 1872;1 and at an election in 1875, from the evidence presented to the supreme court, it was shown that "in many wards no poll-books were kept; that no clerks were appointed; that no record of the number of names or voters was kept or returned; that the ballots were not numbered; that the returns were not signed by any clerks; no poll-lists or tally-sheets were returned."² In the April elections of 1876 the Tribune cried aloud over the "outrageous frauds . . . a monstrous, dangerous, exasperating fraud has been perpetrated." 3 In 1879, the same journal declared that "there is a 'Tammany' society within the Chicago Democratic organization, and this year, for the first time, the society has carried into effect, on a large scale, one of the practices of its New York prototype. It has been engaged, systematically, in corrupting the registry-lists by the insertion of fraudulent names, -- the names of repeaters. The Tribune of yesterday published a large number of these fraudulently registered names. One

¹ Chicago Tribune, April 17, 1876, "With all the political abuses Chicago has suffered since the municipality was formed, we believe there was never any systematic and formidable ballot-stuffing until resort was had to that infamous practice to carry the reorganization of the city under the general charter of 1872." ² Ibid., April 12, 1875.

³*Ibid.*, April 8, 1876.

ward alone shows one hundred and twenty-eight of them already detected."⁴ Again in November, 1884, charges of fraudulent voting were rife.⁵ Some of these charges were due to mere partisanship—the desire of one party to bring on its opponent the odium of corruption; but in very large part they rested on evidence of illegal tampering with election returns. Finally the saner and cleaner forces in both parties united in the cause of election law reform. In journalistic fields, the *Chicago Tribune* led the movement, while the Union League of Chicago and other clubs were driven by "palpable frauds committed under, and the difficulties growing out of, the present defective elections. Small precincts, voting by daylight, and the Pennsylvania plan of choosing election judges were the remedies advocated.⁶

With the pressure from newspapers, civic organizations, and messages from retiring Governor Hamilton and from newly elected Governor Oglesby, both urging remedial legislative enactment, it was inevitable that the matter should receive the attention of the legislature. The law finally enacted provided for registration of voters, for qualification of election judges, and for strict rules regarding the opening and closing of polls; it enumerated election offenses, and provided for the pay of judges and clerks. Abuses were lessened but not

4 Chicago Tribune, November 4, 1879.

⁵ Some of these charges were due to mere partisanship — the desire of one party to bring on its opponent the odium of corruption; but in very large part they rested on evidence of illegal tampering with election returns. One especially flagrant election crime was that in the second precinct of the eighteenth ward of Chicago (sixth senatorial district), where a very clumsy forgery had been committed. "There is every reason to believe that this forgery was committed in a bold and defiant spirit, with the full knowledge that it must eventually be detected, but with a purpose to brazen the matter out until the State Senate can be organized and a United States Senator can be chosen." The case was finally taken up before the federal grand jury, and Brand, democrat, was awarded the seat in the state senate against Leman, republican. *Chicago Tribune*, November 19, 1884.

6 Ibid., January 4, 1885.



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seriously checked until the adoption of the Australian ballot in 1881.7

In the political campaign of 1884, John Marshall Hamilton, who had succeeded to the gubernatorial chair upon the election of Governor Cullom to the senatorship, was a candidate to succeed himself, but the party convention favored ex-Governor Oglesby and chose him by acclamation.8 The platform expressed the party's pride in the administrations of Arthur and Hamilton; demanded revision of the criminal law code, a tariff that would protect labor, and laws for the protection of workmen; it denounced election frauds in the south and instructed the delegates to the republican national convention to support the presidential candidacy of Logan. This last plank gave evidence of the efficiency of the state party machine, for even in Illinois the name of Blaine had more magic than that of Logan. "The mention of Logan's name provoked a storm of applause-that of Blaine's a cyclone of uncontrollable enthusiasm from all parts of the hall-the Logan feeling rallied at the second mention of the Illinois Senator's name, but the applause which followed lacked that spontaneity and long-sustained power which characterized the reception of that magic, magnetic name of the idol from Maine." 9

Even after the state convention had given its formal indorsement, Logan's managers encountered obstacles in pushing his candidacy. Many of the republicans of the state had never become reconciled to his active support of the third term movement in favor of Grant; and many more believed that

⁷ Laws of 1885, p. 188-196.

⁸ Other nominations were J. C. Smith, lieutenant governor; Henry D. Dement, secretary of state; Jacob Gross, treasurer; and George Hunt, attorney-general. Moses, Illinois, 2:895. See Chicago Tribune, February 2, 24, March 23, 1884; Illinois State Register, March 23, 1884.

⁹ For account of the convention see Chicago Tribune, April 17, 1884; Illinois State Register, April 17, 1884.

"Nature made him a soldier and a politician, but neither nature nor art ever designed him to be a statesman."¹⁰ Furthermore, it was felt in republican circles that Blaine not only was capable but also that he had honestly earned the highest honor the party could confer on him — the presidential nomination.

As the day for opening the national convention approached, a rumor gained ground that the managers of Logan were trying to arrange a coalition with Blaine men whereby Logan should become candidate for vice president on a Blaine ticket.¹¹ Logan's supporters, however, denied any such intention, insisting that their candidate would get the presidency or nothing. Accordingly, when the convention, which assembled in Chicago on June 3, called for nominations, Senator Cullom placed before the delegates the name of John A. Logan, whom he characterized as the tried hero and patriot, the sagacious and incorruptible statesman, the man who had never skulked in his life. Three ballots were taken without a nomination. On the fourth ballot Cullom asked to be allowed to read a telegram from Logan.¹² This request was denied, whereupon thirty-four of the forty-four Illinois votes were cast for Blaine, who was subsequently nominated. Logan was then nominated for vice president.

In July, the democrats met in state convention at Peoria, with Palmer as the keynote speaker. The platform presented

11 Illinois State Register, June 3, 1884.

¹² The Logan telegram was reported to have been as follows: "The republicans of the states that must be relied upon to elect the president, having so strongly shown a preference for Mr. Blaine, I deem it my duty not to stand in the way of the people's choice, and recommend my friends to assist in his nomination." See Illinois State Register, June 7, 1884; Chicago Tribune, June 7, 1884.

¹⁰ "General Logan has stumbled up to very near the head of his class in politics, by dint of perseverance, self-confidence, good-fellowship, and active wire-pulling. . . In point of education, training, solidity of parts, mental grasp, and the general equipment so desirable in a Presidential candidate, General Logan is so seriously deficient that his nomination would be looked upon in the Eastern States as something altogether outré." Nation, April 3, 1884.

to the convention was comprehensive and plain; it denounced the republicans for not reducing taxes and for not amending the criminal code, declared for an eight-hour day and the right of labor to organize, and praised temperance, though it committed the state democracy as "earnestly opposed to all sumptuary legislation . . . and to the enactment of prohibition liquor laws as being fanatical in emanation, destructive of the rights of freemen, vicious in principle, utterly inefficacious for good, and fraught with manifold evils." All this and more the delegates were ready to accept without serious question; but on the matter of protection there were grave differences of opinion, which appeared when Carter H. Harrison of Chicago moved to refer the revenue-only tariff plank to the national convention. Harrison, so he stated, did this in the interest of harmony, since many of the Chicago delegates, though they opposed high protection rates, believed in discriminatory duties. William R. Morrison replied with some warmth. Palmer sided with Morrison. The debate became personal; Palmer declared that Harrison, who was the leading candidate for the gubernatorial nomination, should decline the nomination of the convention unless it indorsed the motion to refer the tariff plank. Harrison replied that he was being unjustly treated. In the end the convention supported the Harrison motion by a vote of 653 to 623 and nominated him for governor.¹³ The next week the democratic national convention, at Chicago, named Grover Cleveland for president and Thomas A. Hendricks for vice president.¹⁴

14 Two other parties, though their combined strength was less than the republican plurality over the democrats, took part in the campaign; the greenback candidate for governor was Jesse Harper, while their national nominee was Benjamin F. Butler. In their national platform they indorsed the legal-

¹³ The rest of the ticket comprised: Henry Seiter for lieutenant governor, Michael J. Dougherty for secretary of state, Alfred Orendorff for treasurer, Walter E. Carlin for auditor, and Robert L. McKinly for attorney-general. For complete account of democratic convention see *Chicago Tribune*, July 3, 1884; *Illinois State Register*, July 3, 1884.

The campaign was enthusiastic. The republicans organized Blaine and Logan clubs, uniformed marching units, and encouraged the holding of immense political rallies, featured by torches, floats, bands, and barbecues. In addition they capitalized the popularity of Logan as a soldier, thereby bidding for the support of the soldier vote irrespective of political affiliation. The democrats likewise resorted to rallies, but with no leader to match Logan, they were unable to equal the republicans in creating enthusiasm.¹⁵

The chief issue of the campaign was protection. The congressional discussion over the passage of the "mongrel" tariff act of 1883 had stimulated a deep interest in the tariff question. The democrats as never before felt that it was an opportune time to stand or fall on that question, for there were signs that the people were beginning to feel that high tariff rates not only enriched one section at the expense of another but also contributed directly to governmental extravagances and to political corruption.¹⁶ The republicans, on their part, recognizing the demand for tariff revision, pledged the party in their national platform "to correct the inequalities of the tariff and reduce the surplus, not by the vicious and indiscriminate process of horizontal reduction, but by such

tender decision of the United States supreme court, denounced monopoly, demanded government regulation of interstate commerce, and favored the submission to the people of constitutional amendments designed to give women the ballot and to abolish the liquor traffic. The last of these issues served as the core of the national prohibition platform, which, in addition to declaring for prohibition, demanded that the United States government alone should issue money and that a liberal pension policy be followed. They named J. B. Hobbs for governor, and John P. St. John for president.

¹⁵ In some sections the democrats tried unsuccessfully to fuse with the greenbackers, in others to combine forces with dissatisfied republican elements. See *Chicago Tribune*, June 24, 1884; also for the months of September and October, 1884. Illinois State Register, October, 1884, passim.

1884. Illinois State Register, October, 1884, fassim. 16 A farmers' institute at Princeton in February, 1883, adopted the following resolutions and forwarded copies to their representatives in Congress: "Resolved, That this meeting of farmers, representing about one half of the industrial toilers of this country, desire to join their voice with the common expression of all other classes in favor of relief from the excessive and inequitable burden of the present tariff." Chicago Tribune, February 16, 1883. methods as will relieve the taxpayer without injuring the labor or the great productive interests of the country." 17

That almost universal rebellion of independent republicans, or in contemporary parlance "mugwumps," that swept the democrats into national power did not make much headway in Illinois. Only in Chicago was there a center of strong anti-Blaine and Logan feeling; there the mugwumps claimed to have enrolled over fifteen thousand names "of Republicans who are opposed to the election of James G. Blaine." Outside the city, however, there was no strong reaction; 18 accordingly, in spite of the sweeping victory of the national democracy, Illinois remained thoroughly republican, electing the entire state ticket and a full representation in the electoral college.19 Republicans also had exactly one-half the congressional representation and one-half the members of the state legislature.²⁰

Logan's defeat for vice president and the very active opposition to him that developed during the campaign of 1884 did not dampen the enthusiasm of his friends for his presidential candidacy; and in order to keep their champion on the political stage they concentrated their attention on the approaching selection of a United States senator by the legis-

17 Within Illinois the Harper high license law was a heated issue. The prohibitionists and republicans charged Harrison, the democratic candidate for governor, with the desire of repealing this measure; and the republicans reasoned that the prohibitionists could not, therefore, afford to throw away their votes on their own candidate. Chicago Tribune, September 29, 1884. 18 Chicago Tribune, April 12, 29, October 28, 1884.

19 Official results:

FOR GOVERNOR		SIDENTIAL ELECTORS
Oglesby	111.214 Republican .	
	aro 62c Democrat	
Harrison	8 for Greenback	10,776
Harper	. S,005 Orechebition	12.074
Hobbs	. 10,905 Prohibition .	office Springfield.
- Manuscript election	returns, secretary of state	onice, opringheita

20 The election of 1884 was the last in which the greenbackers as a party participated in a state contest. The success of the resumption law, the adherence of the democratic party to remonetization, and the general friendliness of the people for the national banking law, cut away the only ground on which they could stand as a party.

lature. When that body convened in January, 1885, both houses stood nearly equally divided between the two parties; the roll of the house showed seventy-six republicans and seventyseven democrats, including E. M. Haines, the "independent" of Lake county; the senate was divided between twenty-six republicans and twenty-five democrats, including one "greenbacker."²¹ In the face of such an evenly balanced line-up it was especially gratifying to Logan lieutenants that within the republican ranks no formidable competitor to Logan appeared, whereas the democracy was divided in allegiance between William R. Morrison and Carter H. Harrison.

It was tacitly understood on both sides that the senatorial question should be held back as much as possible until after the house and senate were organized.22 In the senate, the republicans utilized their majority to bring about a prompt organization; the office of president pro tempore went to William J. Campbell, a veteran who had occupied the same position in 1881 and again in 1883. In the house, however, organization was not so readily achieved. Haines, "the marplot of several previous sessions," held the strategic position in the speakership fight; and the seventy-six democrats conceded an obligation to the "guerrilla" politician that worried republican leaders. Although plainly anxious to win Haines' allegiance before the senatorial fight should begin, the democratic caucus tried to satisfy him with the temporary chairmanship, while selecting a regular, Edward L. Cronkrite, as their candidate for speaker. Meantime, C. E. Fuller of Belvidere was accorded the republican nomination, and Joseph B. Messick of St. Clair was selected for the temporary chairmanship.

After a day of preliminary skirmishing, Haines, aided by

 ²¹ Rochelle Herald, November 20, 1884. Logan Scrapbook, 2.
 ²² Illinois State Register, January 6, 1885.

the vote of a republican admirer, Eugene A. Sittig,²³ secured the temporary chairmanship. Once Haines was in the speaker's chair, the anxiety of both Fuller and Cronkrite men became, "will he ever be unseated?" Sittig, indeed, now the avowed supporter of Haines, declared that there was no "power in that Legislature as it is now composed to drive Mr. Haines from that chair again, and he will be the Speaker of the House-not as the slave of the Democratic caucus, but as an independent in the fullest meaning of the term. I stand between him and the Republican party, and what he does for it he will do on my account." 24 The temporary speaker soon showed that both democratic and republican fears as to his attitude were well founded. When permanent organization was proposed by D. Linegar, a prominent Cairo politician and Cronkrite man, the chairman firmly ruled his resolution out of order.²⁵ Successive efforts on both sides to bring this question before the house were equally futile; and after days of parliamentary wrangling Haines at length deigned to make clear his position. Since the state constitution made no mention of the election of a *temporary* speaker, he declared that in electing him to fill the chair they had constitutionally elected him permanent speaker; he insisted, therefore, that the formality of another election was out of order.²⁶ Here indeed

23 Tangible reward for his support came to Sittig, in the form of his appointment as a member of the committee on credentials, thus enabling him to retain his contested seat in the house against all other contestants, and in later being made chairman of the committee on claims. Chicago Tribune, January 9, 1885. 24 Chicago Tribune, January 11, 1885.

25 House Journal, 1885, 1 session, 20.

²⁶ Illinois State Journal, January 10, 1885. In the debate on this clause, during the constitutional convention of 1870, its ambiguities had been thoroughly thrashed out; Haines had there also maintained that "the substitution o the Secretary of State [to call the house to order] dispenses with the temporary chairman. It is the permanent speaker that they elect." Debates and Proceedings of the Constitutional Convention, 1:529. At this point the reader may be reminded that just ten years before, in 1875, Haines had raised no objection to the election of a permanent speaker following the temporary organization of the house. See above, p. 4 ff.

was a challenge, and before it the house stood aghast. Republicans at once lined up solidly against this interpretation; democrats found themselves divided over it. While Simeon H. West of McLean county argued ably for the right of the house to govern itself and choose its speaker, Dill of St. Clair stoutly maintained that the house was permanently organized under the constitution. Haines himself, after asking Crafts to take the chair, defended his course for over an hour; but his oratory, which was occupied to some extent with "cracking old jokes at the expense of Fuller," 27 did not ease the situation. The republican determination to force the election of permanent officers was unshaken, and they voted solidly against adjournment. It became a test of endurance; ingenious filibustering filled the hours until upon an attempted roll call at II P. M. the house broke into wild disorder. Led by one or two hot-headed partisans, a group of democrats started for the republican aisle; the angry republicans surged forward to meet them. Fists were shaken in the faces of opponents, threats exchanged, and pandemonium broke loose. In the meanwhile, "the half-frenzied" speaker "vainly yelled for the clerk to suspend the roll-call." It was not until 1:40 in the morning that adjournment²⁸ was effected.

For four days the controversy was prolonged; again and again resolutions were introduced to the effect that the order of the day was permanent organization. But the speaker steadfastly withstood the attacks of his enemies and pleas of his friends. Finally, however, the long struggle began to wear down even Haines' resistance, and on January 21 he sent word to the republicans that he was ready for a com-

²⁷ Chicago Tribune, January 17, 1885. ²⁸ For a complete account see Chicago Tribune, January 17, 1885. It will be of interest to note that while Governor Hamilton stated that he would consider as invalid any bill passed with Haines as temporary speaker, such prominent men as Chief Justice Scholfield and General Palmer said that Haines was legally in the right.

promise and would help them elect either Eugene A. Sittig or Abner Taylor as speaker. When the republicans replied that they were entirely satisfied with their choice of Mr. Fuller, the exasperated speaker—declaring that he had been elected as an independent democrat and that, since both republicans and democrats had no use for him, he would continue as an independent—ran down the steps from the speaker's chair and locked himself up in the speaker's room.²⁹

This action gave victory for the day to the Fuller and Cronkrite men; yet it by no means solved the speakership problem. Haines' resignation had broken the democratic ranks, and they were determined to postpone the permanent organization until they were again united. "The Illinois House today," read a journalistic comment, "is simply a howling mob-without a Speaker, without a Clerk, without committees, and without function. There have been scenes every day during the last three weeks which would disgrace a town meeting in a frontier Territory, and in the meantime the Senate is awaiting organization to enter upon the business of the session, the Governor elected by the people is not permitted to take his office, the election of United States Senator is postponed far beyond the date contemplated by law, and one of the most populous and progressive States in the Union is dishonored and outraged and humiliated by the spectacle." 30

The democrats at last realized that organization without Haines was impossible. It was openly known that Sittig was ready to cast his vote for the Lake county man whenever it would elect him, and on January 29 the voting began amid a solemn silence. The first ballot resulted in a tie. Fuller's vote had gone to Sittig as a final peace offering and a silent plea to stand by his party. Upon the second roll call it was found that the democracy was solidly in support of Haines. When the name of Sittig was reached he arose to vote; but before he had a chance to east his ballot, Fuller jumped up and asked leave to have his vote changed from Sittig to Haines. In explaining the change Fuller said, "I am not willing that any gentleman on this side of the House (pointing toward Sittig) who is false to the dictates of his party shall be allowed to give the casting vote which shall make my distinguished colleague Speaker."³¹ Sittig recorded his vote for Haines; the deadlock was broken, and the house permanently organized.³²

The intensity of that struggle gave indication of the dramatic quality of the senatorial contest to which the legislators now squared themselves. Indeed, there had developed a widespread recognition that the Illinois senatorial election was to be "a national rather than a state contest." ³³ In spite of the fact that rumor invested Charles B. Farwell, John M. Hamilton, Thomas J. Henderson, and Joseph G. Cannon with senatorial ambition, John A. Logan continued the only prominent aspirant in the republican ranks; and, moreover, Logan had early declared that, "I desire you to know that should I allow my name used it would be with the understanding that it was for the whole contest, however long it might be protracted." 34 Democratic support, in contrast, was sharply split between William R. Morrison and Carter H. Harrison. "Josh" Allen, after nursing some ambitions of his own, withdrew his strength to Morrison, making the latter the favorite of all downstate factions, which, according to the Carbondale

31 Chicago Tribune, January 30, 1885.

32 Illinois State Register, January 30, 1885.

³³ St. Louis Globe-Democrat, January 30, 1885. "The Illinois Senatorial question and the organization of the House have been themes of general conversation among senators, representatives, office holders, and others at Washington." Illinois State Register, February 1, 1885.

³⁴ Chicago Tribune, February 20, 1885; Illinois State Register, February 20, 1885.

Statesman,35 were determined that Harrison, mayor of Chicago, should be downed. This disunion among his opponents contrasted with the powerful unanimity-compelling republican machine gave Logan his greatest advantage. The machine had so far, however, been unable to whip into line one avowed anti-Logan candidate, Eugene A. Sittig, "who declares he will not vote for Logan even if he receives the caucus nomination." With a republican majority of only one on a joint ballot, this defection, if sustained, was so serious as to make "Senator Logan's prospects of reëlection appear to be very poor." 36

In the republican caucus General John A. Logan was nominated by acclamation and a rising vote after a laudatory nominating speech by Senator Lorenzo D. Whiting.³⁷ In his speech of acceptance, Logan showed the quality of his determination: "sometimes people feel it incumbent upon them to say we can not elect. Would it not be as well for us to say we will not let the other side elect? . . . whether we achieve victory now, or not, depends on ourselves." 38

The democratic senatorial caucus had easily effected Morrison's nomination, and on February 13 the joint assembly considered the names of John A. Logan and William R. Morrison, which were presented amid the usual burst of oratory.³⁰ Then for weeks progress went no further. Day

³⁰ The lack of real unity in the democratic party was revealed in its balloting; the caucus vote stood 67 for Morrison, 19 for Harrison, 4 scattering, and 12 absentees — a total of 102 votes or within one of the number necessary to elect a senator. "The most urgent need [of the democratic party] . . . appears to be an accepted leader, strong enough to command the respect of his party, and possessing sufficient of the organizing faculty to unite its forces and suppress the paltry jealousies and bickerings of ambitious party chiefs. Without such a commanding general, trivial and vexatious discords will continue to baffle the efforts of the party hereafter as they have baffled and defeated it in the protracted contest which came to an end vesterday." Chicago Times, May 20, 1885; Illinois State Register, February 5, 1885.

³⁵ Quoted in Chicago Tribune, February 4, 1885.

³⁶ Nation, January 1, 1885. ³⁷ Illinois State Register, February 6, 1885.

³⁸ St. Louis Globe-Democrat, February 6, 1885.

after day, the members assembled in joint' session to sit in ominous calm; or for days together they debated angrily and ineffectively. Feverish insistence on one side to force the election was obstinately blocked by the other. There were sessions when no votes were cast; sessions when the solid vote of one side would be met by no vote at all from their opponents; and there were occasions when the only vote cast was that of Speaker Haines for William R. Morrison.40 Republican unanimity, except for Sittig, remained practically unbroken; when that party voted, Logan rarely received less than one hundred votes.⁴¹ The democrats, never so amenable to party discipline, suffered in addition from the champion iconoclast, Senator Alson J. Streeter. A tried and true democrat, though a greenbacker, he was not a man content to follow caucus dictates unquestioningly. On one occasion, disgusted by the dillydallying tactics of both sides, which had just refrained from voting, he rose to explain his vote and the course that he was determined to follow: "We have been here now two months, and we have as yet failed to elect a United States Senator. Our constituencies, I believe, are dissatisfied in the main. . . . We have been led on until we have disgraced ourselves, and our constituencies; until day by day we see scenes enacted in this house more befitting a street mob than a deliberative body. . . . There is one man in this convention who will not bow to king caucus. . . . As I said, I give you all good notice, and I want you to be here

⁴⁰ Illinois State Register, January 14, 1885.

⁴¹ "It is the belief of many of my constituents," Sittig declared, "that the loss of a clear majority of Republican votes in this assembly is due to a narrow and restricted party management and the concentration and perpetuation of power in the hands of a comparatively few of the friends and admirers of the senior Senator from this State." Republican unanimity may in part be accounted for by the party pledge exacted by Logan from the republican members of the legislature. Logan was able to garner every republican vote but that of Sittig, and the latter attributed his defection to this rigorous party régime. Chicago Tribune, February 20, 1885; Illinois State Register, February 20, 1885.

next week and vote, and if you do not I will try to elect a senator alone."⁴²

Yet through all these weeks no event occurred which could unquestionably give victory or defeat to either side; and the senatorial election continued to hang in the balance of fate. By April 12, three deaths had occurred in the general assembly. The first two vacancies involved no change in the political line-up; in the election that succeeded the third death, however, there occurred an episode which is remarkable in the political history of the state; for in a district overwhelmingly democratic, the republican candidate was elected. It was accomplished by a "still hunt," and is known as the famous "gum-shoe campaign" of the thirty-fourth district.43 "My plan is," wrote Henry Craske, the local republican leader, to John A. Logan, "for you to select a man in each county of the district, whom you know you can depend upon; he in turn to select a man in each school district: who in turn will select not more than five staunch Republicans

⁴² Chicago Tribune, March 17, 1885. On one occasion he gave his vote to "John Smith," and admitted that he had no particular man in mind when he cast his vote, though he thereby risked defeat for his party. Even Colonel Morrison admitted that the presiding officer "could consistently with his duties as Speaker, have declared Logan elected, on the ground that Senator Streeter's vote for 'John Smith' was no vote at all and that, not counting it, Logan had a majority of all present." "After the vote was taken, Streeter remarked that he voted for 'Pocahontas' Smith. That gentleman is dead, and had Streeter declared, in reply to some republican during the joint convention, that he voted for 'Pocahontas,' Logan would have been elected, because a vote for a dead man would be no vote at all. On such slender threads hangs the fate of Senators." Chicago Daily Journal, February 19, 1885; House Journal, 1885, p. 180-184; Chicago Tribune, February 20, 1885.

⁴³ There is considerable doubt as to the originator of the plan. Many claim to have conceived the idea. The *Illinois State Register*, May 9, 1885, very shrewdly observed, "We suppose every prominent Republican in the State will claim the glory of working the scheme in the 34th district." William H. Weaver, the elected representative, attributes its origin to John A. Logan himself. The above account is based on interviews with William H. Weaver and John Purkapile, who distributed the republican tickets in the thirty-fourth district; also on a letter from Mrs. John A. Logan, the Logan Scrapbook, and Henry Craske's *History of the Campaign*. Mrs. John A. Logan claims that "Mr. Craske conceived, and with the assistance of General Logan's friends caused his wonderful scheme to be executed." Mrs. John A. Logan in a letter to the author, April 25, 1918. whose duty it will be to see every true Republican in their district who can be depended on to keep it secret, and thus secure the attendance of all Republican voters at the polls at from three to five o'clock P. M., according to size of town or precinct; and with the apparent apathy that will seem to be in the Republican ranks, lulling the enemy into fancied security, thereby electing a Republican Representative."⁴⁴

So effectively was this plan carried out that the democrats of the district did not even know the name of the republican candidate. When republicans of the district began to congregate at the polls it was too late in the day for the democrats to rally their forces-and the new representative was a republican. The chagrin of the democrats not only in the thirty-fourth district but all over the state was extreme. "The most disgraceful thing which has occurred in Illinois politics for years, was the conduct of the democrats in the Thirty-Fourth district in permitting their majority of over 2,000 to be wiped out and a republican elected. It is disgraceful because it was useless — it is more than disgraceful — it is a political crime. By their inaction, if the republicans will all stand together, the democracy loses a United States Senator for six years, and the possible control of the United States during the last half of Cleveland's administration." 45

Despite the fact that this turn of events seemed now at last to assure Logan's election, the democrats refused to consider themselves defeated. Republicans "stole a check from the democrats but they haven't got it cashed yet,"⁴⁰ they

⁴⁴ Craske, History of the Campaign, p. 6; see also Mrs. John A. Logan, Reminiscences of a Soldier's Wife, 425.

⁴⁵ Illinois State Register, May 8, 1885.

⁴⁵ Illinois State Register, May 12, 1885. "It is said that everything is fair in war and politics. If our republican friends excuse their political burglary in the Thirty-fourth district for this reason, they can not complain if the democrats use all the power they possess within the law to prevent them enjoying the fruits of their wickedness." Ibid., May 12, 1885.



Englis HE Think the Me

John A. Logan

[From photograph in the possession of Mrs. John A. Logan, Washington, D. C.]

declared hopefully and made a vigorous but unsuccessful effort to elect a senator before Weaver should take his seat.⁴⁷ The republicans meanwhile were joyfully following up their advantage. The night of May 14 they secretly administered the oath of office to the newly elected legislator in the hall of the house of representatives; on the following day they formally demanded his recognition. The democrats protested with spirit, but the republicans carried their point, and Weaver was seated.

Even yet the democracy did not give up hope. They decided, at this late day, to abandon William R. Morrison and substitute at the moment of crucial voting the name of Lambert Tree, in the hope that upon him they with the one or two dissatisfied republicans would unite. Unsuccessful here, in a last desperate effort to defeat Logan they attempted to unite upon Farwell, a republican.⁴⁹

The tide was against them. At noon on May 19, when the legislature met in joint session, every member was in his seat. The galleries were crowded with eager spectators; "politicians of both parties from every section of the State were present, while the floor of the house, the aisles and the galleries were packed with interested spectators. General Logan stood hat in hand in the rear of the Republican side of the House. Col. Morrison sat in the midst of the democrats, while Judge Tree was moving about on the outskirts of the crowd." ⁴⁹ The assembly proceeded to the balloting. On the first roll call, the democrats refused to vote. Every republican in the senate and all but one in the house cast his vote for Logan. When Sittig's name was called, he did not

[&]quot; Chicago Times, May 9, to, 1885

⁴⁸ Mr. Farwell received 21 votes in the senate, and 72 in the house. See Lusk, History of the Contest for United States Semator, before the Thirty-Fourth General Assembly of Illinois, 1845, p. 48.

⁴⁰ Chicago Tribune, May 20, 1885

vote. The announcement was met with wild applause by the democrats, followed by a deathlike quiet. Logan lacked only one vote for election. When the call for absentees was read, the democrats again refrained from voting. All eves were turned on Sittig; at last his name was again reached. He asked leave to explain his vote, which was instantly accorded him. In the course of his remarks, he said: "I found myself differing very widely with many Republicans in the choice of a candidate for United States Senator. . . Mr. Speaker, I have found John A. Logan's political methods to be galling to the independent manhood of those who recognize his leadership. . . . I prefer to say that, in obedience to the Republicans of the Sixth Senatorial District, who sent me here as their trusted servant and officer (but under my personal protest) I vote for John A. Logan."⁵⁰ The deadlock was broken - John A. Logan was again United States senator from Illinois 51

Shout after shout went up from the joyful republicans, while Sittig was surrounded by groups of his delighted colleagues. Logan was pulled here and there, shaken, and tossed by his frenzied friends.⁵² Immediately after adjournment "a crowd of the republican members began singing 'Marching Through Georgia,' and they proceeded to march up town to various saloons - where they spent the ballance of the afternoon singing songs, yelling like Indians. . . . It was announced that the town would be painted a deep red at night." A brass band was hurriedly got together, and while Logan held a levee for the crowds of congratulatory friends at his hotel, hundreds of others too exuberant to contain themselves, formed a procession and with torches, banners,

⁸⁰ Illinois State Register, May 20, 1885; Chicago Tribune, May 20, 1885. ⁸¹ Illinois State Journal, May 20, 1885. ⁸² The final vote stood for John A. Logan 103, for Lambert Tree 96, and 5 scattering; total, 204 votes. Illinois State Register, May 20, 1885.

and songs paraded "around the principal streets, bawling for Logan, John A. Logan." 53

The triumph of Logan demonstrated the power of the smoothly working party machine, as well as the magnificent political grasp of the man himself. Even the *State Register* which had consistently and bitterly fought his election, handsomely conceded that "General Logan made a most discreet and energetic fight, and fully demonstrated his ability as the leader of his party. He deserved to win after he had kept his party in line and had secured for it the 103 votes. We would like to have seen a democrat elected — we would have rejoiced to have secured a democratic successor to Logan; but we cannot help but admire the perseverance and pluck that wrested success from apparent defeat."⁵⁴

⁶³ Illinois State Register, May 20, 1885. ⁶⁴ Ibid., May 20, 1885.

VIII. NEW FORCES ASTIR

H OWEVER gratifying the sweeping republican success of the early eighties in Illinois may have been, old-line politicians were becoming acutely conscious of the growing clamor of new issues. Into the political field, long sacred to tariff discussions, to reconstruction debates, to senatorial election campaigns-all saturated with the bitter brine of personal invective - economic questions now insistently pushed their demands. It is true that for almost twenty years, coincident with the country's phenomenal business and industrial development after the Civil War, economic discontent had at various times tried to become politically articulate. The unfolding of business opportunities, the achievements of manufacturers, and the expansion of trade had afforded a spectacle of delight to the American people generally; but to particular groups this development had exhibited only its sinister side, the ruthless contest without rules, in which they were always beaten. In Illinois, railroads and middlemen had pressed too hard the agricultural population; and the granger movement, conceived in stringent economic necessity, had for a period dominated politics. The same forces, dissolving into greenback, and later into "independent" organizations, had less aptly voiced their economic protest.

Meanwhile, in the thriving young cities of the state, diversified industry was leaping into strength. Machine shops, foundries, and factories, with nothing to hamper or limit them, expanded, organized, united, and went on growing. Poverty and unemployment, disease and overcrowding became in a new sense pressing municipal problems. At the same time the people began to know the names "trusts" and "combinations," while newspaper abuse of those "corporations which fatten on the people" became familiar enough.

The growth of industry meant, in a state heretofore so largely agricultural, the tremendous increase of industrial laborers. Caught in the swirl of changing conditions, buffeted and beaten, they had been slow to realize that their individual weakness could be changed to strength by united bargaining power; when first they did essay to grasp that weapon it was not surprising that, divided into foreign language groups, with the native element innocent of organization, their demands were laughed at and ignored. To the press, labor unrest and agitation were only other names for communism and socialism -a fearful embodiment of things foreign and alien; the freely admitted reprehensibility of big business when it combined into heartless trusts must not confuse the citizen into condoning the impractical demands of labor-demands for shorter hours, for safety devices, for employers' liability, for limitation of child labor, for the right of organization - any of which, if insisted upon, would certainly disturb business.1 Such was the doctrine of the newspapers for several years. Early in 1880, the thousands of workingmen in the packing houses of Chicago were defeated by their employers in a threeweeks' strike over their right to organize. "The 'striking men,' finding their wives and children suffering for bread . . . concluded at last to abandon their nonsense and apply to their old employers for work in their old places, at the old rates."

¹ On March 13, 1880, the Illinois State Register declared that "one most consummate piece of humbuggery ever suggested in connection with the 'labor question' is the so-called 'eight hour movement.' The thing is really too silly to merit the attention of a body of lunatics ..., and the idea of 'striking' for eight hours is about as sensible as 'striking' for pay without the hours. A wise laboring man will work just as long as he agrees to work for certain wages, specified between himself and his employer whether for one hour, or for twenty-four hours. No legislative body on earth can properly have anything to do with the subject. It is purely and exclusively a matter of contract between the individual wage-payer and the individual wage-worker."

They were rejected, however, whereupon a demonstration against the "scab" labor took place. The *State Register* termed it "an unpardonable outrage upon the decency of the times," and concluded: "Such 'labor agitators' as these Chicago mobocrats are a fraud upon all the dignities of honest toil. They are traitors, not only to wives and children, but to society and government. They deserve no freeman's sympathy, but detestation. They are entitled simply to the severest penalties of the violated law, supplemented, if need be, by copious showers of shot and shell!"²

Nevertheless in the large centers laboring men began slowly to rally; and organization, once under way, progressed rapidly. The unions formed in the skilled trades came more and more to express discontent and unrest, while the Knights of Labor, emerging from their humble beginnings in the seventies, in the eighties felt strong enough to come to the front with a more aggressive attitude on labor questions.³ In June, 1884, they held a meeting in Chicago to urge the members of the republican convention then in session to put forth in its program something more than vague generalizations about labor. Among the foremost demands of the Knights were those for an eight-hour day, for a law for the incorporation of unions, for the legal prohibition of the labor of children under fourteen,⁴ for an employers' liability act, and

² Illinois State Register, January 11, 13, 14, 1880.

³ The Knights of Labor, according to the idea of the founder, Uriah S. Stephens, received members irrespective of trades and planned a grand army of laborers, strong enough to force a respect of their rights. In 1881, the ruling of secrecy was removed, and with Terence V. Powderly as grand master, it grew by leaps and bounds. Politicians greatly feared its growing strength, which in 1886 was rumored to be 5,000,000 — or seven times its actual membership.

⁴Labor was actuated by other than the humanitarian motive only, in taking the lead in this particular demand. In many industries besides "foundries a system of child labor had been introduced. Boys were kept out of school and taught how to make the mold for one particular piece of casting and nothing else. In foundries where many similar pieces were cast a boy soon became able to do the work of a man. Wages ran down the scale almost to the common day-labor point." Chicago Daily News (evening), November 1, 1890. for a law giving the worker a lien on the product of his labor.⁵

The two years from 1884 to 1886 saw such a formidable development in labor organization, such bold demands for protection and recognition, that, with the great increase of strikes, the democratic press descanted upon "the power and benefits" of labor organizations; and political aspirants began to trim their sails somewhat to this new force. "The unanimity with which congressmen are expressing their friendliness to labor legislation is an indication that they are beginning to realize the great power possessed by organized labor."⁶ Five years before, republicans and democrats had regarded with equal disdain labor's political demands; now republicans in convention were forced to receive politely the demands of the labor representatives, while democrats went so far as to discuss them.7

In October, 1884, the Federation of Trades designated May 1, 1886, for the inauguration of the eight-hour day. In Illinois during the late winter and early spring of that year this concrete demand became symbolic to workingman and employer alike: to the one it was the substance of greater things yet to be; to the other it threatened the right of private capital to the autocratic control of production. Every week saw enthusiasm grow among the laborers; the Knights of Labor formed a hundred new lodges a week until finally they were obliged to call a halt lest they become too unwieldy.8 Organizations of manufacturers, with opposition to unions and Knights as their password, were the answer to this unprecedented growth.9 The dramatic spectacle of the railway strike in East St. Louis - a sympathetic demonstration to the strug-

⁵ Nation, June 5, 1884. ⁶ Illinois State Register, February 5, 1886.

⁷ Ibid., February 5, 14, 18, 1886. 8 Ibid., February 25, March 13, 14, 24, 1886.

⁹ Ibid., May 25, 1886.

gle then going on in the southwestern states - could not have been better staged to spur on both sides.¹⁰ Before his eyes the awakening worker saw displayed the power he might come to wield; state and federal authority stood helpless before it. The owners of industry seemed to see the handwriting upon the wall foretelling a new age; and, for the most part, they set themselves in uncompromising opposition. The lockout became as common as the strike. In February, Cyrus McCormick locked out his fourteen hundred employees when they tried to enforce the principle of union labor. "I told them," said Mr. McCormick, "that the right to hire any man, white or black, union or nonunion, Protestant or Catholic, was something I would not surrender. . . . Where we differed in the matter that involved principle, I would not yield. I also said we would have no trouble about the matter, and to avoid any trouble and to sustain that principle, the works closed this morning."11

During these months the press in general favored labor's demand. Five years had converted the eight-hour agitation into something "theoretically sound . . . humane and unselfish" as long as it asked eight hours' pay for eight hours' work. The plan would give the workingman greater opportunity for personal development; moreover, it had been found that he produced as much in eight as he did in ten hours. But there were signs that the movement had "degenerated into a demand for eight hours' work and ten hours' pay"—a "menace" to be deplored. "A twenty per cent increase in pay contemplates an industrial revolution which ought not rudely to be forced upon the country," just recovering from depression. Moreover, would the workingman be satisfied

¹⁰ Chicago Tribune, Chicago Herald, Chicago Daily News, Illinois State Register, April 1, May 1, 1886, passim. ¹¹ Illinois State Register, February 17, 1886.

with this victory, or would he, on the contrary, continue to demand greater and greater concessions? He could scarcely expect sympathy if that were the case. Still, it sometimes appeared, with the sweeping enthusiasm among workingmen resulting from "the trade and labor unions, the Knights of Labor assemblies, the socialistic and international groups," all "agitating harmoniously for a full, legal day's work," that regardless of theoretical considerations the eight-hour day would be successful.¹²

Outside the industrial centers, the state manifested little sympathy with the movement. The problems of the agricultural population were divorced from those of the city; a vague alliance which the currency question had cemented between farming and industrial classes was almost negatived by sharper lines of cleavage. Moreover, labor had too long been identified in the minds of the farmers with press accounts of socialism and anarchy, red flags, incendiary speeches, and alien violence to win understanding consideration now. Everywhere the forces of law and order were unequivocal in their stand. The Catholic church forbade its members to join the Knights of Labor.¹³ The police force of Chicago reflected the hostility of the employing class, regarding strikes per se as evidence that the men had placed themselves in opposition to law and order. During these months of unrest it became a pastime for a squad of mounted police, or a detachment in close formation, to disperse with the billy any gathering of workingmen. The billy was an impartial instrument: men, women, children, and shop-keeping bystanders alike composed its harvest.¹⁴ It was

¹² Ibid., February 14, March 13, May 1, 1886; Chicago Herald, May 1, 2, 1886. ¹³ Ibid., April 30, 1886.

¹⁴ Altgeld, Reasons for Pardoning Fielden, Neebe, and Schwab, 39-40. Altgeld here quotes Judge McAllister in the case of the Harmonia Association of Joiners against Brenan et al., gives a letter, dated November 21, 1885, from the Peoples' Gas, Light, and Coke Company, and cites several affidavits all setting forth the brutality of the police at this time toward working people or innocent bystanders.

the police, aided by the "Pinkertons," who added the great leaven of bitterness to the contest.¹⁵ To the workingmen they furnished concrete and hateful examples of the autocracy against which they protested.

As May Day approached the tension all over the city of Chicago increased. Squads of police guarded the larger factories and galloped unexpectedly through quarters where laboring men assembled. Meetings and processions revealed the excitement among the workingmen. On April 26 over three thousand men marched in procession, the different trades bearing such mottoes as "The Proletariat Must be Liberated;" the terminus of these "Blatant Anarchists on a Tramp" was the lake front, where eight thousand people listened to the speeches of labor leaders. "Communistic Germans, Bohemians, and Poles, representing the lumber-yards, coopers, bakers, the cigar shops, the breweries, and the International Workingmen's Association" were now prominent, while "the Nihilistic character of the procession was shown by the red badges and red flags which were thickly displayed through it."16 The city lived in dread of what might happen. "The supreme officers of the police department have ceased in the attempt to smooth over the fears of the last few weeks regarding the labor movement. Their sole idea now is that . there will be a great deal of trouble. It was decided last night to place the entire police on reserve early Saturday morning many hundred additional men can be pressed into service as special policemen as soon as any serious outbreak should occur."17

It came then as a surprise that the day passed peacefully

¹⁵ One phase of the activities of the Pinkerton detective agency was to collect armed strike breakers from various states and move them from place to place to protect property confided to their care. ¹⁰ Chicago Tribune, April 26, 1886; Chicago Herald, April 26, 1886. ¹⁷ Illinois State Register, May 1, 1886.

¹⁶⁸

enough - so peacefully that in spite of parades and celebrations the numerical strength of the sixty thousand men actively engaged in the movement was much underestimated.¹⁸ The result of the day differed in the various trades; in a few trades the eight-hour day with ten hours' pay had already been granted, in others the eight-hour day with eight hours' pay was now inaugurated, while still more compromised on a ninehour day with nine hours' pay.19

But on the "Black Road" leading to the McCormick works trouble was brewing. During the winter and spring difficulties had grown steadily more acute. The owner would consider neither compromise nor arbitration; "scabs" had replaced the striking workers; policemen and Pinkertons hovered about the place. When, on May 3, the union men held a meeting near the plant and again indulged in hoots of contempt and derision at the "scab" employees, the owner called in the police. In the mêlée which followed the appearance of a hundred and fifty officers of the law, several workingmen were killed and a score or so wounded. The news went swiftly through the The headlines of the Arbeiter Zeitung screamed: city. "Blood! Lead and Powder as a cure for dissatisfied workmen! About six laborers mortally and four times that number slightly wounded! Thus are the eight-hour men to be intimidated. This is law and order !" That night "thousands of copies of the following circular were distributed in all parts of the city. 'Revenge! Revenge! Workmen to arms! Men of labor, this afternoon the bloodhounds of your oppressors murdered

¹⁹ Chicago Tribune, May 15, 1886. ¹⁹ Ibid., May 30, 1886; Chicago Herald, May 20, June 1, 1886; Chicago Daily News, May 3, 1890; Illinois State Register, May 1, 12, 1886. The matter of hours was by no means settled, even where labor had forced concessions. A few weeks or months found the old schedules in force again in most places and the eight-hour demand remained for years a battle-cry of labor. On May 3, 1890, the Chicago Daily News declared: "He is a foolish man who thinks that this widespread sentiment for a shorter working day can be put down by force or frozen out by indifference."

six of your brothers at McCormick's! Why did they murder them? Because they dared to be dissatisfied with the lot which your oppressors have assigned to them. They demanded bread, and they gave them lead for an answer.'" A great mass meeting at Haymarket square was called for the evening of May 4 "to denounce the latest atrocious act of the police;" some of the notices carried an exhortation to the workingmen to appear armed.²⁰

The fears of a May-day uprising so recently quieted, now awoke again. Reserves of police were held in readiness at nearby stations while Mayor Harrison himself attended the meeting in order to disperse it if the atmosphere became inflammatory. At about ten o'clock that official left the meeting, and, stopping at a nearby police station, informed Inspector Bonfield that no violence need be feared - the meeting had not been of an incendiary character and the thousand or so people in attendance were now dispersing. As soon as the mayor withdrew, however, Inspector Bonfield, already hated by workingmen for numerous previous collisions, marshaled one hundred and twenty-five policemen into formation, marched to the meeting and ordered it to disperse. Almost simultaneously there was a thundering explosion; a bomb burst among the policemen, killing one and fatally wounding several others. The police fired wildly into the fleeing crowd, killing and wounding many - and the "Haymarket riot" was over.

Fear shook the city; rumors of the firing of public buildings and of the massacre of all anarchists spread over the state. The press, long bitter against socialist and anarchist, now became hysterical, while labor and its eight-hour demands were condemned with the anarchists. "That bomb put an end to a good many things beside the blatant mouthings of the

²⁰ Revenge circular, Thomas J. Morgan files; testimony of Police Inspector John Bonfield.

Anarchists. It broke up the strikes. . . . The necessity of putting down Anarchists has made public sentiment impatient with disputes as to hours and wages."²¹ Although for a fortnight thousands continued idle, the "strikers holding out sullenly," 22 the wave of public hostility destroyed the stamina of many who had recently caught the enthusiasm of collective bargaining. The molders, who had long been one of the most actively discontented trades, heard the metal manufacturers announce that one-third of the old hands were back on a ten-hour basis. Their union and the Knights of Labor assembly issued an appeal, asking: "How can you go back when those millions of voices call . . . 'Now is the day of the emancipation of the white slave.' Shall the bosses put brass collars on your necks or shall they black list you? . . . Why men, this is the battle for labor's freedom: Are you content to simply live a slave?" 23 Striking lumbermen "threatened to get up a counter demonstration in the hope of keeping weakening workingmen from giving in and going back to work." 24 But soon even the hardiest strikers were crying quits; lumbermen, molders, tailors, and boot and shoe workers went back, while by the end of June, the police and "scabs," with the aid of "125 Pinkerton men armed with Winchester rifles and heavy Colt's revolvers," had broken the morale of the striking Lake Shore switchmen.25

Evidently labor was settling down; business, in spite of the fact that "a good deal of the spring trade has been diverted from Chicago, and it will take months before the old activity prevails," had won in a struggle the outcome of which it had feared. The focus of the whole issue had been shifted

²¹ Champaign Daily Gazette, May 5, 1886; Chicago Herald, May 11, 1886.
²² Ibid., May 13, 1886.
²³ Ibid., May 16, 1886.
²⁴ Ibid., May 17, 1886.
²⁵ Ibid., May 17, 20, June 29, 1886.

by the Haymarket incident; its consequences held the center of the stage. The bomb thrower himself remained unknown.²⁶ Out of the many arrested, eight men were finally held for trial. The men were either editors, stockholders, or printers of the two international "anarchist" papers of Chicago; three of them had made speeches at the meeting the night of the riot.²⁷ The prosecution, unable to establish any evidence of even remote personal participation of any of the accused, took the stand that in speech and in writing the accused had urged the employment of force and it must have been upon such advice that some unknown person had acted. Pertinent evidence against the men was still so meager, however, that the trial soon resolved itself into a trial of "anarchism" and of the accused as "anarchists." The popular outcry was for a convic-

²⁶ That is, he remained officially unknown; there was a strong impression that as a matter of fact his identity was not entirely a mystery. In a statement now on record in the Illinois Historical Survey, made by Mr. Wallace Rice, June 25, 1919, and concurred in by Mr. Clarence S. Darrow and Mr. George A. Schilling, all of whom were in a position to know the inside history of the case, Mr. Rice says: "It was the impression of all the newspaper men informed in the premises that the fatal bomb was made by Louis Lingg and thrown by Rudolph Schnaubelt. Many of them believed further that this fact was also known to the police and that Schnaubelt was allowed to go after they had taken him into custody because he could not be connected in any way with the other men afterward condemned, with the possible exception of Lingg and of Michael Schwab, who was husband to Schnaubelt's sister. Lingg, however, was thought to be the only one of the defendants who had guilty knowledge of the bomb and its throwing.

"Schnaubelt, after his release by the police, went as far and as fast from the scene of the crime as he could, and when an indictment was found against him at last, was believed to be in southern California near the Mexican line, whence he could easily escape to another country. I myself recall dispatches received by the Chicago papers which told of his whereabouts and, eventually, of his death in Mexico. There was another story, not substantiated, that he had fied to Belgium, and died there."

²⁷ The case against Albert R. Parsons, an eloquent labor agitator known in almost every industrial center in the United States, may be cited. Returning to Chicago the afternoon of May 4, he had, almost by accident, attended and addressed the Haymarket meeting, and with his wife and children had left before the bomb was thrown. After reaching a place of safety, he had voluntarily returned to the city and had surrendered himself to stand trial with his comrades. No evidence except his editorship of the *Alarm* and his espousal of anarchism, could be adduced against him; in fact a report of his speech showed that he had decried the unwisdom of violence against particular persons, urging that it was the system which must be abolished. He was, however, sentenced to death, and died protesting himself the victim of judicial murder.

tion; the public, convinced that it had barely escaped destruction in some fiendish plot, frantically demanded a victim. The jury, after listening for eight weeks to the voluminous evidence, found the eight men guilty of murder and sentenced one, Oscar Neebe, to fifteen years' imprisonment, and seven to death.²⁸ Although many eminent men believed it to be a political trial and exerted powerful influence to secure executive clemency, they could not avert the hanging of August Spies, Adolph Fischer, George Engle, and Albert R. Parsons; their efforts did procure for Michael Schwab and Samuel Fielden a commutation of the capital sentence to life imprisonment.²⁹ The eighth man, Louis Lingg, had committed suicide.

However great the hostility which the anarchist case had aroused against labor, many workingmen were too thoroughly aroused to accept tamely the cold shoulder of society. Heretofore their entrance into politics was tentative, but now they began to lay plans for a third party. "'Keep out of politics' is the advice which the old party hacks, journalistic and other, are forever giving the labor organizations;" but, the Chicago Herald reminded the workingmen, "To keep out of politics is to submit blindly to every abuse of the law-making and executive power or to breed anarchists, who, ignoring politics, assume to accomplish their desires by force." ³⁰ In September a Cook county labor convention, to which nearly every Knights of Labor assembly in the county sent delegates, was called in Chicago; and in spite of serious differences be-

¹⁰ Chicago Herald, June 8, 1886.

²⁸ Chicago Tribune, August 21, 1886. ²⁹ A petition received the signatures of many conservative and influential men who were indefatigable in their efforts to prevent the hanging: Lyman J. Gage, president of the First National Bank, Charles B. Holmes, president of the City Railway, William Penn Nixson, black republican editor of the Inter-Ocean; Potter Palmer, Senator Farwell and Victor Lawson; Judges Tuley, Samuel McConnel, Moran, William A. Gowdy, Chester Daws, S. S. Gregory, and A. H. Barnum. Petitions from other cities of the country and abroad testified to the widespread interest in the case. widespread interest in the case.

tween the conservative and the radical elements, it organized the united labor party, "composed of such regular trade and labor unions and Knights of Labor assemblies as shall officially repudiate the Republican and Democratic parties." Similar manifestations throughout the state resulted in the nomination of local and legislative candidates and in the election of fifteen independents to the general assembly.³¹

Public opinion in general did not, as many socialists confidently expected, rise to repudiate, by the means of an overwhelming political labor movement, the verdict in the anarchist trial. Far from showing "the Republicans . . . that we can break up their party in this State," 32 the anarchist incident proved a disintegrating factor within organized labor itself. However staunch the support of this or that labor group may have been, there were many, following the official action of the Knights of Labor, who were eager to prove their own skirts free from the contaminating touch of anarchism. Labor, they felt, had paid dearly for its radical counsel; this division rendered ineffectual all efforts for united political action.

The next two years were not calculated to quiet restless elements. Serious strikes continued; moreover, the farmers, resentful of a discriminating protective tariff, increasingly restless over currency problems and continued state abuses, showed a disposition to unite forces with the Illinois State Labor Association. When that association met in Peoria in January, 1888, representatives of the farming element, "mostly greenbackers and anti-monopolists, who hope for success by united action with the labor party," joined with it in resolving to form an independent political organization; in April the Illinois labor party convened at Decatur to draw up a platform and to select

³¹ Chicago Tribune, September 23, 24, 26, 28, 1886; Chicago Daily News (evening), May 14, 1890. 22 Chicago Tribune, May 14, 1886.

candidates. The platform advocated "the strict enforcement of all laws and obeyance of the same, calls for a lower State tax, urges that holders of mortgages be taxed on the same, that members of the Board of Railroad and Warehouse Commissioners shall be elected, that means of communication and transportation shall be owned by the government, that a monetary system in the interest of the producer instead of the speculator shall be secured, that arbitration shall take the place of strikes, that a graduated income tax be established, that United States Senators be elected by the people, that both sexes shall have the right to vote, and that the Labor party is a prohibition party."³³ Harmony within the group was disrupted at the outset, however, when, because of resentment at the nomination of W. W. Jones to head the state ticket, several Chicago delegates bolted the convention.

In the campaign of 1888 this situation — the general restlessness together with lack of cohesion in the laboring and farming groups — gave to the democrats their opportunity; to their legitimate strength as the second great party they would add these disunited elements. Indeed, the democratic gubernatorial nominee, John M. Palmer,³⁴ appeared to the more conservative wing of his party as "a bull in a china shop" because of his "pro-Socialistic speeches."³⁵ Palmer, in his speech of acceptance, outlined the stand which he took everywhere on the stump. He turned his back squarely on the old political leaders who regarded the governorship "as a stepping-stone to other places;" who, disregarding the interests of the people of Illinois, had turned the state into a mere election district. But the issue that made his campaign notable was his

³³ Chicago Tribune, January 12, April 26, 27, 1888.

³⁴ Other candidates were: Andrew J. Bell, lieutenant governor; N. Douglas Ricks, secretary of state; Andrew Welch, auditor; Charles H. Wacker, treasurer; Jacob R. Creighton, attorney-general.

³⁵ Chicago Tribune, July 11, 1888.

direct appeal to the laboring man when he denounced the hated Pinkertons; why was it, he asked again and again, that "the State has become an object of such contempt that standing armies are raised in its midst . . . that private men may organize soldiers in the State, hirelings to go with their Winchesters and overawe the people." 36

The general aspect of the situation was far from encouraging to the republicans. Their national organization was committed to a high tariff with which they had but scant sympathy; yet their disavowal of it as a policy of the eastern republicans could not prevent the democrats from making capital out of it. Further, the party seemed singularly lacking in strong candidates to make the presidential race; no one stood forth as a leader who could attract united and enthusiastic support. In this situation the Illinois republicans entertained hopes of naming one or the other of the nominees on the national ticket. Senator Cullom was mentioned by some as a possible "dark horse" for president; others brought up the name of Oglesby for vice president. Neither suggestion met widespread response; so influential a paper as the Chicago Tribune, for instance, preferred to support Judge Walter Q. Gresham of Indiana for president.37 The national convention quashed whatever faint hopes there were by nominating Harrison with Morton of New York as his running mate.

The Illinois leaders therefore turned to the state campaign, but with forced enthusiasm. At Springfield early in May the state convention had nominated Joseph Fifer. The Tribune admitted that "it would be sheer hypocrisy . to pretend that the convention placed in nomination the strongest candidate beyond recall, correction, or change." It therefore urged "straight party men . . . to make the best

³⁰ Chicago Tribune, May 23, 24, 25, August 9, 26, September 7, 1888. ³⁷ Ibid., January 19, April 14, 17, 19, 21, 23, May 2, 28, June 12, 27, 1888.

of it." Fifer was characterized as a "clear-headed, plain, every-day sort of man" and as the campaign proceeded republican hopes began to revive. Fifer's appeal to the soldier vote as a "private," in striking contrast to those who as generals had long solicited the veterans' support, was proving very successful: in southern Illinois he won en bloc the enthusiastic support of the Negro vote which Palmer, contrary to democratic tactics since 1876, was making little attempt to conciliate. Further, in answer to Palmer's Pinkerton argument, Fifer pointed to the law which had been enacted the year before and assured workingmen that it had been and that it would be well enforced.38

Nevertheless, democratic strength was disquieting. "The Tribune can say all it wants to about our deal with the Anarchists; it won't hurt us any with the labor people," was proving true; it was plain that Palmer's strength was formidable in Cook county, while in Chicago "democratic and labor votes are self-same." 39 The farmers of the state, too, were lending a willing ear to the democratic appeal; like the laboring men, they were not to be won over by republican talk of prosperity and high wages so long as that party carried the responsibility for the protective tariff. The argument that this measure meant a full dinner pail for the workingman and home markets for the farmer as well as protection for the manufacturer failed utterly to convince them.

Accordingly, although the election returns showed that the republicans had again secured a governor, the party beheld in dismay the havoc their foes had wrought in their strongholds. Their narrow victory revealed an unexpected unity in the democracy and made the republicans fear that their opponents might "hold the Laborites until after the election of

³⁸ Chicago Tribune, May 4, June 26, July 20, 25, October 16, 24, 1888. ³⁹ Ibid., August 1, 1888.

November, 1890," in which case they would have an excellent chance of doubling their representation in the state senate.⁴⁰ Moreover, the outlook in the state was discouraging to any oldline party. In addition to the uncertain and discontented labor vote, the restlessness of the farmers was causing both political parties uneasiness; the old granger spirit seemed in a fair way to revive. In 1885 the Farmers' Mutual Benefit Association, popularly known as the F. M. B. A., first established lodges in Illinois; within four years, with a membership of forty-five thousand, it effected state organization and thereupon quickly added thirty thousand new members. Its plan of organization "appears to be hybrid, with the old Grange and Knights of Labor for models. There are county assemblies and local lodges, a secret ritual, a badge, a pass word, and a grip." As a protest against the middlemen, "the great class who like leeches extort from the farmers the profits that by hard labor they have dug from the ground," the association undertook to maintain coöperative stores, without "striking success although it has ruined the merchants in the small . . . towns." The platform struck at a variety of grievances felt particularly keenly by the farmers; it included such planks as reconstruction of the revenue code, enforcement of the law providing for the assessment of property at its fair cash value, reduction of the legal rate of interest, reduction of the cost of transportation, and legislation against trusts. Similar demands were also being urged by the Farmers' Alliance, an organization much like the Farmers' Mutual Benefit Association in character, but much less strong numerically, having only ten or twelve thousand members.41

To accomplish what they sought, the farmers resolved that again, as in 1874, they would be represented in the legisla-

 ⁴⁰ Chicago Tribune, April 7, 1889.
 ⁴¹ Ibid., January 6, April 28, October 29, 1890.

ture. In May, 1890, a conference between the Farmers' Mutual Benefit Association, the Farmers' Alliance, the Grange, and the Knights of Labor resolved that "our future success and welfare depends upon concerted action;" accordingly, a federation of the organizations was effected with J. M. Thompson, master of the Illinois State Grange, as president. Each member was to work in his own party for the nomination of candidates favorable to farmers: no state nominations should be made by them as a formal third party, but "in legislative, senatorial, and congressional nominations, we demand of all candidates that they be publicly pledged . . . and we will support no candidate not so pledged." The conference went on record in favor of the free and unlimited coinage of silver, election of senators by direct vote of the people, a national law prohibiting dealing in futures on all agricultural products, and a tax on incomes.⁴²

So successful was this program that besides scoring heavily in township and county elections the farmers' organizations elected fifty republican and democratic farmer assemblymen pledged to the interests of their brethren, and three outright Farmers' Mutual Benefit Association members as "independent" assemblymen.⁴³ In the new general assembly, the republicans could count only one hundred members and the democrats one hundred and one; thus the three independent representatives of the organized farming interests—two of them former democrats—held the balance of power.

Inasmuch as the legislature of 1890 had to select a suc-

⁴² Chicago Tribune, May 3, 1890.

⁴³ For several sessions, ever since the farmers had begun to rouse themselves, it had been customary for the farmer legislators to form a club at Springfield; on January 15, 1891, the farmers of both houses, irrespective of party, met to organize and to draw up an article of the constitution to be thereafter formed: "No person shall be eligible to membership in this club whose principal vocation is not that of farmer"—an article which fifty-eight members of the general assembly signed. *Ibid.*, January 15, 1891.

cessor to United States Senator Farwell the situation was peculiarly disquieting to republicans. At just this inauspicious moment came the news of the McKinley tariff bill, with its proposed increase on the necessaries of life. The strength which General Palmer had developed in the gubernatorial race made him the logical democratic senatorial candidate; what more auspicious for a Palmer boom than tariff reform meetings with the McKinley bill as text! Republican leaders "can see perfectly well that political affairs are not as lovely as they might be. They know or should know, the feeling among the farmers and the alliances. They know that the party is not gaining as it should, that it is losing many of those who have long fought under its flag. They know that this McKinlevism is swaying their party in the West, and that the wholly unnecessary increased taxation policy repels men from the Republican organization." 44 Leading republicans from all over Illinois at a meeting in Chicago in May, 1890, said not one word "which even a desperate newspaper advocate of higher tariff taxes could torture into an approval of the McKinley bill." 45

Under the dark cloud of the McKinley bill what rosy inducements could republican legislators offer the Farmers' Mutual Benefit Association members? They humbled themselves and waited upon the independents in order to ascertain their wishes in regard to the speakership, the senatorship, the coming legislation, and what not; but to no effect --- the triumvirate would make no compromise; they wanted "all this terrestrial globe," and "a vast deal of courting and attention" to boot.40 Indeed the Farmers' Mutual Benefit Association's instructions to ignore the caucus choice of both parties auto-

⁴⁴ Chicago Tribune, May 6, 1890. 45 Ibid., May 8, 1890.

⁴⁰ Ibid., January 7, 1891.

matically precluded any understanding. Palmer had long been the democratic choice; the republicans, on January 14, announced their allegiance to Senator Farwell; while the Farmers' Mutual Benefit Association decided to support Alson J. Streeter, long identified with parties of protest in Illinois politics.⁴⁷ "The principal reason that has compelled us to the solid support of Mr. Streeter is that his interests are identical with the industrial interests of the country—We claim that the questions of money and railroad transportation are the main questions—and we know Mr. Streeter to be sound on the money question and sound in his opposition to the rapacious greed of corporations."⁴⁸

And there the matter stood for two months of struggle and uncertainty. The Farmers' Mutual Benefit Association yielded not one inch, but quietly waited for one or the other of the old parties to accept its choice. It was the republicans who were "under the wheel;" the democrats, remembering the lesson of previous elections, were a solid one hundred and one for Palmer,49 quietly nursing the hope that his liberal record might eventually win the triumvirate. Finally, early in March the republicans began advances toward Streeter, trying to wring from him such concessions as would make their choice of him, "not as an ideal candidate, but as a choice of evils," somewhat plausible. Streeter thereupon drew up a speech of acceptance defining his position; this he incautiously showed to the triumvirate, who immediately declared that the republicans had "little by little, sought and obtained from our candidate such concessions and promises as would, if carried out, entirely unfit him for conscientiously representing the

⁴⁷ He had served as chairman of the farmers' antimonopoly convention in Chicago in 1884 and as union labor candidate for president in 1888. He was not a member of the assembly. McKee, National Conventions and Platforms of All Political Parties, 1789-1905, p. 223, 257.

48 Chicago Tribune, January 14, 1891.

⁴⁹ This in spite of the grave uncertainty of many old leaders over his success.

principles of the independent organizations."⁵⁰ Streeter, indeed, as the *Chicago Tribune* asserted, had "promised everything to everybody. He has told the railroad folks they need not be uneasy if he be elected and he has assured the grangers their rights would be protected."⁵¹ As a consequence two members of the Farmers' Mutual Benefit Association bolted him at the last moment, throwing their votes with the democrats, and on March 12, 1891, John M. Palmer was declared United States senator.⁵²

Such a victory, when some of the ablest democratic leaders had been convinced of its impossibility, could not but excite the highest hopes for victory in the national campaign of 1892 and democrats surveyed the plight of their opponents with satisfaction. Republicans had to carry the onus of President Harrison and the McKinley bill, and the still greater opposition aroused by the proposed "force" measures. In bright contrast shone the popularity of Cleveland, the democratic nominee, which state pride in his running mate, Adlai Stevenson, only augmented.⁵³

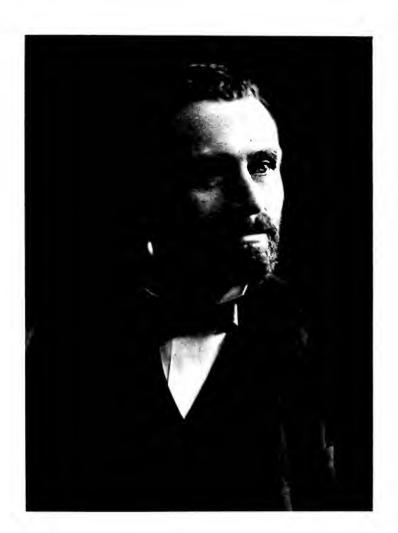
Conditions within the state offered such palpable breaches for assault that when the democrats selected John P. Altgeld

⁵⁰ Chicago Tribune, March 13, 1891. It was these same "independent" forces which early in August, 1891, formally organized the people's party in Illinois indorsing the Cincinnati platform. *Ibid.*, August 14, 1891.

51 Ibid., March 7, 1891.

⁵² Their defeat was a bitter pill for the republicans to swallow, and the *Tribune* placed the first responsibility on "McKinley with his bill. It is to him that a score of Democratic State Senators and Representatives owe their seats. Next, General Palmer should return 'heartfelt thanks' to Joe Cannon and the twelve other Republican Congressmen from Illinois who voted for the McKinley bill, as they could have defeated it. Cannon should get the lion's share, because had he chosen, he could have organized an opposition among Western Republican members which would have stripped McKinley's measure of its worst features and sent it to the Senate so modified as not to be harmful to the party. He purposely neglected to do it, and as a consequence is out of public life and Palmer is in it." *Chicago Tribune*, March 13, 1891.

⁵³ During the winter and spring there was a marked movement in the Illinois democracy to father a Palmer presidency boom, and the delegates to the national convention were instructed to stand for him, though not to oppose Cleveland. Illinois State Register, February 19, 24, 27, March 5, April 12, 24, 28, 1892.



John & altgeld

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to head their ticket, republicans wondered whether after thirty years they might lose control of the gubernatorial chair. Could Fifer, as the logical republican candidate for reëlection, successfully measure swords with him? Chicago politicians knew and feared Altgeld as a bewildering paradox: at once a consummate politician, and a real friend of the people. Elected judge by the democratic labor party and long influential in the radical wing of the democracy, he had always displayed uncanny finesse in the political game—a gift which was potentially at the service of the weak. Still, it was felt that a man so frankly a friend of labor suffered a handicap which would make it possible to wreck his political hopes. But before the gubernatorial campaign was officially launched, Altgeld threw about his political weaknesses a protective cloak of other issues.⁵⁴

He well knew that his liberal views on social and economic questions, which made certain the support of the idealist, the humanitarian, and the laboring man, would readily lend themselves to misrepresentation and calumny; in the parochial school question he found an issue which would bind to him large classes not otherwise to be won. The Catholic, and particularly the Lutheran, population of the state had become greatly exercised over the compulsory school law of 1889, which required the teaching of reading and writing in English. The fear that the authority of parent and of priest, that even the "liberty of religion" were being trenched upon, led to a determined demand from this body of voters for the law's repeal. Altgeld, while declaring himself and the democratic party thoroughly in sympathy with the principle of compulsory edu-

⁵⁴ At a time when no one had given thought to the fate of the "criminal," Altgeld published a pamphlet, *Our Criminal Code*, which held the seeds of scientific criminology. His volume, *Live Questions*, collected from periodicals and newspapers, contained his sympathetic reaction on such questions as "The Eight Hour Movement," "Arbitration of Strikes," "The Slave Girls of Chicago's [Factories]," and "The Administration of Justice in Chicago."

cation, made himself the champion of these religious groups. At a meeting of the state committee, "Judge Altgeld's plan of campaign was endorsed and it was decided to make the school question the main issue of the state canvass - 'we want a law enacted that will insure the rudiments of an education to every child without trenching upon religious grounds and without doing violence to the doctrines that lie at the base of republican institutions." " 55

The republicans vigorously protested at being thus saddled with the onus of a nonpartisan bit of legislation which had inadvertently roused a tempest. They pointed out to the foreign groups that when the measure received the enthusiastic support of members of all parties in the thirty-sixth general assembly no one suspected the existence of the objectionable features that appeared in its practical operation; republicans were cager that these features be removed.⁵⁶ The offended voters, however, heeded this explanation little when it became clear that republicans were appealing to the native Americans to support the "little red school-house." Indeed charges were soon freely circulated that "Governor Joe Fifer is the moving spirit behind the . . . rampant and powerful 'knownothing' propaganda and organization, than which nothing could be better calculated to bring the foreigner into the ranks of the democracy." 57

Meanwhile Altgeld's "political hand shake," as it was bitterly dubbed by his opponents, had brought him a wide acquaintance over the state. Early in the summer he had quietly traveled from county to county in a pre-campaign trip, holding informal receptions for the hundreds of farmers or miners who had driven in to meet him or "plodding about the muddy

⁵⁵ Illinois State Register, May 25, 1892.

⁵⁶ Senate Journal, 1893, p. 26. ⁵⁷ Illinois State Register, June 1, August 31, September 25, 1892.

streets getting acquainted with people and giving them an opportunity to get acquainted with him." 58

In the state campaign Altgeld proceeded on his theory that the "principal cause that will lead to Democratic victory is not a party issue. It is the growth of the mighty trusts and powerful and unscrupulous monopolies . . . under the wing of Republican legislation. The common people are becoming alarmed at the extent of these trusts." 59 With that passionate earnestness which characterized him, he reviewed state evils and he boldly revealed national and state extravagance; in Illinois were institutions where "it took \$600,000 to pay and keep employes to expend \$400,000 on the inmates of the institution." 60 His attacks on the evils of the convict labor system, against which organized labor had long protested, and on the abortive efforts of recent legislation to remedy these evils under the republican administration, and his accusations of neglect in many other fields of law enforcement⁶¹ roused the republican press to frenzy. The "deliberate and malicious falsehoods" of "a brazen demagogue," 62 the fomenter of foreign known nothingism, the sympathizer with the "georgeites," the millionaire labor leader, were themes which the republican press enlarged upon. "The desperation of the republican organs is manifested by the way they attack Judge Altgeld. 'Altgeld is an anarchist,' shouts one organ; 'Altgeld

⁵⁸ "The Journal appears to think it a strange thing for a candidate for governor to notice a workingman, much less shake his soiled hands; and it tries to cast ridicule on Judge Altgeld for visiting railroad shops and mines to meet and become acquainted with intelligent and worthy toilers . . . it is not the custom of the fine-haired republican office-holders to do so." Illinois State Register, May 12, 13, 14, July 22, October 19, 1892. ⁵⁹ Chicago Tribune, January 25, 1892. ⁶⁰ Illinois State Register, September 28, 1892. ⁶¹ "If the institutions of Illinois are not carelessly and extravagantly, if not

corruptly managed, then figures lie. Judge Altgeld gave the figures for his statements and he laid bare some of the iniquities that prevail in the manageadministration." *Ibid.*, September 29, 1892. ⁶² Chicago Tribune, September 7, 18, 1892.

is a goldbug!' cries another; 'Altgeld is only a hundred days Man!' blubbers a third; while a fourth organ howls 'Altgeld was never in the army at all!'"⁶³

Such efforts were in vain; the democratic star at last was in the ascendant. On November 9, the headlines of the State Register ran: "Shout the Glad Tidings, our Country is Free—Everything Democratic and the Majorities Increasing. Illinois over 10,000 on Both State and National Tickets." At length "the oppressors of the wage workers of the land" had been answered; the democracy rallied in a grand jubilee meeting at Springfield, with the triumphant state ticket uniting "with the gallant democracy of Sangamon county and Central Illinois in rejoicing over the glorious victory."

The new administration now faced the problem of remedving the wide range of grievances of the voters who had brought it into power. Altgeld had been elected not only as a democrat but as spokesman for an acute economic and social unrest which demanded satisfaction; and immediately after the thorough house cleaning among the appointive offices which the democratic party demanded as a matter of course, his first attention was given to carrying out definite constructive measures. For the protection of the workers, he appointed a woman factory inspector, Florence Kelley, who carried out rigidly the hitherto neglected provisions of the factory inspection law in regard to sanitary and safety measures; in the interests of a more humanitarian method of dealing with society's dependents he inaugurated the indeterminate sentence and parole system for criminals, sponsored the creation of the great insane hospital at Bartonville and, at Peoria, the Asylum for the Incurably Insane, and in addition improved the facilities and administration of the various state institutions. Seeing in public education the great hope of social democracy

"3 Illinois State Register, August 24, 1892.

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and justice, he spared no effort to improve the school system of the state; the normal schools at De Kalb and at Charleston stand in large measure as his monument, while the University of Illinois received from him heartier support than it had had from any of his predecessors in the gubernatorial chair.

One act, prompted by the uncompromising love of justice and sympathy for humanity which were part of the man, was to bring down upon his head an avalanche of vituperation such as few public men have ever received; this was his pardon of the "anarchists" serving sentences for the Haymarket riot. Simply a formal executive message setting the men at liberty might well have escaped more than passing notice; but Altgeld chose to accompany his pardon with an extended exposition of his reasons, which comprised a denunciation of the whole trial as unfair and illegal and pronounced the sentences wholly unwarranted by the evidence. Thus he not only freed the imprisoned men but in effect accused the state of judicial murder of the hanged men.64 The public at large could interpret his message only as a plea in behalf of "anarchy," and the press from coast to coast united in heaping villification upon the head of the executive who thus opened the gates from within to the "anarchistic snakes." Only here and there a few labor unions and Turner societies, together with judges, mayors, and public men, dared salute his "manful and courageous act" as a deed which struck deeper than the matter of freeing a few individuals to the fundamental rights of human beings.

⁶⁴ Altgeld, *Reasons for Pardoning Fielden*, *Neebe*, and Schwab. It had been rumored that Altgeld would grant the pardon; as soon as he was elected he was urged to take action by the Amnesty Association which had been indefatigable in its efforts to release the prisoners. In answer to Clarence S. Darrow, his law partner, who reproached the governor for his failure to free the anarchists within the first six months of his term of office, urging that it would be a popular move as well as the right thing to do, Altgeld replied, "Darrow, I haven't had time to go over that case yet, but I am going over the record carefully and if I conclude those anarchists ought to be freed I will free them. But make no mistake about its being a popular move — if I do it I will be a dead man politically." Record of interview with Clarence S. Darrow, in Illinois Historical Survey.

IX. DEVELOPMENT OF ARTS AND LETTERS

WITH the close of the Civil War, the people of Illinois came to cast a freshened eye upon the record of the past and upon the needs of the future. There were shortcomings to be made good. There were abuses to be corrected. For good measure, there was the dignity of the commonwealth to be exemplified. Within the short space of three years (1867-1870), a new state constitution was proposed and adopted, the cornerstone of a new state capitol was laid, and as the culmination of long years of effort, a state university was finally established.

At the end of this brief period, Chicago, with a population of three hundred thousand, a definite nucleus of culture, and justifiable hopes of metropolitan status, was advancing toward the most serious check in its history—the great fire of 1871. This was a check, however, which would serve but to liberate a new onrush of ambition and energy—one which was to lead, some twenty years later, to the triumphs of a World's Columbian exposition.

In 1870 Illinois, from many points of view, was backward. The tone of the state was provincial, and large sections had made but slight advance from conditions that had ruled on the early frontier. Communication was limited; schools were lacking in endowment and equipment. As a whole, the state still awaited the application of forces which were presently to promote cultural activities, heighten social amenities, and broaden and enrich the spiritual life of the community.

The University of Illinois, one of the most important

factors in the cultural development of the state, was chartered in 1867 as the Illinois Industrial University — a title which it retained until 1885. Its ranges of machine shops and dairy barns, for example, still bear witness to the practical spirit in which it was conceived. It was, except for the State Normal University at Bloomington, founded ten years before, the first educational institution within the state boundaries to be established on a basis altogether non-denominational. For a generation or more the higher educational interests of the state had been in sectarian hands, and several of the earlier institutions had been aided by the "college" and "seminary" funds, derived from the sale of state and federal lands. The Methodists controlled McKendree College, Northwestern University, Wheaton College, Illinois Wesleyan University at Bloomington, and Illinois Woman's College at Jacksonville. The Baptists controlled Shurtleff College at Alton and the old Chicago University (1857-1886). The Presbyterians controlled Monmouth College, and later were to add Millikin University at Decatur, the creation of a local banker. The Universalists controlled Lombard College at Galesburg. A blend of Presbyterian and Congregational influences was operative at Illinois College, Jacksonville; and the same influences, less happily adjusted, were felt for a decade or more at Knox College, Galesburg.¹ Augustana College, founded in Chicago in 1860 and transferred to Rock Island in 1875, has been the chief educational seat, secular and theological, for the Lutherans.

There had been hopes in some quarters that the State Normal University, the location of which had been largely due to the initiative of Jesse W. Fell (1808–1887), an active and valued citizen of Bloomington, itself might serve as the

¹ See statement by Dean Simonds, prepared for Webster, Seventy-five Significant Years: The Story of Knox College, 1837-1912, p. 69, 70.

basis of the new non-sectarian state institution which was contemplated. Such, indeed, was Mr. Fell's own hope. He was a law partner of Judge David Davis, a personal friend of Lincoln, a man of energy, ability, and integrity; and he was desirous of founding at North Bloomington a town which should be characterized by sobriety, morality, good society, and all the other elements desirable for an educational center. Political and financial considerations, however, led to the selection of another site. Bloomington — Normal, rather — remained as the head of the normal system of the state — a system which was extended in 1869 by the founding of the Southern Illinois State Normal University, at Carbondale, and later by that of several state normal schools in convenient sections north, east, and west.

A few county normal schools were also established; in 1868 the Peoria County Normal School and the Bureau County Normal and Model School were organized. In 1869 came the Cook County Normal School, which, in 1896, was taken over by the city of Chicago and handsomely rehoused. Normal, however, by reason of its priority and of its large and well-trained body of alumni, continued to exercise a strong influence on the educational interests of the state, and even, in later years, a distinctly definite one upon the state university itself.

That there came to be a state university at all, however belated, was due in large part to the earnest endeavors of Jonathan B. Turner of Jacksonville, who for years had labored among farmers, educators, and politicians to forward his cherished ideals of industrial education. That the new institution came to be located in Champaign county was due to the political aptitudes of Clark Robinson Griggs of Urbana, who had been a member of the state legislature in Massachusetts, a railroad promoter in Illinois, and an adroit lobbyist everywhere.² That the university started to advantage on a career ultimately crowned by success, meeting, despite many drawbacks, the immediate practical needs of a new people in a new land, was due to the character and ability of its first regent, Dr. John M. Gregory, a high pattern of forcefulness and devotion.

The State Normal University has been, in a peculiar measure, the center of scientific culture in Illinois. A convention held at Bloomington in 1858 had organized a State Natural History Society, and in 1862 the legislature had granted the society a charter. In 1867, the state granted further a small annual appropriation for the salary of a curator and for additions to the collections. Under Professor John W. Powell (1867-1872), Dr. George Vasey (acting curator in 1872), and Professor Stephen A. Forbes (1872-1884), the number of specimens was greatly increased; and under Dr. Vasey, in particular, many high schools through the state were supplied with cabinets of them.³ In 1871 the collection at Normal passed into the possession of the state board of education, which in 1877 ordered that a portion of it be transferred to the new statehouse at Springfield, where it was united with the State Historical Library-a union which lasted twelve years. The collection was afterward transferred to the state arsenal. The portion remaining behind at Normal was converted into a State Laboratory of Natural History. In 1885 there was an extensive transfer of specimens and material to Urbana and the state university. Some months earlier Professor Forbes had himself left Normal for Urbana, where he was to teach zoölogy and entomology. He brought with him the office of state entomologist; and his other office,

² For Griggs and his methods see Nevins, *Illinois*, 32-40. ³ Forbes, "The State Laboratory of Natural History," in Cook and McHugh, *A History of the Illinois State Normal University*, 236, 239.

that of director of the State Laboratory of Natural History, was transferred soon after. Such accessions could not but add to the consequence of the university and help signal its growing importance in relation to the general affairs of the state. At the same time broader cultural ambitions had begun to assert themselves, and the early designation of "industrial," it had come to be generally felt, was both a misnomer and an embarrassment. Accordingly, in the summer of 1885, the university took its present name.

Thus far the state. In Chicago, in 1870, conditions naturally bore a different stamp. Large communities do not follow the stark educational ideal with the single-minded devotion so often shown by the smaller ones: amenities and diversions have their part. At the beginning of the present period Chicago indeed possessed due educational features. It had a public school system (one which was trying to grow as the town grew) with an enrollment of nearly forty thousand children, and with a staff of more than five hundred teachers. It had the Baptist University founded in 1857 by Stephen A. Douglas, and the St. Ignatius Jesuit College (now Lovola University), built in 1869. In its historical society (founded in 1856) it had a body intent upon the little that had happened and upon the much that was expected to happen. There was a worthy opera house, which gave quarters to a gallery of paintings and to an Academy of Design; and there was an Academy of Sciences with pertinent collections. The town enjoyed, particularly among the Germans, an active musical life; and it possessed, thanks to the state legislature of 1869, a tripartite system of parks and boulevards - one well started, if still far from completion. It had a magazine, The Lakeside Monthly, which had been founded by the admirable devotion of Francis F. Browne to combat the "unbecoming awe" which

was the tribute then paid by the west to the literary east; it had a club which was to develop with the years into some social prominence; and it had even a "Maison Dorée," a restaurant handsomely housed behind the pillars of an early colonial mansion and designed to give Chicagoans some idea of life's elegancies as practiced in an older and richer "world." But the great fire dispersed the academicians, to whichever interest they were committed; it put a brake alike upon the development of the school system and the park system; it caused an hiatus in the orderly issuance of the town's magazine; it forced the historical society to beat a retreat before history in the making, and it desolated the "Maison Dorée," with its portico and its gilded lettering, beyond redemption. But it produced one beneficent and immediate cultural effect; English sympathizers were moved to make offerings which formed the nucleus of a public library - a lack which the city found itself less likely than before to make good.

The rebuilding followed the architectural mode of the day. In that period, as in later ones, the middle west lay open to any assertive outside influence, and modestly abdicated all right of judgment. The mode then current was that of the second French empire - a style with no small capacity for meretriciousness. Simple examples of it (or early halfconscious adumbrations of it) were accepted in various parts of the state. Shapes of indigenous red brick, crowned by mansards aggressive or timid, found place on the campus of Illinois College, Jacksonville, and on that at Urbana. An elaborate yet not altogether unfavorable example of this style was accepted by Morgan county for its courthouse at Jacksonville (1868). At Springfield a still more elaborate example was created (in 1868-1888) in the new state capitol, where an endeavor was made to graft on an accepted structural type the fashion lately regnant in Paris.

The college towns of Illinois invoked the aid of landscape gardening along with that of architecture. The dwellers on the open prairie, without waiting for the landscape architect to receive his label, were impelled by their very situation to summon the horticulturist and the arboriculturist to their obvious opportunities. Few towns possessed the diversified surroundings which furnished sites for the educational institutions at Alton and Monmouth, and later at Macomb. The State Normal University and the University of Illinois were alike established on treeless flats. The academic shades which they developed were due, in the one instance, to Jesse W. Fell, a tree-lover and tree-planter, and, in the other, to the taste and knowledge of Dr. Thomas J. Burrill. Similar services were performed for Jacksonville and Galesburg, whose sites, at the beginning, were equally bare.

Landscape gardening is one art that may flourish without an elaborate centralized apparatus, and literature is another. Within two or three years after the great fire, literature began to lift its head in Chicago, and literary clubs and literary publications to become active. Thus, 1873 saw the foundation of the Fortnightly, a club of ladies devoted to social amenities and to essays on literature and art. In 1874 was founded the Chicago Literary Club, an association of professional men given over to a wide range of humane studies. Both clubs are still active. After some months of silence *The Lakeside Monthly* resumed publication; and in 1873 *The Alliance*, a weekly devised by a group of liberal literary preachers with a taste for the essay—David Swing, Reverend Robert Collyer, Dr. Hiram W. Thomas, and others—made its first appearance and continued through ten years.

As literature may rise without libraries, so music may flourish in reasonable independence of metropolitan facilities. During Chicago's earlier days music was chiefly in the hands of the German element, and gave a good account of itself, whether vocal or instrumental. Theodore Thomas first brought his own orchestra to Chicago in 1869. In 1870 the city possessed two rival male choruses. German singers had first come together, in any considerable body, in 1865, to furnish music for the funeral services of President Lincoln. The organization of a permanent male chorus followed; then the customary dissensions arose; and five years later a keen rivalry between two societies of equal powers was in full force. The Germania Männerchor, engaging orchestra and soloists, gave a performance of Weber's opera "Der Freischütz." The Concordia, equipping itself in similar fashion, responded with Mozart's "Magic Flute,"⁴ and the Germania retaliated with Flotow's "Stradella." In 1875 more than a score of singing societies held a three-day Sängerfest at Springfield. In 1881 the twenty-second festival of the North American Sängerbund was held in Chicago, with a chorus of eleven hundred voices, a mixed chorus of six hundred, an orchestra of one hundred and forty, and a fine array of soloists.

In the lower part of the state, wherever the German element was numerous and active, the musical life was active in correspondence. Belleville, the capital of St. Clair county, may be instanced. The citizens of this advanced community had voluntarily taxed themselves for a system of public schools before the free educational system of the state was established in 1855, and they organized one of the first kindergartens in the United States, as well as an early *Turngemeinde*. Belleville had formed a *Sängerbund* as early as 1855—an organization which, in 1873, was merged in a *Liederkranz*, a male and mixed chorus of four hundred voices. In 1867 there was founded a philharmonic society with some thirty members. Both

⁴ For this performance as well as for the one that prompted it, see *Chicago Tribune*, April 7, 1870, and Moses and Kirkland, *History of Chicago*, 2: 582.

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these organizations early put up their own buildings. A third society was the Kronthal Liedertafel, and in 1881 these three societies united in a summer night's festival of significant proportions. Belleville naturally developed its own composers and supervisors of music, and also a large choral body formed of school children. Thus, in 1871, Belleville was able to celebrate in the church (later, cathedral) of St. Peter's the twenty-fifth anniversary of the accession of Pius IX with a full choir, two bands, and the boys of the parochial school attired in the uniform of the Papal Zouaves of the day. The juvenile choruses of Belleville, chanting in German and in Latin, were perhaps an anticipation of the rise of interest in music among the children of the native element in such music schools as those of Jacksonville, Galesburg, and Decatur.

The conspicuous center in Chicago, for a culture predominantly musical, was Crosby's Opera House, whose brief, brilliant, and varied career lay between the close of the Civil War and the great fire of 1871. It was the earliest of a series of buildings by means of which idealistic and energetic young men endeavored to provide, each in his own day, a gathering place for the arts. Crosby's offered opera, both Italian and English; extravaganzas and spectacles;⁵ it provided studios and exhibition halls; and, after some lapses from its early ideals, was upon the verge of rededication to art at the hands of Theodore Thomas when fire wiped it out for once and for all. Music was resumed in Chicago in 1872, with the organization of the Apollo Club and the Beethoven Club; concerts and lectures were given in churches in residential districts that were still standing. The rebuilding of the city was celebrated, in 1873, by a Gilmore Jubilee, when a thousand voices and a

⁵ Among them "The Black Crook," reprobated by the moralists of the day, but revived without objection in 1893.

great orchestra with many anvils filled the arches of a vast new railway station.

Though literature may spring up here and there almost as freely as music, the study of it is best aided by the close presence of such cultural mechanisms as are provided by educational institutions and their libraries. Thus Jacksonville, settled by markedly choice stocks from the south and east, and propelled by a blend of influences Presbyterian and Congregational, early became conscious of itself as the prime diffuser of culture throughout the state, was made the site of a group of the state's charitable institutions, and led, under the impetus of Illinois College and kindred forces, in the formation of various clubs and societies designed to serve the advance of the higher life. The town, which had founded a literary society in 1864 (a society that still exists), and had established later, in 1869, the first Sorosis outside of New York City, formed later a Plato Club. This club functioned under the direction of Dr. Hiram K. Jones-who founded also an Academe for the study of classical literature and for the consideration of educational questions - and it was a living force in the town's life for more than twenty years. On different occasions it was addressed by Emerson, Bronson Alcott, and Dr. William T. Harris. A second Plato Club was formed later at Bloomington, and entertained Alcott and Matthew Arnold; and a Philosophical Club, similar in aim and tone, was established at Quincy. Later, in 1889 and 1890, the clubs at Jacksonville and Bloomington, acting with the Illinois Platonic Association, gave formal symposia in honor of the birthday of Plato, and these events were duly recorded in a bimonthly Bibliotheca Platonica.6

Meanwhile, the State Normal University, the actual crea-

⁶ This exponent of the Platonic philosophy was edited by Thomas M. Johnson, Osceola, Missouri.

tion of General Charles E. Hovey, its first principal (1857), had moved on under the guidance of Dr. Richard Edwards, who succeeded him in 1862, and of Dr. Edwin C. Hewett, who had succeeded in turn in 1876. During the early years of the institution its best energies went into the common branches, and conditions remained comparatively static; but a quickening of activity was to come at a later period.

In the early seventies the Order of the Patrons of Husbandry (predecessor of the different national farmers' alliances, 1880-1890, and of the people's, or populist, party, organized nationally in 1892), rose into influence, with the object of advancing the social needs and of combating the economic backwardness of farm life. One of the earliest of its granges in Illinois was established in 1872 at Dixon.⁷ On its cultural side this movement gave an impulse to the establishment of libraries, traveling or local, of reading courses, lyceums, and farmers' institutes, of improved highways and rural free delivery; it encouraged better agricultural exhibits and brought about an improved agricultural press; and utilized all other practicable means for the lessening of rural isolation and the betterment of the farmers' opportunities. Membership, which included alike the old and young of both sexes, had by 1874 risen in the various states to nearly eight hundred thousand.

In 1876 Illinois took its share in the centennial exposition at Philadelphia. Illinois made its appearance frankly and consciously as the "prairie state," proud of the productivity of the deep loam of its corn belt and its river bottoms and of the marked prosperity which was resulting from it. It was a soil through which the plow might run mile after mile without touching a pebble—a soil which made a rotation of crops unnecessary through the greater part of the state's confines. Though a deplorable hitch in the legislature had cut the state's

⁷ Chicago Tribune, March 6, 1872.

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appropriation to \$10,000, subscription papers were circulated privately and sufficient funds were collected for an adequate and representative display. The most successful phase of this display was made in the Agricultural Building. The exhibit of the Illinois Industrial University, shown in that building and in others, was the largest made by any educational institution. Its exhibit at Paris, in 1878, received a gold medal. But the linked chain which led from a remarkable soil to a wonderful productivity in crops and in livestock, thence to prosperous farmers, and on to ambitious sons and daughters, avid of education and eager to contribute to the strength and adornment of the commonwealth - all this remained in large part a matter for future demonstration, an ideal dawning, indeed, but not yet fully clear in the general consciousness and awaiting a realization which was to come with the after years. Nearly ten were to elapse before the state university, as a chief agent in this great metamorphosis, was to take a comprehensive and representative name, and more than twenty before it should completely establish itself in the collective mind of the people as the right engine for a vast work, and should begin to receive the full measure of support and recognition which it required and deserved.

The centennial first brought art to the general notice of the American people. It gave, too, useful indications of cultural coöperation in a broad fashion. It stimulated our historic consciousness. It taught the country, the middle west included, something about the value of artistic taste as applied to our rising manufactures. It introduced new elements into home life and into household ideals. One feature of the centennial was the spirited rivalry among manufacturers of pianos and sewing machines for awards and diplomas; in fact, the final victory of the piano over the melodeon and the parlor organ may be said to date from about this period. In the later seventies Japanese asymmetry raged throughout the land. Closely followed upon this the ideal of Eastlake and the eccentricities of the English "æsthetic" movement. Art had inoculated the country; the west, along with other sections, took to the new manifestation with promptitude and with unquestioning docility.

In 1879 the Chicago Academy of Fine Arts gave way to the Art Institute-an organization which, after passing through several buildings of varying styles and varying suitability, was finally housed, in 1892, in a Palladian palace on the lake front. Through the intervening years art made its manifestations in environments likely and unlikely. During the earlier eighties the Columbia Theater maintained a creditable art gallery in its lobby. The Hotel Richelieu,⁸ an early essay in the direction of the elegant, in 1885 showed in its upper gallery some two hundred and forty pictures in oil and water color. For many years the Calumet Club gave annual art receptions; that of 1885 displayed a hundred works. In 1882 the Illinois Art Association, which had been formed by members of the Illinois Club, a social organization that laid stress on the fine arts, devoted \$25,000 to gathering a permanent collection of paintings and other art objects. During all these years the Interstate Industrial exposition, which had been established in 1873 and which continued to the day of the Columbian exposition, gave annual exhibitions of increasing scope and value; that of 1885 offered more than four hundred paintings-most of which, significantly, were the work of American artists. During these same years-the earlier eighties - a union of art clubs was active through the central section of the state. Though works of art were themselves necessarily infrequent, the study of the history of art

⁸ Andreas, History of Chicago, 3: 355, 666.

was prosecuted with vigor and enthusiasm, and essays upon art and literature were read before large union meetings called at Springfield, Champaign, Decatur, and Lincoln.

Through this same period the musical interests of the state grew in strength and variety. The Illinois Conservatory of Music, at Jacksonville, one of the oldest schools of its kind in the state, had been established in 1871, and was to be merged later with Illinois College. In 1876 was established the school of music of Northwestern University, which was to lead to vastly significant results in the musical life of Evanston in the early years of the coming century. In 1883 Knox Conservatory of Music was founded at Galesburg. In Chicago new schools and conservatories came to dispute the field with older ones. An Amateur Musical Club, resembling in social character the Fortnightly, was formed in 1877, when three or four ladies met for piano practice; from this small germ grew an organization which was to count some seven hundred members, active and associate, and was to enliven social life for many seasons with programs of real value. In 1877, too, Theodore Thomas began his long series of summer night concerts in the Exposition Building, and for many years patrons were privileged to hear a high order of orchestral music as best they might among the amenities of an auxiliary beer garden and the tumults of the lake front railroads. In May, 1882, and again in May, 1884, the Chicago Music Festival Association, in conjunction with Mr. Thomas and his orchestra, gave successful series of concerts of the highest character.9 In 1878 the Edison phonograph was first exhibited in Chicago.

By this time, too, Chicago had begun to loom larger in the eyes of the eastern opera companies. Their visits became more frequent and more extended. The city came to be entertained—in a fashion none too legitimately musical—by the

• Thomas, A Musical Autobiography.

struggles of rival managers and the squabbles of rival prima donnas. Opera became a recognized means of social display; its complicated paraphernalia now seemed abundant and accessible; and certain ardent, enterprising spirits, moved by a desire to emphasize an element undeniably metropolitan and to open up a field for picturesque executive action, decided to give a great opera festival. This festival was successful in itself, but more interesting still was what it led to. First of all, where should it be held? No suitable hall existed. Some years earlier Central Music Hall had been put up by an ambitious and idealistic young citizen, George B. Carpenter, who paid out his life in the strain of his endeavor. This hall had served, and was still to serve, a variety of useful purposes, but it was too small for the larger ideas of 1885; and, on the other hand, the days of coliseums and hippodromes were yet to come. It was decided to construct a suitable opera hall within the confines of the useful old Exposition Building; and it was this extemporized interior which, with its various peculiarities, was reproduced, mutatis mutandis, in the well-known Auditorium, dedicated four years later-the life monument of Ferdinand W. Peck. It was this vast hall which really domesticated the opera and the symphony concert in Chicago, and which added so greatly to the collective expressiveness of the community, whether on occasions of jubilee or of protest. As the city grew, a still larger hall was required, and the Coliseum came into being. It originated in an enterprise which brought the old Libby Prison from Richmond to Chicago for exhibition and museum purposes. After this war relic was removed from behind its castellated street screen an arched structure of iron girders was substituted, and the new hall, since so familiar as the scene of mass meetings, concerts, "shows," and political conventions, began its career of service.

The great libraries of Chicago and that of Urbana were

still in the future; yet a lesser institution, founded in an early day but rehoused during the present period, calls for notice the Withers Library at Bloomington. Organized by women in 1857, it was installed in 1887 in its new building, erected by the contributions and energies of women on the site of Mrs. Withers' first home. It existed for many years as a subscription library, until taken over by the city and so made public; but it stands forth with some prominence among many later institutions of like aims, throughout the state, which are due, in whole or in part, to the systematized philanthropy of Mr. Andrew Carnegie.

But culture is not a matter to be pursued merely within studious interiors, however the multiplication of libraries and the retired manner of life amongst early collegians may have made it seem. The ideal long ago established by the Greeks was to engage the attention of the modern American; he was to reach good terms with his body through the cultivation of an active out-of-door life. The days of general sport were at hand. Baseball, our first modern equivalent for the games of the ancient palestra, established itself shortly after the close of the Civil War. The Forest City Baseball Club, of Rockford, was one of the earliest to enjoy a general fame, about the years 1865-1870. The sport grew rapidly in favor. In 1876 the National League of Baseball Clubs was organized; a second league followed in 1882; and in 1888-1889 the tour of a Chicago ball club round the world made the national game known to other countries. Shortly after 1875 lawn tennis established itself as a favorite pastime. In 1878 walking became prominent as a form of sport, and a Chicago postman remained for a while the six-day champion. In 1879 the first national convention of croquet players ever held in the United States gathered at Chicago. In the same year, the White Stocking ball park, Chicago, saw the first national

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tournament of the National Archery Association. In 1880 and in 1884 large roller skating rinks were opened in Chicago, the former on the future site of the Auditorium Building. During these years, and through later ones, the "Wild West" and its ideals exercised a powerful sway; when the loving cup was passed around at the banquet which inaugurated the Columbian exposition, no drinker was more warmly applauded than "Buffalo Bill." The German turner associations had been active through the sixties, and one of the earliest buildings replaced in Chicago after the great fire was that of the Turngemeinde on the north side, in which both gymnastics and music were cultivated. The influence of turning reacted on the Young Men's Christian Association, which began to lay greater stress on physical education; a training school for directors of such activities was formed in 1885. The safety bicycle appeared in 1887, and within ten years the League of American Wheelmen had a hundred thousand members, men and women.¹⁰ In due season the league ran out its course as a promoter of health and pleasure, but the wheel continued to survive, especially in rural and suburban districts, as a practical convenience and as a supplement to other forms of locomotion.

If transportation and the various forms of communication are to be ranked as adjuncts to cultural development, then earlier and vastly more important matters than the bicycle must claim attention. The railroad, however, once mentioned speaks for itself; so does its notable extension through the state. The mileage of Illinois increased from some 4,000 miles in 1870 to more than 7,800 in 1880, and to more than 10,000 in 1890. The extension of telegraph lines was in due proportion.

The spread of information and of ideas through the news-

¹⁰ Paxson, "The Rise of Sport," in Mississippi Valley Historical Review, 4: 143-168. paper press kept pace with the spread of the railway and the telegraph. In 1870 the number of titles of periodicals of all classes published in Illinois was but slightly over five hundred. In 1880 the number had risen to more than a thousand. In 1890 the total number of publications had passed thirteen hundred, including 111 daily newspapers and 938 weeklies. The greatest advance, as will be noted, was made in the decade 1870-1880, despite the backsets of the Chicago fire and the panic of 1873. The decade marked the rise of the daily to greater importance, and the growth of the Chicago press to proportions truly "metropolitan." It was during these years that the general change in the characteristics of the American newspaper was largely effected. The earlier type of journal had been concerned chiefly with ideas; the later type tended to lay emphasis on news. The one had been the organ of a personality-the expression of an individual character which, even if violent or crude, was immensely earnest and effective; the other tended to become an impersonal property or "plant" -a composite of many diverse natures and talents addressing a world of wider and more varied interests. The one had been concerned primarily with the promotion of political thought and political fortunes; the other now devoted itself to the advance of business interests and the upbuilding of the particular community it served. Newspapers appearing at Springfield, Peoria, Bloomington, and Cairo obtained a general currency and standing throughout the state and ranked in influence with those of Chicago. At meetings of the National Editorial Association Illinois has for years occupied a seat of honor, and hundreds of able journals have reflected the enterprise and intelligence of their communities and of the state.

Through this period the principal church organizations in the state kept pace in their growth with the increase in population and with the general social advance. This was evidenced in a material way by the largely increased cost of church buildings and the great improvements made in church architecture, by the mounting value of church property, and by the large totals of the annual contributions, whether for home work or foreign missions. It was evidenced in a less material way by the continuing vigorous life of theological schools and of denominational organs. Almost every church organization had its theological seminary and its flourishing weekly periodical. The Northwestern Christian Advocate, the Standard, the Interior, and the Advance were powers throughout the middle west.

The changes in the habits and manners of the people had not been without their effect on religious life and religious observances. The old-time days of simplicity in worship and in attire, along with certain marked manifestations of early fervor, passed away, though the camp meeting still flourished,¹¹ and with them passed most of the old-time asperities, jealousies, and controversies. The result was brought about, in considerable part, by a general union in Sunday school work; with freedom of intercourse came more liberal interpretations and broader views. A more important reason for rapprochement and union among the various denominations was found in the development of evolutionary thought, a portentous, illunderstood novelty which approached in the guise of a common danger and called for a common defense. Through a disturbed decade or two, before adjustment and adaptation came, it operated to unsettle the religious convictions of the day. Further stir and confusion were added by the picturesquely sensational lectures of Robert G. Ingersoll (1833-1899), of Peoria; but these faded in importance before the honest,

¹¹ In the early seventies large camp meetings were held at Des Plaines, Lake Bluff, Kankakee, and other favorite headquarters; and in 1884 a national prohibition camp meeting was held at Decatur.

thoughtful endeavor to reconcile the elder religious beliefs and the newer scientific views.

The words "club" and "social" have been frequent in recent paragraphs. They might almost serve, of themselves, to indicate the changes in tone and in methods which had begun to steal over the state. The church, the schoolhouse, and the county fair had by no means lost their power as sources calculated to energize collective social endeavor; but in Chicago, at least, other agencies began to take the initiative. Here the churches were coming to be supplemented by organizations active in the central district -- flocks led by essayistpreachers who freed their services from specific sectarian dogma: sometimes these churches took the guise of ethical culture societies; or, if they held the old designation, they called themselves "institutional" churches and devised the mechanism for social and cultural betterment. The schools began to specialize --- particularly with the introduction of manual and technical training, and with the multiplication of high schools - yet remained schools merely. The county fair took an urbanized form and continued to revive annually, in the autumn, within the building of the Interstate exposition.

But in the decade between 1880 and 1890 the favored form of procedure tended more and more to become that of the club. Some of these organizations, purely social in nature, have been named. Others of the same type were the Chicago Club and the Union Club. Some clubs frankly expressed an outside—an eastern—ideal, and when they were found to be too far from the definite needs of a new day they died a natural death. Other clubs were socio-political in their nature; some of them started in residential districts, and when found to be too far from the center of things to impress themselves, they died too, or else came down town. Clubs like the Iroquois,

the Marquette, the Hamilton, and the Union League strove to raise the tone of political life and aided in the earliest assemblage of the "better element" for political and social reforms. The Union League Club began in 1887 its elaborate annual celebration of Washington's birthday --- with speakers, frequently, of national celebrity.12 The Woman's Club (1876), like other earlier organizations of its kind, began to practice parliamentary rule in sessions given over to considerations of art and literature, but moved on in due season to effective dealings with the social problems of a great and growing community. The Sunset Club (1889-1901), a gathering of young professional and business men, discussed weekly over the supper table current questions of both local and national interest. A Press Club had been founded in 1879, and the first of the athletic clubs made its appearance about this time. Hull House, the earliest of Chicago's ameliorative settlements, dates from 1889.

This same decade witnessed further attempts in Chicago to establish permanent periodicals. The *Dial*, begun in 1880, was marked for a continuance into the present day. The *Current*, a weekly with flamboyant literary pretentions, lasted from 1883 to 1888; and *America*, a literary and political weekly which opposed a threatened preponderance of non-American elements, appeared from 1888 to 1891.

Two architectural developments of the present period deserve record, each highly important in its own way. In 1881 began the building of the industrial town of Pullman, with the generous if not fully considered hope of meeting handsomely the newer social and industrial developments of the day. The new town realized itself in red brick and terra cotta, with a blend-

¹² The first speaker in the series was James Russell Lowell, who had been expected to deliver an address on "Our Politics," but who, for some unexplained if not inexplicable reason, chose to give instead a lecture on Shakespeare's "Richard III." *Chicago Tribune*, February 26, 1887.

ing of "advanced secular Gothic" and of what was known, whether fairly or unfairly, as "Queen Anne." ¹³ In 1883 was designed the first steel cage construction known to the world. This earliest of "sky-scrapers" was the Home Insurance Building in Chicago, a modest endeavor of ten stories; but it revolutionized the building methods and the general aspect of American cities. Chicago had lately become a center for the construction and installation of passenger elevators, and this industry, functioning within the steel cages, has made practicable the tall towers which greet the arriving foreigner in New York and surprise him afresh within the "Loop" of Chicago. Buildings of this new type, looked upon, rightly enough, as indications of an urban spirit and as evidences of commercial and financial success, were imposed, in cases, on towns not at all actuated by an urban spirit nor prompted by urban ambitions; surely Illinois has more than one quiet, academic town, otherwise homogeneous in tone, which would be better for their absence. The new type, a matter of engineering rather than of true architecture, furnished a frame on which to hang a decorative drapery of brick or stone, borrowed from various irrelevant and incongruous periods; later, it even brought the public under the added tyranny of "period" furnishings. In smaller towns, however, real buildings, conceived in the sincerer style of earlier times, continued to rise. Many of them, especially, if intended as architectural monuments, adopted the rock-faced Romanesque style introduced by Richardson from central France. This style persisted rather late in many parts of the state. A simple, straightforward phase of it was employed at Monmouth in the Warren county courthouse; a handsome and elaborate expression of

¹³ An illustrated article, "Pullman: A Social Study," by Richard T. Ely in Harper's Magazine, 70:452-466, presents the social and æsthetic aspirations of Pullman's founder.

it occurs in the Central Congregational Church, Galesburg; and a finely dignified manifestation of it, both exterior and interior, in the library of the state university at Urbana.

The World's Columbian exposition of 1893 had, of course, its preliminaries, and they reached further back than many people may realize or may remember. In 1885 the directors of the Chicago Interstate Industrial exposition expressed themselves to this effect: "Resolved, that it is the sense of this meeting that a great World's Fair should be held in Chicago in the year 1892, the four hundredth anniversary of the landing of Columbus in America." In 1888 the Iroquois Club made itself active toward the same end. In 1889 a "World's Exposition Company" was organized by Chicagoans, with a capital stock of \$5,000,000. In 1890 finally came congressional action: Senator Shelby M. Cullom of Illinois introduced a bill at Washington which provided for the holding of the "World's Columbian Exposition of the Arts and Industries in commemoration of the four hundredth anniversary of the discovery of America"-a wording similar enough to that of the local resolution of 1885, save that it discreetly omitted to name any particular city for the site of the enterprise. Into this open field entered Chicago, New York, St. Louis, and Washington. The early efforts made by Chicago, together with its central situation and its reputation for vigorous action, gave it the prize. The city was required to show that its anticipatory subscription of \$5,000,000 could be depended upon, and to add \$5,000,000 more. A duplex organization, consisting of a national commission representing all the states and of a local board of directors elected from among the original stockholders, was formed. The two bodies, acting together, appointed a director-general, and the great enterprise was fairly under way.

The state of Illinois rose to the occasion. Since the centennial of 1876, prosperity and enlightenment had increased in the west. Here was an undertaking which promised to exceed in grandeur any known event of like nature, and it lay close at home. Illinois, at a special session of the state legislature, appropriated \$800,000, put up a large, costly, and conspicuous state building, before which stood a statue of "Illinois Welcoming the Nations," and installed an exhibition illustrative of the growth and resources of the state and of the development of the various departments of the state government. The University of Illinois, which was now rising to its full status as a successful and widely recognized state institution during the brief incumbency of Regent Burrill, contributed an "extraordinarily large exhibit"-one that was "by far the most extensive and most representative," he reported, "shown by any institution." Meanwhile, his predecessor, Dr. Peabody, acted as director of the exhibit of liberal arts.

The vast enterprise was carried through, in great part, as regarded its practical administrative details, by the citizens of Chicago; the outcome spoke loudly for their pluck, industry, liberality, energy, and capacity for coöperation. The exposition, in the words of the English commissioner, an experienced official, "surpassed all its predecessors in size, in splendor, and in greatness both of conception and execution;" nor has that result been more than equaled since. The exposition stimulated national, state, and civic pride, opened new visions of utility and beauty in all the varied ways of life, and exercised a strong influence on the furtherance of commercial and inventive activities, and on the study and appreciation of history, science, and art. Three at least of the many phases of this vast undertaking will linger indelibly. For the first time cosmopolitanism visited the western world; for the first time woman publicly came into her own; for the first time,

and on a grand scale, art was made vitally manifest in the American consciousness.

The varieties of human types and of human thought were most clearly and effectively asserted through the many congresses arranged by the World's Congress Auxiliary. During the six months of the fair, gatherings were constantly held in the halls of the Art Institute and elsewhere. There were congresses, for example, on social reform, on commerce and finance, on woman's progress, on science and philosophy, on literature, education, and the various arts.¹⁴ Most striking and memorable of all, however, was the Parliament of Religions, when representatives of various sects at home and of many variant schools of thought abroad met on one platform and tolerantly engaged in an interchange of views. Most impressive of the delegates were those from the orient; they added picturesque costume to novel discourse, and enlarged the western concept of the world and of the "varieties of religious experience" within it.

It was at the Columbian exposition that woman, for the first time, asserted herself in the official world on a large scale and in an emphatic way. The labors of a board of "lady managers" ran parallel to those of the national commission and of the local board of directors; and it was soon perceived that woman, profiting by the experience in coöperation and administration gained during the preceding decade in her multifarious clubs, was developing an adequate ability for large affairs. A Woman's Building, favorably placed, was designed by a woman architect, decorated by woman artists, and filled with the evidences of woman's activity and taste. Through women, the child, too, received a measure of public

¹⁴ For these congresses two temporary structures were erected within the two wings of the Art Institute, each seating about three thousand persons. They were called respectively the Hall of Columbus and the Hall of Washington. Currey, *Chicago: Its History and Its Builders.*

recognition: one of the features of the fair was a *crèche*, or children's nursery. The success of women at Chicago had its influence through the state. A specific example was furnished by Peoria, where, in 1893, a woman's club financed and constructed its own buildings, and soon brought all the social and administrative aspects of such an organization into full play.

But the highest and most reverberant note of all was struck by the artistic phases of the exposition, and it rang through the state and country for a generation. The directors had virtually given a free hand to a committee of architects in the laying out of the grounds and the disposition of the buildings. The earliest sketches for the fair had been prepared by the gifted John W. Root, of Chicago; his sets of water color sketches covered the undertaking in all its more important aspects, showing a strong feeling for festal considerations and a striking use of color. But Root died while the fair was still shaping, and as it shaped it grew; and it was presently determined that so large an endeavor, to be executed in so short a time, must be not the work of one man but the work of many: associated architects from all over the country-from Chicago, from the east, and even from the west beyond Chicago - worked in harmony under the general direction of Daniel H. Burnham, Root's surviving partner. It was seen, too, that no individual style, however picturesque and festal, could serve at the present juncture. A standardized style was required and was adopted; and that style, adjusted to a common scale among its several practitioners, was the style taught in Paris, at the Ecole des Beaux-Arts, where many of the participating architects had been trained. There issued the White City; the multi-colored city was reserved by the years for Buffalo and for San Francisco. The result was an ensemble on a scale more magnificent than has ever been attempted for such a purpose, and complete in its union of

variety and harmony: possibly the very lack of color led to a heightened distinction. It all showed what could be achieved by the coöperation of the allied arts of architecture, painting, sculpture, and landscape gardening, and it awoke the nation to the value and desirability of beauty as a practical asset. The impression it made was nation wide, and beauty began to be accepted as the fit national expression of the people's general advance. Throughout the state of Illinois schools, libraries, bank buildings, and parks soon began to respond to the great exemplar which had risen by the shores of Lake Michigan.

It was during the fair and the years immediately preceding it that Chicago first came to be known as a theatrical producing center — if one may pass over the troupes of Negro minstrels whose weekly improvisations enlivened the seventies. In 1891–1893 the Chicago Opera House was conspicuous as the home of the American Extravaganza Company. The productions of this company were large and lavish, and the vast attendance of pleasure seeking throngs at the fair gave them a wide fame. During these years a local librettist and a composer together produced a series of light operas, of which "Robin Hood" became perhaps the best known. Through the same period a German theater, constructed in 1892, and housing also a German-American Press Club, contributed to the cosmopolitan atmosphere.¹⁵

While the Columbian exposition was under construction, other important building operations with high cultural implications were under way. During this time the latest structure to be occupied by the Art Institute was completed. The insti-

¹⁵ A German theater had been established in Chicago, on the north side, as early as 1858. Another had followed, on the west side, in 1870. On New Year's Day, 1875, five German theaters presented plays. During the next two decades the German theater, as an institution, was housed in different Englishspeaking theaters of the central district, and in later years returned to its original haunts on the north side.

tute — which had succeeded (in 1879) the Chicago Academy of Fine Arts and the earlier Academy of Design, and had occupied a succession of buildings of various styles and sizes received aid from the directorate of the Columbian exposition to the extent of \$200,000, and occupied its new quarters in 1893. In this same year was laid the cornerstone of the Public Library — a coöperative work planned by architectural designers and practical librarians; also, that of the Chicago Academy of Sciences, in Lincoln Park, and that of the latest building of the Chicago Historical Society.¹⁶

More important still was the founding of the University of Chicago, whose first halls were completed and occupied during the early days of fair building. The old Chicago University, a Baptist institution, founded by Douglas in 1857, had passed away during the days of depression which had come upon denominational and privately endowed colleges in the eighties. The later eighties witnessed a happy conjunction between Professor William Rainey Harper of Yale and John D. Rockefeller of Ohio, himself a prominent Baptist. In 1890 Mr. Rockefeller made an offer of \$600,000 for founding a new university in Chicago, if an additional amount of \$400,000 were pledged by others. Professor Harper, who had become President Harper, took hold of the enterprise in the summer of 1891, and building began late in the autumn of that year. This new activity started up in the same quarter of the city as was witnessing the rise of the various structures which were to house the fair - only a mile, in fact, from the great Court of Honor, and much less than that from some of the lighter phases of the enterprise. Cobb Hall and the

¹⁶ September 3, 1892, was "Shovel Day" for the great drainage canal, designed to improve conditions in Chicago by turning the flow of the Chicago river from Lake Michigan into the Illinois and Mississippi rivers. The sanitary district of Chicago was organized in 1889 and the canal was opened in January, 1900.

divinity schools took shape but a few hundred yards from the Ferris Wheel and the Street in Cairo. The Gray City rose *pari passu* with the White City, and opened its doors — with five hundred students and a faculty of one hundred and twenty — on the first of October, 1892, a few weeks earlier than the dedicatory ceremonies held for the exposition itself. The conjunction of two such events might be felt as marking saliently a stage in the forward movement of the state, and might well be accepted as the climax of an almost unequaled progress, through twenty years, in the general complex of civil life. They represented, in the fields of art and education, such a cultural triumph as was the proper and gratifying accompaniment to that comprehensive advance in population, wealth, agriculture, invention, and manufacture which had led the state on to so notable and widespread a prosperity.

X. CORN IS KING

U NTIL 1870 Illinois was primarily an agricultural state. Not only was the major part of its population engaged in agriculture, but the other principal pursuits such as manufactures, trade, and transportation were so clearly dependent upon this fundamental one that their growth served only to proclaim the primacy of agriculture. During this period the prairie state presented the remarkable spectacle of a commonwealth developing along the lines of agriculture, manufacturing, and mining, and securing a high position among the states of the union in each field of productivity.¹

The relative importance of agriculture, curiously enough, cannot at all be gauged by the number of persons engaged in it, for these figures would lead to the conclusion that agriculture has been a declining rather than an expanding industry. The table on the next page suggests some interesting conclusions.

In the first place, it is evident that there were actually fewer people engaged in farming in 1890 than there had been ten years before; furthermore, that although in 1870 one out of every two persons gainfully occupied was in agriculture, by

¹ The following table shows the position which Illinois held among the other states of the union as an agricultural state:

CENSUS YEAR	Number	Value of	Value of	Value of	Value
	of	farm	land and	farm	of
	farms	property	buildings	implements	livestock
1870	2	4	4	3	1
1880	I	3	3	5	1
1890	2	1	1	4	3

RANK OF ILLINOIS WITH RESPECT TO:

1890 there were three persons in other industries to every one in farming.

Vala	Total	Persons in all	occupations	Persons in agriculture a	
YEAR	population	Number	Per cent	Number	Per cent
1870	2,539,891	742,015	29.2	376,325	50.7
1880	3,077,871 3,826,352	999,780 1,353,559	32.5 35.4	436,312 430,134	43.6 31.8

PERSONS ENGAGED IN AGRICULTURE IN ILLINOIS, 1870-1890²

a Males and females over ten years of age, exclusive of lumbermen, apiarists, fishermen, and other workers in similar pursuits not strictly agricultural.

A closer inspection of the table suggests one reason for this decline. It will be observed that the percentage of the population engaged in gainful occupations, as a whole, increased from 29.2 in 1870 to 35.4 in 1890. From these figures one might expect a decline in the number of the leisure class or of those in attendance at school; as a matter of fact, exactly the opposite was the case. The real explanation lies in the steady transference during this period of various industries from the household to the factory. Whereas previously a place had been found in the farm home for such domestic industries as garment making, butter and cheese production, sugar making, canning and preserving, meat slaughtering, and the like, these were now being taken over one after another by factories and produced more economically in centralized establishments, though perhaps by the same individuals. This statistical change has served to magnify the relative importance of manufactures and by that much to reduce the relative importance of agriculture.

This explanation, however, does not account for the decline in the absolute number of those engaged in agriculture between

² Compiled from census reports by C. L. Stewart, Land Tenure in the United States, 35.

1880 and 1890. This decrease came rather as the result of the increased efficiency of the agricultural population. Evidence of this appears in a comparison of the population engaged in agriculture and the number of bushels of cereals produced by them. In the table the year 1840 is taken as the base year, the statistics for the other years being given as percentages of the 1840 figures:

Year	Population engaged in agriculture	Cereal production
1840	100.0	100.0
1850	133.9	248.6
1860	206.7	502.0
1870	357-3	877.5a
1880	414.3	1,425.9
1890	408.3	1,503.0

a Based on average crops of 1868 and 1870. The crop of 1869 was a complete failure.

It is seen from this table that while the number of agricultural workers increased fourfold in the fifty years ending in 1890, the production of cereals was fifteen times as great. This enormous increase in the productivity of the average worker between 1840 and 1870 must of course be explained in the first instance by the gains in labor power and efficiency effected by the invention and introduction of machinery. Partly responsible also for the excellent record made by Illinois agriculture were undoubtedly the character and industry of the farming population. Between three-fourths and four-fifths of the farmers were native Americans, and of the foreign born the Germans and English alone made up a considerable element.³

The proportion of farm operators increased between 1870 and 1890 at the expense of the agricultural laborers. In 1870 farm laborers made up 33.1 per cent of the agricul-

³ For table see appendix, p. 481.

tural workers; this proportion increased to 35 per cent in 1880, but by 1890 had fallen again to 30.6 per cent, showing that at the end of the twenty-year period a larger percentage of the workers consisted of operators who were working on their own account. The decline in the proportion of laborers may be accounted for in part by the increased use of farm machinery during this period, and in part by the rise of laborers to the status of tenants or owners operating their own farms.

The farm operators may be divided into the two broad classes of owners and tenants. Statistics showing this distinction were not gathered until 1880, when it was disclosed that already 31.4 per cent of all Illinois farms were being operated by tenants; by 1890 this percentage had risen to 34.4 In this year Illinois ranked third among the states of the union in the number of tenant farmers. This increase in the proportion of tenants was largely due to the falling off in the number of owners, which declined almost 17,000. In 1880 only one county, Logan, had a percentage of tenant farms greater than 50, though two others, Mason and Christian, had over 45 per By 1890 nine counties had over 45 per cent of their cent. farms operated by tenants, namely, Grundy, Livingston, Ford, Marshall, Mason, Logan, Christian, Madison, and St. Clair. The counties with the highest percentages were in the east central part of the state, Ford county having 53.7 per cent.⁵

The extent of tenant farming in these counties is partly accounted for by the holdings of William Scully, an Irish landlord who was accumulating an estate of 211,000 acres, making him the largest landholder in the United States. In the decade before the Civil War he came to America to purchase Mexican War land scrip. He located thousands of acres in Illinois, and continued his purchases until by 1887 he had acquired

⁴ Thirteenth Census of the United States, 5: 124. ⁵ Stewart, Land Tenure in the United States, 49.

30,000 acres in Logan county alone. After these years of farming operations, Scully returned to England; eventually, his holdings were let out to tenants under what became a system of ironclad one-year leases: at the end of the year, he or his agent had the right to decline to renew a tenant's lease, in which case the tenant would have to find a purchaser of his improvements satisfactory to the agents; Scully's agent might in any year raise the rent or disapprove of the proposed purchaser of a tenant's improvements. Scully also made certain requirements of his tenants in the direction of scientific farming by requiring a definite rotation of crops and specified farming methods. Since Scully spent most of his time in England, his holdings involved not only the uncertainties of landlordism but also those of absenteeism; it was particularly difficult for tenants to appreciate the point of view of a landlord with whom they had no direct contact. The problem, moreover, became an issue of state importance as a result of the fact that the tenants were generally not prosperous --- some were paupers brought over by Scully agents — and since the tenants were required to pay the taxes, there was often an inadequate contribution to the public school needs and to other public improvements. In 1887, feeling against "Lord" Scully produced a widespread impression that legal restrictions were necessary. As a result, bills introduced into the general assembly by Piatt of Henry county and Pierce of Logan county led to the enactment of the antialien landlord act of June 16, 1887.6 To the requirements of this law Scully conformed by establishing a residence at Washington, D. C., from 1895 to 1901 and taking out citizenship papers, so that the status of his holdings remained unchanged.⁷

⁶ Laws of 1887, p. 5 ff. An accompanying act prohibited alien landlords from including the payment of taxes as a part of the rental of farm lands. *Ibid.*, 4. See also *Chicago Tribune*, January 28, 1887. ⁷ His naturalization was completed in 1900. Until his death in 1906 he

⁷ His naturalization was completed in 1900. Until his death in 1906 he continued to make his home in England where he acquired the reputation of being "the greatest American farmer."

More important than any other factor in increasing the yield of Illinois farms was the extended use of agricultural machinery. The invention and introduction of improved implements, especially adapted to the new type of prairie agriculture, was almost coincident with the settlement of the land. It did not become significant until the decade of the Civil War, when machinery was introduced on a large scale to make good the lack of labor caused by the withdrawal of the men for service in the army. The most marked effects upon production, however, are observable between the years 1870 and 1890.

Year	Value of farm implements	Increase per cent	Average value per farm	
1870	\$27,661,269 <i>a</i>	60.0 b	\$171	
1880	33,739,951'	21.9	132	
1890	34,456,938	2.1	143	

a Reduced to a gold basis. b Increase over 1860.

This table does not show fully the great increase that was taking place in the use of farm machinery, for the value of these implements was steadily declining during this whole period, partly as a result of a general lowering of the price level, but more largely because of the improvements in methods of production; at the same time, the efficiency of the new tools was being steadily increased.

Almost half the improved farm machinery used during this period was to be found in the northern division of the state.8 The southern division was particularly backward in

⁸ Since 1867 the Illinois Horticultural Society has divided the state into three rather clearly marked divisions, and by an act of March 24, 1874, the legislature has recognized these divisions. The boundary between the northern and central divisions is the southern boundary of Rock Island, Henry, Bureau, La Salle, Grundy, and Kankakee counties. The boundary between the central and southern divisions is the southern boundary of Pike, Scott, Morgan, Sangamon, Christian, Shelby, Coles, and Edgar counties. Illinois State Horticultural Society, Transactions, 44: 17, 252-255.

this respect, as might have been expected from the character both of the land and of the crops in that section. It was in the northern and central divisions, where the important cereal crops were concentrated, that the need for a heavy investment in field machinery was greatest. Only in the northwest section of the southern division, where wheat was being grown, was there any opportunity to use these labor-saving devices. Illinois inventors and manufacturers took a prominent part in the development of agricultural machinery, for the use of which the level prairies were peculiarly well adapted.

No machine has been of greater importance on the level prairies of the west than the reaper, and while its first conception cannot be claimed as an Illinois invention, its production on a large scale dates from the establishment of the first McCormick factory in Chicago in 1847. In spite of claims to priority by other inventors, it seems certain that the first practicable reaper was invented by Cyrus Hall McCormick in 1831 in Rockbridge county, Virginia. Here and in the neighboring town of Lexington he gave exhibitions of his machine, and in 1833 he advertised reapers for sale at fifty dollars apiece,⁹ printing testimonials from four farmers who professed satisfaction with trials of the machine.¹⁰

McCormick, however, did not secure a patent on his invention until June 31, 1834, and in the meantime Obed Hussey, after a public trial of his mowing and reaping machine on July 2, 1833, near Carthage, Ohio, had obtained a patent for his invention on December 31, 1833. A long and bitter controversy between these two men as to their claims to priority has never altered the facts that McCormick gave an earlier public trial of his invention and that Hussey was the

⁹ Lexington Union, September 28, 1833. ¹⁰ Quoted from the Lexington Union in the Farmers' Register, volume 1, number 5. See also Mechanics' Magazine and Register of Inventions and Improvements, November, 1833, p. 260.

first to patent his.¹¹ Since these early reapers were not wholly successful, McCormick laid aside, for a few years, his plans for their manufacture, but in 1839 introduced some improvements. In 1840 he sold two reapers, in 1842 seven, in 1843 twenty-nine, and in 1844 fifty. Of these last one was sold in Illinois. It soon became evident that if the business was to attain large proportions it must be moved to the west, where alone could be developed a great demand for the reapers. Accordingly, in 1847, McCormick selected Chicago as the site of a new factory.

Shortly after 1840, George Rugg of Ottawa, Illinois, improved on Hussey's cutting apparatus by serrating the edges of the sections; and the idea was applied also to the McCormick reaper. During the next few years other improvements in reaping machines were patented by McCormick, George Esterly, John H. Manny, and William N. Whiteley, all of whom were destined to play important rôles in the later development of the reaper.

Soon the reaping machine had been so perfected that it delivered the cut grain in condition suitable for binding. Since most reapers required two operators and six or eight men to follow the machine and bind the grain, a crew of from eight to ten men was required to cut and bind from ten to twelve acres of grain a day. Two young farmers of Illinois, the Marsh brothers, Charles W. and William W., patented in 1858 the Marsh harvester, which had an elevating device to convey the cut grain to tables, where men could bind it on the machine. After the Civil War the improved Marsh harvesters began to drive the combined reapers and mowers from the field.

Finally an automatic binder was invented to take the place

¹¹ The claims of Obed Hussey are set forth in the following: Stabler, Overlooked Pages of Reaper History, 7 ff.; Memorial of Robert McCormick.



C. H. M. Cormick

[From painting in the McCormick Agricultural Library, Chicago]

of the men on the machine. Binders which used wire for holding the sheaf were patented after the war, but were unsatisfactory. In 1869 and 1870 George H. Spaulding of Rockford, Illinois, constructed a grain binding machine. In 1878, John F. Appleby, of Palmyra, Wisconsin, who had made his first model twenty years earlier, succeeded in making his "twine binder" a commercial success.¹² It was now possible for one man to do as much as eight had previously accomplished with the reaper.

The development, during the nineteenth century, of the modern harvester from the primitive scythe passed through six epochs: "(1) That of the improved scythe and cradle; (2) that of the hand-rake reaper, adapted to deliver the cut grain in gavels by manual means; (3) that of the self-rake reaper, in which the same was accomplished automatically; (4) that of the Marsh harvester, on which the grain was bound manually by operators riding upon the machine; (5) that of the automatic binder; and (6) that of the machine of steel. The cradle saved one-half the labor before required, the reaper a half of the remaining labor; the modern twine binder saves nearly all."13

The settlement of the west presented new problems to makers of plows. The older moldboards made either of wood or of cast or wrought iron were all found to be unsatisfactory in the new soil, so different from the brittle soil of the east. Finally, after almost fifty years of experimentation, the solution of the difficulty was discovered in the steel plow which would scour in bad land and not wear out in sandy soil.

It is said that "John Lane, who operated a little forest forge at about where now towers the Illinois Central station

¹² Mr. Appleby died on November 8, 1917, almost the last of the pioneer inventors in the perfection of the complete harvester. ¹³ Official Retrospective Exhibition of the Development of Harvesting Ma-

chinery, Made by Deering Harvester Company, 7.

on Twelfth street, in Chicago, in 1833 fabricated the first steel plow the world had ever seen, using a worn-out steel cross-cut saw blade, from which he laboriously shaped share and mouldboard."14 He was followed by John Deere, who began the manufacture of plows at Grand Detour in 1837 and made use of specially manufactured plow steel; in 1847 he moved to Moline and established there the business which still bears his name. William Parlin in 1842 began plow manufacturing at In even the largest steel plow factories, however, Canton. most of the processes were carried on by hand.¹⁵ It remained for John Lane, a son of the original maker of the steel plow, to revolutionize the manufacture of plows by the invention of soft center steel in 1868. This permitted an outer surface of finely tempered steel, which would scour well and yet not break because of the inner layer of softer metal. About this same year, too, large drop hammers and heavy cast-iron dies were introduced to shape the different parts. These changes permitted both a cheapening in cost and an improvement in character and durability.

The introduction of the wheeled (sulky or riding) plow marked another great improvement. The first patent was granted in 1844; not until twenty years later, however, did a practical sulky plow come into general use. In 1864, F. S. Davenport patented the "Davenport." A decade later, in 1875, Gilpin Moore received a patent for a sulky plow, afterwards manufactured by Deere and Company, and for years continued to make improvements. W. L. Cassady the following year also received his first patent; he was the first to remove the landslide entirely and use a wheel in its place. In 1884, G. W. Hunt patented the first three-wheeled riding plow, which

 ¹⁴ "The Tool Which Holds a World in Debt," Farm Implement News, 34:27.
 ¹⁵ Sobey, "Some Changes I Have Seen in Nearly Fifty Years," Farm Implement News, 34:28.

was brought out by the Moline Plow Company.¹⁶ During the period 1890 to 1900 both the two-wheeled and three-wheeled plows were perfected. From the wheel plow it was now a comparatively simple step to the gang plow and other improved types of a later period.

A minor factor and yet one of no mean importance in the development of the plow was the establishment of plowing matches. The plowing match seems to have made its appearance early in the year 1877, when the first one in Illinois of which there is a record was held at Wheatland, Bureau county. So successful was this experiment that annual matches have been held there ever since, and have also been introduced in other counties. The plowing matches were not limited in their beneficial effects to the mere stimulation of local rivalry, but became the occasion for testing the merits of different makes of plows and other agricultural machinery, resulting in marked improvements. Great advancement was recorded in the communities fortunate enough to have introduced these contests, not only in the cultivation and yield of the land, but also in the use of better farm machinery and in the general appearance of the farms, houses, and schools.

Another notable step forward was taken with the introduction and improvement of the disk harrow. Although it was probably invented before 1870, the improvements which have made this implement practical have come since that date. It is now one of the most valuable and most generally used implements in American agriculture. Another important invention was the cultivator. The introduction of the surface blade cultivator made both possible and practicable the shallow cultivation of corn, probably the most valuable improvement made in corn production during this period.

The grain drill was improved by a device, patented in 1877 by J. P. Fulghum, for varying the length of the cavities of the seed cylinder, thus permitting a variation in the amount of seed to be drilled. The edge-selection drop used on the recent corn planters was brought out by the Dooley brothers of Moline about 1892. Hay tedders and especially hay rakes were improved; spring-tooth rakes, bull-tooth or sweep rakes, and side-delivery rakes were introduced. The last named were made practical necessities by the introduction of hay loaders. These, together with hay carriers, forks, and slings, hay stackers, and hay presses or bailers, have enormously lightened one of the most wearisome tasks of the farm. The manure spreader dates back to the thirties, but many of the ideas of the modern spreader made their appearance in the patent of J. S. Kemp, granted in 1877. A spreader with a solid bottom appeared in 1884, and in 1890 one with an endless apron, with hinged slats, was introduced.17

Of peculiar importance in the prairie state was barbed wire, the invention of J. F. Glidden of Illinois. The cheapness and effectiveness of this fence material made it a great boon, particularly to the stock and dairying interests of the state.

The motive power to run farm machinery was furnished during this period almost exclusively by draft animals, especially horses; accordingly, the number of these advanced *pari passu* with that of farm machines. With the increased supply of mechanical power and horses the same number of workers could care for a larger number of farms, as is shown by the fact that while the agricultural population increased 14.3 per cent between 1870 and 1880, the number of separate farms increased 26.2 per cent (from 202,803 to 255,741). From the first settlement of the state down to 1880 there went on

17 Davidson and Chase, Farm Machinery and Farm Motors, 103, 120, 193-194.

an uninterrupted process of converting the land area of the state into farms, and of increasing the percentage of improved land on the farm. During this period the agricultural population, as well as the number of farms, steadily increased. After 1880, however, these various factors remained almost stationary, and in some instances even decreased. The important changes in Illinois agriculture after 1880, and especially after 1890, have been in the greater yields and in the growing values both of the farms and of their products. The year 1880, therefore, seems to mark a turning point in the agricultural development of Illinois.¹⁸ The singular decline in the number of farms (from 255,741 to 240,681) and in the total farm area (from 26,115,154 to 25,669,060 acres) between 1880 and 1890 may be attributed to the urban and westward migration of the agricultural population, to the competition of the newly developing grain growing states of the northwest, and to the consequent fall in the prices of agricultural products.

The land surface of Illinois is approximately 35,867,520 acres, of which six-sevenths had already been included in farms by 1880; the next thirty years saw an addition of only 4,000,000 acres to the farm area. The proportion of improved land in farms rose steadily from about three-fourths in 1870 to over four-fifths in 1890, indicating better utilization of the land for production. By 1890 there was very little unimproved land in the northern and central divisions of the state, except in the counties between the Mississippi and Illinois rivers. In the southern division there was much unimproved land, since the Ozark ridge made a great deal of the land too rough for ordinary farming, and other lands were still heavily timbered.

There was also in the state much wet and swampy land which needed to be drained or tiled before it could be culti-

18 For table see appendix, p. 481.

vated. A beginning had been made in the southern section, but there was still in the central division land too wet for cultivation. Altogether in the state about five per cent of the area, or 1,813,096 acres, came within this category; its value was placed at \$12,869,286, and it was estimated that it would be worth \$52,958,603 when drained.

In the late seventies an important movement started for tile drainage. By 1880 there were 44,880,760 feet of drain tile laid in Illinois, or a little less than 2 feet of drain tile to every acre of improved land. In 1886 the amount had increased to 14 to each acre, and in 1890 there were 20 feet to each acre. By 1895 there were 666,669,066 feet altogether, or 26 feet to each acre of improved land. Most of this work was carried on in the eastern part of the northern and central divisions, where the land is very level and lies at the headwaters of many streams.

The agricultural changes during this period were also reflected in the values of the different classes of farm property. The total value in Illinois farms increased from \$883,871,705 in 1870 (gold value) to \$1,175,772,293 in 1880, and to \$1,477,759,187 in 1890.¹⁹

Changes in the number and character of the agricultural population, in the farm area, and in the equipment of the farm are important, but even more significant is the use to which the land and the labor and capital applied to it have been put. The amount of farm products furnishes a test by which may be measured the efficiency of Illinois farmers. Judged by this standard, agriculture seems to have made little progress during the twenty-year period ending in 1894, for the value of farm products was almost the same at the end as at the beginning of the period. In the following table are

¹⁹ A clearer picture of the changes involved may be seen from table showing average values per farm; see appendix, p. 481.

CORN IS KING

shown the values of farm products for five-year periods, together with their distribution in the different divisions of the state and between the two principal groups of products:

PERIOD	Average value	Distr	ibution (per	Per cent of farm products		
	of farm products	North division	Central division	South division	Field crops	Animal products
1875-79	\$224,275,136	42.2	40.0	17.8	76.6	23.4
1880-84	263,676,476	47.4	36.2	16.4	74.0	26.0
1885-89	234,840,954	45.5	38.1	16.4	72.2	27.8
1890-94	225,135,443	54.2	32.6	13.2	72.6	27.4

FARM	PRODUCTS	IN	ILLINOIS.	1875-1894 ²⁰

The steady decline which set in after 1884, and which brought the figures back to the former level in spite of an increase in actual quantities, points clearly to a fall in prices. This slump was due in part to a general contraction of the money supply, but in much larger measure to the increased amount of farm products being marketed from the newly opened northwest. That the eighties and nineties were a period of hard times for the farmers in Illinois is indicated by the fact that not until about 1900 do the reports of the Illinois state board of agriculture show that the farms of the state taken as a whole yielded a steady profit, one year with another, above the costs of production. The northern division of the state grew steadily in importance during this twenty-year period at the expense of both the other divisions. During the five years 1890-1894, over half of all the farm products (54.2 per cent) was produced there, as against a third for the central division (32.6 per cent) and about one-eighth for the southern division (13.2 per cent).

Of the two large groups of farm products-field crops

²⁰ Compiled from data given in the Statistical Reports of the Illinois State Board of Agriculture, 1875-1894. and animal products — the field crops constituted about threefourths of the total value for the state; in the southern division, where livestock farming was not so profitable, the proportion was even higher — four-fifths. There was a tendency, however, for the field crops to become more highly concentrated in the northern and central divisions.

The period 1875-1884 shows an increase in the value of the field crops as a whole, while the next ten years show a fall so marked that their value was less in 1890-1894 than it had been twenty years before.²¹ Comparing the four main groups of field crops which may be differentiated --- cereal, hay and pasture, horticultural, and miscellaneous cropsthere was a decline in the relative importance of the cereal crops from 74 to 70 per cent, and a corresponding growth in that of the hay and pasture crops from 21 to 25 per cent. The horticultural and miscellaneous groups, with some slight fluctuation, maintained the same relative position throughout the period. The loss in the relative importance of the cereal crops was distributed fairly uniformly throughout the state, their place being taken in the northern and central divisions by the hay and pasture crops, and in the southern division by the horticultural crops. This last group, including Irish potatoes --- in the production of which Madison county led --- sweet potatoes, peaches, and small berries, was very much more important in the southern part of the state than in any other section. Likewise, the miscellaneous crops, which included tobacco, cotton, and sorghum, throve best in the warmer climate of that division.

The cereal crops, comprising corn, wheat, oats, barley, rye, and buckwheat, at the beginning of this period ranked in the order just given. By 1879 rye had become more important than barley, and by 1889 the crop of oats was larger than that

²¹ For table giving the essential facts for the field crops see appendix, p. 482.

of wheat. At the end of this period, therefore, the order of importance was: corn, oats, wheat, rye, barley, and buckwheat - an order which has not since been changed.²²

Corn maintained practically the same relative position in the state at large, though it declined somewhat in the northern division and gained in the southern. The wheat crop showed the greatest loss, but this was more than made good by the great gain shown by oats. The other three crops were of distinctly minor importance. These changes reflect in a general way what has happened in other states; for "Wheat, like beef, has been, in a sense, a frontier crop."23 Since it stands transportation well and contains considerable value in a relatively small bulk, it is well suited to production in new communities where transportation facilities are poor, and where there is an abundance of cheap land in proportion to the supply of labor. As land became more expensive and labor more abundant in Illinois, wheat production tended to move on to the newer lands of the northwest. This movement was accelerated by the introduction of agricultural machinery, by the invention of new processes in the milling of flour, and by the extension of railroads and the opening up of vast areas of new wheat lands

On the other hand, the crops that took the place of wheat had characteristics which fitted them for production in a rapidly developing state. Corn and oats must be utilized on the spot in the feeding of horses, cattle, and swine, or in the distilleries, the production of breakfast food, or other manufactures.

As it used to be said of the southern states before the Civil War that "Cotton is king," so might it with equal truth be said of Illinois during this period that "Corn is king," for

²² For table showing the value and relative importance of these various crops see appendix, p. 482. ²³ Carver, Principles of Rural Economics, 113.

the crop constituted about 60 per cent of the total value of the cereals. In its production Illinois led all other states in the union in 1890, being followed by Iowa, Kansas, Missouri, and Nebraska.24

During the seventies there was a steady growth in the number of acres planted in corn, which reached the highest point in 1877 with 8,935,411 acres, an amount not equaled again until 1915. There was a corresponding increase in the yield, which reached its highest point in 1879 as a result of the bumper crop of that year, amounting to 305,913,377 bushels - a crop which has been exceeded only three times in the history of the state. By a combination of circumstances, moreover, the most important of which was short crops in Europe, the financial returns during these years were extremely large. During the eighties, however, prices fell and acreage was curtailed. The lowest point was reached in 1892, when only 5,188,432 acres were planted in corn, and when the total crop was cut down to 137,540,285 bushels --- the lowest figure with two exceptions since 1870.

Climatic conditions contributed to the hazards of corn farming during the period. A severe drought in 1873 and 1874 made these years especially disastrous, the average yield per acre being only 21 and 18 bushels per acre respectively.25 The next few years were fairly normal; but in 1881 the lack of rain caused a complete crop failure in the southern division, where only six bushels per acre were harvested. In the first seven years of the eighties there was only one year-1885in which some part of the state did not report crops below the average. The 1887 failure was the worst in the history

 ²⁴ For table showing some of the important facts in connection with changes that have occurred in this crop, see appendix, p. 483.
 ²⁵ From Clay county came the report, "the summer was very dry, causing almost a total failure of corn;" Jefferson county reported, "we were nearly burnt up." Department of Agriculture of Illinois, *Transactions*, 1874, p. 81, 97.

of the state with the single exception of that of 1874, and, like the earlier one, was due to drought.²⁶ The half decade 1890-1894 witnessed continued failures of the corn crop in the southern division. Certainly the record of these years offers an adequate explanation of the steady loss of interest in corn growing on the part of the farmers in the southern division; the proportion of the corn crop which was grown in the southern division sank from 16.6 per cent in 1870-1874to 10.5 per cent in 1890-1894.

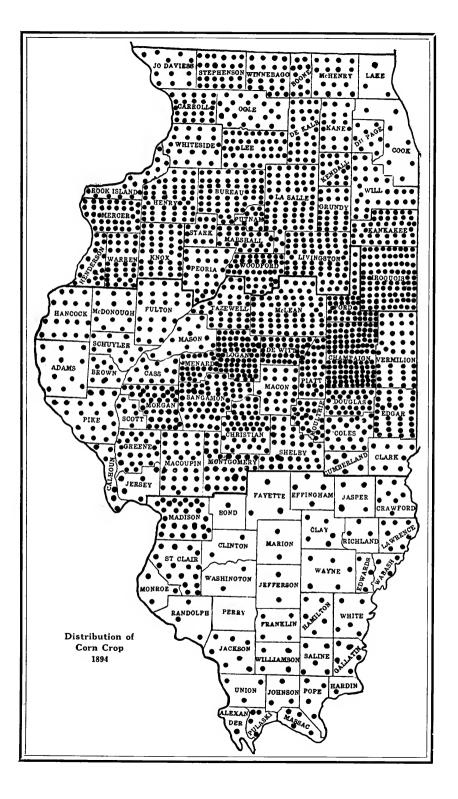
That the farmers of Illinois were not securing the fullest returns possible from the land, even aside from adverse climatic conditions, is apparent from a comparison of the highest yields and the average yields. In 1879, for example, of the four counties reporting an average yield of over 40 bushels per acre, Scott county had an average yield per acre of 57 bushels, but the best yield reported from that county was 90 bushels per acre; for Mercer county the two figures were respectively 50 and 100; for Warren, 45 and 100; and for De Kalb, 42 and 105.²⁷ The conclusion is inevitable that a great many farmers were not making the fullest use of the land.

A factor which affected the value and through that the quantity of what the Illinois farmers produced was the price received for their crops. The prices for corn fluctuated from the low level of 22 cents per bushel in 1878 to the high record during this period of 56 cents per bushel in 1874. The Illinois state board of agriculture estimates that there were in the period 1870–1893 only ten years in which growers of corn received a profit over and above all their costs of production; that is to say, in three years out of five the farmers suffered a loss. It must be remembered, however, that the farmers were making a living for themselves and their families and were gaining an increment in the value of the land which more than offset losses on the crop.

A study of the distribution of corn production throughout the state during this period shows that the central division produced more than either of the other two, except for the two periods 1880–1884 and 1890–1894. The southern division never produced more than about one-sixth of the total crop. In 1869 the center of the corn belt had been Sangamon county, but by 1879 it had shifted to McLean county. By 1894 Champaign county was the leading corn growing county in the state. The natural limits of the corn belt had been pretty well determined by the end of this period, and the tendency within this belt to concentrate upon corn was clearly evident.

As might have been expected from their prominence as producers of corn, Illinois farmers have made several contributions in the introduction of new varieties. Golden Eagle, one of the eight recognized varieties, was originated in 1871 by H. B. Perry of Toulon. In 1880, a standard variety called White Superior was originated by P. R. Sperry of Monmouth, and in 1890 J. H. Beagley of Sibley originated the Silver Mine. In methods of production, too, experiments and improvements were constantly being made. Perhaps the greatest contribution during this period was the introduction of shallow cultivation by Professor George E. Morrow of the University of Illinois, who as head of the department of agriculture did much to promote scientific agriculture.

In the production of wheat Illinois has suffered the same fate which has overtaken all the wheat growing states east of the Mississippi. During the first half of the nineteenth century the center of wheat production moved first from the



New England states to western New York, and by 1850 was located near the center of Ohio. By 1860 the center of wheat production was in Indiana, eighteen miles northeast of Indianapolis. The census reports of both 1870 and 1880 showed that the center of wheat production was in the state of Illinois, the first year 82 miles northeast of Springfield, and in the second year 69 miles northwest of the same city. This westward movement carried the center of production in 1890 into Iowa, where it has since remained.28 The full effects of this movement were not felt adversely in Illinois until about the middle of the eighties, when the competition of Iowa and Minnesota, both better adapted to wheat production than Illinois,²⁹ began to show itself.

During the period from 1870 to 1881 there was a very steady increase in the acreage devoted to wheat in Illinois, the maximum being reached in the latter year with 3,642,589 acres. Unfortunately, however, this year saw one of the most severe crop failures in the history of the state, the average yield being only slightly over 7 bushels per acre for the whole state. From this year there was a very steady fall both in the acreage and in the yield of wheat, due to a fall in prices reaching the lowest point in 1894, when the price of wheat on the farm was only 42 cents a bushel. This fall in price was brought about by the opening up of the new lands in Minnesota, the Dakotas, and Kansas, which produced enormous quantities of wheat and glutted the Chicago market. In more than half of the fifteen years ending in 1894 it was reported by the Illinois state board of agriculture that the Illinois farmer lost money on his production of wheat. The profit per acre on winter wheat fell from \$7.44 in 1877-1879

Statistical Atlas of the United States, 1914, plate 388.
 Rutter, Wheat-Growing in Canada, the United States, and the Argentine, 69.

to 14 cents in 1890-1894.30 Most of the winter wheat was raised in the central and southern divisions, especially in the eastern half of these two sections; and the spring wheat was confined for the most part to the eastern half of the northern section.

While winter wheat held its own only moderately well, the production of spring wheat showed the most extraordinary fluctuation and decline. The census of 1870 reported a crop of 10,133,207 bushels for Illinois; by the end of the decade this had fallen to 2,687,049 bushels on a three-year average, and the next five-year average saw a still further shrinkage to 790,795 bushels. The reason for this extraordinary fall was that this crop came into direct competition with the spring wheat grown in the new northwest; whiter and cheaper flour could be produced in Minneapolis flour mills from the hard wheat of the northwest. From \$2.54 in 1877-1879 the profits per acre on spring wheat fell steadily until in the period 1890-1894 the unfortunate farmer who had continued the cultivation of spring wheat lost 16 cents on every acre planted.³¹

A comparison of the production of the two kinds of wheat shows that by 1890 over nine-tenths of all the wheat produced in Illinois was winter wheat. The northern section of the state did not produce as much, therefore, as did the other divisions, and after 1880 did not produce enough even for its own consumption.

In striking contrast with the decline of wheat production stands the steady growth in the production of oats. From 1860 to 1900 almost without a break there was a steady increase in the acreage and yield of this crop.³² The great increase from

³⁰ For table showing the essential facts concerning the production of winter wheat in Illinois see appendix, p. 483. ³¹ For table see *ibid.*, p. 484.

³² For table giving important facts in connection with the oats crop between 1870 and 1894 see ibid., p. 484.

an average annual yield of 37,000,000 bushels in 1870-1874to 104,000,000 bushels in 1890-1894, must be attributed to the enlarged demand for food for horses, the number of which, especially in the cities, was increasing steadily. In oat production the northern, central, and southern divisions stood to each other as 5:3:1, the southeastern counties of the northern division and the northeastern counties of the central division being the center of the oat district. Illinois ranked first as an oat producing state in both 1870 and 1880, but was superseded in 1890 by Iowa. Oats, like corn, were an unprofitable crop during most of this period, due to the glutting of the market by the overproduction of the new lands in the northwest. But as they fed a considerable part of the crop to their stock, Illinois farmers continued and even expanded its production.

The minor cereal crops, consisting of rye, barley, and buckwheat, are of relative insignificance in Illinois. The production of rye, four-fifths of which is produced in the northern division, reached its highest point in the period 1880–1884, after which it declined again. The production of barley showed a rapid fall during this period, accompanying and probably due to a decline in its profitableness. Ninety-five per cent of the barley in 1894 was produced in the northern division, most of this in the three counties of Stephenson, Ogle, and McHenry. Most of the crop was consumed by the breweries. Buckwheat was unimportant at the beginning of this period and steadily lost ground until in 1890–1894 the average annual crop was less than 50,000 bushels; most of it was grown in the Rock river valley.³³

The second group in the category of field crops, hay and pasture, although only one-third as important as the cereals,

³³ For table giving the important facts concerning the production of rye, barley, and buckwheat from 1870-1894 see appendix, p. 485. was five times as important as the horticultural and fifteen times as important as the miscellaneous crops. Hay made up approximately three-fifths of the total. As might have been expected from the distribution of the dairying and cattle raising industries, the northern division far outranked either of the other two, producing from one-half to three-fifths of the total forage crop. The production of hay showed a very steady increase to the middle of the eighties, after which there was a falling off both in the number of acres harvested and in the amount produced, probably due to a steady fall during this period in the price of hay.

Of the four important kinds of grasses reported as being grown in the state in 1879—timothy, prairie, clover, and Hungarian and millet seed—timothy was by far the most popular, almost three-fourths (72.6 per cent) of the acreage devoted to hay being sown with timothy grass. About onefifth (19.1 per cent) was devoted to prairie grass, 7.7 per cent to clover, and less than one per cent to Hungarian and millet seed. Timothy was the favorite in the central division, prairie grass in the northern division, and clover in the southern division.

The acreage devoted to pastures followed the same course as did the production of hay, increasing steadily until the second half decade of the eighties, after which there set in a decline. As time went on, the growth of the cattle feeding industry tended to concentrate pasture acreage more and more in the northern division, though Morgan county in the central and Washington county in the southern division showed a great development.³⁴

The third group of the field crops is the so-called horticultural crops, which comprise vegetables, orchard fruit, bush

 34 For table giving the important facts relating to forage crops see appendix, p. 485.

fruits, and vineyard products. Of these the vegetables were the most important, constituting from one-half to almost threefourths of the group. Orchard fruits made up between one-fifth and two-fifths of the total at different periods, while the other two classes were relatively unimportant, amounting together to only about five per cent of the total. The preeminence of the vegetables was greatest in the northern division, the orchard and bush fruits having a relatively larger importance in the more hospitable climate of the other sections of the state.

The vegetables comprised Irish potatoes, sweet potatoes, turnips, and other root crops. Of these, Irish potatoes made up almost nine-tenths in value throughout the entire period. Turnips and other root crops have shown a steady decline in relative importance, while sweet potatoes have grown somewhat in favor.35

Throughout the three decades between 1860 and 1899 Irish potatoes grew steadily in importance, reaching their climax in the last named year, with a record crop of 15,484,390 bushels. Since then there has been an equally steady decline. That Illinois farms are not so well adapted to potato growing as are those of neighboring states is shown by the fact that between 1866 and 1889 the average yield per acre in Illinois was less than that in Ohio, Michigan, or Wisconsin.36 The prices were very unstable during this period, fluctuating between a minimum of 25 cents a bushel in 1899 and a maximum of \$1.12 in 1873.37 The crop was always more important in the northern division than in the two other sections.

Sweet potatoes, the production of which was at the begin-

³⁵ For table giving the more important statistics concerning these crops see

³⁶ Yearbook of the United States Department of Agriculture, 1909, p. 493. ³⁷ The average yield for the state was only 40 bushels per acre, the smallest with two exceptions in the history of the state.

ning of this period nearly equally divided between the central and southern divisions, came, as time went on, to be more exclusively a product of the southern section, where Union and the adjoining counties produced the greater part of the total supply. There was a steady increase during this period in the production of sweet potatoes, due in considerable measure to improved methods of propagation.

The value of the minor root crops showed a marked increase during the seventies and the first half of the eighties, but after that showed an even greater decline. This was in part due to the fall in the general price level, but also to the unpopularity of turnips and beets and other similar root crops in the southern part of the state. Here droughts and heat had caused many failures during the seventies, so that the farmers in this section turned with relief to the production of corn. In the northern division, however, the growth of Chicago provided an excellent home market for onions and market garden produce, while the development of the dairy industry tended to increase the amount of turnips which were raised as feed for the cows. By the end of the period threefourths of these crops were being produced in the northern division. An interesting development during this period was the growth of market gardening, especially in the vicinity of Chicago and of St. Louis. From about \$750,000 in 1870 the value of the market garden products increased until in 1889 it was about \$1,400,000.

Orchard fruits, of which apples constituted nine-tenths, made up a much less important group of horticultural products, and one, moreover, of steadily declining consequence. Most of the apples, peaches, and pears were grown in the southern division of the state, as the climate in the northern part was too severe.³⁸

³⁸ For table showing the production of these three fruits see appendix, p. 486.

The production of bush fruits such as strawberries, raspberries, blackberries, and similar small fruits, has never been important in Illinois, partly because of climatic conditions and partly because of the lack of an adequate labor supply for the necessary intensive culture. These crops also were concentrated in the southern division of the state, especially in the vicinity of Union county. For a while it seemed that a fruit canning industry might be developed.³⁰ In 1875 the Fruit Growers' Association of Southern Illinois was organized; and by 1877 the Illinois Central was running a regular fruit train to Chicago, the rate being 80 cents per hundred pounds from Cairo to Chicago.⁴⁰

The fourth group of the field crops comprised a number of miscellaneous products such as tobacco, broom corn, flax, hemp, cotton, sorghum, maple sugar and maple sirup, clover and other grass seeds, peas, and beans. Of these tobacco is not only the most important but has had the most interesting history.⁴¹

During the Civil War the cutting off of the supply of southern tobacco forced the price to the highest point which it had ever reached and stimulated its production in the northern states. As southern Illinois was fairly well adapted to the growing of tobacco, the production of this crop increased rapidly in that section. In 1862 the acreage devoted to this product was 8,585, which yielded about 9,000,000 pounds, but in the next year 30,627 acres were planted in tobacco, the largest acreage in the history of the state. In spite of a poor crop the yield this year was 20,000,000 pounds. For the rest of this decade the acreage was over 20,000; it declined in the early seventies, however, then rallied and held its own for a

⁴⁰ Chicago Tribune, January 7, 1875; Illinois State Register, April 21, 1877. ⁴¹ See "Report on Culture and Curing of Tobacco in the United States," in Report on the Productions of Agriculture as Returned at the Tenth Census.

³⁹ Report of the Commissioner of Agriculture, 1873, p. 279-280.

decade or more, only to fall again disastrously in the early nineties.42

Broom corn has always been distinctively an Illinois crop. As early as 1820 it was mentioned as having been "planted in rows on the sides of corn fields." Records show that a Mr. Beebe, a farmer near Platteville, planted twelve acres in 1856 and obtained a good crop, and that Messrs. Johnson and Beauregard of Champaign county had a field of 400 acres in 1861.43 When statistics of this crop began to be gathered by the Illinois state board of agriculture, in 1877, the acreage devoted to it already amounted to 14,566 with a total yield of 6,674,747 pounds. The center of broom corn culture was in Illinois, especially along the line of the Illinois Central railroad,44 which transported the raw material for the important industry of broom making, in which Chicago held high rank.45 From this time until the end of the eighties there was a fairly steady increase in acreage and production. Most of this product was raised in the central division, and was highly concentrated in Coles, Douglas, and Henry counties.48

The textile crops have never been important; they showed a steady decline during this period, with the exception of a boom in the production of hemp, noted in the census report for 1890. Cotton became so unimportant that it was no longer reported by the census bureau. As flax fiber became an unprofitable crop during the seventies, the farmers turned to the production of flaxseed, which by 1880 was being produced in such large quantities as to give Illinois first rank among

⁴² For table showing the growth in production and the distribution of the

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⁴⁵ Moses and Kirkland, *History of Chicago*, 1:411. ⁴⁶ For table showing production of broom corn see appendix, p. 486.

the states in this field. By 1890, however, this also had been given up as an unprofitable crop.

The same story of decline must be told of the sugar crops, although a temporary gain over the preceding decade in the cases of maple sirup and of sorghum sirup was reported by the census of 1880. The maple tree products were concentrated for the most part in the eastern and northwestern sections of the central division, while the sorghum sirup was produced most extensively in the Wabash river valley of the southern division.

One of the minor crops of Illinois which increased in importance during this decade was grass seeds. During the twenty years 1870–1890 there was more than a fivefold increase. At the beginning of the period timothy made up somewhat more than one-half, but by the end clover constituted over two-thirds. The chief center of production by the end of the period was the region between the Mississippi, Illinois, and Rock rivers.

Never very important, the legume crops, consisting of dry beans, cowpeas, and castor beans, have on the whole shown the same decline which has characterized the other minor crops. The production of the first two centered principally in Jasper and Cumberland counties, and of the third 99.5 per cent was produced in the southern division.⁴⁷

⁴⁷ For table giving the statistics of production of the miscellaneous crops see appendix, p. 487.

XI. ANIMAL PRODUCTS OF ILLINOIS FARMS

THE second main group, the animal products, constituted about one-fourth of the total values yielded by the farm, but it was steadily growing in importance during the period 1870-1890. The growth and relative importance of the five main classes are shown in the following table:

	Average total production (value)	Distribution (per cent)			Percentage of animal products				
PERIOD		North division	Central division	South division	Animals sold	Dairy products	Poultry products	Wool	Honey
1877-79	\$52,456,925	53.1	36.9	10.0	84.7	13.4		1.9	
1880-84	68,484,171	54.3	35.1	10.6	80.0	18.2		1.8	
1885-89	65,393,242	55.3	35.1	9.6	75.8	19.7	3.4	1.1	
18 90-94	61,753,273	63.1	28.0	8.9	65.5	29.6	3.9	.9	г.

ANIMAL PRODUCTS IN ILLINOIS, 1877-1894

It will be noticed that there was a steady decline in the relative value of animals sold, while dairy products more than doubled. Wool, never of great importance, declined heavily, while poultry and honey appeared only toward the end of the period. More than half of all of the animal products were produced in the northern division, and this tendency to concentration became more marked as time went on. This was due to the growing predominance in that region of both the cattle feeding and the dairy industries.

As a larger proportion of Illinois land was brought under cultivation the great blue-grass pastures were broken up and the number of livestock tended to decrease. On the other hand, the tendency toward a decline in the number of animals was counteracted by the development of the practice of buying "feeders" to be fattened on Illinois corn. There was a net gain in the value of livestock in the state from \$118,205,358 in 1870 to \$180,431,662 in 1890.¹ This represented an increase of 52.7 per cent, a rate of growth which was far below that for the preceding twenty years, 1850-1870, when the building of railroads had given an abnormal impetus to grain farming and cattle raising.

One group of livestock, the draft animals, was given a position of new importance in agricultural economy by the introduction of machinery, for there was a greatly heightened demand for animals, particularly horses, to supply motive power. Illinois ranked highest in the union in the absolute number of horses for the twenty years ending in 1890; during these two decades there was a steady increase from 853,738 to 1,335,289. In view of the use made of the animals it was natural that the distribution should show a strong concentration in the corn belt; almost half of the total number was in the northern division, less than a fifth was in the southern.²

With the increase in numbers and use came a stimulated interest in the breeding of horses. The importation of French horses seems to have begun in 1866, when Dr. A. G. Van Hoorebeke brought the Percheron stallion Lucifer 285 to Monmouth; by 1870 Illinois had taken the lead in the breeding of draft horses and held it through two decades. In 1890 there were listed 488 owners of pure-bred horses, of whom 221 had Clydesdale, 152 Percheron, 100 Shire, and 15 Belgian,³ almost all in the northern and north central divisions,

¹ The growth of livestock during the period 1870-1890, on this basis of value, is shown in the appendix, p. 487. ² The most pertinent facts in this regard are presented in the appendix,

² The most pertinent facts in this regard are presented in the appendix, p. 488.

⁸ Sanders, A History of the Percheron Horse, 133, 154; American Clydesdale Stud Book, volume 5; National Register of French Draft Horses, volume 5, 6; American Shire Horse Stud Book, volume 1, 2; National Register of Belgian Draft Horses, volume 1.

McLean county leading in the number of owners of all kinds except Belgians.

The southern half of the state was interested chiefly in the other varieties of draft animals. There was an increase in the total number of mules and asses in the state from 85,075 in 1870 to 123,278 in 1880, or a gain of 44.9 per cent; but in the following decade the number declined 12.5 per cent, falling to 107,875 in 1890. These animals were shifted more and more to the southern counties during the whole period, because of their ability to thrive in a hot climate and to stand the pestiferous flies bred in great swarms in the swampy lowlying districts of Egypt. But not even in the southern part of the state did these animals average as many as one to a farm.

Even more marked was the decline in the number of oxen and their relegation to a few counties in the extreme southeastern part of the state. From 19,766 in 1870 the number fell to 3,346 ten years later, but increased by 1890 to 6,579, due principally to a very large increase in the southern counties. Their inefficiency has made oxen unavailable for use in connection with expensive farm machinery. Seven counties, including Saline and the counties which immediately surround it, contained almost all the working oxen in the state in 1890; and these same counties were, with a few exceptions, the poorest in farm machinery.

An even more marked concentration in the northern and central divisions is to be noted in the case of the second group of livestock, the meat and dairy animals. The number of milch cows showed a steady growth throughout the period, increasing from 640,321 in 1870 to 865,913 in 1880, and to 1,087,886 in 1890, the last figure being surpassed only by Iowa and New York. In 1890 the average farmer in the northern division had over twice as many dairy cows as the average farmer in the central division and over three times as many as the average farmer in the southern division.⁴

An investigation of the popularity of the different breeds of dairy cattle in Illinois, made by the federal bureau of animal industry in 1884,5 showed that the shorthorns were far in the lead and were generally distributed throughout the state. Next in favor were the Jerseys-rather remarkable, since during the seventies the fact that the first cases of contagious pleuropneumonia ever known west of the Alleghenies were in herds of pure-bred Jerseys had led to the belief that this breed was more subject than others to attacks of contagious and infectious diseases. By 1884, however, the prejudice against the Jerseys was passing away and they were again being sought to increase the butter-producing capacity of cows.

Holstein-Friesian cattle were also in considerable demand during the eighties, the large yield of milk by cows of this breed making them particularly popular in the vicinity of large cities. Ayrshire cattle were at one time comparatively popular in Illinois, and pure-bred herds were to be found at several places. But they seem to have lost favor, for well-bred Ayrshires could be purchased in the early eighties for little more than the price of common milch cows. By 1890 they had been superseded in favor by Guernsey cattle; nineteen herds of this breed were to be found in the state, most of them in Cook and the neighboring counties.

In 1890 there were altogether in the state 368 herds that were headed by at least one pure-bred animal. The Jerseys led with 234, the Holsteins coming next with 115 herds, while the Guernseys had only 19. The high quality of the dairy cows of Illinois was attested by the performance of the brown Swiss cow Brienz, owned by A. Bourquin of Nokomis, which

⁴ These facts are shown in the appendix, p. 488. ⁵ Report of the United States Bureau of Animal Industry, 1895, p. 366-368.

in 1891 broke the existing public competition butter fat record by yielding 9.32 pounds of butter fat during the three days of the Chicago Dairy Show.⁶

The development of the dairy industry was brought about by the growth of urban industrial centers in the state.⁷ During the twenty years ending in 1874 there was almost a threefold increase in the value of dairy products sold by the farmers, from about \$7,000,000 in 1877-1879 to an annual average of over \$18,000,000 for the half decade 1890-1894, due almost entirely to the increasing demands of Chicago, Peoria, St. Louis, and other expanding cities. During the year 1869 there were sold from Illinois farms 9,259,545 gallons of milk, an amount surpassed only in the more densely settled states of New York, Ohio, Massachusetts, and Pennsylvania. Cook and Kane counties each sold over 2,000,000 gallons and together contributed over half of the state's total. Elgin was the center of the milk shipping industry, doing a business of about \$500,000 annually. Shipments from this region increased from 757,112 gallons in 1866 to 1,235,653 gallons in 1867.8

Comparatively little milk was shipped to Chicago in the early seventies from points distant more than fifty miles from that city. Fifty-three miles formed the extreme limit of regular milk shipment on the Chicago and Northwestern railroad, while on the Chicago, Burlington and Quincy the limit was seventy-three miles. Three-fourths of the Chicago milk supply came from the Rock river valley, where hundreds of farmers devoted themselves entirely to dairy farming, shipping direct

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⁶ Jersey Herd Book, volume 16-23, 26; Holstein-Friesian Herd Book, volume 8-9; Herd Register of the American Guernsey Cattle Club, volume 1-3; Hale, History of Agriculture by Dates, 63. ⁷ The principal facts concerning the growth and distribution of the dairy

industry as a whole are set forth in the appendix, p. 489. ⁸ Illinois State Agricultural Society, *Transactions*, 1871, p. 163; *Western*

Rural, volume 6.

to Chicago or selling to the cheese factories. The transportation charges were based upon a zone tariff system; those on the Chicago and Northwestern were 16 cents per eightgallon can for distances up to twenty miles, 20 cents for twenty to forty miles, and 24 cents for more than forty miles. The rates on the Chicago, Burlington and Quincy road were 15 cents per eight-gallon can up to forty miles, 20 cents for forty to seventy-five miles, and 25 cents for seventy-five miles and over.⁹

The shipment of milk into Chicago received a special impetus in 1872 as a result of the removal of all cow stables to points outside the city limits, upon order of the Chicago board of health. The amount shipped over the Chicago and Northwestern railroad alone increased from 1871 to 1872 by nearly a million gallons. In 1872 the city board of health reported daily shipments of 14,112 gallons. In addition, cows kept near the city supplied about 6,000 gallons. This made a total of 20,112 gallons daily, or a rate of 7,340,880 gallons per year.¹⁰ As the demands of the city grew and as improved methods of refrigeration were introduced, the market naturally drew upon a larger and larger area for its supply, absorbing about nine-tenths of all the milk sold in Illinois. By 1890 Kane, McHenry, and Du Page counties were the leading producers of milk, while Boone, De Kalb, Lake, and Cook made up a group of only slightly lower showing.

St. Louis did not furnish so good a market for the southern division as did Chicago for the northern. This was due largely to the existence within that city, or in the immediate vicinity, of swill milk dairies, the owners of which were able to purchase spent grain from the breweries at two cents a bushel, and distillery slops at a proportionately low price. About 1870,

however, milk shipments into St. Louis began from towns in Illinois; and in the following year the Ohio and Mississippi railway shipped 157,356 gallons into St. Louis from stations within a ninety-five-mile radius. The transportation charges averaged two cents per gallon.11

The prices received by the farmers of the state show, on the whole, a steady increase during this period. The highest prices appeared in the central division, where the lack of large cities caused the farmers to deliver their own milk, receiving a retail instead of a wholesale price. In the northern division the business was organized in the hands of city dealers who paid much lower prices to the farmers for their product.¹² A curious fall in the price of milk in the southern division was probably due to the better organization of the city dealers in St. Louis as the demand for milk in that city became greater, and to the greater distance of the farmers in that section from their natural market. St. Clair, Randolph, and Washington counties showed the greatest development of the dairy industry in this section.13

Following closely upon the large scale organization of the milk industry was the transfer of butter making from the farm home to the factory. During the seventies and early part of the eighties most of the butter produced in the state was still churned on the farm in the old-fashioned wooden-dasher churn. Once butter making machinery had demonstrated its commercial possibilities, the homemade product steadily declined.

The industrial revolution in butter making began in this country about 1861, when the first creamery was established

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¹¹ Report of the Commissioner of Agriculture, 324. ¹² The milk which was shipped into Chicago went to the city dealers, who, during the six winter months of 1871-1872, "paid farmers 4½ cents per quart and retailed at 7 cents; during the summer of 1872 farmers received 3½ cents, city retailers obtaining 6 cents." *Ibid.*, 341. ¹³ The development during this period is shown in the appendix, p. 489.

in Orange county, New York.¹⁴ The first one west of the Great Lakes was the Elgin Butter Factory, established in 1870 by Dr. Joseph Tefft. By 1871 this factory was already making 80,000 pounds of butter. The second creamery to be established was probably that owned by I. Boies, at Marengo, who soon operated a large number of factories.

The introduction of the cream separator, about 1880, further hastened the process of commercialization. Previous to this, the whole milk had been taken to the creameries, but skimming stations, to which the milk was brought and from which the cream was forwarded to the creameries, were now established. Later, each farmer had his own separator and skimmed the milk on the farm.

Finally, the invention in 1890 by Professor Stephen M. Babcock of the University of Wisconsin, of the milk tester, by which the amount of butter fat in the milk could be determined, placed the dairy business upon a scientific basis. Before this, creameries had paid for cream by the inch, but now they paid for it on the basis of quality, and at once an impetus was given to the movement for improved breeds of dairy cows.¹⁵

The phenomenal development of the production and sale of cream is indicated by the increase of 673 per cent for the half decade 1880–1884. In 1878 the amount of cream sold from the farms was 62,707 gallons, in 1879 it was 230,949, in 1880 it was 601,314, in 1881 it was 1,380,936, and in 1882 it was 2,188,396. On the other hand, the amount of milk sold fell off from 96,659,845 gallons in 1879 to 38,986,861 in 1880, and the amount of butter from 25,028,225 pounds in 1879 to 24,553,449 in 1880.

¹⁴ Sanford, *The Story of Agriculture in the United States*, 273. ¹⁵ For some of the changes wrought in the sale of butter, cream, and cheese on Illinois farms see table in the appendix, p. 490. The butter industry acts as a buffer in the dairy business. When, due to abundance of pasture because of increased rainfall, too much milk is produced and the price falls, the surplus is made into butter. This product is admirably adapted to store up the most valuable elements in milk, for it contains the largest value in the smallest bulk of any dairy product, will keep longest, and will stand transportation best. On the other hand, when the price of milk is high, less butter is made and the supplies in storage are reduced.

Of the four branches of the dairy industry, that of the production of cheese was the one which varied most and which finally became of least importance. The first cheese factory in Illinois was established in 1863 by J. H. Wanzer on his farm near Elgin, as a result of inability to market whole milk at remunerative prices. The real impetus to the production of cheese by the factory method, however, was given two years later when Gail Borden built in Elgin a factory which manufactured 240,000 pounds of cheese the first year; this success encouraged others and in 1867, only two years later, there were seventeen factories in northern Illinois. The factories of McHenry county alone produced 600,000 pounds of cheese, using 5,500,000 pounds of milk. By 1870 there were fortysix cheese factories in the state, and each year thereafter for a decade saw an increase in the number. Kane county in 1873 had fifteen factories which produced 2,297,500 pounds of cheese. The largest of these establishments was Gould's, which used the milk from 1,300 cows and made 490,000 pounds of cheese. By 1878 there were between sixty and seventy butter and cheese factories within fifty miles of Elgin.16

The home market for cheese was more than supplied by these factories, so that a movement began for the export of

¹⁶ Illinois State Agricultural Society, Transactions, 1873, p. 81; 1878, p. 269.

the product to eastern markets. The very success of the industry, however, proved its undoing. Difficulties with the factories as to price led the farmers to remove some of the cream from the milk; the manufacturers next substituted buttermilk and tried to hasten unduly the curing of the cheese. Illinois cheese soon lost its good reputation, and its manufacture fell off rapidly. By 1890 the industry revived somewhat, as many factories were starting to make filled cheese. This business flourished until 1896, when a law which prohibited filled cheese gave it a fatal blow, and within a few months it declined so that Illinois sank almost to the bottom of the list of cheese producing states.

A new demand for whole milk was created when, in 1865, Gail Borden selected Elgin as one of the points for the manufacture of condensed milk. Since the industry can use only very pure milk, it led to the introduction of more sanitary methods of production and marketing.

No less interesting than the changes in the dairy business were the developments during this period in the cattle industry. In 1870 Illinois was surpassed only by Texas in the number of cattle raised chiefly for beef, but since that year other states had forged to the front; in 1890 Illinois was outranked by Texas, Iowa, Kansas, and Missouri.¹⁷ During the two decades 1870-1890 the number of "other cattle"—that is, all neat cattle except milch cows, calves, and oxen—almost doubled, increasing from 1,055,499 in 1870 to 1,968,654 in 1890. Most of these cattle were to be found in the northwestern part of the state, particularly between the Mississippi, the Rock, and the Illinois rivers. In the fifty years ending in 1890 the beef cattle in the northern division had increased over ninefold, those in the central division had about trebled, while those in the southern division were actually fewer by 6,170 in 1890 than they were in 1840. This concentration was due chiefly to the development of Chicago as the central market.

The improvement in the breeds of beef cattle in the state had begun as early as 1840 and had been given a decided impetus by the formation in 1857 of the Illinois Stock Importing Association. Among the pioneers in this field were J. C. Cox of Jacksonville, importer of shorthorn cattle, B. F. Harris of Champaign, an exponent of heavy cattle, and Emory Cobb of Kankakee, importer of high-grade cattle. By 1875 the number of thoroughbred cattle in the state was considerable; nine-tenths were shorthorns, the remainder consisting of Jerseys, Devons, Herefords, and Ayrshires. In 1884 Illinois led all the other states, excepting Kentucky and Ohio, in the quality of its beef cattle.¹⁸ Thirty-five per cent of the animals in Illinois were "high grades," that is, cattle in which the blood of pure-bred animals had exercised a strong influence for improvement.

The first, and for some years the only, representatives of pure-bred cattle in the state were shorthorns. By 1870, Illinois breeders already had a considerable reputation and attracted buyers from all over the country. By 1884 shorthorns, or grades got by animals of this strain, made up two-thirds of all the cattle in the state.¹⁹ John Wentworth, the famous politician and one-time editor of the *Chicago Democrat*, had on his "Summit Farm," near Chicago, about eighty thoroughbred animals; his herd was noted for the fact that it was headed by Fifteenth Duke of Airdrie, one of the greatest of the famous Bates bulls. By 1890 there were in the state 1,038 herds of

¹⁸ Illinois State Agricultural Society, Transactions, 1861-1864, p. 372; 1875, p. 321-324; Report of the United States Bureau of Animal Industry, 1885, p. 386.

¹⁹ Chicago Tribune, August 10, 1871; Report of the United States Bureau of Animal Industry, 1885, p. 367.

shorthorn cattle led by registered animals, over half of these being in the northern division.²⁰

In the seventies, T. L. Miller's Highland Stock Farm in Will county became the center for the breeding of Herefords. Other prominent breeders were Thomas Clark of Beecher, Will county, and G. W. Henry, owner of Rossland Park Stock Farm, at Ashburn. There were about eighty herds of Hereford cattle in the state in 1884 and one hundred and eighty-nine in 1890, most of them in Will county.²¹

Another popular breed was the Polled Aberdeen Angus, of which there were about thirty herds in 1884; this number had increased to 158 by 1890. The herd which Messrs. Anderson and Findley of Lake Forest had started in 1878 had by 1885 grown to be the largest herd of that breed in the United States or Scotland 22

Other breeds of considerably less importance were Devons, Galloways, and Ayrshires. In the eighties two new breeds were introduced: J. C. Duncan of Normal imported some Normandy cattle from France, and John Dick of Quincy made an importation of Simmenthal cattle.²³

Slightly over one-fourth of all the beef cattle in Illinois in 1890 were high-grade stock.24 The largest proportion of each kind was to be found in the northern division, but the central division made the best showing, as just one third of all the cattle in that section were high grade.

²⁰ American Short-Horn Herd Book, volumes 31-33, 65. The quality of this breed was attested by the fact that Roan Boy, a shorthorn steer, exhibited by C. M. Cubbertson of Newman, was adjudged the champion of the American Fat Stock Show in 1883. Ten years later the shorthorn steer, Cup Bearer, exhibited by M. E. Jones, of Williamsville, was declared the champion beef animal at the Columbian exposition. Hale, History of Agriculture by Dates, 58, 65. ²¹ Sanders, The Story of the Herefords, 348. Mr. Miller founded the American Hereford Herd Book in 1879; Prairie Farmer, November 14, 1885; American Hereford Record and Hereford Herd Book, volumes 8-10. ²² Prairie Farmer, November 14, 2885.

²² Prairie Farmer, November 14, 1885.
 ²³ Hale, History of Agriculture by Dates, 60, 61.
 ²⁴ The quality of the neat cattle of Illinois may be judged from a table in the appendix, p. 491, showing the pure-blooded and other stock in 1890.

In the development of beef production which has taken place in Illinois, two distinct historical stages may be noted; and the industry seems now to be entering upon a third stage.25 The first stage was that in which cattle were fed on corn as the most profitable method by which to bring the corn to market. The second stage was reached when the ranges were broken up; the object now became not so much to raise cattle as a means of marketing corn as to raise corn in order to make beef. The third stage is that of baby beef making.

The first of these methods is well illustrated by the following comment: "Several droves of cattle have been brought into Morgan county, during the past week, from Missouri, for the purpose of putting its immense yield of corn in marketable condition, it being the policy of all farmers to send their staple to market in the form of beef." 26 It was estimated that one ton of pork could be made from about six tons of corn, one ton of beef from ten tons of corn, and one ton of butter from twenty-five tons of corn. Since many farmers at the beginning of this period had to haul their grain thirty or forty miles to reach a railroad, most of them preferred to "make their corn walk to market."

Moreover, it was easy and profitable to raise stock. In the newer sections there was much open prairie land, covered with luxuriant grass, where cattle could be herded at a dollar a head from May to October; then they were turned into stalk fields, in which gleanings of corn had been left, at a cost of ten cents an acre. During March and April, clover, timothy, or prairie hay could be fed to the cattle; these were

²⁵ Wallace's Farmer, volume 38.

^{**} Wallace's Farmer, volume 38. 26 Illinois State Journal, October 1, 1860. By some, however, native cattle were preferred to those brought in from other states. Thus Mr. John F. Alexander of Springfield, who grazed $7,\infty\infty$ head of Texas cattle in 1869, asserted that this was a losing business and that he intended hereafter to feed and graze none but home-grown cattle. Illinois State Journal quoted in Chicago Tribune, February 28, 1870.

the only expensive months. The total cost of growing stock under these conditions was about six dollars a head; the cattle were ready for market in from three to five years, at the end of which time they sold at about twenty-five dollars a head. Since the railroads, furthermore, discriminated in favor of the livestock business, there was considerable profit in this method of growing beef.

Among the drovers in the early days may be mentioned Isaac Funk of Bloomington, one of the first to recognize the value of the prairie lands. Corn was kept before the cattle all the time in order to secure weight as rapidly as possible. The large animals were preferred to the small ones; until the late eighties or nineties little attention was given to the finish of steers which were sent to market.

After the open prairie land in the state of Illinois was settled the feeders bought their cattle cheaply from the ranges on the plains west of the Mississippi river and fattened them at home on corn. Up to 1895 the number of beef cattle in Illinois increased at a rapid rate.²⁷

As a swine breeding state Illinois has always ranked high. For four decades prior to 1870 importations of improved breeds had been made steadily, until Illinois had become the center of pure-blooded swine in the United States. In 1869 an Illinois Swine Breeders' Association was formed with Thomas J. Crowder, of Springfield, as president.²⁸

During the twenty-year period the number of hogs in the state doubled, increasing from 2,703,343 in 1870 to 5,924,818 in 1890. The northern division almost trebled and the central doubled the average number per farm, while there was an

²⁷ For the changes which took place in the production of beef cattle during this period see table in the appendix, p. 497.

²⁸ Paxton Record, December 4, 1869. For the important facts as to the increase and distribution of swine during the period 1870-1880 see table in the appendix, p. 492.

actual decline in the southern division. This concentration of hog growing in the corn belt had been going on since 1850, particularly in the region between the Mississippi, Illinois, and Rock rivers.

Illinois was also the foremost state in the union in the excellence of the breeds. In 1880 nearly sixty per cent of all the breeders of pure-bred swine in the United States resided in this state. Within its borders were to be found the most perfect representatives of all the leading breeds. The four volumes of the *American Berkshire Record* issued prior to the close of 1880 give the pedigrees of 1,418 Berkshires bred in Illinois, and of 1,679 owned in the state; the corresponding Poland China records register 361 hogs bred in Illinois, and 396 owned here. There were also good droves of Chester Whites and Essex. The breeding stock in whole counties or districts was composed largely of pure-bred animals of one or another of these strains.

Chicago gained preëminence in pork packing in the late fifties; by 1861 it had passed Cincinnati and had become the center of the industry. In the thirty-five-year period ending in 1889 there was a steady increase in the number of hogs sold in Illinois; but the climax was reached in 1885–1889, and after that date the industry declined, since the price of hogs fell more rapidly than did the price of corn, so that it became less profitable to feed corn to hogs. The industry was fairly widely distributed throughout the state, though as time went on the northern division gained at the expense of the southern division.²⁹

Sheep raising has always been a very fluctuating industry in Illinois. In 1840 the figure was a little less than 400,000; it increased to almost 900,000 ten years later, but fell off

²⁹ For the more important facts concerning the production of pork see table in the appendix, p. 492.

again in 1860 to 769,135. As a result of the Civil War and the high price of wool, new interest began to be manifested in sheep raising, particularly in the raising of Merino sheep. The wool clip of 1865 was the largest ever produced in the state, amounting to nearly 12,000,000 pounds from a little less than 3,000,000 sheep.

With the lessened demand after the war there was a great fall in the price of wool and of sheep. Merinos which in 1862 or 1863 had been bought at fabulous prices were now sold for \$1 to \$1.25 apiece. By 1870 the number of sheep had fallen to half what it had been five years before. This blow to woolgrowing diverted attention from the Merino to the mutton sheep, but the number of sheep declined through the seventies, until it reached the low point of 1,037,073 in From 1880 to 1883 an enthusiasm developed in cen-1880. tral Illinois for long-wooled rams, but it had cooled off by 1884. The decline which then set in continued steadily until 1890; there were then only 922,631 sheep in Illinois. Wool was selling for less than it had for some years, and mutton was only \$2.30 per hundred pounds gross, the lowest price recorded in the history of Illinois.³⁰

The sheep industry was fairly well concentrated in the central division, though a temporary increase of sheep in the northern division in the late seventies put that division in the lead in 1880. Lake county had over 65,000 sheep in 1890, many times more than any other single county.

The breeds of sheep changed radically in Illinois between 1865 and 1890. In the former year fully three-fourths of all sheep in the state were Merinos or their crosses. When woolgrowing ceased to be profitable the English mutton breeds — the Lincolnshires, the Cotswolds, the Southdowns, the

⁸⁰ For the important facts as to the sheep industry see table in the appendix, p. 492, 493.

Shropshires, and the Leicesters—were more largely introduced; and by 1890 the proportion of Merino sheep had sunk to 31.1 per cent, while the English breeds were 42.7 per cent. The remaining 26.2 per cent were "common" sheep. The worst showing was made by the southern division, where nearly half of the sheep were scrub stock.

The demand for a mutton sheep led not only to the introduction of new breeds but also to a modification of the Merinos from the Vermont type, weighing only 90 pounds, to a species developed in western Pennsylvania and eastern Ohio weighing 160 to 210 pounds, good for mutton, and yielding a fourteenpound fleece. Unsuccessful experiments were made with the French Merino in northern Illinois, in order to secure a high grade of wool on a mutton carcass; but by 1890 little of this blood remained.

The first mutton sheep introduced into Illinois was probably a grade of Leicester, but by 1890 the Southdowns were the standard mutton sheep. The latter breed had been introduced into the state in 1844 by Jesse A. Pickrell. John Wentworth improved his Southdown breeds and popularized this strain in the state during the seventies and eighties.

The Shropshires are a comparatively recent introduction into the state and have had their greatest development since 1883. Their carcasses were heavier than those of the Southdowns and their mutton but little inferior, while they yielded larger fleece. The Cotswold was long a favorite mutton sheep in Illinois, and the cross of the Cotswold on the Merino was at one time a general practice. Other breeds which were found in Illinois in 1890, but to a much less extent, were the Hampshire Downs, Lincolnshires, Oxford Downs, Horned Dorsets, and Cheviots. The Southdowns and Oxford Downs were largely centered around Sangamon county, while the Shropshires were represented most largely in Will, Vermilion, Champaign, and De Witt counties.

The number of sheep sold in Illinois between 1875 and 1895, with the exception of the half decade 1880–1884, showed a steady decline, due, no doubt, to the high price of corn as compared with the price of mutton. In the eighties the practice of raising early lambs was successfully introduced. Farmers with blue-grass pasturage fattened western sheep for the fall market. The industry was fairly well scattered throughout the state, though the central division led the other two.³¹ In spite of the decline in the number of sheep, more wool was clipped during the seventies, owing to the improvement in the Merino and the long-wooled mutton sheep. During the next decade, however, the emphasis given to mutton sheep caused a great shrinkage in the wool clip.³² The industry was distributed over the state, the central division leading.

Last on the list of the products of the farm are apiarian and poultry products. The statistics of eggs and poultry sold by no means indicate the importance of the hen to the Illinois farmer, for they take no account of the amount consumed on the farm. Of the eggs and poultry sold, about half were from farms in the northern division. The value of both these items increased from an average of 997,123 for the half decade 1885-1889 to \$1,052,639 for the half decade 1890-1894.

The production of honey and beeswax increased almost threefold between 1870 and 1890, the former growing from 1,547,178 to 4,602,941 pounds, the largest figure recorded. There was a decided movement in the industry from the eastern half of the state to the northwestern section during this period, but it has never become important.

³¹ Carman, Heath, and Minto, History and Present Condition of the Sheep Industry of the United States, 609. See table in the appendix, p. 493. ³² For actual figures see *ibid*.

XII. EXPANSION OF BUSINESS, 1870-1878

THE financial problems which called for solution in Illinois during the period 1870-1878 were not essentially different from those which were occupying other states. National questions of funding and resumption were foremost at the beginning of the period. The proposed refunding act, by which six per cent bonds of the federal government, especially the five-twenties of 1862, were to be converted into five per cent bonds, called forth emphatic objections from Illinois. The members of the Chicago Clearing House Association, together with representatives of several banking institutions in other parts of the west, sent a memorial to congress protesting that the bill threatened the national bank note circulation, which was based upon the ownership of federal bonds. They asserted: "Even if the National Banks in the East would submit to the inequality, with other inequities forced upon them by this bill, that the West could not do it - because they could not submit to so great a loss on the investment of their capital."1 In general, the western bankers demanded a resumption of specie payments rather than a refunding of the national debt,² but in spite of their opposition a refunding act was passed July 14, 1870, which converted the outstanding federal bonds at lower rates of interest.

Although resumption of specie payments was not finally effected until 1879, there were demands for it in Illinois throughout this entire decade. Agitation was first directed against the fractional paper money authorized in 1863, which

¹ Chicago Tribune, March 26, 1870.

² Ibid., March 21, 1870.

had been issued to a total amount of \$20,215,635.³ These small notes were easily lost or destroyed and were generally dilapidated and filthy; and the retail merchants demanded their retirement and the issue of subsidiary silver coin. "If Congress would order that no more fractional currency be issued, except in exchange for torn bills, and that all received should be cancelled, we might resume specie payments, so far as retail business is concerned, immediately."⁴ Such action was not taken by congress, however, until 1876.

As early as 1870 an editorial in the *Chicago Tribune* stated that the west generally was in favor of specie resumption. "Whatever weakness may ever have existed at the West in favor of currency inflation and of depreciated paper is rapidly disappearing. From nearly all our Northwestern exchanges we meet with a growing demand for specie resumption."⁵ This analysis doubtless reflected the trend of republican opinion and the *Tribune's* own sentiment on the matter. The issue of inflation was presented very sharply on the occasion of President Grant's veto of the so-called inflation bill on April 22, 1874. A poll of the western press showed that 514 newspapers approved, 408 disapproved, and 111 were noncommittal; for Illinois the corresponding figures were: 129 for, 117 against, and 9 noncommittal.⁶

More-important than questions of national finance, however, was the subject of banking. After the disastrous failure of the State Bank in 1848, Illinois, in common with a number

⁶ Chicago Tribune, May 13, 1874. An entire page is given up to this poll. Among the papers which were opposed to inflation were the Rock Island Times and Argus, Alton Telegraph, Quincy Herald, Galena Industrial Press, Kewanee Independent, Cairo Gazette, Jacksonville Journal, Illinois State Register, Illinois Staats-Zeitung, and Chicago Union. Among those which disapproved the veto were the Peoria Democrat, Champaign Gazette, Peoria Transcript, Illinois State Journal, Danville Commercial, Rock Island Union, Chicago Inter-Ocean. The Chicago Tribune was strongly opposed to inflation.

⁸ Knox, United States Notes, 104.

⁴ Chicago Tribune, March 5, 1870.

⁵ Ibid., March 14, 1870.

of other states, had adopted the free banking or bond deposit system,⁷ which came to an end, after a life of twenty years, as a result of Civil War vicissitudes. The vacuum created by the abolition of the free state banks of issue was meanwhile being filled by the incorporation of national banks within the state. This system was inaugurated in 1863 and within a year seven national banks were established⁸ in Chicago, Aurora, Cairo, Danville, La Salle, Monmouth, and Rock Island. By 1865 the number was seventy-six and by 1870 it was eighty-one. Their growth was steady but slow, due partly to the high minimum capital of \$50,000, which was too large for the small towns and villages, and partly to political opposition.⁹ The desire of the framers of the act was to substitute national for state banks without deranging the business of the institution or affecting essentially the volume of bank note circulation. Several states-Indiana, New York, Pennsylvania, Rhode Island, New Jersey, and Maine-passed "enabling acts" to facilitate the transformation of state into national institu-But political opposition in Illinois prevented the tions.10 passage of such an act, even though bills for this purpose were at various times introduced in both senate and house.¹¹ The following table shows the growth in the number and resources of the national banks in Illinois:

⁹ Davidson and Stuvé, History of Illinois, 587.

 ¹⁰ Bankers' Magazine, 19: 865, 20: 523.
 ¹¹ Opposition to national banks as such also found expression, especially on the part of those who favored the issue of paper money directly by the governthe part of those who favored the issue of paper money directly by the govern-ment. This, together with the repeal of the national bank act, was urged by a "convention of citizens of Illinois," held in Ottawa, Illinois, September 9, 1867. *Chicago Tribune*, September 10, 1867. Resolutions of similar purport were passed by the democratic convention in the thirteenth (Cairo) congressional dis-trict on August 12 and by the Springfield convention on September 14, 1870. *Ibid.*, August 13, September 15, 1870. After the organization of the greenback party there were a great many indorsements of these principles by farmers' conventions, workingmen's meetings, greenback clubs, and similar groups.

⁷ White, Money and Banking, 340; see also Centennial History of Illinois, 3:93. ⁸ Bankers' Magazine, 18:617.

YEAR	Number	Loans	Deposits	Circulation	Capital	Undivided profits
1863	3	\$ 186	\$ 313		\$ 275	\$ 5
1865	76	12,228	15,783	\$7,495	10,715	832
1870	81	27,821	21,608	10,132	12,770	1,365
1875	146	49,537	28,287	11,414	19,466	1,939
1880	136	45,662	49,392	8,567	14,965	1,874
1885	165	76,966	68,664	6,877	25,424	2,481
1890	192	122,750	102,696	4,821	31,222	5,203

NATIONAL BANKS IN ILLINOIS (000 omitted)

Private banks have always conducted a large part of the banking business of the state, not only in the small towns and villages, but also in the largest cities.¹² It is estimated that in 1860 there were one hundred and twenty-three of these banks in the state, and the number probably did not vary much for several years.¹³

In 1867, the year which witnessed the elimination of the free banks, the legislature organized twenty-five banking institutions by special charter. The powers of these institutions varied greatly; some were commercial banks, while others had savings, or savings and trust, features.¹⁴ In the same session the legislature provided for the incorporation of two loan and trust companies and seventy-two insurance companies.¹⁵ Although banking was specifically prohibited in the charters of several of the insurance companies, they were permitted to borrow and loan money, and later some of them developed into banking institutions.

During the following session (1869) charters were granted by special act to sixty-seven banks, fourteen loan and trust companies, and fifty-six insurance companies. In none of the

¹² Moses and Kirkland, History of Chicago, 1: 530; Knox, History of Banking in the United States, 728.

¹³ Bankers' Magazine, 15: 54, 19: 133, 710.

¹⁴ 2 Laws of 1867, 1:56 ff. ¹⁵ Ibid., 2:98 ff, 277 ff.

charters granted were provisions made for reports by the corporations to any state officer, nor were there any general laws calling for such reports from any banking institutions save the few remaining free banks. Probably many of the charters of the insurance companies were not used for the purpose designated.

One of the most important and most needed clauses adopted by the constitutional convention of 1870 deprived the legislature of the power to pass special legislation. It provided that "no corporation shall be created by special laws, or its charter extended, changed, or amended, except those for charitable, educational, penal or reformatory purposes, which are to be and remain under the patronage and control of the State, but the General Assembly shall provide, by general laws, for the organization of all corporations hereafter to be created." 16

The committee on banks and currency made its report to the convention on April 29, 1870. It is plain that the committee did not have in mind provisions which would facilitate the incorporation of state banks, but that it aimed simply to limit the power of the legislature in case it should wish to enact banking legislation.¹⁷ It is further evident from the report of the committee and from the debates which followed, if they express at all the sentiment of the people, that there was little desire or enthusiasm for state banks.

The report of the committee contained eight separate sections, of which the first five were adopted with very little debate.¹⁸ They provided (1) against any participation by the state in banking enterprises; (2) for the submission of banking laws to the vote of the people; (3) for the individual

¹⁸ Constitution of 1870, article 11, section 1. ¹⁷ Debates and Proceedings of the Constitutional Convention, 2:1553, 1688. 18 Ibid., 1553, 1678.

liability of stockholders in banks for the amount of shares held; (4) against the suspension of specie payments by banks created by the state; and (5) for the publication of quarterly reports by state chartered banks.

The next two sections, providing for the taxation of the paid-up capital of any banking association and of the "capital actually used" by private bankers receiving deposits, raised a question that had been a live one for several years and excited animated debate. Bank shares were taxed in the hands of the owners, but bank capital was exempt. Many felt that under this system banks were not bearing their just share of taxation, and others that the method was unjust. The two sections were finally stricken out on the ground that these matters belonged properly to the committee on revenue.

The last section, which was discussed at considerable length in committee of the whole, may best be given in full:

"Section 8. If a general banking law shall be enacted, it shall provide for the registry and countersigning, by an officer of State, of all bills or paper credit, designed to circulate as money, and require security to the full amount thereof, to be deposited with the State Treasurer in United States or Illinois State stocks, to be rated at ten per cent. below their par value; and in case of a depreciation of said stocks to the amount of ten per cent. on the dollar below par, the bank or banks owning such stocks shall be required to make up said deficiency, by depositing additional stocks. And said law shall also provide for the recording of the names of all stockholders in such corporations, the amount of stock held by each, the time of any transfer, and to whom." From the debate it was apparent that in the minds of many the national banking system was not yet a permanent institution and that provision should be made in the constitution for state banks of issue. It was feared that national banks would soon be abolished because

of the political opposition to them. "National Banks," stated one political faction, "are the great tree of monopoly that has brought forth much bitter fruit. Railroads and Manufacturies are simple branches of it." It was also argued that as the national banking system would expire by the statute of limitations in fourteen years, and in any event when the national debt was paid off, it was desirable to provide a system that would take its place. Those opposed to the section argued that, as the state debt would soon be expunged and as the national debt was being paid off rapidly, the provision that state bank notes should be based on a bond deposit would be void. When the question was finally brought to a vote, the section was adopted;¹⁹ and it was finally ratified by the vote of the people.

Under the new constitution, practically no change was made in existing legislation on banks until the passage of the general banking act of 1887. For almost twenty years the banking business of the state was carried on by national, private, and the comparatively small number of specially chartered state banks. The national banks increased at a healthful rate, chiefly at the expense of the chartered state banks, which decreased in number and played no important part in Illinois banking during this period. The private banks, however, apparently grew in number and influence.

The orderly development of banking in the state was severely disturbed by the great fire in Chicago in 1871. The city's importance as the economic nerve center of an extensive region made it inevitable that its disaster should have wide ramifications; the destruction of approximately \$187,000,000 of capital²⁰ in a distributing point of such significance was

¹⁹ Debates and Proceedings of the Constitutional Convention, 2: 1678 ff. ²⁰ Moses and Kirkland, History of Chicago, 1: 208. A very full account of the fire and all events connected with it is contained in the Chicago Tribune, October 9, 1872, the first anniversary. See also above, p. 29 ff.

bound to be felt more or less directly by the whole country.

Fire insurance companies, of course, were particularly affected. Over \$100,000,000 in risks were carried in the burned district by various companies, and claims when adjusted amounted to over \$90,000,000; of this only about \$38,000,000 was paid at once. Several companies in the east were hard hit; a number compromised their claims, and a great many were forced into the hands of receivers who paid only part of the claims.²¹ Of the Illinois companies involved, many had only a paper basis, having received their charters by the careless legislation of 1867 and 1869,²² and were as a result completely wiped out by the enormous claims which now arose; those which were able to withstand the strain at all could find in their more careful reorganization and in their strengthened financial standing some compensation for the ordeal through which they had passed.

The banks escaped more fortunately than might have been expected. There were in the city at the time eighteen national banks with a combined capital of \$6,550,000 and twelve state and private banks with a combined capital of \$6,950,000. All the bank buildings, with the exception of one which was rendered untenantable, were destroyed; and for a time it was feared that the whole credit machinery of the city would be crippled. But the safes were found in good condition, and the banks speedily found new quarters for their business. They suggested that they pay their creditors by installments, beginning with fifteen per cent; but this precaution was soon found to be unnecessary, for instead of balances being drawn out

²¹ The policyholders of Chicago organized to protect their interests, and ²¹ The policyholders of Chicago organized to protect their interests, and elected a committee consisting of W. F. Coolbaugh, Cyrus Bently, C. B. Farwell, Marshall Field, C. M. Henderson, J. L. Thompson, J. F. Bonfield, John Crerar, and Francis Peabody. *Chicago Tribune*, November 18, 1871.
 ²² The legislature in these two sessions chartered, under special acts, 128 insurance companies of all kinds. *2 Laws of 1867*, 1:98; *Laws of 1869*, 2:495.

deposits were freely made.²³ The total loss on discounted paper resulting from the fire was only \$600,000. By October 17 most of the banks had unconditionally resumed business.

Although during the spring of 1871 there had been some complaint of slow collections in the country districts, owing to the low prices of all agricultural products except wheat and the consequent unwillingness of farmers to sell their products, the movement of the new crops had begun by the end of July, considerably earlier than usual. Consequently, the usual demand for currency for crop moving purposes was felt. New York exchange declined to 75 cents per \$1,000 discount but even at that price could not be obtained in sufficient quantity, and some of the banks ordered currency shipped to them. By October, at the time of the fire, the money paid out to the farmers was already coming back to the banks; and by November, in spite of the temporary interruption, deposits had become so large that the banks were complaining of idle funds. In January, 1872, the condition of the money market was described as "plethoric." 24

These funds, however, could not long be permitted to accumulate in banking institutions. Building operations began almost before the ashes of the fire had cooled and continued until interrupted by the panic of 1873.²⁵ The building trades boomed, real estate rose enormously in value; and many banks, especially savings banks, made large and unwise loans upon speculative values. A branch of the Bank of Montreal was opened in Chicago in order to facilitate credit operations and to attract English capital, which, as had long been the case with eastern capital, saw now the chance to profit by the high

²³ Report of the Comptroller of the Currency, 1872, p. xxiv.
²⁴ Chicago Tribune, June 9, July 31, November 11, 24, 1871, January 15, 1872.
²⁵ "The activity in building is calling every dollar of available capital into use." Ibid., April 1, 1872.

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interest rates prevailing in Chicago and the west generally and sought investment there.26

Although not enjoying a stimulus comparable to that felt by the building trades and a few cognate industries, most other activities recovered within a surprisingly short time. Commerce and trade especially revived quickly, for the demand for necessaries on the part of a population of over one hundred thousand had to be met; and the grain and livestock trades were scarcely affected at all.²⁷ The most severe sufferers were the manufacturing industries, for the machinery destroyed in the fire could not be replaced at once, while loanable capital was needed in the work of rebuilding the burned structures. Nevertheless, reconstruction made steady progress.

This promising industrial revival after the fire was nipped in the bud by the panic of 1873, which everywhere made retrenchment necessary. Not only in Illinois but throughout the United States and even in Europe every department of economic activity was affected in some degree by this financial crash, which came as the logical result of a long period of industrial expansion and inflated credit. The five years preceding the panic had seen remarkable expansion in railway building; the average annual amount of new building in the United States from 1860 to 1868 was 1,499 miles; in the next four years almost 25,000 miles were built. To this total the western states contributed over half, practically doubling their

²⁶ Colbert and Chamberlin, Chicago and the Great Conflagration, 330. Eight per cent was offered in 1871. Chicago Tribune, April 5, 1871. In the fall of 1872 there was a marked stringency; "even on call loans money is not to be had at less than 10 per cent, instead of 8 per cent and 6 per cent, as in times when funds are abundant." Ibid., September 7, 1872. A loan of \$1,000,000 for twenty years at six per cent, secured on some of the best business property of the city, was placed in London this year. ²⁷ Except in so far as an opportunity seems to have been afforded for manipulation by speculators. An oat corner was attempted but collapsed in June, and a similar fate overtook a wheat corner in August. Ibid., June 19-20, and August 23-29, 1872. In 1874 the legislature passed a law prohibiting dealing in futures, which went into effect Iuly 1.

futures, which went into effect July 1.

mileage between 1868 and 1872. The Chicago and Northwestern and the Chicago, Milwaukee, and St. Paul railroads were being extended with particular rapidity. In Illinois the growth of railway mileage between 1860 and 1868 had been only 650 miles; but beginning with 1869, when Illinois had a railway mileage of 4,031 miles, there was a rapid expansion, the mileage in 1872 reaching 6,361 miles.28

Clearly, the building of new railway facilities was proceeding much more rapidly than the population required. The money to finance this construction, which was estimated at \$1,755,000,000 for the five years ending with 1873, or \$351,000,000 annually, had been raised by the sale of bonds abroad and in the domestic money market. In addition, bonds and stocks of states, cities, manufacturing corporations, and mining companies had been floated. Most of these were sold abroad; and when the foreign demand fell off, the bonds of railroads and other enterprises which were in process of construction were forced upon the home market until their negotiation became almost impossible. It was discovered later when the panic came that in many cases the institutions which were the first to go to the wall were heavily involved in financing western railroads.29

This great extension of railway facilities brought about important changes in agricultural, industrial, and commercial organization and production. Not only was a vast amount of capital sunk in improvements, many of which were far in advance of the real needs of the country and which brought

²⁸ Poor, Manual of Railroads, 1873-1874, p. xxvii, xxix. ²⁹ Thus the New York Warehouse and Security Company, a grain and produce house, had financed the Missouri, Kansas and Texas railroad; Kenyon, Cox and Company had indorsed \$1,500,000 of the paper of the Canada Southern railroad; Messrs. Jay Cooke and Company had made large advances to the Northern Pacific railroad; the Union Trust Company had loaned \$1,750,000 to the Lake Shore and Michigan Southern railroad. Commercial and Financial Chronicle, 17: part 2, p. 382.

in but small returns on the capital invested,³⁰ but the opening of such large areas of fertile land and their consequent rapid settlement disturbed the price of grain and revolutionized the status of the farmers. The rapid development of railway construction, moreover, created an unprecedented demand for iron and steel and gave new activity to mining; the development of these basic industries led to overinvestment and was attended by land speculation on a large scale. There seemed to be no limit to the possibilities of successful expansion in the industrial world; profits were large, prices were inflated, optimism ran riot.

The commercial situation, however, was not healthy. For years the United States had been borrowing abroad, first on account of the Civil War and later for the purpose of financing her railways and other industrial undertakings. It is estimated that the total foreign indebtedness incurred by the people of the United States between 1861 and 1868 was \$1,500,000,000.³¹ With the proceeds from the sale of their bonds and other securities they had been buying large amounts of commodities from Europe, as is clearly shown in the large excess of imports during these years. By 1873 the supply of bonds was exhausted, and it became necessary to pay for imports with a corresponding amount of exports, or with gold, or else to restrict importation. Like a spendthrift who appears to be flush as long as he can draw bills on the future, the people of the United States had been expanding their enterprises with borrowed capital and now were called upon to meet their bills. Moreover, this foreign indebtedness had brought with it an annual burden of interest, estimated in 1868 at \$80,000,000, while payment to foreign owned vessels

for freight, expenditures of American travelers abroad, and other items, brought the total annual payments up to about \$130,000,000. To meet these demands it became necessary to export specie, thus seriously disturbing the domestic money market.

The monetary situation, too, contributed its share to the panic. The circulating medium of the country consisted of United States notes (greenbacks) and national bank notes. After the Civil War the policy of retiring the former was begun, but was checked in 1868, when the outstanding issue was \$356,000,000. In 1870 and again in 1871 the secretary of the treasury reissued some of these notes, thus adding to the currency of the country and giving an additional stimulus to speculation, though the notes were soon retired again. But the supply in actual circulation, that is, outside the treasury, was increased from \$314,704,000 in the middle of 1869 to \$346,168,000 in $1872.^{32}$ At the same time the issues of national banks were expanded from \$291,800,000 in 1870 to \$315,500,000 in 1871, and to \$333,500,000 in 1872.

In the expansion of bank credit the Illinois institutions showed a growth even greater than the nation as a whole. This is shown in the following brief table:

Year	Number	Loans	Deposits	Circulation
1869 1870 1871 1872	83 81 110 132	\$32,924 27,821 36,223 43,069	\$18,923 21,608 28,720 32,595	\$ 9,819 10,132 13,644 15,600
1873	134	44,768	32,564	1 5,262

NATIONAL BANKS IN ILLINOIS (000 omitted)

From this table it is seen that deposits and circulation together increased 65 per cent in four years. Here was abun-

³² Noyes, Forty Years of American Finance, 17.

dant stimulation to industrial and commercial expansion, as well as to purely speculative enterprises. It is impossible to present similar statistics for the state and private banks in Illinois, for these were not collected prior to 1873. It is probable, however, that they contributed to the prevailing expansion by the extension of their loans and the corresponding growth of their deposits.³³

Another way in which the prevailing banking practice contributed to bringing on the panic of 1873 was the custom of concentrating the bank reserves in the reserve cities, especially in New York. The country banks were required to hold a reserve of 15 per cent of their deposit liabilities but were permitted to deposit three-fifths of this with banks in the "redemption cities," as they were then called. In all four years between 1869 and 1872 they held far more than the legal requirement; but in 1872 of the \$102,000,000 counted as their reserve \$57,000,000, or considerably more than half, had been deposited with reserve city banks. Their power to withdraw money from the city banks was therefore considerable.

There were two classes of reserve cities. In fifteen cities, banks might become agents of country banks; but the banks of these cities must keep a reserve of 25 per cent of their deposit liabilities. Half of this reserve, however, could be deposited with the banks of the central reserve cities. Until 1887 New York City was the only one in this class, so that this system permitted a serious concentration of reserves in the banks of this one city. In 1872 the fifteen reserve city banks held reserves to the amount of \$79,000,000, but \$33,000,000 of this was deposited in New York City banks, giving these reserve city banks in their turn a large drawing power upon the New York banks.

³³ Report of the Comptroller of the Currency, 1887, 1:228.

The New York City banks in 1872 held reserves of \$65,000,000, or 29.1 per cent of their demand liabilities. While this was above the legal minimum, it cannot be considered sufficient in view of their responsibilities as the final repositories of the bank reserves of the country. They held in this year \$81,000,000 of bankers' balances; fifteen of the fifty New York banks held practically all of this, while seven of them held between 70 or 80 per cent of these deposits.34 Moreover, according to the very careful analysis of their condition given in the report of the national monetary commission by Professor Sprague, it appears that the position of these few banks was by no means a strong one. "It is clear, then," he wrote, "that with this situation in New York an emergency would cause serious disturbance if it should lead to the withdrawal of any considerable amount of money by the outside banks, and there could not be the slightest doubt that this would be done or at least attempted." 35

One of the reasons for the concentration of bankers' deposits in New York was the payment of interest, running as high as four per cent, on such deposits by some of the banks in that city, among which the seven mentioned above were numbered. This had at least two very undesirable consequences. It caused outside bankers to send money to New York in order to earn something on their deposits while still counting them as reserves; and it forced the New York banks, in order to pay this interest, to keep their reserves unduly low and to loan their accumulated funds on call.³⁶ The only

⁸⁴ Sprague, History of Crises under the National Banking System, 15. ⁸⁵ Ibid., 18.

⁸⁶ "The prevailing practice, not only of national banks, but of State banks and private bankers, of paying interest on deposits attracts currency from all parts of the country to the large cities, and especially to New York, the great financial centre. At seasons of the year when there is comparatively little use for currency elsewhere, immense balances accumulate in New York, where, not being required by the demands of legitimate and ordinary business, they are loaned on

people who borrowed from the banks in this way were speculators on the stock exchange. There was thus established a close connection between the bank reserves of the country and stock exchange dealings.

But the evils resulting from the payment of interest upon deposits were by no means confined to the New York banks, or even to those of the reserve cities. "It may be safely said that this custom, which prevails in almost every city and village of the union, has done more than any other to demoralize the business of banking. State banks, private bankers, and associations under the guise of savings banks, everywhere, offer rates of interest upon deposits which cannot safely be paid by those engaged in legitimate business." 37

Every year the interior banks withdrew money from the reserve cities for the purpose of moving the crops. In 1873 this movement began early in September and resulted in a withdrawal by interior banks of their deposits in New York City, which in turn resulted in a contraction of loans. In the third week of this month the whole house of cards fell in ruin. The New York banks were unable to stand up under the strain imposed upon them and many of them failed. The excitement and general distrust which followed the first suspensions caused a general and rapid calling in of loans; this in turn pre-

call at a higher rate of interest than that paid to depositors and are used in speculation.

"Every year, at the season when the demand sets in from the West and South for currency to be used in payment for and transportation of their agricultural products, there occurs a stringency in the money market arising from the calling in of such loans to meet this demand.

" Until this year, though annually creating some embarrassment, this demand

"Until this year, though annually creating some embarrassment, this demand has been met without serious difficulty. . . . "This year there was a great demand for currency to pay for the heavy crops of a bountiful harvest, for which the European countries offered a ready market. The suspension of certain large banking houses, the first of which occurred on the 18th day of September, alarmed the people as to the safety of banks and banking institutions in general. Suddenly there began a rapid calling in of demand loans and a very general run on the banks for the withdrawal of demonstration of the Secret of the Secret and the Treature 1872 period. deposits." Report of the Secretary of the Treasury, 1873, p. xi-xii, 92.

37 Ibid., 95-96.

cipitated the failure of other houses. There was a great fall in the prices of stocks, runs on some of the banks occurred, and a general feeling of distrust and panic grew up. On September 20 the New York Stock Exchange was closed, to remain so for ten days.

Relief was brought to the financial community in two ways. The federal government purchased bonds to the amount of \$12,000,000 and exchanged \$17,000,000 of currency for certificates of deposit held by the banks. By January, 1874, the government had purchased \$26,000,000 of bonds with legal-tender notes. This action, however, had little effect in staying the course of the panic, as it was "tardy, timid, and insufficient."³⁸

More important in lessening the demands upon the banks for cash was the issue of clearing house certificates. These were issued by the New York banks to a total amount of \$26,505,000, beginning with \$10,000,000 on September 22 and continuing until January 14, 1874, the date of their final cancellation.³⁹ By thus pooling their reserves the New York banks were enabled to devote their energies to meeting the demands of the interior banks. Liberal remittances were sent to Chicago and to other centers. But the drain was more than they could stand, and on September 24 a partial suspension of specie payments was declared. This was followed by a premium on currency in terms of certified checks and clearing house certificates, amounting to about four per cent on September 30.⁴⁰ Foreign exchange rates went up and a temporary blockade set in.

The worst effects of this were felt in the grain and produce markets. In Chicago it was reported that "the shipping

³⁸ Kinley, The Independent Treasury of the United States and Its Relations to the Banks of the Country, 201.

⁸⁹ Conant, History of Modern Banks of Issue, 656.

⁴⁰ Chicago Tribune, September 24, 30, 1873.

movement was partially paralyzed by the news from New York that sterling exchange was unnegotiable."⁴¹ The movement of wheat and meat products to the Atlantic ports fell off, and in consequence the elevators and stock yards became crowded to their utmost capacity, and shipments from primary markets were necessarily refused by the railroads. The price of wheat fell sharply—from \$1.13 on September 19 to 90 cents on September 24. The following week foreign exchange dealings were resumed, and shipments were renewed, bringing a rise in the price of wheat, which sold above \$1.00 on September 29.

The suspension in New York was quickly followed by similar action in most of the secondary money centers. When the New York banks failed to respond to the demands of their correspondents, these in turn were not able to meet the demands of their correspondents. Exchange on New York, which would otherwise have commanded a slight premium, was at a discount and to a considerable extent unavailable. In Boston, Philadelphia, Baltimore, Washington, New Orleans, Cincinnati, and St. Louis the issue of clearing house loan certificates, and at the same time the use of certified checks, payable through the clearing house, were sanctioned as a measure of relief.⁴²

The Chicago banks declined to resort to the issue of loan certificates, thereby drawing upon themselves considerable criticism. The situation was never so serious in this city as in the east, however, and the need of clearing house certificates was not so pressing. The banks were able to effect all clearances with currency; and at a meeting of the bankers in the Clearing House Association to consider the question of issuing clearing house certificates, a motion was adopted, by a decisive vote of twelve to four, declaring that under the circumstances it was "inexpedient to issue any Clearing-House certificates."⁴³

Whatever may have been the situation elsewhere, there is no doubt that the condition was improving daily in Chicago. In the first place, and most important in the money stringency which always accompanies a panic, a steady stream of currency was flowing into the city. On Wednesday, September 24, receipts by express of about \$500,000 were reported, and as much the following day. After this the daily inflow rose to \$2,000,000 and then to \$3,000,000, so that for the week ending Thursday, October 2, a total of \$16,165,000 had been received through the express companies alone. "In addition to this," said an editorial in the Chicago Tribune, "there were several persons reached Chicago yesterday to purchase grain, especially barley, at the reduced prices: each of these persons brought his currency with him. Brewers and distillers who can command the money are making the best of the market by cash purchases." ⁴⁴ It was estimated that currency to the amount of \$250,000 was brought into the city in this way on that single day.

This large movement of currency into Chicago, it may be said, was a normal one and would have occurred in even larger measure if the panic had not interrupted it. The crops had already begun to move eastward and were being paid for in cash. The Chicago bankers therefore occupied a strategic position, as eastern buyers had to secure the grain and remit cash for it. Indeed, as one writer put it, "if we demand diamonds and rubies for what we have to sell, we shall get

⁴³ Chicago Tribune, September 26, 27, 28, 1873. The action of the meeting was commended by the Tribune: "not to adopt the loan certificate plan in vogue in New York, which is simply a system of requiring the creditor banks at the Clearing-House to take their balances in the bills receivable of the debtor banks at 4 per cent discount instead of taking them in greenbacks." ⁴⁴ Ibid., September 27, 1873. them."⁴⁵ The crops had been very large, and in consequence the demand for currency in the east had been heavy for several weeks prior to the panic. Indeed, the unusual abundance of the crops made the situation more difficult.

The Chicago banks were able to weather the storm for several days, but on the morning of Friday, September 26. five national banks were forced to suspend. These were the Union, the Cook County, the Second, the Manufacturers, and the Bank of Commerce; and these were followed two days later by the Third National. The Union National and the Cook County National resumed business on Monday, September 29; but the former was forced the following day to go into liquidation. The suspension of this bank gave a greater shock to confidence, not only in Chicago, but throughout the west, than any other incident connected with the panic. In one respect, however, the failure of this bank helped to relieve the drain for currency from Chicago, for it had held probably one-third of the country bank deposits in the city, and the country demand was now reduced by that much.46

Notwithstanding the strong position of the Illinois banks as a whole, the lack of currency brought about in the state a partial suspension of cash payments which was apparently only a little less general than in the east. On September 24 the Clearing House Association in Chicago voted to recommend the suspension of currency payments on any large demands made upon the banks either from the country banks or over the counters. Similar action was reported from Bloomington, Peoria, and Danville, where it was decided to pay only small checks in currency, giving certified checks, if desired, for the balance. There was, however, great diversity of opinion as to what constituted a "small check;" some banks paid \$25, some \$1,000, and others 25 or 30 per cent of a depositor's account.⁴⁷

A complicating factor was hoarding on the part of individuals; this seems to have continued until about the middle of October, after which it was less appreciable. A far more serious cause of disturbance from the suspension of payments was the dislocation of the domestic exchanges. In making payments at a distance local substitutes for money will not serve, and the failure of some banks to remit cash to other banks for drafts and checks sent to them soon brought business to a standstill. In Chicago the exchanges were completely blocked for a few days, and serious derangement continued for a longer period.

"The effect of the financial panic on the transportation business has been very serious," said the *New York Tribune*, "railroad freight on all the principal lines from New York to the West has fallen off since the beginning of the panic from 25 to 50 per cent. . . . The eastern-bound freight, which consists mainly of grain, has not been so seriously affected as yet, but unless western buyers, who are compelled to pay greenbacks to the farmers for grain, are supplied by the banks with something besides certified checks, they say that the movement of produce eastward will soon cease."

During the progress of the panic and afterwards the loans of the banks throughout the country were contracted, both on the part of the reserve city banks and of the country banks. The most severe contraction among city banks was in Chicago, where loans were reduced from \$25,300,000 on September 12 to \$19,000,000 on October 13; they were at the latter figure on November 1. By some writers this was attributed to the re-

⁴⁷ Chicago Tribune, September 25, 26, 27, 1873. When this action was taken the Chicago Times announced in flaming headlines that all the banks in Chicago had suspended, a statement which did much to increase the panic and induce a run on the banks by country banks and depositors.

fusal of the Chicago banks to issue clearing house certificates.48

Although complete data are lacking, it is possible to get a fairly clear picture of the situation in Illinois during this period. For the western states in general the following table shows the movement of the principal items:

Date	Loan s	Circulation	Deposits \$92,856,762 75,541,162 70,772,060	
September 12 October 13 November 1	116,833,970	\$59,659,474 60,253,336 60,475,600		
Date	Due from redeeming agents	Legal- tenders	Specie	
September 12 October 13 November 1	8,029,701	\$14,085,011 16,341,748 16,199,236	\$246,003 217,680 275,521	

CONDITION OF COUNTRY BANKS IN WESTERN STATES, 1873"

It is evident that loans were contracted about 10 per cent between September 12 and November 1; that deposits fell off about 24 per cent; and that while there was only a slight increase in the reserve, the ratio of reserve to liabilities rose considerably, so that the banks were in a relatively stronger position at the latter date than at the former. But this safety was secured in part by a curtailment of loans, and in even larger measure by recalling their balances from the reserve city banks, the amount due them being reduced from \$18,000,000 on September 12 to \$8,000,000 on November 1.

⁴⁸ Report of the Comptroller of the Currency, 1873, p. 142. ⁴⁹ The following states are included: Ohio, Indiana, Illinois, Michigan, Wisconsin, Iowa, Minnesota, Kansas, and Nebraska. The date of September 12 was that of the regular report of the national banks; special reports were called for on October 13, the day on which the New York city banks held the smallest amount of legal-tender notes during the crisis, and on November 1, the day on which the banks resumed currency payments. Report of the Comptroller of the Currency, 1873, p. 94.

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It is impossible to present as complete data for Illinois banks alone, but the following tables show the amount and character of the reserves held at the specified dates by the national banks in the state and in Chicago:

Date	Number of banks	Liabilities to be pro- tected by reserve	Reserve required, 15% of liabilities	Reserve held	Fer cent of reserve to liabilities	Cash	Due from redeeming agents
September 12. October 13 November 1	116		3,545,538	5,543,677	23.5		\$3,838,853 2,642,425 2,630,350

RESERVES OF ILLINOIS NATIONAL BANKS, 1873 50

RESERVES OF CHICAGO NATIONAL BANKS, 1873 51

Date	Number of banks	Liabilities to be pro- tected by reserve	Reserve required, 25% of liabilities	Reserv e held	Per cent of reserve to liabilities	Cash	Due from redceming agents
September 12. October 13 November 1	18 18 18		6,262,888	\$8,814,904 8,243,366 7,775,913	32.9	\$5,236,282 5,444,986 5,324,392	2,798,380

The significant point in both these tables is the fact that while the percentage of their liabilities held as a reserve was always well above the legal requirement, especially in the case of the country banks, yet the character of the major part of this reserve was such as to occasion trouble the moment the banks tried to bring it into their own hands. Almost 60 per cent of the reserves of the country banks on September 12 consisted of balances due them, so that their actual reserves on hand, instead of being 24 per cent, were only 9.1 per cent of their liabilities.

The per cent of reserve to liabilities held by the Chicago

⁵⁰ Report of the Comptroller of the Currency, 1873, p. 130. ⁵¹ Ibid., 142. banks, 29.4, was the lowest, with three exceptions, reported at any quarterly period within the past six years, and even of this small percentage over three-fifths was in the form of sums due them from other banks. Their actual cash reserve on hand on September 12, a week before the beginning of the panic, was only 17.4 per cent instead of 25 per cent. As a result of this situation the Chicago banks were compelled to strengthen their reserves, first, by calling in their deposits from the New York banks (over \$1,000,000 being secured in this way between September 12 and November 1), and second, by contracting their loans, the principal effect of which was to reduce their liabilities in the form of deposits.⁵² This meant the denial in many instances of needed accommodation to their customers. The practice of permitting the national banks to count as part of their legal reserve sums deposited in other banks, with the resulting concentration of reserves in New York City, here brought about its logical consequences.

The effects of the panic did not cease with the banks, but reached all other lines of activity. Railway construction fell off rapidly. In Illinois the high water mark for fifteen years was reached in 1871 with 1,197 miles; this declined to 170 in 1874, and after a temporary revival in 1875 fell off again until in 1877 only 59 miles of new road were built—the smallest amount in a decade. In sympathy with the cessation of railroad building the production of iron and steel declined. This greatly depressed prices; blast furnaces, rolling mills, machine shops, and foundries ceased work; and many men were thrown out of employment. The consumption of pig iron

⁵² Report of the Comptroller of the Currency, 1873, p. 134-135. "The resumption of discounts has been, in one sense, very limited. A large portion of the paper which has fallen due during the last fortnight has been paid only in part. . . This overdue or partly paid paper has been renewed or extended. There have been discounts in a few cases of entirely new paper, and at notes not exceeding ten per cent on short time, the collaterals being local securities of established values." Chicago Tribune, October 3, 1873.

— which is the best measure of the aggregate iron industry fell off from 2,500,000 tons in 1874 to 1,090,000 tons in 1876 for the United States as a whole; for Illinois the corresponding figures were 37,946 in 1874 and 54,168 in 1876. The price of bar iron fell from \$96 a ton in January, 1873, to \$40 in January, 1879, which is equivalent to a drop of one-half even after making allowance for the resumption of specie payments in the latter year.

The agricultural interests of the state also suffered. It was estimated by the Illinois state board of agriculture⁵³ that the corn crop yielded a profit to the farmers of the state in only one of the seven years 1872–1878; this was in 1875, when there was a combination of large yield with good prices. The crop of 1874 was the smallest during this decade, and though prices were high the returns to the farmer were insufficient. In other lines good crops were secured in 1874, 1875, and 1876; but this was partially neutralized, so far as the producers were concerned, by a considerable decline in prices. The prices for wheat to Illinois farmers during the years 1874, 1875, and 1876 were the lowest since 1870.

After the first stages of the crisis had run their course and liquidation had taken place, a long period of depression ensued. Large amounts of idle currency accumulated in the banks, prices were low, profits small, and few new enterprises were begun. Rigid economy was practiced by all, both from lack of means and by reason of timidity. The year 1876 began auspiciously, but the excitement of the election checked business transactions in the closing months.⁵⁴ The prices of corn and wheat remained fairly steady. The following year witnessed a considerable increase in the price of wheat, which, coupled with abundant harvests, added largely to the wealth of the

⁵³ Statistical Report of the Illinois State Board of Agriculture, 1916, p. 5. ⁵⁴ Bankers' Magazine, 28:394, 29:398; Financial Review, 1877, p. 1, 1878, p. 1.

farmers; the price of corn, however, still remained low and did not recover until 1879. The disastrous railroad strikes in July, 1877, and the agitation of the silver question by congress in the fall prevented the manufacturing, mercantile, and banking businesses from expanding.

In 1877 there occurred in Chicago the so-called "savings bank crash." It is estimated that in 1872 there were in Chicago eighteen savings banks with deposits of \$12,013,000;55 most of them were commercial banks, state or private, which carried on the savings business as a subordinate branch. exposing it, accordingly, to all the risks of ordinary banking. Some eight banks failed: the Merchants', Farmers', and Mechanics' Savings Bank,⁵⁶ the Fidelity Savings Bank, the Third National, the Central National, the German National, the German Savings Bank, Henry Greenebaum and Company, and the German-American Savings Bank.57

The cause of the failure of these savings banks can in part be traced back to the panic of 1873, as their deposits were invested largely in Chicago real estate, which shrank greatly in value during the succeeding years. Overloans and general mismanagement, however, were also responsible. The shock to public confidence as a result of these failures, involving as they did the savings of artisans, mechanics, and laborers,58 destroyed for many years the usefulness of savings institutions in Chicago.

In consequence, the savings of the people were diverted into another type of savings institution, which became very popular in Illinois, namely, building and loan associations. The

⁵⁵ Moses and Kirkland, *History of Chicago*, 1:530. ⁵⁰ This bank made a particularly discreditable showing, having been looted by the president and cashier so that it could pay only ten per cent of the deposits to the depositors.

⁵⁷ Industrial Chicago, 4:180; Chicago Banker, 1:271; Chicago Tribune, September 14, 1877.

⁵⁸ Ibid., September 14, 1877.

first association of this type in Chicago was incorporated in 1869, but not until the passage in 1879 of the law governing them were any considerable number organized.⁵⁹ After 1883 their growth was very rapid throughout the state.

Reforms in the laws governing banking were demanded throughout this period. A bill was introduced in the legislature in 1874 providing for the organization of state banks on the same general lines as national banks, with the addition of a trust feature, but it met with the vigorous opposition of the presidents and other officials of the State Savings and the Fidelity banks of Chicago, who secured its defeat.⁶⁰ In his message of January, 1875, the governor urged the passage of a banking law; and the Bogue bill, introduced in the ensuing session of the legislature, called for quarterly statements from banks organized under state charter; but no action was taken, and the bank system of the state continued to be "one of almost complete irresponsibility." 61

Postal savings banks were urged in order to provide safe depositories for the savings of the working people and, after the savings bank failures, a demand was made for a savings bank law; but for a decade no law was passed to provide for the organization of such institutions. In 1887, however, the general assembly passed a savings bank act,62 the chief provisions of which may be summarized as follows:

Any thirteen persons or more, citizens of the state, twothirds of whom should reside in the county where the proposed society was to be located, could organize a savings bank. The trustees were to own unincumbered real estate worth in the aggregate at least \$100,000, situated in the county where such

⁵⁹ Moses and Kirkland, *History of Chicago*, 1:531. ⁶⁰ Industrial Chicago, 4:186. The failure of both these banks within three years made clear the reason for their desire to be free from supervision.

⁶¹ Chicago Tribune, January 11, 14, 1875. ⁶² Laws of 1887, p. 77 ff.

society was to be established. No trustee could accept pay for his services or borrow from the bank. The deposits were to be invested only in the following securities: (1) stocks or bonds of the United States; (2) of the state of Illinois; (3) of any other state which had not within three years defaulted in the payment of principal or interest; (4) of any city, county, town, or village of Illinois; (5) of any city or county in the New England states or New York, New Jersey, Pennsylvania, Ohio, Indiana, Michigan, Iowa, Missouri, Kansas, Nebraska, Wisconsin, or Minnesota; (6) in the stocks of any national bank or state bank or trust company chartered in Illinois; (7) in the mortgage bonds of any railroad company of approved credit located in any of the states aforesaid; (8) in bonds or notes and mortgages on unincumbered real estate located in any of the states aforesaid, worth at least twice the amount loaned thereon; (9) in real estate for the transaction of its own business or upon foreclosure of mortgages held by it.

The aggregate amount received as deposit from any one person was limited to \$3,000. Banking powers of discount were prohibited, and provision was made for annual reports and for biennial examination by the superintendent of banking.

Two savings banks, the Decatur Mutual Savings Association and the Chicago Society for Savings,63 were organized under this act in the next two years. But before the usefulness of the act could fairly be tested it was declared unconstitutional on the ground that it had not been submitted to a vote of the people, as required by the constitution. Since the act had prohibited these associations from exercising ordinary banking powers, the legislature had not considered this a banking act.64

⁴³ Report of the Auditor of Public Accounts, 1888, p. xii. ⁶⁴ Reed et al. v. People ex rel., 125 Illinois, 592. Governor Oglesby con-sidered vetoing the bill because no provision was made for its submission to the people, but finally decided this was not necessary. Chicago Tribune, May 15, 33, 1887.

No provisions for the organization of savings banks have since that time been passed in Illinois, and few institutions which are devoted solely to that purpose exist in the state.

Very little actual legislation affecting banking found a place on the statute books between the adoption of the constitution and the passage of the general bank act in 1887. By an act of 1875 foreign corporations were authorized to loan money in the state and to take real estate as security for such loans, but they were specifically prohibited from exercising banking powers and privileges. In 1879 greater protection to depositors was provided by a law making the receiving of deposits by any bank officer, after the actual insolvency of the bank, an act of embezzlement; and the converting of a bank's funds to the private use of any bank officer, larceny. This was aimed against abuses which had characterized the bank failures in 1877. At the same time savings banks were forbidden to become liable as guarantors.⁶⁵

⁰⁵ Laws of 1875, p. 65; 1879, p. 113 ff.

XIII. FINANCIAL PROBLEMS, 1878–1893

THE year 1878 marked the end of the long depression which had followed the panic of 1873, and ushered in a remarkable trade revival which was felt throughout the whole country, and not least in Illinois. Unusually large crops in 1877 gave the first presage of returning prosperity; and the repetition of bountiful harvests in the next few years breathed new life into the whole structure of business, especially as a lighter crop than usual in Europe in 1879 and following years created a strong demand for grain for export, and so maintained prices on a high level.¹ Of the prosperity resulting from this remarkable combination of circumstances Illinois enjoyed her full share.²

The corn crop of 1879 was 305,913,377 bushels, a record which has but rarely been surpassed since; and the wheat crops of 1879, 1880, and 1882 were the three largest in the history of the state.³ The total value of cereal crops

¹ The prices of corn and wheat at the end of 1878, when the European harvests were good, had fallen to the lowest point they had reached in the decade. *Financial Review*, 1879, p. 2. The price of corn to the Illinois farmer was twenty-two cents a bushel, while that of wheat was only eighty cents. *Statistical Report of the Illinois State Board of Agriculture*, August 1, 1915, p. 4, December 1, 1915, p. 5.

December 1, 1915, p. 5. ² "Mr. Chairman Wright, of the depression committee, frankly confesses to having seen and heard much that astonished him in Chicago, and to having been thoroughly impressed with the truth of the statements of the manufacturers and business men regarding the marked increase of general prosperity that has been visible in this city for more than a year past. He found things he did not expect to see, such as a community of men engaged in mammoth manufacturing and mercantile operations who paid cash for what they bought and required cash for what they made or sold, and who declared that there was an abundance of money with which to carry on their business; and he failed to find there a city full of starving mechanics and workingmen unable to find employment." Chicago Tribune, August 2, 1879.

³ The figures are: 1879, 45,417,661 bushels; 1880, 56,508,409 bushels; 1882, 52,323,261 bushels. For the crop of 1881, see note 9.

increased from \$520,000,000 in the half decade 1870-1874 to \$630,000,000 in the period of 1875-1879, and to \$690,000,000 in the following five years. The effect of these large crops was to stimulate industrial, commercial, and financial undertakings along all lines; a "boom" period was ushered in which continued until checked by the panic of 1884.

Railroad earnings rose at once⁴ and gave impetus to new building; the mileage in the state increased steadily from 7,570 miles in 1879 to 8,909 in 1884.5 While in other parts of the country the large earnings led to stock watering by the declaration of stock dividends,6 this seems not to have occurred to such a large extent in Illinois, as the capitalization of the railroads in the state for the two years 1879 and 1880 remained the same --- \$231,000,000. In the half decade 1879-1884, however, the mileage of the roads increased only 18 per cent while the capital stock increased 40 per cent,⁷ which suggests that the gain in earning power was ultimately capitalized.

It was but natural that speculation should be a concomitant of the new prosperity. One of the most disastrous ventures was the attempt by J. Keene and others to corner the Chicago wheat market in 1880. The corner finally broke with large loss to the people concerned; and the price of wheat declined

⁴ The amount paid out in interest and dividends by the railways of Illinois was \$17,053,730 in 1878 and \$24,986,503 in 1879. Poor, Manual of Railroads,

^{1879,} p. vii, 1880, p. vii. ⁵ The figures as to the growth of railroad mileage in Illinois do not adequately indicate the changes which were making Chicago the great distributing center of the west, for the greatest growth was taking place in those railroads which lay outside the state of Illinois, but were tributary to Chicago. The most prominent corporations which were largely increasing their mileage during this period were the Chicago and Northwestern, with a total mileage at the close of period were the Chicago and Northwestern, with a total mileage at the close of the year 1880 of about 2,800; the Chicago, Milwaukee, and St. Paul, with 3,700; and the Chicago, Burlington, and Quincy, with 2,800. These companies watered their stock largely during this period. Thus in 1880 the Chicago, Rock Island, and Pacific Company doubled its stock through a "scrip dividend" of one hundred per cent; the Chicago, Burlington, and Quincy issued a twenty-eight per cent stock dividend. Noyes, Forty Years of American Finance, 64-65. ⁶ Financial Review, 1881, p. 1. ⁷ Poor, Manual of Railroads, 1880-1885, passim.

sharply, from \$1.59 per bushel in January to \$1.03 in September. More successful was the effort of Armour and Company of Chicago to corner pork; after controlling the whole market supply of the country for some months, this ring closed out with a large profit in the autumn.8

The following year, 1881, speculation in breadstuffs was especially flagrant. Taking our short crops and the small stocks in Europe as a basis for their operations, the speculators in Chicago seized the markets in August and from then until November held control of them, crowding up the prices of wheat and corn to such a point that exports were seriously checked and stocks accumulated. In November and December the usual decline from such an artificial movement followed, resulting in loss to many who had been engaged in it.9

In spite of the excesses of speculators, however, the closing years of the decade were years of really solid prosperity. The best evidence of this is afforded by that faithful indicator of commercial conditions, the record of business failures.¹⁰ The year 1880 as the low water mark was in all respects regarded as a record-breaking era of prosperity.¹¹

⁸ Financial Review, 1881, p. 1, 2. ⁹ The wheat crop in Illinois was a disastrous failure in 1881, averaging only seven and one-third bushels to the acre and yielding 22,374,163 bushels, as against 56,508,409 bushels for 1880. This was the smallest harvest in twenty years. While the small yield was compensated for in a measure by higher prices — \$1.07 per bushel in 1881 and 82 cents in 1880 — the total value was only about half as much as for the preceding or for the following year. The corn crop in 1880 was fair, but in 1881 was a decided failure, only four years between that date and 1915 showing a smaller yield. In 1879 the number of bushels produced was 305,913,377; in 1880 it was 250,697,036; and in 1881 it was 174,491,706. The high prices obtained for the small crop of 1881, however, made the total value nearly equal to that of the year 1879. Statistical Report of the Illinois State Board of Agriculture, August 1, 1915, p. 4, December 1, 1915, p. 5; Financial Review, 1882, p. 1.

10 See appendix, p. 494.

11 "Perhaps there has never been a more satisfactory or prosperous year in the career of any nation than the last year has been for the American people. The peculiar merit of this prosperity was its genuineness and substantiality; it was not wildly illusive as was the apparent prosperity of the years following the War and preceding the panic. . . The influx of foreign labor has certainly exerted a salutary and important influence in discouraging strikes, lock-outs, and

With the year 1882 came a slackening of speed in the business world, and the following year was one of steadily increasing depression in commercial and financial affairs, culminating in the panic of 1884. In Chicago, however, the large liabilities of 1883 made that year more serious than the year of the panic itself. Bank clearings, which are a fair index of business prosperity, in 1884 fell off ten per cent from the total of the previous twelve months.¹² A run of minor importance was made upon some of the Chicago banks, but it was without serious consequences. There were no national bank failures in Chicago and only two in the state,¹³ due to a general shrinkage of values which occurred not only in Illinois, but throughout the country.¹⁴

The year 1885 showed a quick recovery from the temporary depression, for business was sound at bottom. Except for the almost complete failure of the wheat crop, conditions in Illinois were healthy.¹⁵ The upward movement continued during the next few years, though it was interrupted by the switchmen's strike in Chicago in 1886 and other labor troubles of that year, and in 1887 by the attempted corner in wheat carried on by Chicago and California cliques.

These were hard years, however, for Illinois farmers, for the rapid settlement of the western lands was glutting the

other labor disturbances which might have occurred if there had been a scarcity in the supply of labor. . . Railroad-building has received a remarkable impetus during the past year. . . The growth of manufactures has kept pace with the extension of the railroads. Far more coal has been mined and iron and steel made than in any previous year. . . . We would be safe in saying that the amount of building has been 50 per cent greater than any year since the panic." *Chicago Tribune*, January 1, 1881.

12 Industrial Chicago, 4: 181.

¹³ These were the First National of Monmouth and the Farmers' National of Bushnell. Report of the Comptroller of the Currency, 1914, 2:114.

¹⁴ Ibid., 1884, p. 40.

¹⁵ The average yield per acre of wheat was only seven bushels in 1885, the smallest in the history of the state since 1860. The total yield was only 8,299,243, the smallest between 1860 and 1915 with one exception. Statistical Report of the Illinois State Board of Agriculture, August 1, 1915, p. 4.

markets with an enormous amount of grain. In 1889 the price of corn in Illinois was only 23 cents, the lowest point it had reached in ten years, the lowest in fact with one exception in twenty-five years. The price of wheat to the Illinois farmer, after the failure of the pool in 1887, fell to 65 cents a bushel, which was the lowest price since 1860¹⁶ and was not reached again until 1893. It was in general a period of falling prices, which affected adversely industrial and commercial enterprises.

The growth of mortgage indebtedness may sometimes be interpreted optimistically as an indication of hopefulness and energy which make it desirable to mortgage the future for the sake of immediate improvements which will yield a larger return. During this period, however, the increase in the mortgage indebtedness of Illinois farmers must be regarded as a sign of depression and of a severe struggle against adverse conditions.

Year	Number of mortgages	Number of acres mortgaged	Amount of mortgages	Fer cent for loans	Per cent for deferred payments	Average interest rate	Average duration
1870	69,931	6,609,673	\$125,337,391	61.5	38.5	9.4	3.1
1880	82,150	7,048,322	112,367,054	76.6	23.4	7.6	3.5
1887	92,777	8,082,794	147,320,054	80.0	20.0	6.9	3.8

MORTGAGES ON ILLINOIS FARMS, 1870-1887 17

As the table shows, the number of mortgages and the number of acres of farm land under mortgage increased steadily between 1870 and 1880. The decline in the value of the mortgage indebtedness was due to a decrease of \$19,000,000 in the farm mortgages in Cook county, resulting possibly from the transfer of this land to the category of town lots or city property. During the eighties the increase in all three of these items was especially rapid, and this must

¹⁶ Chicago Tribune, June 15, 1887.
 ¹⁷ Report of the Bureau of Labor Statistics of Illinois, 1888, part 1.

be attributed to the severe agricultural depression of this period, which resulted from the opening up of the northwest and the consequent fall in the price of grain. This view is borne out by the fact that a larger proportion of the mortgages was for loans and a smaller percentage for deferred payments on the land. The only bright feature in the table is the decline in interest rates, but this may be interpreted in part as a sign of stagnant enterprise and idle money in the banks.

It will also be noted that the foreclosures of mortgages increased fifty per cent between 1880 and 1887. In the former year the number of farm mortgages foreclosed in Illinois was 810, with a total valuation of \$1,204,598; and in the latter year it was 1,223 with a value of \$1,892,535.¹⁸ Most of the mortgages were executed in the northern and central divisions of the state. Only a small proportion was held by nonresidents of the state, most of whom lived in Connecticut, New York, and Wisconsin.

The year 1891 witnessed a repetition, on a smaller scale, of the combination of circumstances which had made 1879 such a fortunate one for the farmers—the unusual combination of an immense wheat crop in the United States coupled with a famine in Russia and partial crop failure in France, leading to very high prices.¹⁹ The stimulus thus given to general manufacturing and mercantile business was felt throughout the year 1892 in improved conditions, and this year was singularly free from any great or unexpected disasters in the business or financial world. Unfortunately, however, the panic of the next year was to prove that this was merely the calm before a storm.²⁰

¹⁸ Report of the Bureau of Labor Statistics of Illinois, 1890, p. 206.

¹⁹ Financial Review, 1893, p. 3.

²⁰ The panic of 1893 is discussed in Centennial History of Illinois, 5: 394-420.

To revert to the developments in banking, there is to be noted as the most important event the passage of the state bank act of 1887. This was the first general act on this subject which had been passed since the adoption of the constitution in 1870, and, with a few amendments, is the present state banking law. The more important provisions of this act are as follows:²¹ Any association of persons desiring to organize a bank under the provisions of this act is to apply to the auditor for permission. If he is satisfied after a thorough examination, he may give the association a certificate authorizing it to commence the business. Double liability of stockholders is provided for; reports are to be called for once every three months; and an annual examination of the bank is to be made by the auditor. Banks are forbidden to own real estate, except the banking premises. Not more than one-tenth of the paid-in capital may be loaned to any one individual or firm. The capital stock must be not less than \$25,000 in towns of less than 5,000 inhabitants, and \$50,000 in those of 10,000 inhabitants. All corporations with banking powers existing by virtue of special charters were made subject to the provisions of the act.22

²¹ Laws of 1887, p. 89 ff. ²² Report of the Auditor of Public Accounts, 1890, 1: xiii ff.; Laws of 1887, p. 89 ff. The auditor ascertained that twenty-six banks of this sort were operating in the state, as follows:

Name	Location	Capital
Alton Savings BankA	lton	\$100,000
Bank of IllinoisC	hicago	100,000
Belleville Savings BankBe	elleville	I 50,000
Chicago Trust and Savings BankChicago Trust and Savings Bank	hicago	3 50,000
Corn Exchange Bank of Chicago	hicago	1,000,000
Dime Savings BankCl	hicago	69,475
Enterprise Savings BankC	airo	50,000
Home Savings BankC		5,000
Illinois Trust and Savings BankC	hicago	1,000,000
International BankC	hicago	486,000
Northwestern Bond and Trust CompanyCl	hicago	100,000
People's Bank of RockfordRo	ockford	125,000
Pullman Loan and Savings BankPu	ullman	100,000
Springfield Marine BankSp	pringfield	85,500

After the act had been submitted to a vote of the people and ratified, it was discovered that by error no provision had been made for the establishment of banks in cities of over 10,000 inhabitants.²³ An amendment the next year, accordingly, provided that banks could be organized in cities of 10,000 to 50,000 inhabitants with a minimum capital of \$100,000, and in cities of over 50,000 inhabitants with a capital of at least \$200,000. Another amendment provided that each director must hold in his own name at least ten one hundred dollar shares of stock of the bank in which he was director.²⁴

An adequate state banking law had long been needed in the state, and much interest was manifested in the new system.²⁵ The *Chicago Economist* commented on the situation as follows: "The law will have a great influence on the financial and commercial affairs of the State. . . The National banks now have a great lead, and will hold their prestige for a long time yet unquestionably, but the very basis of their existence is threatened by the reduction in the National debt, and no new basis has yet been discovered. In this city many efforts to form new financial institutions have been put forth in the

Name	Location	Capital
The East St. Louis Bank	East St. Louis	40,000
The Elgin City Banking Company	Elgin	60,000
The Farmers' and Mechanics' Bank	Galesburg	100,000
The Hibernian Banking Association	Chicago	111,000
The Merchants' Loan and Trust Company	Chicago	2,000,000
The Moline Savings Bank	Moline	none
The Montgomery County Loan and Trust Company		50,000
The People's Bank of Bloomington	Bloomington	100,000
The Sangamon Loan and Trust Company	Springfield	58,323
The Union Trust Company		500,000
The Workingmen's Banking Company	East St. Louis	50,000
Western Trust and Savings Bank		100,000
Total		\$6 800 208

²³ Chicago Tribune, November 28, 1888.

24 Laws of 1889, p. 58, 59.

25 Report of the Auditor of Public Accounts, 1890, 1: xix.

past few years, but the great difficulty has been to secure the right sort of a charter. Nearly all the old bank charters have been rendered valueless by one cause or another, and capitalists naturally dislike to organize under the unlimited liability or partnership. Organizations can now be formed with only the same liabilities and under substantially the same conditions as those of Eastern cities. We shall accordingly have in this city new State banks, trust companies, mortgage loan companies, etc., and throughout the State local banks will spring up." 26

During the first few years after the ratification of the bank act the state banks increased rapidly in number and in capital, loans, and deposits. By November, 1890, fifty-four permits for organization had been issued and twenty-four banks were operating. The loans and discounts totaled \$48,025,615 and the combined capital of the banks was \$10,212,500.27 Two years later one hundred and ten permits had been issued, the loans and discounts had risen to \$76,647,599, and the combined capital to \$17,512,500.28

In addition to the savings bank act and the general banking act, already described, the legislature in 1887 passed a third act providing for the organization of trust companies. The following are the more important provisions of this law:29 Any corporation incorporated under the laws of the state for the purpose of accepting and executing trusts may be appointed assignee, or trustee and executor. The amount of money which any such corporation shall have on deposit at any time must not exceed ten times the amount of its paid-up capital and surplus, and its outstanding loans must not exceed that amount. Each company, before accepting any such appointment or

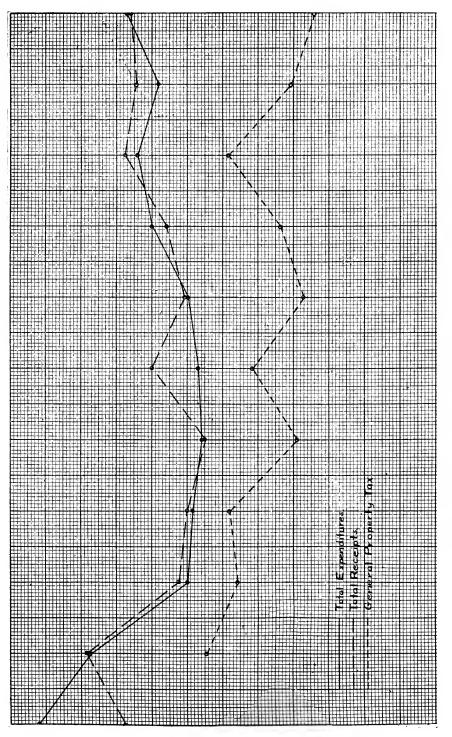
²⁶ Quoted in Bankers' Magazine, 43: 870.
²⁷ Report of the Auditor of Public Accounts, 1890, p. xiv; 1892, p. xiv.
²⁸ Ibid., 1892, p. xiv.
²⁹ Laws of 1887, p. 144 ff.

deposit, must deposit with the state auditor \$200,000 in stocks of the United States or of Illinois or in approved mortgages on real estate.³⁰ Every company must procure from the auditor a certificate of authority before accepting any trust or deposit. Annual reports and examinations must be made, and more frequent reports may be called for.³¹

The finances of the state reflect in a general way the trend of the times in private business. Expenditures, which had been over \$13,000,000 for the biennium ending in 1872 and almost \$12,000,000 in 1874, declined to less than \$9,000,000 in 1876 and remained below the high figures of 1872 and 1874 for twenty years thereafter.³² It was, of course, not possible to make any considerable reduction in state expenditures, as most of the funds went to the support of public institutions or for work which could not be curtailed without serious inconvenience or even suffering. Retrenchment and economy, however, were the order of the day; and in spite of the growth of population the expenditures were held down to practically a fixed amount, so that by 1892 the total disbursements of the state were still under \$11,000,000 for the biennial period. Revenue remained constant; and after a rather serious deficit of \$2,452,143 in 1871-1872, there was no year in which the discrepancy between receipts and expenditures resulted in either a large surplus or an embarrassing deficit. The small deficits of 1879-1880 and of 1885-1886 were easily taken care of the succeeding year; the deficit of 1891-1892 marked the beginning of a series of lean years, but the

³⁰ In 1897 this section was amended so as to provide for a deposit with the auditor of securities worth \$200,000 in cities of over 100,000; for those with less than 100,000 population the deposit need be only \$50,000. Provision was also made for larger deposits in case the estates held exceeded ten times the amount thus deposited, and for subsequent reductions. Laws of 1897, p. 187. ³¹ The Illinois Trust and Savings Bank of Chicago was the first company to the f

³¹ The Illinois Trust and Savings Bank of Chicago was the first company to qualify under this act. Report of the Auditor of Public Accounts, 1888, p. xii. ³² Report of the Efficiency and Economy Committee, 1050.



INCREASE OF STATE RECEIPTS, EXPENDITURES, AND TAXES, 1871-1892

consideration of this period does not properly belong here.³⁸ The table on page 304 shows the main expenditures of the state during this period, grouped according to the most significant purposes.

The deficit of 1871–1872, it may be noted, was due to extraordinary and unexpected expenses. There were first of all the additional expenses of an unusually long session of the legislature, which was necessary in order to revise the statutes so as to harmonize them with the newly adopted constitution of 1870. For the same reason the item of printing was exceptionally large both for this and for the next biennium. Then the Chicago fire made it necessary to expend about \$1,000,000 annually for each of the four years 1871– 1874 to repair and reconstruct bridges in Chicago which had been destroyed. Most important of all, however, was the payment of almost \$4,000,000 on the public debt.³⁴

Throughout the period there was an appreciable increase in the amount required by the administrative officers, owing to the higher schedule of salaries provided by the constitution of 1870, and to the larger number of people employed as the volume of work expanded with the growth of the state. The judiciary, too, found it necessary to make gradually increasing demands for funds. The legislature, however, was singularly modest in its requirements, and its items show very little variation.

For purposes of higher education additional special outlays, amounting during the twenty years to \$210,000, were

³³ See Centennial History of Illinois, 5:421 ff. The table on the following pages shows expenditures of the state for 1871-1892. In constructing these tables it has been necessary to regroup the items as presented in the auditor's biennial reports, where the arrangement is arbitrary and generally without significance. This criticism may be made of most statistical reports published by our state governments. For a statement of the items included under each of the headings in the table see appendix, p. 495 ff.

³⁴ Smaller payments in successive years completely expunged the debt by 1882.

THE INDUSTRIAL STATE

Admini		tive offices	General assembly		Judiciary		Printing,	
BIENNIUM	Salaries	Other expenses	Pay and mileage	Other expenses	Salaries	Other expenses	binding, and stationery	
	I	Ia	II	IIa	III	Illa	IV	
1871-72	\$ 49,600	\$51,325	\$475,453	\$33,568	\$318,634	\$77,235	\$124,724	
1873-74	81,082	57,313	296,560	12,756	386,758	64,730	207,356	
1875-76	86,016	46,355	1 52,923	5,483	360,922	19,079	79,637	
1877-78	91,494	56,470	228,723	9,236	426,630	52,834	81,271	
1879-80	94,750	67,733	208,510	12,742	484,747	56,394	78,906	
1881-82	96,275	64,608	281,717	16,664	501,288	59,328	90,796	
1883-84	94,766	65,210	246,555	13,175	501,701	58,768	81,222	
1885-86	97,378	72,834	287,367	21,876	506,756	59,298	118,566	
1887-88	97,800	64,473	255,630	29,940	517,721	60,381	95,074	
1889-90	98,006	67,076	255,134	I 5,779	547,7 ⁸ 7	78,356	1 10,665	
1891-92	104,452	68,425	230,756	16,355	533,507	72,801	90,350	

State	EXPENDITURES,	1871-1892
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Educational institutions		Charitable institutions		Penal and co institu	Militia and	
Current expenses	Other expenses	Current expenses	Other expenses	Current expenses	Othe r expenses	militar y affairs
v	Va	VI	VIa	VII	VIIa	VIII
\$ 69,233	\$208,869	\$ 592,299	\$542,078	\$180,216	\$189,123	\$ 9,729
83,723	134,895	681,019	755,796	103,800	20,839	8,165
82,879	17,664	768,268	275,217	100,879	18,140	7,976
102,579	79,696	892,040	544,769	241,390	164,103	39,454
112,966	20,700	1,034,399	366,893	303,925	262,823	138,182
130,728	32,613	1,173,972	428,306	385,987	153,883	143,878
153,262	29,613	1,321,189	643,906	304,935	80,457	275,860
1 50,9 54	130,013	1,606,334	603,580	311,847	133,049	273,693
176,206	83,519	1,893,154	539,597	334,318	149,402	334,768
176,002	32,813	1,890,404	529,611	312,585	81,132	210,346
189,752	176,288	2,122,520	744,597	416,532	208,932	285,124

FINANCIAL PROBLEMS

BIENNIUM	Statehouse and executive mansion	Public schools	Public health	Internal im- provements and public works	Agri- culture	Industrial supervision and statistics
	IX	x	XI	XII	XIII	XIV
1871-72	\$ 818,443	\$1,825,792		\$2,062,087	\$17,500	\$ 18,149
1873-74	1,063,984	2,029,390		2,444,619	21,600	34,449
1875-76	715,228	2,020,466		185,424	22,000	39,412
1877-78	242,411	2,022,380	\$ 1,669	146,193	32,100	34,773
1879-80	45,427	2,020,914	8,766	11,333	36,300	40,899
1881-82	57,246	2,132,126	12,847	10,950	35,700	55,370
1883-84	48,130	2,133,224	16,673	10,965	40,800	69,882
1885-86	419,236	2,132,084	24,522	10,950	42,800	82,727
1887-88	259,982	2,109,144	20,744	10,965	47,800	187,771
1889-90	70,323	2,132,659	25,248	10,950	51,500	110,065
1891-92	54,516	2,130,898	18,861	30,965	47,023	116,189

STATE EXPENDITURES, 1871-1892

Refund taxes improperly paid	Local bond payments	Fish and game conservation	Historical monuments, celebrations, and exhibits	State debt payments	Miscellaneous	Total expenditures
xv	XVI	XVII	XVIII	XIX	xx	XXI
\$162,011	\$1,334,343			\$3,913,767	\$133,315	\$13,207,030
184,337	2,297,949			674,557	107,569	11,754,282
442,473	2,508,623			960,042	68,725	8,983,831
36,528	2,255,470			946,651	160,242	8,879,088
48,665	2,218,565	\$ 1 ,997		527,287	320,035	8,583,909
7,924	2,393,569	4,390		265,854	209,371	8,747,394
61,855	2,518,297	7,026			134,986	8,948,457
1,273	2,779,039	13,133			161,188	10,034,501
657	2,824,888	14,714	\$ 1,771		249,817	10,360,236
769	2,924,969	19,861	3,243		1 10,223	9,825,510
1,038	2,696,334	19,520	251,931		78,362	10,706,028

made for the construction of buildings for the Illinois Industrial University; while an equal amount was assigned to the Southern Normal University: \$160,000 in 1872-1873 to erect new buildings, and \$150,000 in 1885-1886 to replace the buildings which were destroyed by fire in 1885. The common schools, which had already become well organized before 1871, continued with practically no variation.

Part of the increase in expenditures for charitable institutions was due to the taking over by the state of duties formerly performed by the local governments, but another large part was due to the fact that with the furnishing by the state of improved facilities for caring for the insane, the feeble-minded, the deaf and dumb, and the blind, many persons were sent to state institutions who formerly would have been cared for at home. Closely analogous are the expenditures for penal and correctional institutions. A number of new buildings were erected, and the state assumed a larger share of the care of those classes, which previously had been defrayed by the local governments.³⁵ As the labor of the convicts in the state peniten-

³⁵ The following are some of the more important items which caused the increase in expenditure for group VII:

- 1871-1872: reform school, \$30,000; a large part of the remainder went to meet indebtedness of the state penitentiary.
- 1873-1874: reform school, \$57,500; conveying convicts to the penitentiary and reform school, \$36,000; fugitives from justice, \$10,000.
- 1875-1876: about the same as 1873-1874.
- 1877-1878: conveying convicts, \$45,000; fugitives from justice, \$32,000; largest item was payment of accumulated indebtedness of Northern Illinois penitentiary.
- 1881-1882: Southern Illinois penitentiary, \$230,000.
- 1891-1892: asylum for insane criminals, \$23,000.

For group vila some of the new or variable items were as follows:

- 1871-1872: reform school, \$70,000.
- 1877-1878: Southern Illinois penitentiary, \$143,000.
- 1879-1880: Southern Illinois penitentiary, \$200,000. 1883-1884: reform school, family building, \$30,000.
- reform school, kitchen, bakery, dining room, etc., \$54,000. 1885-1886:
- 1887-1888: Southern penitentiary, cell house, \$40,000. 1889-1890: Southern penitentiary, cell house, \$40,000.
- 1891-1892: state reformatory, \$40,000; asylum for insane criminals, \$50,000.

tiaries was managed under the contract system during this period, the expenses of maintenance were kept unusually low. The mounting expenditures for the care of the dependent, defective, and delinquent classes, taken together, marks the development of a greater sense of social responsibility for these groups on the part of the commonwealth; it evidences also a growth in numbers of these classes which is entirely normal, being inevitable with the constant expansion of the population.

Expenditures for militia and military affairs partake both of the character of defense and of police duty. For the first three biennial periods, 1871-1876, the only expenditures made by the state which were chargeable to this group were those of the adjutant general and his department. After this the expenses of the Illinois national guard are included, although they were carried on the auditor's books under a special fund, called the "military fund," until 1884. The expenditures of the adjutant general and his department varied from \$20,000 to \$50,000 during this whole period; the expenses of the national guard showed a normal growth due to larger enlistments in this body and also exhibited very great fluctuations in some years when troops were mobilized for strike duty, as the state had to bear the entire expense of their maintenance on such occasions, sometimes for considerable periods.

Expenditures for internal improvements and public works had all but ceased in Illinois with the completion of the Illinois and Michigan canal; and they remained insignificant until the state embarked in 1909 upon a program of improving the state roads. Practically the only outlays on this score, therefore, were the sums occasioned by the cost of rebuilding the bridges across the Chicago river, which had been destroyed in the Chicago fire of 1871, and other extraordinary expenditures for the repair of the Illinois and Michigan canal and the improvement of the Illinois river.³⁶

Somewhat more important at this time were the expenditures for the heterogeneous functions brought together in the above table under the title "industrial supervision and statistics." While the small expenditures under the head of public works show the disinclination of the people to have the state undertake the ownership and operation of public utilities, the growth of this other group of expenditures illustrates the need, which is felt in all modern states, of regulating and supervising more carefully the methods of private business, for the sake of protecting both workers and consumers and of preventing practices injurious to the welfare of the whole community.

Following the adoption of the constitution of 1870, a railroad and warehouse commission was established in 1871 with important powers of supervision and regulation of railroads and public warehouses. By the establishment of this commission Illinois was the leader in the movement for public regulation of railroads, and the litigation as to the constitutionality of this act resulted in an important judicial decision in the case of Munn v. Illinois --- upholding the power of the state to regulate business affected with a public interest. This commission remained in existence until superseded by the public utilities commission on January 1, 1914.

In 1877 state humane agents were appointed at Chicago, East St. Louis, and Peoria; beginning with a modest \$2,400

³⁶ The following sums were expended for these purposes:

^{1871-1872:} Illinois and Michigan canal, \$227,696; canal commission, \$11,-000; bridges, etc., in Chicago, \$1,823,391.
1873-1874: Illinois river improvement, \$154,221; practically all the remainder for repairing damage done by Chicago fire.

^{1875-1876:} Illinois river improvement, \$156,906. 1877-1878: Illinois river improvement, \$83,789; Illinois and Michigan canal, \$51,453.

^{1879-1880:} Illinois river improvement, \$368. 1891-1892: Illinois and Michigan canal, \$20,000.

a year their expenses slowly increased to about \$10,000 a year. The commissioner of labor statistics dates from 1879 with an appropriation of \$3,500 a year, which has grown to about \$50,000. With 1881 there began the expenditures for the state board of livestock commissioners and state veterinarian, which have swelled from \$1,687 in the first year to over \$200,000. Mine inspectors and examiners date from 1883 and have added to the expenditures from \$6,846 in the first year to about \$100,000 today.

A few other items, though not involving large expenditures, serve to show the widening complexity of the state's activities. In 1880 was established the fish commission. In 1877 the board of health was created to fill an obvious social need; while its scope was limited during this period, it nevertheless succeeded in establishing itself firmly as a definite agency of the public service. Another new field was opened up in 1888 when the Lincoln homestead was purchased as an historical monument; and in 1891–1892 about \$250,000 was appropriated to the World's Fair celebration. Ever since then there has been a regularly recognized group of expenses for monuments, exhibits, and celebrations of various kinds, the demand for which has grown with the passing years.

To secure the revenue needed to meet its expenses the state was making use of an antiquated tax system, which was only partially modified during the ensuing decade. The constitution of 1870 made some changes in the article on revenue³⁷ as it had stood in the constitution of 1848, but the necessary state revenue was to be obtained as before, principally by taxing the owners of property in proportion to the value of the property owned. According to the terms of the new constitution, (1) the capitation tax was omitted; (2) the list of objects which could be specially taxed by the legislature was

37 Constitution of 1870, article IX, section 1-13.

greatly increased by adding to the specified "pedlars, auctioneers, etc.," liquor dealers, insurance, telegraph and express interests or business, venders of patents, and corporations owning or using franchises or privileges; but it was provided that all such special taxes should be imposed by general law, uniform as to the class upon which it operated; (3) the exemption clause was made more specific and somewhat longer; (4) general regulations were substituted for detailed provisions with regard to tax sales and redemptions; (5) limits were placed upon tax rates for county purposes and upon local indebtedness; (6) special assessments for local improvements were authorized. For forty-six years these provisions remained unchanged except for an amendment in 1890 authorizing the city of Chicago to issue \$5,000,000 in bonds on account of the World's Fair.

In 1872 the general assembly revised the tax law to make it conform with the changes in the new constitution, and this law still forms the basis of the present system of state taxation. This act defined in greater detail the rules for listing and valuing property, increasing the number of items that must be scheduled under personal property; it provided for the review and equalization of original assessments by county boards; and it reorganized the state board of equalization, adding to its duties that of assessing railroad property and the capital stock of Illinois corporations.

Under this system the general property tax still remained the backbone of state and local finance. Where the township system of organization existed, each township was to elect an assessor; where there were no townships the county was made the unit for assessment purposes. The local assessor was to assess all property at its fair cash value; real estate was to be listed and valued by the assessor, but in the case of personal property the owner himself was required to list it; if he failed

to do so, then he was assessed according to the assessor's best judgment.

During the next decade about ninety per cent of the state taxes were derived from the general property tax.38 As long as Illinois remained an agricultural state and the forms of the wealth of her citizens were such as to make them easily ascertained and valued by the assessor, the general property tax was fairly well administered. But as new industries and forms of wealth developed and as corporate securities and other kinds of intangible personalty multiplied, it became increasingly difficult to ascertain all taxable property and to assess it fairly.39

Year	Estimated true value	Assessed valuation	Percentage which assessed value made of true value
1850	\$ 156,265,006	\$119,868,336	76.8
1860	871,860,282	367,227,742	42.1
1870	2,121,680,579	480,664,058	22.7
1880	3,210,000,000	786,616,394	21.4
1890	5,066,751,719	808,892,782	16.0

ESTIMATED TRUE VALUE AND ASSESSED VALUATION OF PROPERTY

It appears from the above table that there was a great decline in the proportion of the true value that was assessed for taxation from 1850 to 1890. In the former year most of the wealth in the state consisted of real estate and farm implements and livestock, but by 1890 other forms which could easily be concealed had multiplied to such an extent that only

³⁸ See appendix, p. 500. ³⁹ That these facts were realized by the members of the legislature which passed the revenue act of 1872 is evident from the debates on this measure. The topics debated at greatest length were those of deduction of indebtedness and listing of credits.

one-sixth of the true value was returned for taxation.⁴⁰ On the other hand, attention may be called to the census estimates of true value, showing that the wealth of the people of Illinois was rapidly growing during this period.

An innovation was made in the tax law of 1872 which was designed to reach some of this growing wealth at the source by taxing the corporations which were producing it. The tangible property of corporations could be fairly easily ascertained and assessed by local officials. But this by no means always measured their total taxability. Many of them had valuable franchises which every increase in population and wealth of the community made more valuable. Tangible property was not a sufficient index of earning power or of ability to pay taxes. The law of 1872 accordingly sought to ascertain and assess the value of the franchise as well. Tangible property continued to be assessed by the local officials as before; but the "corporate excess," that is, the value of the securities of corporations, less the value of their property assessed locally, was to be ascertained and taxed by the state board of equalization.41 In 1875 "companies and associations organized for purely manufacturing purposes or for printing, or for publishing of newspapers, or for the improving and breeding of stock" were released from assessment by the state board, which meant in practice release from assessment on their corporate excess. But even in the case of those corporations which the law directed should be assessed, the work of assessment was so inefficiently performed that the true corporate excess was not reached. The corporations either failed to make

⁴⁰ The state board of equalization had passed the following formal resolution in 1870: "That it is the opinion of this board that the aggregate assessment of the property of the State for the year 1870 is not more than one-fifth of the true value of all the property in the State." *Chicago Tribune*, October 28, 1870. ⁴¹ The state board of equalization, organized in 1867, consisted of the state auditor of public accounts and one member elected from each congressional dis-trict. It was therefore workers and one for the state auditor of public accounts and one member elected from each congressional dis-

trict. It was, therefore, cumbersome and unwieldy.

reports to the state board of equalization of the capital stock, funded debt, and assessed value of their tangible property, or they made defective or erroneous reports with a view to reducing their assessment. On the other hand, the state board, clothed with insufficient power, performed its work in a very inefficient manner. The decline both in number of corporations assessed and in valuation of their corporate excess is shown in the following table:42

Assessments of Corporate Excess by the State Board of Equalization

Date	Number of corporations assessed	Net assessment of capital stock and franchise
1873	207	\$20,730,057
1874	224	11,719,216
1875	100	4,802,112
1880	29	2,179,460
1885	114	3,791,623
1890	305	6,956,909

Though the decade 1880-1890 showed an improvement in the latter respect, no adequate assessment of corporations was secured until compelled by the courts a decade later.43

The assessment of railroad property, which had previously been made by local assessors, was now also divided between these and the state board of equalization, the former assessing the railroads upon their tangible property and the latter upon their corporate excess, except in the case of the Illinois Central railroad, which was exempted from ordinary taxes by virtue of its payment into the state treasury of a percentage of its gross receipts. The first effect of the introduction of this new scheme of assessment, under the law of 1872, was to

⁴² Moore, Taxation of Corporations in Illinois other than Railroads, since 1872, p. 93. ⁴³ See Centennial History of Illinois, 5:444-445.

increase the valuation of railroad property in the state from \$25,568,784, in 1872, to \$133,520,633, in 1873.⁴⁴ But here also a shrinkage soon appeared, which reduced the assessment to \$40,461,865 in 1878; after this date the assessment moved slowly but steadily upward, reaching \$75,310,524 in 1890. The corporate excess, however, which was found to be \$64,611,071 in 1873, dwindled rapidly until in 1877 it disappeared entirely. For the next twenty years the railroads paid taxes only on the value of their physical plant.

Taxes were received also during this period from banks and insurance companies under special modes of taxation; and department fees and some miscellaneous items added a few thousand dollars each year. For local purposes the general property tax was almost the only source of revenue, though local districts were permitted to impose a poll tax and the road tax was often paid in labor at the rate of \$1.25 or \$1.50 a day.

44 Haig, A History of the General Property Tax in Illinois, 210.

XIV. RAILROAD TRANSPORTATION, 1870-1893

WING to its strategic position between Lake Michigan on the north and the Ohio river on the south, below which the country is mountainous and broken, Illinois is probably the most important railroad state in the union. All the trunk lines between east and west thread their way across this state, with the exception of a few southern roads, while practically all the through lines from north to south in the central states have one of their termini at Chicago. Indeed Chicago is the terminus for all the more important lines stretching to the Atlantic, to the Pacific, to the Gulf of Mexico, and to the northwest, while the more southerly lines, north of the Ohio river, pass through East St. Louis, Illinois, which is opposite St. Louis, Missouri. Owing to the presence of these trunk lines and their branches, and the local coal roads, Illinois has long boasted of the greatest railway mileage of any state in the union 1

Down to 1869 only one year, 1856, had seen over 350 miles of railroad constructed in a single year in Illinois. In that year the Illinois Central was completed and the maximum building record of the state - 1,348 miles - was attained. Beginning with 1868, however, an era of railroad construction set in, which continued until interrupted by the panic of 1873.2 These years were marked by a notable activity in railroad building in all parts of the country, especially in the west. The construction in 1869, 1870, and 1871 for the United States as

¹ See appendix, p. 501. ² The new mileage constructed cach year was as follows: 1868, 216; 1869, 591; 1870, 666; 1871, 1197; 1872, 457; 1873, 228.

a whole was 4,999, 6,145, and 7,379 miles respectively, each year setting a new record for the number of miles built.

In addition to the general movement toward expansion there was in Illinois the special stimulus of the "tax grab" law of 1869, which permitted counties that chose to bond themselves in aid of a new railroad to deduct from the increase in taxes, which would normally accrue through the rise in the value of the land, enough to pay the interest on these bonds. The prohibition in the constitution of 1870 of such local grants of credit in aid of railroads had the effect of hastening the promotion of new roads which would probably otherwise have been postponed or perhaps never built. Consequently many new schemes were started in 1869 and 1870 which were not concluded until a year or two later.³

The liberality of local governments in granting aid to almost any proposed road, under this "tax grab" law, was truly amazing. The local credit voted in aid of railroads in eighty-six counties, in the form of bonds and money, amounted to \$16,088,027; returns from the other sixteen counties would certainly have brought the total for the state well up to \$20,000,000.⁴ The alacrity with which particular localities hastened to pay a heavy price for the advantages of a railroad is well shown in the case of the Ottawa, Oswego, and Fox River Valley railroad, a line of 57 miles stretching from Streator to Fox River Junction. Kendall, one of the smallest counties of the state, containing only nine townships, voted \$131,000 in aid of its construction; Kane, La Salle, and Marshall counties

³ In his report for 1870 the auditor stated that "two thousand miles of railroads have been built in this State since the adjournment of the last General Assembly, and are now in actual operation." Quoted in *Chicago Tribune*, December 17, 1870.

ber 17, 1870. ⁴ These figures do not include the lands granted the Illinois Central by the state or lands granted various roads by individuals. *Report of the Railroad and Warehouse Commission*, 1873, p. 8. In 1877 it was estimated that the aggregate debts of towns, counties, cities, and districts in the state amounted to \$40,000,000. *Chicago Tribune*, January 11, 1877.

contributed additional bonds for \$323,000, making a total of \$454,000, or nearly \$8,000 a mile.5

When it is remembered that in addition many roads received grants of land from various private individuals, it is not surprising that there was called into existence a class of irresponsible promoters, who, without capital of their own, built lines as a speculation, selling stocks and bonds at whatever prices these would bring, often with no serious intention of operating the road but hoping to sell out at a profit.⁶ For such roads, of course, there was no economic justification.

In 1870 there were 4,708 miles of railroads in Illinois." The Illinois Central, with 707 miles inside the state, was the longest single line. This road formed an immense Y with its northeast terminus at Chicago, its northwest terminus at Galena, the junction at Centralia, and the base at Cairo. The Chicago, Burlington, and Quincy was second with 460 miles of lines, stretching across the state from Chicago to Burlington, Iowa, and occupying with its branches the northwest section of the state. Other important lines were the Chicago and Alton (243 miles) from Chicago to East St. Louis; the Chicago, Rock Island, and Pacific (193 miles) between Chicago and Rock Island; the Toledo, Peoria, and Warsaw (249 miles), now the Toledo, Peoria, and Western, which stretched from the Indiana state line at Iroquois county directly across the state through Peoria to Warsaw; the Toledo, Wabash, and

⁵ Commercial and Financial Chronicle, 16:693, quoting the Chicago Tribune, May 11, 1873. See also the case of Quincy, Chicago Tribune, February 24, 1871. ⁶ The Ottawa, Oswego, and Fox River Valley railroad may again be cited for illustration. In addition to the local aid received, it issued bonds of its own to the amount of \$1,260,000, over \$22,000 a mile; then upon completion it was leased in perpetuity to the Chicago, Burlington, and Quincy, and the disillusioned county bondholders sought to release themselves from the obligations they had undertaken. Commercial and Financial Chronicle, 16:693, quoting the Chicago Tribune, May 11, 1873.

7 A table giving the length of the various roads and their cost was printed in the American Railroad Journal, 43:8. Subsequent construction can be traced in the Reports of the Railroad and Warehouse Commission.

Western, which extended across the state from east to west about fifty miles south of the Peoria and the Western, passing through Springfield and Decatur. This last named road was the result of consolidations of numerous small lines and now forms part of the Wabash system.

During the year 1870 some 666 miles of new road were added to the railway net of Illinois, comprising the Rockford, Rock Island, and St. Louis (130 miles), from Sterling to Alton; the Gilman, Clinton, and Springfield; the St. Louis, Vandalia, and Terre Haute; the Ohio and Mississippi, from Vincennes to St. Louis; and the Indianapolis and St. Louis. The extension of the Belleville and Southern Illinois to Du Quoin gave a connection with the coal fields of the state. Most of these lines, it will be noticed, were east and west roads across the state.

The year 1871 witnessed the largest construction, with one exception, of any year in the history of the state, namely 1,197 miles: this was more than one-seventh of the new construction in the whole country.⁸ A noticeable feature of the railway building now begun and carried through during the rest of the decade was the opening up of the southern part of the state. The Springfield and Illinois Southwestern⁹ was completed to Shawneetown, thus providing a route from central Illinois, and also by means of various connections from the northern part of the state, to the southeastern counties, which until this time had been unprovided with railway facilities. Work was also begun on the Cairo and Vincennes, and on the Cairo and St. Louis, in the southwestern section of the state. The latter line was built as a narrow gauge road.¹⁰

⁸ Poor, Manual of Railroads, 1872.

⁹ This road later became a part of the Baltimore and Ohio system.

¹⁰ Cairo was hailed as the coming railroad center. See *Du Quoin Tribune*, quoted in *American Railroad Journal*, 55:483. An active controversy was car-ried on at this time as to the relative merits of the narrow gauge of three feet and the standard gauge of four feet eight and one-half inches. Several of the

In other parts of the state also railway building was progressing. The Chicago, Pekin, and Southwestern was being built from Chicago to Pekin in the interests of the Chicago, Burlington, and Quincy system. The Bloomington and Ohio railroad built about 70 miles during the year; the Decatur and State Line Company 129 miles; the Decatur, Sullivan, and Mattoon 40 miles. These and other short connecting lines, none of great importance, filled in the gaps between the larger systems already built; most of them were later absorbed by the large companies and their names have been forgotten.

There followed a period of pronounced reaction, only 457 miles being built in 1872 and 228 in 1873. Largely responsible, of course, was the general depression caused by the panic of 1873; partly responsible, too, was the prohibition by the new constitution of further local aid under the "tax grab" law of 1869, and the higher interest rates. But the fundamental reason was the fact that Illinois was no longer so keenly in need of new lines and was now unwilling to pay exorbitant prices for them. To show how well the state was provided with railroads, the railroad and warehouse commission published a table in 1872 which showed that 73 per cent of all the land in the state lay within five miles of a railroad; 21.5 per cent between five and ten miles; 4 per cent between ten and fifteen miles; and only 1.5 per cent was more than fifteen miles distant. The commission concluded that when to these facilities were added the advantages which were presented by the lake, navigable rivers, canals, and slackwater navigation of the state, and also those of the railroads in other states adjoining the border, it might fairly

southern Illinois lines were constructed with the three-foot gauge, which was urged because it was cheaper and more economical to operate and hence could be extended into districts where the more expensive standard gauge lines would not pay. An Illinois narrow-gauge convention was held in 1875 to advance this movement and to advocate the construction of a narrow-gauge railroad to the seaboard. Railroad Gazette, 2:417; American Railroad Journal, 45:109; Railway Age, 4:514.

be presumed that no other state in the union possessed equal facilities for the transportation of persons and property, so uniformly distributed through its territory.¹¹

It will be instructive to pause at this point and note the character of the railroads and equipment with which the state was now so well supplied. Early Illinois railroads, like those of many western states, were built across the level, open prairie and were constructed at the lowest possible cost, with little regard for their permanency. The demand for improved means of transportation was pressing and as much track as possible was built with the limited capital available. The existing traffic, indeed, would scarcely have warranted anything better; but it was hoped that with the development of the country the increasing traffic would pay for improvements as the temporary equipment wore out. Already in 1870 this substitution of more permanent structure had been begun on some of the older lines.

In its first annual report for 1871, the railroad and warehouse commission stated that the railroads of Illinois compared favorably with those of any other western state. They were in good repair on the whole, although the work of ballasting was proceeding slowly on account of the lack of suitable material in the state and the great expense of obtaining it from a distance. The bridges, stations, and other permanent structures were being gradually improved; and the passenger accommodations were especially good. Sleeping and dining cars were just being put into general use, the first having been introduced in 1867.¹²

While Illinois railroads may have compared favorably with those in other states in many respects, they were always handicapped in the construction of the roadbed, owing to the scarcity

¹¹ Report of the Railroad and Warehouse Commission, 1872, p. 19-20, 168-169. ¹² Ibid., 1871, p. 8-9.

of gravel or other suitable material for ballast. The early typical earth road has been described as follows:

"A newly constructed road-bed, which depends solely upon the material found at each point along the line for ballast, and which is not more carefully drained than was formerly common, frequently degenerates into the condition depicted by the expressive phrase 'mud road,' and this is practically what a number of American railroads formerly were, the mud sometimes flying in all directions before the march of the locomotive as freely as it flies on a common dirt road after a heavy rain when a vehicle is driven over it at a rapid pace."¹³

The first step in the improvement of such a road was the use of earth ballast. When properly applied this material rendered the roadbed much more serviceable, and as it was more practicable than sand or gravel, its use had become very general in 1870. Even as late as 1890, about 40 per cent, or 4,044 out of 10,213 miles, of the railroads in the state were still earth ballasted. At this latter date the other forms of ballast were: slag, 82 miles; cinders, 561 miles; stone, 892 miles; gravel and sand, 4,412 miles.¹⁴ The use of earth ballast caused high maintenance charges, and also high operating expenses, as accidents and losses were more frequent.

Practically all the rails of the Illinois railroads in 1870 were of iron and constructed according to a T pattern. These were very unsatisfactory, and a substitute was eagerly sought both in England and in this country. The first steel rail was laid in this country in 1864, and a year later the first one in a central western state was reported to have been laid. The early steel rails were imported, the first one rolled in this country being produced by the Chicago Rolling Mill in May, 1865, under the direction of W. F. Durfee, the engineer of

 ¹³ Ringwalt, Development of Transportation Systems in the United States, 296.
 ¹⁴ Report of the Railroad and Warehouse Commission, 1890, p. 46.

that company.¹⁵ The works of the Joliet Iron and Steel Company were established at Joliet in 1870, and in 1873 they first manufactured Bessemer steel. In 1874, however, the company failed, and although it made a second attempt it again failed in 1879. The Vulcan Steel Company of St. Louis, which also undertook the business of making steel rails, met a similar fate in 1877.

It is not possible to state how many miles of steel rails there were on Illinois railroads in 1870, but there could not have been many. In 1874 there were 1,398 miles of steel rails of about 60 pounds weight per yard as against 11,229 miles of iron rails of an average weight of 40 to 60 pounds.¹⁶ The following year it was reported that 518 additional miles of steel rails had been laid.¹⁷ Most of these, as might be expected, were on the larger roads, as the Chicago and Alton (141 miles), the Illinois Central (105), Chicago, Burlington, and Quincy (95), and the Chicago and Northwestern (94). At first the high price of steel rails prevented an extension of their use, but after 1875 (in which year they sold for \$120 currency per ton, or about \$95 gold), prices fell steadily until in 1885 the low level of \$28 per ton was reached. This permitted the replacement of iron by steel rails, and substitution went on so rapidly that by 1885 the railroad and warehouse commission could report that "since their last inspection nearly all the leading roads in the State have removed the old iron rails, and replaced them with steel rails." 18

¹⁵ Ringwalt, Development of Transportation Systems in the United States, 198, 200, 201; Johnson, American Railway Transportation, chapter 4; Report of the Pennsylvania State Railroad Commission, 1864, 1866.

¹⁷ Ibid., 1875, p. 12. This report also stated that twenty-six per cent of the railroads of the state were laid with steel rails; but if the proportion of eleven per cent given the previous year was correct, this figure is much too high. ¹⁸ Ibid., 1885, p. xiii.

¹⁶ Report of the Railroad and Warehouse Commission, 1874, p. 360. These are the miles of lines owned by Illinois roads. Not all the mileage was in Illinois. The figures, however, are valuable in showing the proportion of steel and iron rails on these roads.

This movement toward a heavier track was caused by, and also made possible, the use of heavier locomotives and other rolling stock. Thus the average load of a freight train on the Chicago and Alton line grew from 124 tons in 1875 to 177 tons in 1880, and 184 tons in 1885.¹⁹

It was in the development of special types of passenger cars that Illinois made her contributions. Mr. George A. Pullman patented his new sleeping car in 1865, and two years later the Pullman Company was incorporated for the manufacture of these cars. They were followed soon afterwards by dining and parlor cars. The splendors of these new palaces on wheels were described by Mr. Charles G. Leland of Philadelphia as follows: "A remarkable subject of interest, which our party examined this morning, was the City of Chicago-not the metropolis itself, but its reflection, as regards splendor and enterprise, in a sleeping car of that name, which runs on the Illinois Central. This car cost \$20,000, and is said to be cheap at the price. Every comfort which can be placed in such a vehicle is to be found within its wooden walls. . . . Not less remarkable is the corresponding seat car for day passengers, which surpasses in splendor, and still more in comfort, any car which I have ever seen on an eastern road. There is yet another car, which cost thirty thousand dollars, which I did not see, but which was described as a miracle of its kind." 20

The introduction of the vestibule seems to have followed the use of dining cars, although rather tardily. A vestibule car is said to have been designed as early as 1852, but they did not come into use until the end of the eighties, and their general introduction on the railroads of Illinois came even later than

¹⁰ The average weight of freight engines increased from twenty-eight tons in 1869 to forty-two tons in 1880. *Tenth Census of the United States*, 4: 570-573. Ringwalt, *Development of Transportation Systems in the United States*, 319. ²⁰ Ibid., 209.

that.²¹ The need for this device had, however, been pointed out as early as 1871 by the railroad and warehouse commission in the following statement: "The recent adoption of dining cars for the accommodation of passengers, instead of stopping trains at eating stations, which has come into use on several of the important roads, involves the necessity of passengers passing from car to car through the trains while they are running at full speed. The practice of passing through trains in that manner has always been regarded, and proven by serious loss of life, to be very dangerous; especially is this so where the old style coupling, draw-head and platform. are used.

"The danger to life in this regard is considered by this Board to be quite enough to require legislative action, which shall oblige, at an early day, the use of platforms and couplings of some of the various forms now well known, by means of which these dangers may be materially diminished.

"As the platforms of passenger cars are structures usually made independent of and attached to the body of the cars, the necessary changes can be readily accomplished at moderate expense, and the Board therefore recommend that after one year the use of any platform and coupling on passenger trains, except such as when coupled together are, and remain in near contact, should be prohibited by suitable penalties." 22

The various improvements made in track and equipment tended on the whole to reduce the danger of accidents, relative to the increasing traffic. Laws began to be passed also, beginning in the seventies, for the prevention of accidents. An act of 1869 provided for flagmen at crossings and a few other precautionary measures, but the general law of 1874²³ was

 ²¹ Johnson, American Railway Transportation, 48.
 ²² Report of the Railroad and Warehouse Commission, 1871, p. 8-9.

²⁸ Laws of 1860, p. 312-315; Hurd's Revised Statutes, 1874, p. 807 ft.

much more far-reaching. This required the right of way to be fenced in and cattle guards to be placed at crossings; it prescribed rules of procedure where two lines crossed; it left to the local government units the regulation of the speed of trains through the corporate limits, but imposed certain penalties for the violation of such ordinances; and it required all roads to equip passenger trains with automatic couplers.

The work of coupling and uncoupling cars was the most dangerous task of railroad employees, being responsible for about 37 per cent of all accidents to them.²⁴ The automatic coupler replaced the old link and pin coupler very slowly, however, and the power of the interstate commerce commission had to be employed before the change was made complete. The increase in railroad accidents during this period was very slight for passengers and did not keep pace with the increase in passenger traffic; those to employees showed a greater growth, especially of nonfatal injuries; but the largest number of fatal accidents was among persons other than passengers and employees, the largest percentage of whom were killed at crossings. The following table shows the number of accidents as reported annually by the railroad and warehouse commis-It should be pointed out, however, that part of the sion. apparent increase is doubtless due to the fact that in the earlier years not all the cases of accident were reported.

The building of new railroads was almost entirely suspended for the rest of the decade after the panic of 1873.25 This was apparently due less to the hostile railroad legislation than to the fact that the state was already well supplied with transportation facilities.²⁶ There was thus no inducement for the investment of new capital, particularly at a time when

 ²⁴ Report of the Railroad and Warehouse Commission, 1882, p. xv.
 25 The miles of new lines built were as follows: 1872, 170; 1873, 228;
 1875, 350; 1876, 176; 1877, 59; 1878, 114; 1879, 130.
 26 Report of the Railroad and Warehouse Commission, 1876, p. 21.

YEAR	Passe	ngers	Empl	loyees	Otl	ners	To	otal
Ending June 30	Killed	Injured	Killed	Injured	Killed	Injured	Killed	Injured
1874	27	67	71	210	129	127	227	404
1875	16	36	61	350	109	132	186	518
1876	8	68	102	262	163	167	273	497
1877	10	42	65	212	132	108	207	362
1878	7	23	51	186	169	163	226	372
1879	7	28	72	246	140	129	219	404
1880	18	39	126	431	173	217	317	687
1881	20	85	145	354	176	149	337	688
1882	13	65	147	528	247	224	40 7	817
1883	11	65	154	518	220	227	385	810
1884	17	137	131	598	228	240	376	975
1885	14	131	128	701	227	262	369	1094
1886	12	52	112	666	236	240	360	958
1887	(not	given)						
1888	97 <i>a</i>	249 <i>a</i>	187	1375	317	350	601	1964
1889	25	116	172	1188	360	402	557	1706
1890	27	136	176	1059	365	369	568	1564
1891	39	236	195	1255	434	407	668	1898
1892	25	205	218	1727	477	508	720	2440
1893	23	399	246	2664	533	688	802	3751

ACCIDENTS ON THE STEAM RAILROADS IN ILLINOIS

a Eighty of these ninety-seven were killed in the Chatsworth disaster in August, 1887, and 140 of the 249 passengers injured were hurt in this accident.

interest rates were high and it was difficult if not impossible to float new securities. The panic of 1873 and the resulting depression had been caused by overinvestment in railroads and other forms of fixed capital, and the prevailing difficulties could be corrected only by permitting the country to grow up to the existing facilities.

Not only was new building suspended, but the work of improvement was interrupted and for several years after 1873 many of the roads were unable, because of the decline in earnings, even to keep their permanent structures and rolling stock in good repair. By 1878 the railroad and warehouse commission reported that certain railroads in the state were in a condition that made them dangerous highways of travel and freightage. Although under existing statutes the commission had no authority to compel the repair of a road if it was found defective, it began the policy of annual inspection of and report on the railroads in the state, hoping by publicity to secure such improvements as were necessary.²⁷ The policy seems to have been successful and the practice was maintained subsequently.

More important than the mere physical growth in mileage or improvement in equipment is the question as to how satisfactorily the railroads were actually serving the people of the state in carrying them and their freight. For an answer to this question it is necessary to turn to statistics of traffic and rates, but these are unfortunately both incomplete and inaccurate.²⁸ It is impossible to say how great the freight traffic was in 1870, but by 1872 the railroads in the state carried about 12,000,000 tons. By 1875 the freight carried amounted to-12,900,000 tons. This was made up of various products in about the following proportions: 29 grain, 23 per cent; flour, 4.5 per cent; livestock, 9 per cent; coal, 16 per cent; manufactures, including agricultural instruments, 5 per cent; and general merchandise, 20 per cent. This list leaves 22.5 per cent of the traffic unclassified. So far as they are available the data of railroad traffic in Illinois are given in the following table for five-year periods:

²⁹ Compiled from *ibid.*, 1875. This report is so incomplete that the figures given can be considered only rough approximations.

²⁷ Consult Report of the Railroad and Warehouse Commission, 1878, p. xix. ²⁸ The railroad and warehouse commission complained that the returns made by the railroad companies were very imperfect; they were not only meager, but incorrect, due either to ignorance or carelessness in their preparation. The commission was continually urging that the reports be made more accurate. See *ibid*. 1879, p. xxiii.

	F	reight	Passengers		
Year	Tons carried	Tons carried one mile	Passengers carried	Passengers car- ried one mile	
1872 1875 1880 1885 1890 1895	12,000,000 12,900,000 23,297,000 34,571,000 48,364,000 59,000,000	1,449,118,034 <i>a</i> 3,025,300,000 <i>b</i> 4,271,377,000 6,697,000,000	11,047,858 20,603,000 23,600,000 38,028,000	334,115,234 <i>a</i> 499,000,000 <i>b</i> 574,000,000	

GROWTH OF RAILWAY TRAFFIC IN ILLINOIS

a Estimated in Report of the Railroad and Warehouse Commission, 1875, p. 13.

p. 13.
 b Estimated on basis of tons carried and miles in average haul.
 c To make the figures comparable the estimated traffic of elevated lines was subtracted from the figure given by the railroad and warehouse commission.

To the shipper in Illinois the question of rates was almost more vital than that of railroad facilities, for of what avail were the latter unless he could afford to use them? In 1870 the freight rates were, on the average, 2.43 cents per ton-mile. But this average, when rates were in such a confused condition, probably in very few cases represented the amount actually paid. Passenger rates were between 3.5 and 6 cents per mile, with an average of 4 cents. While these were about the same as were being charged in other states in the middle west, they were decidedly higher than similar rates for the United States as a whole, which were 1.889 cents per ton-mile for freight and 2.392 cents per mile for passenger service.³⁰ That these rates were high, not only relatively in comparison with the rest of the country, but also absolutely in comparison with the cost of service, there is little reason to doubt. By 1880 the freight rates had been reduced to 1.32 cents per ton-mile and the passenger rates to 3.28 per mile. But whether they were high or not, the farmers and other shippers generally believed them

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³⁰ Report of the Railroad and Warehouse Commission, 1871; Dixon, State Railroad Control, 44; Newcomb, Changes in the Rates of Charge for Railway and other Transportation Services, 14.

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to be so.³¹ In defense of the railways it may be said that the traffic in Illinois at this time was so light that rates had to be high if fixed charges were to be met. The rates for freight and passengers by five-year intervals are shown in the table:

	111	inois	United States		
YEAR	(1) Freight	(2) Passenger	(3) Freight	(4) Passenger	
.870	2.43	4.00	1.889		
875			1.421		
880	1.32	3.28	1.232		
885	.96	2.20	1.011		
1890	.832	2.066	•94 1	2.156	
1893		2.409	.878	2.105	

AVERAGE FREIGHT AND PASSENGER RATES, 1870-1893 32

But not merely were rates high; they were also discriminatory. The truth of the matter was that there were more railroads than the state really needed; it was simply impossible to expand the traffic to keep pace with the new roads, often promoted by irresponsible adventurers — and accordingly the existing traffic had to be divided among a larger number of rivals. Competition became most severe;³³ and owing to the peculiar nature of railroad service, which can be sold only in

³¹ See report of the committee on transportation of Illinois State Grange, January 15, 1875, and address of Illinois State Farmers' Association to the railroad and warehouse commission quoted in *Railroad Gazette*, 7:46.

³²Sources: column 1, Reports of the Railroad and Warehouse Commission. Rates given for the years 1880 and 1885 are estimates made by the commission on the basis of the rates reported by the leading railways of the state. In the later years the rates were compiled by the writer from statistics given in the later years the rates were compiled by the writer from statistics given in the reports. Column 2, *ibid*. Column 3, Newcomb, Changes in the Rates of Charge for Railway and other Transportation Services. Column 4, Report on the Statistics of Railways in the United States. ³³ At Chicago and Peoria and all other important centers of trade, shippers

³³ At Chicago and Peoria and all other important centers of trade, shippers ³³ At Chicago and Peoria and all other important centers of trade, shippers not only had the option of transport to any one of several Atlantic seaports but they had also the option of two or more routes to the same port. "Report on the Internal Commerce of the United States," 1876, House Executive Documents, 44 congress, 1 session, number 46, p. 69. connection with the line that renders it, this meant that each line attempted to steal its competitors' business by offering lower rates, secret rebates, and other favors. The loss caused by the lowering of the rates at competitive points was then made up at noncompeting points. Larger amounts were often charged for a short haul between two noncompeting points than for much longer hauls between competing points; and large or influential shippers were given concessions which were made up by additional charges on small shippers.

The need for a more equitable adjustment was imperative, yet so strongly did the idea prevail that the only way to secure lower rates was to encourage free competition, that only after a severe struggle did the constitutional convention in 1870 undertake to establish the right of the state to regulate the railroads.³⁴ The legislature of 1871 promptly carried out the provisions of the constitution by establishing a mandatory railroad and warehouse commission to regulate and fix maximum rates.³⁵ Discrimination and extortion were made illegal, and the commission was empowered to enforce the law in such cases. But the railroads fought the laws and the commission appointed to regulate rates.²⁶ Cases were promptly brought before the courts to test the constitutionality of the act establishing the commission;³⁷ until these were decided little change was made in actual conditions. Even when its power to regulate was judicially determined, the Illinois commission adopted a very conservative policy in fixing its schedule of rates;³⁸ and the

³⁴ See above, p. 18 ff.

³⁵ A full analysis of the measure is given in American Railroad Journal, 44:480.

Commercial and Financial Chronicle, 15:794.
 Of these the most famous was that of Munn v. Chicago, which was decided in 1876 and established the principle that the state had the power to regulate business affected with a public interest.

³⁸ The commission issued a circular giving their construction of the railroad law and outlining their plans, which is reprinted in American Railroad Journal, 46:905.

maxima were made high enough so that the railroads could still have considerable freedom in adjusting rates to meet competition.³⁹ It adopted a policy in most cases of acting as arbiter rather than as public prosecutor, as the law apparently intended.

After the validity of the "granger laws" had been established by the United States supreme court in 1877, the railroads gradually assumed a more conciliatory attitude and the complaints against them became fewer. These by no means altogether ceased, however, and in 1880 there were brought before the Illinois commission 47 formal complaints of which 25 were for extortion (unreasonably high rates), 13 for unjust discrimination, and 9 for other offenses. All these cases were settled by the commission, and in those cases where the decision was against the railroads the latter acquiesced promptly in the decision of the commission.⁴⁰ Gradually the complaints against the roads for violation of the law became fewer; and by 1884 the number of cases which came before the commission had been reduced to three, all of which concerned the question of discrimination. For some years after this there were no cases of importance.

One of the most cogent reasons for the lessened need of reduction of rates by the state was the fact that competition really did tend to lower rates as fast as the decreasing costs of operation would allow. This movement was particularly noticeable throughout the seventies.⁴¹ The panic of 1873 intensified it abnormally, for when in the general depression railway earnings fell off, many roads became bankrupt; and such roads, relieved of their fixed charges, entered into an especially ruthless rivalry for traffic.

³⁹ For illustrations see Railroad Gazette, 5: 270, 373.

40 Clark, State Railroad Commissions, and How They May Be Made Effective, 37. 41 Hadley, Railroad Transportation, 104. These periods of ruinous competition in the early seventies led the railroads involved to endeavor to escape by the formation of "pooling" agreements. It was very difficult, however, to get all the roads into one pool or to enforce the agreements, and for that reason they were generally short lived. They also operated to the disadvantage of certain of the important commercial cities and to the advantage of others; and the luckless cities would then bring pressure to bear upon the pool, which usually resulted in its dissolution.

The first regular organized pool in the United States was the Chicago-Omaha pool, which was formed in 1870 by three Illinois roads. These were the Chicago, Burlington, and Quincy, the Chicago, Rock Island, and Pacific, and the Chicago and Northwestern, then the only lines connecting the two cities named. They had only recently been completed and, finding their early rate wars and competition mutually destructive, they formed a pooling agreement. The traffic pooled was the passenger and freight business between Chicago and Omaha. As each road had about an equal amount of business, it was comparatively easy to apportion the traffic, and it was agreed that each road was to reserve practically half of its earnings for itself and to share the remainder equally with the other two roads. This percentage was maintained throughout the agitation of the granger period and conduced greatly to the stability of rates. In fact, Larrabee concluded that its success in maintaining rates was one of the chief causes leading to the granger This pool lasted for fourteen years without a movement.42 break and was then, in 1884, merged into the Western Freight Association.

Another pool, which was more distinctly an Illinois affair, was entered into in 1875 by the Illinois Central, the Wabash,

⁴² Johnson, American Railway Transportation, 230; Report of the Industrial Commission, 19:333; Larrabee, The Railroad Question, 194.

and the Chicago and Alton railroads on all competitive business. This was a money pool, and equalization was made and balances were settled each month. The work of equalization, which was performed by a board of arbitrators, was brought to a high degree of exactitude. A typical monthly report, for example, shows that out of a total business of \$2,800,000 by the three Chicago-St. Louis lines, one fell \$800 short of its allotted percentage, another only \$400, and the third exceeded its share by \$1,200. Rates were in general maintained effectively and were kept stable by this organization; but at times it broke down and severe rate wars occurred, especially for passenger traffic. For instance, in 1880 the Wabash cut its passenger rate from Chicago to St. Louis to \$2.00, and the other roads reduced theirs to \$3.00.43

Another state association, concerning which, however, little is known, was the Illinois Railway Freight Association. From the scanty reports available it seems to have been composed of Illinois lines and to have concerned itself principally with intrastate business. It attempted to fix rates and appointed committees to draw up complete freight tariffs. At a meeting in December, 1881, it was urged by the rate committee that the maximum rates permitted by the railroad and warehouse commission be adopted as the minimum rates of the association.

In addition to these local pools there were agreements among the trunk lines concerning both eastbound and westbound traffic. During the seventies the number of traffic associations, both freight and passenger, increased in number in all parts of the country until practically every road was a member of more than one organization.44 These associations were on the whole very successful in steadying rates and distributing competitive traffic so as to check interline warfare.

⁴³ Railway Age, 9: 562.
⁴⁴ Johnson and Huebner, Railroad Traffic and Rates, 1:299.

But the excessive competition, due to the building of railroads in excess of the economic needs of the time, led again and again to the breaking of these agreements and to rate wars.

To the railroad men of the time coöperation seemed the only protection from ruin. In 1877 the delegates who had been appointed by the London shareholders of the Illinois Central railroad to investigate the causes of the steady decline of traffic upon that road concluded that much of the loss of traffic was due to the severe competition of small lines. The remedy they pointed out in these words: "The best prospect of maintaining remunerative rates, at present, lies in making agreements between the railroad companies for the maintenance of rates, and for division of earnings at competitive points. The absorption of the smaller lines into the systems of the larger companies is what must be looked to as the final settlement of the question of competition between the railroads."⁴⁵

But both pooling and combination were strongly opposed by shippers and the public in general, who believed that unrestricted competition was the best cure for high rates and unfair practices. In Illinois the shippers were for the most part farmers, and as they controlled the legislature many bills were brought in by them to prohibit pools.⁴⁶ As the railroad and warehouse commission pointed out, however, it was interstate and not intrastate pooling that constituted the really serious problem, and over this the state legislature had no control. The shippers were advised to await the action of the federal government, which was already being strongly urged to undertake legislation to regulate the railroads.

In 1881 a suit was brought against the Chicago and Alton, the Wiggins Ferry Company, the Madison County Ferry Com-

⁴⁵ Report of the delegates, American Railroad Journal, volume 50. The report is given in full, p. 779-781, 811-812.

⁴⁶ See Railway Age, 14: 177, for an illustration.

pany, and the St. Louis Bridge and Tunnel Company to prevent a pooling agreement from going into effect, on the ground that it would destroy competition in the transportation of freight across the Mississippi river.47 The court held that by the common law people could not lawfully be deprived of the benefits of competition by contracts between companies. The agreement was therefore held to be illegal. This seems to have been almost an isolated case in Illinois, however, and pooling went on practically unrestrained until the passage of the federal interstate commerce act in 1887.

The actual rates differed frequently so widely from the published rates that it is not possible to say exactly what effect pooling had upon rates, but that it did not always raise them appears from various rate agreements in which considerable reductions below the previous tariffs were agreed upon.48 The purpose of the pooling agreements was not so much the fixing of higher rates as the assurance that the published rates would be observed by all the roads. If secret rates and rebates were not given, it was quite possible that lower published rates could be established. The pool was therefore not concerned with raising rates, but with prevention of rate-cutting. The maximum freight rates were determined by water competition and by the effort of the railroads to develop the greatest possible traffic consistent with reasonable rates. An inspection of freight rates in Illinois shows that these fell much more rapidly before 1887, the year in which pools were prohibited, than in subsequent years.49

In spite of the severe rate wars and competition, the rail-

⁴⁷ Reported in the *Railroad Gazette*, 14:62-63. ⁴⁸ Thus in 1875 the Illinois Central and the Chicago and Alton railroads agreed to the following reduction in passenger fares: Chicago to New Orleans, from \$33.00 to \$28.00; Chicago to Mobile, from \$31.00 to \$26.50; Chicago to Vicksburg, from \$31.25 to \$26.50. In the same year the four roads between Chicago and St. Paul agreed to a 25 per cent reduction of freight rates. ⁴⁹ For table see appendix, p. 502.

roads of Illinois had by 1880 completely recovered from the demoralized conditions of the previous decade. The revival of business after 1878 gave an impetus both to freight traffic and to passenger travel. For the increase in the latter the reduction of fares on all Illinois railroads may have been partly responsible,⁵⁰ but the growth of freight traffic was due to bumper crops and improved industrial conditions. Earnings increased steadily, improvements were made in both roadbed and rolling stock, and the railroads of the state entered upon a new era of prosperity which continued until 1884.

At the same time rates were much lower, the average in 1885 being 2.2 cents per mile for passenger traffic and .96 cents per ton-mile for freight.⁵¹ The following table shows the gross earnings of railroads operating in Illinois:

YEAR ENDING JUNE 30	Gross earnings	Per cent of increase or decrease over previous year	
1881	\$176,073,250	26.0 increase	
882	189,352,978	7.5 "	
883	214,146,915	11.5 "	
884	210,228,068	1.8 decrease	
885	199,123,334	5.2 "	

EARNINGS OF ILLINOIS RAILROADS, 1881-1885 52

The panic of 1884 affected railway construction as well as earnings and in 1885 there was an actual decrease in mileage in the state.⁵³ The years 1884 and 1885 were marked by a

⁵⁰ Report of the Railroad and Warehouse Commission, 1880, p. 20. ⁵¹ Ibid., 1885.

 52 These figures are for the entire lines of the roads reporting to the railroad and warehouse commission and not for that part of the business done only within the borders of Illinois, as these latter were not published until 1884. The Illinois business alone yielded a gross return in 1884 of \$56,447,139, and in 1885 of \$56,960,964, which shows a slight gain instead of the loss indicated in the above table for these years.

⁵³ Railroad construction in Illinois for the period 1880-1893 was as follows: 1880, 273 miles; 1881, 409; 1882, 416; 1883, 192; 1884, 40; 1885, -4 (loss); 1886, 371; 1887, 326; 1888, 106; 1889, 122; 1890, 384; 1891, 10; 1892, 123; 1893, 63.

large production of corn and other foodstuffs in Illinois with resulting low prices. At the prevailing freight rates it scarcely paid the farmers to ship their produce to market, and they accordingly requested the railroad and warehouse commission to order a general reduction of rates. This the latter refused to do.54

The years 1886 and 1887 witnessed the beginning of another period of railroad expansion, especially in the newer country west of the Missouri river, but Illinois railroads did not share in this prosperity. Less freight was hauled in 1886 than in the previous year and, while there was an improvement in the amount of business in 1887, rates were still so demoralized by the severe competition of western lines that earnings remained low. Fifteen companies operating in Illinois had passed into the hands of receivers during the panic of 1884,55 and twelve of these were still under the control of the courts in 1886. Two years later most of these had been sold under foreclosure or otherwise reorganized. These were the weaker roads. The financial and physical condition of the stronger systems was, on the other hand, improving; thus the Illinois Central was able in 1886 to sell a large block of 3¹/₂ per cent bonds on the London market at par,⁵⁶ although a decade before it had been forced to pay 6 per cent interest. The earnings of Illinois railroads began to show an increase in 1888, which continued very steadily until interrupted again by the panic of 1893.57

54 Railway Age, 14:179; Report of the Railroad and Warehouse Commission, 1885, p. xiii.

⁵⁵ Ibid., p. vii.

⁵⁶ Railway Age, 15:353. A quotation from the London Economist refers to this transaction as "an unparalleled feat in the history of American railways." ⁵⁷ The gross earnings of Illinois railroads for business carried on within the

state were as follows from 1884 to 1893 (year ending June 30): 1884, \$56,447,000; 1885, \$56,960,000; 1886, \$55,677,000; 1887, \$56,860,000; 1888, \$61,333,000; 1889, \$63,170,000; 1890, \$65,471,000; 1891, 73,499,000; 1892, \$81,793,000; 1893, \$85,823,000. Compiled from Reports of the Railroad and Warehouse Commission.

Traffic, both passenger and freight, showed a steady growth during this period. The amount of freight carried in Illinois increased from 35.5 million tons in 1885 to 48.3 million in 1890, and to 61.7 million in 1893. The decade ending in 1885 had seen the freight traffic in the state just doubled, and the eight years following almost equaled this record. Along with its growth in tonnage, an interesting change was manifesting itself in the character of the freight, which reflected the industrial changes taking place in the state during this period. Manufactures and coal began to take the place of the products of agriculture as the most important class of freight. Thus in 1875 the products of agriculture, animals, and lumber made up exactly half of all the freight carried (49.8 per cent), while coal and other minerals, merchandise, and manufactures made up the other half (50.2 per cent). But by 1890 the percentage of the two groups was 35.8 and 64.2 respectively. This change in character, of course, reflects the growing industrialization of the state and the urban concentration.

During the decade ending in 1893 the improvement of the physical equipment of the railroads went on at a rapid rate. Steel rails superseded iron on all the principal roads of the state, better bridges were built, heavier and more capacious rolling stock was provided, safety appliances were introduced, Pintsch and other improved lighting systems replaced the oil lamps in passenger coaches, passenger trains were provided with steam-heating systems, and many other improvements were adopted in order to guard the lives of passengers and employees and to care in a more efficient manner for the ever-increasing volume of freight and passenger traffic. The use of greater care in guarding against accidents and in the preservation of life and property was especially noteworthy.⁵⁸

⁵⁸ See Reports of the Railroad and Warehouse Commission, 1882-1892.

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Illinois still led all the states in the union in the total railroad mileage constructed and in operation in 1893. There were in this year 10,315 miles, or over 18.04 miles of railroad per 100 square miles of territory and over 36 miles of road per 10,000 inhabitants. Most of the people of the state lived within easy access of railroad facilities, 85 per cent of all the land being within 5 miles of a railroad in actual operation, 11.5 per cent between 5 and 10 miles, 2.5 per cent between 10 and 15 miles, and only 1 per cent farther distant than 15 miles, although none more than 20 miles away. The many railroads in other states near the boundary lines are not included in this estimate.⁵⁹

59 Report of the Railroad and Warehouse Commission, 1893, p. 31.

XV. WATERWAYS AND ROADS, 1870-1893

A S THE state acquired adequate facilities for transportation by way of the railroads, it naturally came to make less use of the slower and less easily controlled waterways. The streams which had borne the traffic of the pioneer had served their day; the enlarged commerce of the industrial commonwealth could not well accommodate itself to their intermittent and slow navigation. Especially were the more expensive commodities, which could stand higher freight rates and which required certainty of delivery within a reasonable time, transferred from the rivers to the more reliable railroads.

By 1870 the competition of railways had begun to make inroads upon the important St. Louis traffic, most of which had its origin in Illinois. "The great system of Railroads now rapidly spreading out from our City in every direction," said the secretary of the St. Louis Merchants' Exchange, "has had the effect to contract the limits of the freightage by water and we now find an excess of tonnage in nearly every trade. In years gone by, when not only the freight but the passenger travel went by water, our fine and commodious packets found a remunerative trade. But in this fast age, everybody takes the quickest route, and our steamers have to look almost entirely to their freight list for their profits."¹

A few years later an Illinois authority commented in even more discouraged tones upon the decline in water transportation:² "Every one familiar with the business knows that

¹ Report of the Trade and Commerce of St. Louis, 1871, p. 17-18. ² Report of the Railroad and Warehouse Commission, 1875, p. 21.

the railroads have almost driven the steamboats out of trade. Instance the Ohio, Mississippi, Missouri and Illinois rivers, where only a few years since fleets of fine boats were sailing, doing a prosperous business; now occasional boats make a precarious livelihood. . . Even in Chicago, so favorably situated for water transportation, the relative amount done by rail is yearly increasing."

The river commerce of Illinois is difficult to determine because of the paucity of statistics, but investigations conducted by the federal government on the internal commerce of the country in 1869 and again in 1886 make it possible to trace the changes which occurred between these dates. A study of the traffic on the Ohio river shows that at all ports where there was railroad competition the river trade had been reduced during this period to between one-half and one-third of its former volume, while at other ports where there was no railroad competition there was a marked increase in the river traffic.³ This was probably true of other river towns.

Cairo was the most important commercial city on any of the Illinois rivers, situated as it was at the junction of the Mississippi and Ohio rivers, but the commerce of this city fell off from \$20,000,000 in 1869 to a little over \$7,729,000 in 1886; of the latter amount about half was wholesale and retail merchandise. The number and gross tonnage of the vessels engaged in the river trade also declined, though not in the same proportion. The number of steamboats and barges arriving at Cairo in 1872 was 4,105 with a gross tonnage of 1,486,717; in 1886 there were 2,868 boats of 1,119,364 tons.⁴ In the latter year the city was still served by eleven packet lines plying on the Ohio, Mississippi, Tennessee, and Cumberland rivers, but as a result of increasing diversion of traffic

³ Report on Internal Commerce of the United States, 1887, appendix, 514-515. ⁴ Ibid., 91, 514-515.

to the railroads there was each year less commerce to divide among them, and the number of lines and vessels was steadily reduced.

The most important single branch of the river trade was the traffic in grain, which was drawn from all over the state and shipped farther south. But with the building of railroad connections from Cairo into southern territory the boat lines lost the business. The railroads made a rate low enough to get the traffic, allowed the bulk grain to be stopped in transit for sacking without extra charge, and put in switch connections at the large plantations. Against these and other advantages the steamboats could not long compete.⁵

St. Louis was the most important center of the Mississippi river trade and was served in 1870 by four packet lines with over twenty vessels operating between this city and Illinois ports. These lines were able to operate only about ten months in the year, being ordinarily forced to suspend operations in the winter on account of ice.⁶ Interesting light is thrown on the character of the vessels engaged in this trade by noting that while the number of steam vessels registered in Illinois river ports increased from 61 in 1872 to 72 in 1895, their average tonnage declined from 211 to 115 tons for the same years. As reduced freightage demanded less capacity the size of the vessels was reduced, for smaller vessels were better adapted to the shallow and variable waters of the Illinois rivers.

Far more important than the water traffic of these rivers for the Illinois shipper was their influence upon railway freight rates. In 1876 it was stated by a federal authority that "the Mississippi River is still and will always continue to be the

⁵ Report of the Commissioner of Corporations on Transportation by Water, part 2, p. 304-305. ⁶ Report of the Trade and Commerce of St. Louis, 1870, p. 10, 31, 38-41; 1871, p. 17.

most important avenue of commerce between the West and the South, not only with respect to the commerce actually carried upon it, but in the influence which it will ever exert toward regulating rates on competing rail-lines, especially for the transportation of the heavier commodities comprising the lower classes of freight and embracing agricultural products, lumber, minerals, &c."⁷

The Illinois river was regarded by shippers during the seventies as very influential in preventing unreasonably high railway rates, and there was much agitation at that time for the improvement of this waterway. "The people of this State, generally," said the canal commissioners in 1870, "have a very deep interest in making the Illinois River navigable for boats drawing five or six feet of water, from LaSalle to the Mississippi River, at all seasons when not shut in by ice, or when the canal from Chicago to LaSalle is open, which is about eight and one-half months in the year, and not only this State but many of the Western and Southwestern States, as it connects Lake Michigan and the great chain of lakes with the Mississippi and its tributaries, on which is from 10,000 to 12,000 miles of river navigation." 8

The demands for improvement of the waterways led in 1872 to the building, by the state of Illinois, of a lock at Henry on the Illinois river. This lock was at the time of its construction the largest one on the continent. Its installation caused a revival in the river commerce; and the following year there developed between several Illinois river points and Peoria a large grain trade, which was important enough to induce two Peoria elevators to erect the necessary machinery for unloading grain from river boats quickly and cheaply.9

⁷ Report on Internal Commerce of the United States, 1876, p. 38. ⁸ Report of the Canal Commissioners of Illinois, 1870, p. 36-37.

⁹ Report of the Trade and Commerce of Peoria, 1873, p. 9.

The building of the lock helped to reduce freight rates, not merely by water but also by rail, and also benefited the producers of grain and other commodities. After this improvement the cost of freight between Chicago and St. Louis and intermediate points was only three-fifths of the cost by rail; and as a result of the river competition freight rates generally were held down and the benefits were distributed throughout a large section of the state.¹⁰

A further improvement in the upper part of the Illinois river was made by the construction in 1876 of a second lock at Copperas creek. On the section of ninety miles between Copperas creek and La Salle, where the Illinois and Michigan canal connects with the river, the state collected tolls just as it did on the canal. The principal freight carried through the river was grain, a considerable amount of sorghum from various Illinois points to St. Louis, and merchandise from Chicago and Peoria. The St. Louis boats ran to Chicago; in 1886 there were nine steamers engaged in this trade.¹¹ The number of boats fell off steadily, however, and no new ones were built because of the keen railway competition.

The federal government was now induced to undertake the further improvement of the Illinois river from Copperas creek to its mouth at Grafton on the Mississippi river, and for many years improvements were carried on jointly by the state of Illinois and the United States government. A lock and dam were completed at La Grange, 79 miles from the mouth of the river, in 1890; and four years later a second one was opened at Kampsville, 48 miles farther south. The building of these improvements gave promise of satisfactory navigation on the Illinois river at all times, as it was believed that a stage

¹⁰ Report of the Canal Commissioners of Illinois, 1872, p. 56; 1874, p. 11; Chicago Tribune, March 13, 1871. ¹¹ Report of the Trade and Commerce of St. Louis, 1882, p. 57; 1886, p. 55.

of water would be permanently secured sufficient for all purposes of navigation and affording at least as deep a channel as existed in the Mississippi river between Grafton and Alton.¹²

After the completion of the locks and dams built by the federal government there was an increase in the number of steamers plying between St. Louis and Illinois river ports, from nine in 1886 to fourteen in 1899.¹³ Many of these steamers, however, were not cargo carriers but were used merely to tow barges. An idea of the general trend of the river commerce may be secured from a study of the receipts from and shipments to Illinois river points at St. Louis. In the following table these figures are given for five-year intervals:

Year	Receipts at St. Louis (tons)	Shipments from St. Louis (tons)
1871	146,000	10,936
1876	129,940	20,560
1881	160,555	5,175
1886	88,010	5,175
1891	31,190	4,305
1896	30,325	11,780

FREIGHT TRAFFIC BETWEEN ST. LOUIS AND THE ILLINOIS RIVER

The great decline shown in the receipts at St. Louis of produce from Illinois river points is traceable to the falling off of the movement of flour and grain by water. In the case of flour and wheat this might easily be at least partly explained by the shifting of the center of wheat production to the northwest and to the consequent decline of Peoria as a wheat and flour milling center. But the decrease in the shipments of corn and

¹² Report of the Trade and Commerce of St. Louis, 1890, p. 79-80. ¹³ Ibid., 1899, p. 132-134. oats — the latter of which almost ceased — can be accounted for only by the fact that most of this traffic had been diverted to the railroads. The same thing was true of shipments of livestock and meats down the river, due to the decline of Peoria as a meat packing center and to the use of refrigerator cars, which gave the railway practically the whole trade. So, too, shipments of salt, coal, hay, lumber, butter, cheese, and other products, which amounted in the aggregate to a considerable tonnage in 1870, had all but ceased twenty years later.

The Illinois and Michigan canal, stretching from a point on the Chicago river about five miles from its mouth to La Salle, where it connects with the Illinois river, forms a part of the through waterway from Chicago to the Gulf of Mexico, of which the Illinois river is another link. This canal had been in the hands of trustees since 1845, when money had to be borrowed from private sources to complete it, but had been so successfully managed that by 1871 the debt was entirely paid and the canal trust was dissolved. The question as to the state's attitude toward the canal when it should again come under state control had already arisen during the debates of the constitutional convention over the section dealing with the state debt. Those opposed to the canal wished a provision incorporated in the constitution forever prohibiting the state from incurring debts for the construction of internal improvements. But the friends of the canal, who wished not only to see the canal kept up but also to have further improvements made on the Illinois river, vigorously opposed this proposal, and finally won their point, at least to the extent of permitting a state indebtedness of \$250,000.14

The canal was turned over to the state on August 17, 1871, with all debts paid and a balance of \$92,100 to its credit.

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¹⁴ Chicago Tribune, January 28, 31, 1870, July 1, 1871; Constitution of 1870, article IV, section 18. See also above, p. 10 ff.

Efforts now began to be made to have the state enlarge the canal in the hope of expanding its traffic and thus increasing the amount of revenue from tolls. The Joliet Iron and Steel Company, operating a large steel plant at Joliet, in a letter to the canal commissioners in 1872, declared that it would ship ore to the amount of 134,000 tons a year via the Illinois river and the Illinois and Michigan canal from the iron mines of Missouri, if satisfactory navigation could be maintained throughout the year.¹⁵ The canal commissioners urged canal improvements, but usually they were on the defensive, and their reports were filled with excuses and explanations of the declining revenues.

The amount of freight transported over the canal remained fairly steady during this period, but since the total amount carried within the state was rapidly increasing this meant that the canal's share was growing smaller while that of the railroads was increasing. In 1873 and 1874 there were transported by canal to Chicago 12,425,705 bushels of corn and wheat, while in the same years the Chicago and Rock Island railroad alone carried to Chicago 16,279,634 bushels. The contest between the canal and the railroads was a spirited one, but after 1882 both the absolute and relative tonnage of the canal fell off. So unpromising, indeed, was the outlook that in 1882 the people of the state voted by a large majority to cede the canal to the federal government as a part of a lakes-to-the-gulf waterway.16

The movement of freight and the financial condition of the canal from 1870 to 1893 are shown by five-year intervals in the following table: 17

¹⁵ Chicago Tribune, September 12, 1871; Report of the Canal Commissioners

of Illinois, 1872, p. 65. ¹⁶ Report of the Trade and Commerce of Chicago, 1873, p. 72, 74; 1874, p. 72, 74; Report of the Trade and Commerce of Peoria, 1882, p. 17. ¹⁷ "Preliminary Report of the Inland Waterway Commission," Senate Docu-

ments, volume 17, number 325, p. 250-251.

Year	Boats running	Clear- ances	Tons transported	Gross expenses	Tolls	Surplus or deficit
1870		2,902	585,975	\$108,695	\$149,635	\$40,940
1875 a		3,554	670,025	74,511	107,081	32,570
1880		4,536	751,360	125,601	92,296	33,405 b
1885		3,990	827,355	86,393	66,800	19,593 b
1890		2,920	742,392	75,125	55,112	20,013 b
1893		2,452	529,816	59,522	38,702	20,820 b

OPERATIONS ON THE ILLINOIS AND MICHIGAN CANAL, 1870-1893

a After 1872 the table includes clearances from the locks at Henry and Copperas creek on the Illinois river. b Signifies a deficit.

Grain was the most important commodity passing through the canal. In 1892 the articles transported consisted of 2,333,957 bushels of grain, 359,680 cubic yards of stone, 9,710,695 feet of lumber, and 1,683 tons of merchandise.¹⁸ Under the last named were included hardware, dry goods, cutlery, groceries, and similar bulky or heavy commodities. The reduction in tolls, which was imperative if the canal was to retain any of the traffic, caused a steady fall in the receipts from the canal; and although the expenditures upon the canal were pared down to the very minimum it was impossible to prevent a deficit. Every year since 1879 has witnessed a deficit in the operating expenses of the canal, no allowance being made in these figures for interest on the investment.

In spite of declining traffic and repeated deficits, the canal was still a sufficiently effective competitor to keep down railroad rates. In 1876 the canal rate on corn from La Salle to Chicago, 99 miles, was 3.25 cents a bushel; the railroad rate was 4.5 cents. From Henry to Chicago, 128 miles, the water rate was 4 cents per bushel, while the railroad charged 4.5 cents. But from Tiskilwa, which did not have the advantage of water

^{18 &}quot;Preliminary Report of the Inland Waterway Commission," Senate Documents, volume 17, number 325, p. 251.

competition to Chicago, 123 miles, the railroad rate was 6.83 cents, although most of the way the grain from this place and from Henry moved over the same tracks and frequently on the same trains. The effect of the canal competition was also seen in the railroad rates from Peoria to Chicago, 160 miles; in the summer the rate was 3 cents a bushel, but 4.5 cents in the winter when the canal was not in operation.¹⁹ The effective and the possible competition of the canal route and its effect in keeping down railroad rates was probably the most potent influence in inducing the people to continue in operation an artificial waterway which on the surface was losing money for the state.

The agitation for improved and cheaper transportation facilities, which took the form of granger legislation, of rate regulation, of the creation in Illinois of the railroad and warehouse commission, and of other efforts to secure cheaper rates directly from the railroads, next found expression also in efforts to improve the waterways and thus reduce the cost of transportation. The low prices obtained by the farmers for their grain and the high railway freight rates which made it almost impossible to market their products at a profit caused many shippers to look to artificial or improved waterways as the best solution of their problem. This movement led to the building, by the state, of two locks on the Illinois river in 1872 and 1876 which greatly improved the navigability of the upper section of the river. But this improvement did not help the Illinois farmers and other shippers on the upper Mississippi; they desired a shorter and more direct route between their section of the state and Lake Michigan. Thus began an agitation for a second canal which finally culminated in the construction of the Hennepin canal. Although it was not completed until 1907, the discussion of this project in the earlier

19 Putnam, The Illinois and Michigan Canal, 121.

period throws considerable light upon the character and extent of the forces that were agitating for cheaper transportation.

The proportions of this movement may be judged from the fact that nine hundred delegates attended a canal convention held in 1874 at Rock Island, Illinois. This convention passed resolutions declaring that the time had come for the United States government to assume control over interstate commerce; that congress had too long neglected the petitions for direct water communication between the Mississippi and the Great Lakes; and that the construction of a canal from Hennepin on the Illinois river to Rock Island would help to solve the transportation problem of the farmers on the upper Mississippi. The convention also favored the improvement of the Illinois and Mississippi rivers, and urged the state of Illinois to cede the Illinois and Michigan canal to the federal government as a link in a through waterway from Lake Michigan to the Mississippi.²⁰

A memorial was drawn up and sent to congress by a committee appointed for the purpose. In this were set forth the advantages of cheap transportation from the northwest to the east, the need of an all-water route in order to compete with the railroads, the enormous volume of freight traffic between the Mississippi and Lake Michigan, the savings that would accrue to the shippers, and similar arguments. But this memorial seems to have made little impression upon congress. The following year another canal convention was held at Rock Island; and this time they appointed delegates to go to Washington to lobby for the building of the Hennepin canal, but this enterprise, too, was without success.²¹

The next canal convention seems to have been held in 1879

²⁰ Chicago Tribune, March 25, 1874. ²¹ Ibid., January 15, 1875.

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at Ottawa, when 600 farmer delegates met to urge a deep waterway from the Great Lakes to the Mississippi. Petitions were circulated which were to be forwarded to congress. When, less than a month later, the rivers and harbors bill was passed, great discontent was expressed because the Illinois congressmen were unable to get more than \$40,000 for the Illinois canal improvement, while Wisconsin men got \$100,000 for a useless project, the improvement of the Fox river.²²

Several further meetings were held in 1881, but the most important step forward was taken in 1884 when the national board of trade at a meeting in Washington, D. C., indorsed the following resolution presented by the Chicago Board of Trade: "*Resolved*, That the enlargement of the Illinois & Michigan Canal and the construction of the Hennepin Canal, connecting the Illinois and Mississippi Rivers, as by survey recently made by the Secretary of War, are necessary to control and materially reduce the cost of transportation from the fields of production to the great lakes, and that the cheapest possible transport from the interior to the seaboard is indispensable to the retention of foreign markets for our cereals."²³

A few days later the advocates of the Hennepin canal were given a special hearing before the congressional committee on railways and canals. They presented arguments to show the saving in cost of transportation that would be effected by the construction of the canal; they pointed out the absolute necessity of having foreign markets to take off surplus cereals and argued that the canal would aid in marketing this agricultural produce by reducing the transportation rates both directly and indirectly by their restraining effect upon railway freight charges. The house committee was convinced and voted 8 to 2 to report favorably a bill appropriating \$1,000,000 to begin

 ²⁸ Chicago Tribune, January 17, February 12, 1879.
 ²³ Ibid., January 25, 1884.

work on the Hennepin canal;²⁴ but the project failed to receive the sanction of congress.

Agitation, however, continued in spite of the objections that now began to be made: some thought it would be better to secure the improvement of the Illinois river before urging the construction of a new canal. They pointed out that the lockage involved in the project was enormous, that the proposed ditch was too small, that it was not planned to construct it by the most feasible route, and that the time for such a canal had not yet arrived.²⁵ A waterways convention of 595 delegates held at Peoria in 1887, however, indorsed both plansthat for the improvement of the Illinois river and that for the construction of the Hennepin canal. Finally the federal government decided to undertake the Hennepin project, but even after the decision was made construction proceeded very slowly, and not until 1907 was the canal finally completed.

Plans for through water routes to the seaboard and even to Europe were not confined to the rivers and canals alone, but looked also to the lakes. There were many projects looking to the development of a direct water route from Chicago to Europe without the necessity of transhipping the freight. Α considerable trade existed at that time in grain, which went by lake boat from Chicago to Montreal and was there loaded on ocean steamers. Chicago shippers urged that the locks on the Welland canal, which were too small to permit the passage through them of ocean-going ships and even of the larger lake vessels, be enlarged; they also desired to have the free navigation of the St. Lawrence assured them by the terms of the treaty of Washington of 1871.26

The swelling volume of the lake trade, however, was itself

 ²⁴ Chicago Tribune, February 1, 7, 1884, January 30, 1885; Report of the Trade and Commerce of Peoria, 1881, p. 17.
 ²⁵ Chicago Tribune, February 26, 1885, December 11, 1886.
 ²⁶ Ibid., December 13, 1870, April 20, 25, May 16, 20, 1871.

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making this dream of through commerce unrealizable, for with its increase there went on a steady growth in the size of the lake vessels. Although the Welland canal was twice enlarged, there were on the lakes in 1884 no less than 255 vessels which drew too much water to pass through it.²⁷ One result of the situation was a decline in the traffic on this canal and its diversion to the Erie canal. But the gain by the latter was not so great as the loss of the former. The canal system as a whole was losing steadily to the railroads. Even before 1870 the railroads had begun to compete vigorously for the eastbound traffic from Chicago, especially for grain; but the success of the railways in diverting this trade to themselves differed among the various commodities.

In the case of flour the balance turned in favor of rail shipments as against those by lake as early as 1866. Between 1872 and 1885 the railroads enjoyed their most pronounced ascendancy, in some years carrying more than ten times as much as the water route. During the next ten years there was a great increase in the total shipments, and the share of the railroads fell to slightly over half by 1894. In the contest for the wheat and corn trade the railroads were less successful. From 1870 to 1894 between a third and a quarter of each of these grains was shipped east from Chicago by rail, the remainder, which moreover was a steadily increasing amount, going by water. On the other hand, in the movement of oats from Chicago the railroads have since 1873 maintained a supremacy over the lake vessels, exactly reversing the proportions for wheat and corn.

Of the total grain and flour movement from Chicago during the period 1860–1864 lake shipments were approximately ten times as great as those by rail. The next twenty years saw the latter equal and finally exceed the former. The average

27 Chicago Tribune, October 3, 1884.

annual lake shipments increased from 41 to 63 million bushels between 1860 - 1864 and 1880 - 1884, while the all-rail movement grew from 4 to over 64 million bushels. But the next decade saw the situation reversed again, the lake route taking about 64 per cent of all in the period 1890 - 1894. At this date the total eastbound shipments by lake were 97 million bushels and those by rail were 80 million.²⁸

Though the slackening interest in waterways within the state is readily enough explained by the expansion of the railroads, it is not so easy to understand why the highways connecting the farms with shipping points both on railroads and rivers should have gone so long neglected. In spite of the denser settlement and the increased ease of communication with other parts of the country, within the state Illinoisians were moving about on roads that were still those of a frontier state; although by 1870 more miles had been constructed, their condition was hardly better than it had been twenty-five years before.

Practically all the roads in the country districts throughout the state were of earth and, although for a part of each year most of them were almost impassable, the farmers and other persons who used them manifested little interest in their improvement. The road legislation was antiquated and obstructive, little change having been made in the road law passed in 1841. Administration was highly decentralized and only by much effort were conditions gradually improved.

After the adoption of the constitution of 1870 it was realized that the existing road laws were inadequate and unsatisfactory, and in 1871 the first step toward their improvement was taken by the appointment of a standing committee of the house on roads, highways, and bridges. A similar committee

²⁸ Report of the Commissioner of Corporations on Transportation by Water, part 2, p. 168. existed in the senate. In 1872 a new road law was passed, which provided for the division of all counties into districts, in each of which three highway commissioners were to be elected who were to have the care and superintendence of all road affairs.²⁹ An attempt to have incorporated a provision providing for the maintenance of the roads by contract with the lowest responsible bidder failed, because the farmers wished to work out their road taxes at leisure.

This law, it was declared, caused great confusion, so the following year it was repealed, and two new laws were passed in its place - one for counties under township organization and the other for those under county organization, which for the most part were those in the southern part of the state. These latter counties cared little for local road officials, so in them road administration was placed in the hands of a county board which appointed district supervisors. But in counties under township organization, offices to fill were apparently regarded as more desirable than efficient road administration; and not only were the three elective commissioners in each district retained, but in addition three overseers of highways elected for one year were provided for; these latter officials, having charge of actual construction and repair of roads and bridges, were abolished in 1877, restored in 1879, and abolished again in 1883.30

An opposing tendency was manifesting itself in the desire to reduce the expenses of road administration to as low a point as possible. Accordingly, while the number of officials was multiplied their pay was reduced; the per diem pay of the local highway commissioners was cut from \$2.00 in 1872 to \$1.50 in 1873 and to \$1.25 in 1879.31 This struggle between two

House Journal, 1871, p. 68, 93; Laws of 1871-1872, p. 679
 Laws of 1873, p. 169; Laws of 1877, p. 182; Laws of 1883, p. 138.
 Laws of 1873, p. 184; Laws of 1879, p. 269.

opposing tendencies explains also the alternate inclusion and exclusion of the elective highway overseers in the laws of the period.

The forces operative in bringing about changes in the road laws in the seventies were on the whole political rather than economic. The farmers, who made most use of the public highways, manifested little interest in wagon road improvement. The Illinois State Farmers' Association, which held annual conventions beginning in 1873, had not a word to say on this subject. The same thing was true of the Illinois State Grange, which was organized in 1872. During the depression from 1873 to 1878, with the prevailing low prices for agricultural products, the farmers were more interested in securing lower rates from the railroads so as to market their crops at less cost, than in voting additional taxes to improve the roads between their farms and the railroad stations. The former was cheaper and seemed to them of greater importance and more economical.

Toward the end of the decade, however, agitation began among the more progressive elements for a betterment of the bad condition of the country roads in Illinois. For road building in the prairie states the engineers were agreed in urging proper grading and drainage. Thorough compacting of the road surface by means of a steam roller was also recommended.³² In order to encourage the introduction of road machinery and to arouse interest in its use, the state board of agriculture in 1874 offered a gold medal for the best road building machine on display at the state fair that year. In 1875 they offered a cash prize of \$100 for the best half mile of earth road built in the state during that year. In the period 1877-1880 still another plan was tried, of offering a cash prize of \$100 to the Illinois township which built the greatest mileage of earth roads

82 Engineering News, 3: 36; 4: 101, 300, 306; 5: 193, 310; 6: 219, 228, 235, 243.

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during that year. And finally between 1879 and 1882 cash premiums and medals were offered for the best road-building machine and scraper on display at the state fair. By 1883 the displays of such machines had grown so numerous that the premiums were discontinued.

Under the stimulus thus given, numerous road making contests were held and considerable impetus was given to road improvement. The contest held in 1875 will serve as an illustration. A prize of \$100 was offered for the best half mile of road constructed, and in making the award there were to be taken into consideration the kind of soil, the devices adopted in construction, the time in which the work was done, and the cost of construction. At the trial at Roberts' Station in Ford county four competitors appeared on the ground, but as it was impossible to find available halfmile stretches of road, owing to the wet weather, the distance was reduced to 80 rods for each competitor, and the time of completion was limited to a day and a half. The prize was awarded to W. J. Edwards of Chicago, who constructed the 80 rods with a Wauchope grader and ditcher in 9 hours and 20 minutes at a cost of \$8.40 or 101/2 cents per rod. But his machine complete cost \$675, and the committee felt that so expensive and heavy a machine might not be readily available for all localities, so they also commended a lighter machine called the Chicago scraper and ditcher, which cost only \$15 and which made a good showing in the contest.33

The increasing public sentiment in favor of improved roads found expression in 1879 in the governor's message to the general assembly, when Shelby M. Cullom mentioned the bad condition of the roads and the need for improvement. He had no constructive program, but said he thought there could be "some plan devised by legislation to encourage their permanent

⁸³ Department of Agriculture of Illinois, Transactions, 1875, p. 72-74.

improvement." ³⁴ This last phrase may be interpreted as the first official indorsement of "hard roads" in Illinois. Four years later Governor Cullom referred again to the bad roads and expressed his belief that the legislature would act in response to a "strongly expressed public sentiment" in favor of improvements.³⁵ As usual the agitation for road reform took the form of a demand for changes in legislation, but there were some so bold as to declare that the only way to get improved roads was to place competent men in charge of road work and to collect all road taxes in cash instead of labor.

The road question was considered so important that the senate in 1883 directed the secretary of state to gather information as to actual expenditures in the counties during the previous year. He reported expenditures for road purposes amounting to \$2,492,940, but this sum was undoubtedly an underestimate, as it was less than the amount of taxes collected for roads and bridges during that year. Two new road laws were passed during this session.³⁶ One which affected counties under township organization abandoned the elective overseers in each township, provided for additional taxes for roads, authorized road officials to build permanent roads where possible, and provided for tile drainage of roads. The other law applied to all counties in the state and provided for a special levy, by vote of the people, in any township or county for the construction of "hard roads."

This "hard roads law" was hailed as a great revolution in road affairs in Illinois. It was the first legislation providing for hard roads at public expense, although toll roads of a permanent type had existed in the state for a number of years. The application of tile drainage in road building was also an

⁸⁴ Reports General Assembly, 1879, 2:14. ⁸⁵ Ibid., 1883, 1: 10-11. ³⁶ Senate Journal, 1883, p. 216, 237, 510-511; Laws of 1883, p. 132 ff.

innovation, although for several years engineers had been recommending proper grading and thorough drainage as the best means of improving prairie roads.³⁷ Tile drainage was just coming into prominence in agricultural operations, and the legislators, hitherto suspicious of manufacturers of draintile, at length consented to apply the same principles to road construction. Some of the railroads in the state offered to haul material for building hard roads at the actual cost of service.

The growing interest in the subject of improved roads is evidenced by the action of various societies and meetings. One of the important organizations in the agitation for better roads and in the campaign of education necessary to arouse the public was the Illinois Society of Engineers and Surveyors, organized in 1886. This society stood for the application of scientific engineering methods to road construction and maintenance, and its influence was a factor of no mean importance in the movement for road betterment. The state board of agriculture was another body which advocated the improvement of roads; it commended heartily the hard roads provisions of the law of 1883 and urged the people of the state to take advantage of them.³⁸ In May, 1886, the board called together a threeday meeting of the local highway commissioners. Over 400 farmers assembled on this occasion to discuss the road situation in Illinois, thus making it one of the most notable gatherings yet held for such a purpose. It was generally recognized that road improvement was one of the greatest problems before the people of the state, but there was considerable difference of opinion as to what was necessary to secure the desired improve-The convention finally adopted resolutions favoring ment. proper grading and thorough drainage.

³⁷ See papers read before the annual meetings of the Illinois Tile Makers' Association. Department of Agriculture of Illinois, *Transactions*, 1881, p. 483-485; 1882, p. 502-504. ³⁸ Ibid., 1883, p. 364.

A so-called "permanent road" convention, also under the auspices of the state board of agriculture, was held the following year at Springfield. This body urged coöperation of its officers and the appointment by the legislature of a committee of the state board for this purpose. A law was passed during the ensuing session of the legislature providing for the division of counties not under township organization into road districts with three elective highway commissioners in each district.³⁹ This law may be said to have unified the system of road administration, since after this time there is very little difference in this respect between the two different types of counties in the state. It was unfortunate, however, that the model of decentralized administration should have been taken as the one to which the state system was made to conform.

The movement for good roads was not confined merely to agitation or even to legislation. Experiments were being made toward the end of the eighties in the construction of gravel A number of towns along the Sangamon river - Sayroads. brook, Gibson, Lexington, Towanda, and Money Creek-had built gravel roads at an expense of about \$900 a mile, which was \$391 in excess of ordinary dirt roads. Such a method was feasible, however, only in those sections where gravel was easily obtained. A few localities voted the issue of bonds for the construction of hard roads, and in at least one instance funds were raised for this purpose by private subscription.40 In 1890 a bill was introduced into congress by Senator Cullom appropriating \$50,000 for the construction of a macadam road from Springfield to Camp Butler, but the grant was not made.

By this time, however, economic and social forces began to supplant the political forces and to give new impetus to the

³⁹ Department of Agriculture of Illinois, Transactions, 1887, p. 11; Laws of

^{1887,} p. 269 ff. 40 Engineering News, 19: 487; 20: 267; 23: 236, 501. At Highland, C. Kock raised \$600 in a few days.

movement for improved roads. Definite demands began to be made by various state organizations which represented the more enlightened elements of the rural and village population. Such were the Illinois Farmers' Institute, the Illinois State Grange, the Illinois State Dairymen's Association, the Illinois State Horticultural Society, and the Illinois Society of Engineers and Surveyors. The last named body was particularly active in urging the appointment of a commission to study the matter, the adoption of a constitutional amendment to permit bond issues for road improvement, and other reforms. The dairymen resolved in 1891 that "it is the duty of all interested in the industry of farming to encourage the immediate building of permanent stone and gravel roads, and to discourage the expenditure of any money in the customary method of plowing roads."⁴¹ In 1890 the State Grange adopted resolutions favoring the appropriation of money by the state and counties for the construction of hard roads connecting county seats and other important towns; by 1892 this organization was demanding federal as well as state aid for local roads and also the use of convict labor in public highway improvement.

It is clear that the more progressive elements in rural Illinois were in favor of road improvement and of greater centralization in road administration. In 1891 a bill was introduced into the house providing for the establishment of a nonpartisan state board of highway commissioners; but the committee on roads and bridges reported the bill adversely,42 and the political forces against it proved too strong. The appointment of such a commission had to wait another decade.

The construction of highway bridges had progressed as little as had that of roads. In both respects Illinois lagged

⁴¹ Report of the Illinois State Dairymen's Association, 1891, p. 461. ⁴² House Journal, 1891, p. 656, 1006–1007.

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behind neighboring states. Bridges were poorly built and in many cases actually dangerous; yet nothing was done to better conditions. As early as 1872 provision had been made by law for county aid in building substantial and expensive bridges, but few townships availed themselves of this aid and cheap structures continued to be built. Several bridge accidents in the decade from 1880 to 1890 called attention to the inadequacy and even danger of the ordinary wooden highway bridge, but practically nothing was done to remedy the situation.

The two decades and a half ending in 1893 constituted what may be called the "awakening period" in the history of roads in Illinois. There was much talk and little achievement. It was a period of education and agitation. Yet by the end of it the economic and social forces which were to "pull Illinois out of the mud" were beginning to operate, although many more years were to pass and other forces were to develop and unite with these before the final steps were taken in the effective movement for highway improvement.

XVI. TRADE AND COMMERCE, 1870-1893

THE majority of the people of Illinois in 1870 were engaged in farming, and most of them in highly specialized forms of agriculture. The city workers, on the other hand, were developing a great diversity of industries, many of which were built up on the basis of the raw materials furnished by the farms. A large and growing interchange of commodities had, therefore, developed between the rural and urban sections of the state, and between both of these and more distant markets in the east and south. No longer could a single producer or group of producers supply all their own wants, but each was forced to trade with the others. In the early seventies the chief commercial interests of Chicago and in that city were centered the commercial interests of the whole state—were grain, flour, livestock, provisions, lumber, wool and hides, seeds, and coal.¹ Of these the most important was grain.

Before 1870 most of the surplus grain of Illinois had gone to eastern markets, being shipped from Chicago via the Great Lakes and the Erie canal or the St. Lawrence river. Corn, pork, and other agricultural products also found a market in the south. It had been the custom to place grain shipped to Chicago from Illinois farms, or from points farther west, in warehouses in that city, from which it was sold to grain dealers. This necessitated immense warehousing capacity and the whole business of storing, buying, and shipping grain was of

1 Report of the Trade and Commerce of Chicago, 1871, p. 9-13; 1872, p. 10-14.

great importance. About this time, however, various events occurred which threatened the prosperity of this trade and the preëminence of Chicago as its principal center in the United States.

Illinois had long been losing ground as a wheat producing The center of production of winter wheat was steadily state. moving to the southwest, while that of spring wheat was being pushed even more rapidly to the northwest. As a result of the large immigration into these states, Dakota, Nebraska, and Kansas expanded their wheat producing area from 3,600,000 acres in 1879 to 5,050,000 in 1884. New markets sprang up at Omaha, St. Paul, and Kansas City to care for the grain traffic from these new sources of supply, and to that extent interrupted the flow of grain to Chicago just as thirty-five years before Chicago had diverted the trade intended for Cincinnati and other points farther east.²

Already in the early seventies Chicago had lost its position as an important market for winter wheat, although efforts continued to be made to regain this trade. Peoria, the other primary grain market in Illinois, had by the early eighties ceased to place any emphasis upon its wheat receipts, making no effort to attract more wheat to its market than was needed to supply the local demand.³ The spring wheat trade still remained important, although Duluth rapidly gained upon and finally outdistanced Chicago as the chief center of this trade. In 1881 there were shipped from Chicago seventeen million bushels as against three and one-half million from Duluth; but a few years later, in the five year period 1886-1890, the shipments from Chicago had fallen while those from Duluth had increased to almost an equal amount. In the next five-year

² Railroad Gazette, 17:38. ³ Report of the Railroad and Warehouse Commission, 1878, p. xxii; Report of the Trade and Commerce of Peoria, 1884, p. 13.

period Duluth passed Chicago and has ever since held first place as the center of the spring wheat trade.⁴

Other cities also were competing with Chicago for the grain trade. The opening of the jetties at the mouth of the Mississippi river in 1869 greatly improved the facilities of that route, reducing the cost of shipping grain from St. Louis to Liverpool from fifty to thirty-two cents a bushel. St. Louis immediately made a strong effort to divert the export grain trade from Chicago to the river route via New Orleans.⁵ The St. Louis Grain Association was said to have been organized for that express purpose. Grain shipments increased rapidly, but after a few years fell off again, declining even below their former proportions. The reason for this was the increasing railroad competition which was beginning to divert the grain traffic from both the water routes. Especially instrumental in effecting this change was the fact that the water routes were closed during the winter months.

It had been the practice during the earlier period to let the grain accumulate in warehouses until navigation opened in the spring, but about 1871 the railroads began to carry the grain to the east during the winter, and these winter shipments

⁴ The following table gives the exact figures. Those for Duluth are for grain received, but for practical purposes this may be treated as equal to the amount shipped east. The statistics for Chicago are from *Reports of the Trade and Commerce of Chicago*, and those for Duluth are from *Reports of the New York Produce Exchange*.

Period	Shipp ed from Chicago (bushels)	Received at Duluth (bushels)
1881–1885 1886–1890	16,729,000 16,545,000	9,089,000 16,086,000
1891–1895.	29,705,000	40,317,000

WHEAT SHIPMENTS OF CHICAGO AND DULUTH, 1881-1895

⁵ Western Agriculturist, November, 1877, p. 8; Cairo Evening Bulletin, April 1, 1869, p. 1; Tyson, History of East St. Louis, 50. increased until in a few years the movement of grain eastward was continuous throughout the year. With this change Cairo entered the field and attracted, during low water and the winter season, much of the grain that was seeking a market farther south. By 1874 Cairo had become so important as a grain center that the Board of Trade of that city adopted a system of grain inspection and appointed one of the assistant state inspectors to organize and take charge of the work. But the movement of the grain producing area to the northwest prevented the grain trade of Cairo from assuming large proportions. For this trade Chicago, because of its position, had undisputed supremacy over other Illinois cities. Milwaukee and Toledo also attracted some of the trade of the Mississippi valley; the latter for a time attained some importance as a grain depot, principally as a result of the real or supposed extortions of the warehouse system of Chicago.⁶

Of all the factors which threatened to divert the grain trade from Chicago at this time the warehouse system was the most irritating and called forth the most discussion. It was charged that there was a combination between the railroads and the warehouses by which the grain traffic of Chicago was completely monopolized. The combination exacted a warehouse storage charge of two cents for twenty days on every bushel of grain entering the city whether or not it was ever actually in a warehouse. The only exception to this rule was in the case of wheat brought in bags to Chicago, but as most of the wheat was now handled in bulk, the exception had no practical significance. In order to compel country shippers to consign all grain shipped to Chicago to the "ring" elevators an additional charge of eight to ten cents per bushel was made

⁶ Department of Agriculture of Illinois, *Transactions*, 1871, p. 99; *Report of the Railroad and Warehouse Commission*, 1874, p. 33; *Chicago Tribune*, August 18, 1871, April 30, 1874.

by the railroads on all grain shipped to independent elevators which were not members of the combination.⁷

This storage charge not merely diverted the grain traffic from Chicago, but, it was urged, it also prevented the growth of flour milling in the city, since wheat made into flour at Peoria and other points escaped the tax of two cents a bushel and hence enjoyed an advantage in this respect over Chicago. In order to protect the grain producers and shippers the Chicago Board of Trade demanded the registration of all receipts issued for grain placed in storage and the cancellation of such receipts as soon as the grain in storage was removed. But the warehousemen refused to agree to such a system.

It seems hardly open to doubt that the high storage charges had an adverse effect upon the Chicago grain trade. In 1870 it was estimated that the charge for storage for one year was thirty-three and one-third per cent of the selling price in the case of wheat and nearly seventy-four per cent in the case of oats. The Illinois farmer was practically forced by such a system to sell his grain as soon as it reached the market, which was just at the time when prices were lowest. The system of grading at Chicago was also the subject of considerable complaint, and much of the corn from southern Illinois began to be shipped direct to Toledo, where it could be sold on its merits and avoid the grading system prevalent at Chicago.⁸

During the progress of the controversy numerous petitions were forwarded to the constitutional convention asking that some provision be incorporated in the state constitution to protect the people against warehouse frauds. It was objected, however, that such a clause would be in the nature of legislation rather than a statement of fundamental principle such as alone belonged in the constitution. After the adoption of the con-

⁷ This was effected by a new freight tariff. *Chicago Tribune*, July 4, 1871. ⁸ *Ibid.*, January 28, February 16, 19, March 3, 17, 1870.

stitution the demand for appropriate legislation was renewed before the legislature, and in spite of the opposition of the Board of Trade, of the warehousemen, and of the railroads, three separate laws were passed in 1871 for the protection of the grain trade: a law providing that a license be taken out for each warehouse; an act to govern the transportation of grain by railroads; and an act to establish a board of railroad and warehouse commissioners.⁹

The warehousemen refused to take out licenses as directed and contested the authority of the new railroad and warehouse commission, which was appointed and organized for business in July, 1871. From 1872 on there were suits continuously pending in the courts to compel the railroads and the warehousemen to comply with the law, but by the end of the decade the constitutionality of the act and the authority of the commission had been fully established. There were constant disputes, however, as to the character of the work done by the commission. The Board of Trade declared that the administration of the commission was unsatisfactory, and some of the largest shippers protested that the state grain inspection was unfair. On the other hand, the commission claimed that the system of state grain inspection was rapidly growing in favor, and that eastern cities were following the example of Chicago in this respect. As a result of the work of the commission the worst abuses were gradually eliminated, and in 1877 by an agreement between the elevator men and the railroads the elevator storage charge was reduced from two cents a bushel for twenty days to one and one-fourth cents for ten days, and the trimming charge from one dollar to fifty cents per car, while the railroad companies abolished their charges for switching.¹⁰

⁹ Chicago Tribune, April 18, 1871.

¹⁰ Ibid., October 16, November 12, December 7, 1872, January 6, 1874, August 8, 1876, February 16, 1877; Report of the Railroad and Warehouse Commission, 1873, p. 35; 1874, p. 33. The bad repute of the Chicago warehouse system was enhanced if anything by the "corners" which occurred in that market in 1871 and 1872. A wheat corner was attempted in 1871, but it finally collapsed. In the following year two corners were organized—one in wheat and the other in oats. These speculative operations aroused a great deal of feeling against the grain trade manipulations carried on in Chicago.¹¹

Another factor which worked against the grain trade of Chicago, temporarily at least, was the inadequacy of storage facilities. The fire of 1871 destroyed a great many elevators and warehouses, and during the next few years the business was hampered by the lack of facilities for handling it. In 1872 some of the railroads were compelled to refuse to accept grain from the shippers because of lack of room in which to store it. This particular difficulty was gradually remedied, however, and when a few years later the railroad and warehouse commission endeavored to ascertain the storage capacity of all the warehouses in Illinois a great expansion was disclosed. The Chicago elevators had a storage capacity of 26,000,000 bushels, while those in other cities had over 31,000,000 bushels; the largest warehouses outside of Chicago were at East St. Louis (700,000 bushels) and Peoria (300,000 bushels).

After 1870 the railroads played an increasingly important rôle in the commercial and industrial development of Illinois. They were able, therefore, to affect this development for good or ill by their rate policy. It was charged in 1871 that all railroads except the Michigan Central were discriminating against Chicago and in favor of Kansas City with regard to the shipment of packing house products. "For nearly two years," said the *Chicago Times*, "Kansas City has taken the

¹¹ Report of the Railroad and Warehouse Commission, 1872, p. 35; 1879, p. xxvi-xxvii; Chicago Tribune, August 19, 20, 21, 23, 24, September 20, 1872, January 16, 1884. During September and October, 1884, there was a gigantic corner in corn on the Chicago market. *Ibid.*, September 23, 27, October 1, 1884.

lead of Chicago in beef packing. Kansas City packs three times the number of cattle as Chicago. The reason is that packed beef is transported from Kansas to New York through Chicago at 70 cents per 100 pounds. The roads east of Chicago receive 42 cents of this amount, while Chicago packers are charged 65 cents for the product packed from here." ¹² It seems from these rates that the Chicago packers had an advantage of five cents a hundred pounds in the cost of shipment to the New York market, but they were not satisfied with this and protested to the railroads. These complaints were repeated from time to time. Similar charges were made of discrimination against the Chicago grain dealers, as the grain was carried directly to the east without stopping at Chicago as formerly or even passing through that city. By 1879 a considerable quantity of grain was being shipped eastward by rail from points to the west of Chicago via the Joliet cut-off, thus avoiding the grain inspection and switching charges at Chicago.13

That the railroad discriminations were not aimed at Chicago, but lay rather in the very nature of rate fixing at that time, is seen from the fact that other towns complained equally of discriminations against them and in favor of Chicago. Thus Peoria claimed that the apparent object of the rate discriminations by the railroads was to force all traffic to go by way of Chicago. It was, moreover, asserted that during the months when water navigation was closed the rates from Peoria to eastern points were so high that the shipment of grain from that city was almost prohibited. The growing industries of Peoria were, however, beginning to absorb the grain shipped to that city and to leave less for export. About

¹² Chicago Times, December 8, 1871.
 ¹³ Report of the Trade and Commerce of Chicago, 1875, p. 19; 1888, p. xlvi;
 Report of the Railroad and Warehouse Commission, 1879, p. xxxii.

1885 corn began to be substituted for rye in the production of distilled liquors, owing to improvements in machinery for preparing grain for distillation; and as a result the demand for corn increased while that for rye fell off.¹⁴ On the whole, railway rates were not arbitrarily fixed, but were subject to the competition of other carriers and of competing markets and regions of production.

An effort to stabilize rates and divide the field was made by the railroads in 1878. By an agreement made in that year the railroads were to charge a relatively low rate on agricultural products and a relatively high rate on manufactured products going to eastern or southern markets, while just the reverse would be done in the case of goods moving to the west. By this arrangement it was designed to stimulate the movement of agricultural products to the east and south and of manufactured goods to the west, a movement which at that time was perfectly normal and did not prejudice the interests of the state, as there was little manufacturing in Illinois. But with the growth of manufacturing industries these discriminating rates began to prove irksome.

As the manufacturers or wholesale dealers of Chicago reached out into southeastern markets they found themselves at a serious disadvantage in competition with dealers from New York and other eastern cities because of the operation of the agreement of 1878.¹⁵ By 1890 goods were being shipped from Chicago as far east as Pittsburg, west to the Pacific coast, and to a lesser extent into southern territory. The shippers of Chicago protested against this system in vain. Unable to secure a readjustment of rates directly from the railroads, they united with shippers of Cincinnati, who had a similar grievance,

¹⁴ Report of the Trade and Commerce of Peoria, 1878, p. 13; 1879, p. 13; 1885, p. 10, 14.

¹⁵ The extent of this disadvantage and the nature of the discrimination may be illustrated by the following table of rates to two important southern points in

and made complaint before the interstate commerce commission. In 1894 the commission decided in their favor and ordered a reduction of rates on the lines south of the Ohio on goods from Chicago and Cincinnati. The order of the commission was set aside, however, by the supreme court in the famous maximum rate case;¹⁶ and not until 1905 were the rates to the south on Chicago manufactures reduced below those on manufactures coming from the east.

In spite of all these disadvantages and difficulties the trade and commerce of Chicago were expanding at a rapid rate. Indeed, some of the evils may be regarded merely as growing pains incidental to the readjustments which were taking place in a rapidly developing state. By 1880 the more important railroad connections between Chicago and the west and northwest had been made and Chicago was drawing the grain trade from an area of about 350,000 square miles of the most productive agricultural district of the world. This section was, moreover, being developed with marvelous rapidity and was

cents per hundred pounds. The numbered classes are manufactured goods and in general high-grade traffic. The lettered classes include agricultural products.

From	Distance (miles)	Ţ		3				asses		c		E	F	G
New York Chicago	735	100 116	85	70 82	55	48	40	36	40	36	36	48	55	72
			To	Atla	NTA,	Ge	ORGIA	1			. <u>.</u>			
From	Distance (miles)	·	2	3	4	5		lasses A	В	С	D	E	F	G
New York Chicago								36 40	48 47	40 38	39 34	58 61	78 68	6S 63

To KNOXVILLE, TENNESSEE

- From opinion of the interstate commerce commission in Freight Bureau of the Cincinnati Chamber of Commerce v. Cincinnati, New Orleans and Texas Pacific Railway Company and others, Interstate Commerce Reports, 6:195 (204, 205).

¹⁶ Ibid., 6: 195 (200-201); Interstate Commerce Commission v. Cincinnati, New Orleans and Texas Pacific Railway Company, 167 United States, 479 (493-495). connected with the Chicago market by a railroad mileage of over 15,000. These facts were sufficient to guarantee a brilliant future for the city in spite of the decline of the winter wheat traffic. Receipts of grain increased from 98,935,413 bushels in 1873 to 164,924,732 bushels in 1883,¹⁷ or a gain of sixty-six and two-thirds per cent.

About 1885 another change was inaugurated by the railroads, which threatened to divert some of the traffic from Chicago. The shipper was now permitted to leave his grain in the cars and sell it on the track. In case it was sold he paid the local rate to Chicago; and if not sold he could reconsign it to the east at the through rate, which was two cents lower per bushel than the sum of the local rates. That this was an advantage to the producer and shipper and an economical method seems clear, but it is equally clear that it did not work to the advantage of Chicago. It was, of course, a blow to the warehouse and elevator interests, and there was a strong tendency toward eliminating the terminal warehouse. But if the investment in expensive terminal facilities was rendered unnecessary by the system of selling on the tracks, there was no reason why other cities could not be grain markets. As the railroads granted the same concessions to other cities, there was thus a further diversion of the grain traffic from Chicago.

The Chicago roads had apparently not been perturbed by the sacrifice of the city terminal interests, but when the grain began to move to other centers their own position was threatened. To combat this diversion of the trade from Chicago two policies were open. They could lower rates to and through Chicago sufficiently to allow that city to compete on an equality with points nearer the sources of supply, or they could improve the system of marketing grain. They chose the latter plan,

¹⁷ Report of the Railroad and Warehouse Commission, 1880, p. 519; Report of the Trade and Commerce of Chicago, 1911, p. 18.

and allied themselves with certain warehouse owners who had sufficient capital to buy up all the grain along their lines and ship it to Chicago. The railroads then gave to these dealers the use of their terminal facilities and local elevators on especially favorable terms. In other words, the roads were practically subsidizing dealers to get grain for their lines and for the Chicago market. As a result of the concentration of the business, however, the marketing expenses were considerably reduced, most of the saving in this respect going to the producer.¹⁸ This is illustrated in the following table showing the savings effected in the case of wheat:

	1884	1897
Average Chicago cash price (cents per bushel)		81.2
Average farm price (cents per bushel)	64.5	76.3
Cost of concentration at Chicago	18.2	4.9

There was some protest against this system by the independent grain dealers who were being gradually forced out of business, but the fear of an oppressive monopoly was dismissed as groundless by the industrial commission after the plan had been in operation a number of years.¹⁹

The importance of Chicago as a packing center is discussed in another place,²⁰ but the influence of this industry upon the commercial development of the city calls for notice at this point. Illinois was the leading state in the slaughtering and meat packing industry, Chicago alone producing more than the state ranking second. Between 1870 and 1890 there was a steady growth in the receipts of cattle, hogs, and sheep, most of which were slaughtered and packed, although an increasing number were of course reserved for local consumption. The shipments of beef in packages, of barreled pork, and of cured meats did

¹⁸ Newcomb, Changes in the Rates of Charge for Railway and other Transportation Services, table 70.

¹⁹ Report of the Industrial Commission, 6:9, 50, 76. ²⁰ See p. 394 ff.

not show a corresponding growth,²¹ as the introduction in the early seventies of refrigerator cars stimulated the shipment of fresh meat instead of the prepared products.

Other products closely connected with the packing industry, for which Chicago has long been a distributing center, were lard, wool, and hides. There was a steady increase between 1870 and 1890 in the shipments of lard (from 43,292,000 pounds to 471,910,000) and of hides (from 27,246,000 pounds to 199,084,000), but in the case of wool the maximum shipments (of 51,904,000 pounds) were made in 1885. Salt was received in large quantities at Chicago for use in the packing house plants, and a considerable amount passed through the city for use elsewhere.

Other of the bulky raw commodities for which Chicago was an important distributing point were the lumber and shingles of the northern pine forests. In the early seventies this traffic was conducted for the most part by water, and large quantities of lumber were sent down the lakes and via the Illinois and Michigan canal and the Illinois river to southern markets. But as the forests were cut back from the water's edge, railroads began to penetrate the upper peninsula of Michigan, and other roads were built between the Wisconsin and Minnesota forests and Iowa, Kansas, and other western points. New sources of supply, new markets, and new routes of transportation all helped to divert the traffic from Chicago. Moreover, the lumber manufacturers in Michigan and other nearby states began to assort lumber at their own mills for the retail market, thus saving the cost of yardage and middlemen's profits at Chicago. And finally the pine forests of the south began to supply the southern markets to which most of the Chicago shipments of lumber had been directed. After about 1880 the lumber trade of Chicago began to fall off and

²¹ See tables in appendix, p. 503.

became increasingly local in character; the great building activity within the city has of course caused the receipts of lumber to increase, though in the case of shingles even the local demand has declined since 1885.22 This is doubtless due to the development of fireproof construction.

The importance of Chicago as a general distributing center for other products was, however, becoming manifest during this period. By 1870 the movement of merchandise to the south had reached large proportions, and a considerable part of this passed through Illinois. During the winter of 1869-1870 it was stated that sufficient tonnage could not be obtained on the Mississippi river to move forward the accumulated freight which the two railroads running southward from Chicago carried to the river ports. Flour, oats, hay, bulk meats, agricultural implements, and merchandise were the articles which entered most largely into this trade, many of which were supplied by Illinois manufacturers.²³

This general business received a rude interruption at the time of the fire of 1871 and again following the panic of 1873, but by 1876 the amount of merchandise received, produced, handled, and sold at Chicago had immensely increased. During the years after the panic the wholesale and jobbing trade of Chicago showed a remarkable expansion. Many of the interior merchants, who a few years before had made the bulk of their purchases in the east, began now to buy practically all their goods in Chicago. Agencies of the larger manufacturing establishments in eastern cities were located in Chicago, and the number of wholesale and jobbing houses in the city grew rapidly. At the same time the older established houses more

²² Chicago Tribune, March 9, 1871; Report of the Trade and Commerce of Chicago, 1886, p. xxxiv; Industrial Chicago, 4:315-318. For table of receipts and shipments of lumber and shingles at Chicago showing the gradual decline of that city as a distributing point for these articles see appendix, p. 503.

23 Chicago Tribune, March 11, 1870.

than doubled their business in five or six years after the fire in 1871.24

Chicago enjoyed certain advantages over its eastern competitors as a distributing and jobbing center, which enabled it to forge ahead rapidly at this time. The prosperous agricultural population of the Mississippi valley furnished an unrivaled market for staple commodities, and the location of Chicago in the very heart of this district gave it an initial advantage. Chicago merchants were better posted as to the responsibility and tastes of their customers than were eastern merchants. They could therefore sell on a narrower margin of profit, as they had the very pick of the customers. As they usually sold goods on shorter time than most eastern merchants, moreover, they were able to give better terms in other respects. It was stated that goods of nearly all descriptions could be bought at wholesale in Chicago at prices as low as those in New York or any other eastern market with freight charges added, and in many cases as low without any allowance for freight, and that the stocks in Chicago were as fresh, as large, and as desirable as those to be found elsewhere. By 1876 the wholesale trade of Chicago, exclusive of the products of western agriculture, amounted to not less than \$350,000,000 annually.25

One of the potent agencies enabling Chicago to stem the tide of eastern competition in the wholesale business, and to make such notable progress in such a short time, was the system of employing commercial travelers. Up to the time of the Civil War the "drummer" had been regarded as a

²⁴ Report of the Railroad and Warehouse Commission, 1872, p. 32; Chicago Tribune, January 1, 1877; Report on Internal Commerce of the United States, 1876, appendix, 90. For instance, in 1876 the important dry goods house of A. T. Stewart and Company established a wholesale branch in Chicago. A decade later the number of branch firms or agencies in Chicago was noteworthy. American Artisan and Patent Record, February 27, 1886, p. 10.

25 Report on Internal Commerce of the United States, 1876, appendix, p. 82.

sort of privateer in trade, but with the development of the railroad and telegraph facilities during the following decade he had won a position of importance and responsibility. By 1875 the soliciting of orders and selling by sample in the hands of agents of business houses had become an established method of intercourse between buyer and seller. The advantages and economies of this mode of commercial intercourse were quickly recognized by Illinois merchants, who began to sell almost every conceivable article of merchandise, and to buy raw materials, through this new agency.²⁶

One interesting development of Chicago commerce during this period was the direct importation of goods from Europe and the Orient. It had been urged that foreign trade was restricted by having to pass through New York and that if Chicago were made a port of entry a large direct trade with Europe would result. In 1872, accordingly, Chicago was made a port of entry, but there was little diversion of trade from New York to the direct route via the St. Lawrence river and the Great Lakes. The value of imported goods upon which duty was paid at Chicago increased from \$6,955,234 in 1880 to \$15,406,786 in 1890.²⁷

Besides the trade with Europe, the early seventies saw the growth of a direct trade between Chicago and the Orient. Tea and other oriental goods began to be shipped from China and Japan across the Pacific ocean and by the transcontinental railroads, which were just being built, to Chicago. The first cargo of tea thus received at that city arrived in 1870. In two months of the following year 25,000 chests of 60 pounds each came direct by rail to Chicago, and about 50,000 chests passed through the city on the way to New York and other

²⁶ Report on Internal Commerce of the United States, 1876, appendix p. 66-67. ²⁷ Report of the Trade and Commerce of Chicago, 1880, p. 60; 1890, p. 116-117.

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eastern points. Illinois merchants were led by these facts to believe that Chicago was destined to become the central distributing point in the west for teas and oriental goods, as well as for many native products.28

It is difficult to determine exactly the extent of the territory covered by Illinois wholesale houses and jobbers, as some branches of trade, like boots and shoes, extended farther than others. The supplies of the western territory, as far west as Utah, seem to have been drawn largely from Chicago prior to 1880. Nevada was competitive ground for eastern merchants and those of the Pacific coast. This western trade was largest in mining machinery and supplies, boots and shoes, and dry goods. The Chicago trade in boots and shoes, which were of coarse and medium qualities and thus well adapted to the western and southern demand, was probably more extended than that of any other commodity, reaching to Nevada on the west, to Tennessee and Georgia on the south, and to Pennsylvania on the east. Dry goods and drugs went nearly as far, but in less volume.29

The panic of 1884 caused a depression in the wholesale as well as in all other business in Chicago; but by the end of the following year a revival began which continued unabated through the next few years. The boot and shoe industry was by 1888 one of the largest in the city and was represented by over eighty leading manufacturers and jobbers, giving employment to nearly 7,000 operatives. Still, it was claimed by enterprising merchants that "the boot and shoe trade of Chicago is in its infancy."³⁰ The dry goods trade stood at the head of the wholesale business, showing sales which increased from \$55,300,000 in 1879 to \$83,570,000 in 1888.

 ²⁸ Chicago Tribune, March 24, 1870, May 12, 1871, December 15, 1874.
 ²⁹ Report on Internal Commerce of the United States, 1879, p. 48-49.

³⁰ Report of the Trade and Commerce of Chicago, 1888, p. xv; Chicago Tribune, January 1, 1886.

Allied with this was the wholesale millinery business, whose sales in the last named year amounted to \$6,500,000. Somewhat larger and more extensive was the manufacture and trade in men's and boys' clothing. Chicago claimed the largest manufacturing house of this kind in the world, and altogether nearly a hundred factories and jobbing houses with a capital of \$14,000,000. The sales of Chicago clothing extended eastward into Michigan and Ohio, and throughout the southwest, west, and northwest. Other commodities for which Chicago was an important distributing as well as producing center, were paper, the sales of which in 1888 were \$33,900,000; manufactured iron, comprising bar iron, plate steel, nails, carriage goods, and the like, with sales of \$11,500,000; and agricultural implements with local production of \$12,000,000 and a trade many times as large.³¹

Although Chicago overshadowed all other Illinois cities in the wholesale and jobbing business, Peoria had developed a considerable trade along similar lines by the early seventies. In 1875 the local Board of Trade claimed that "the wholesale and jobbing interests keep pace with the facilities offered, and Peoria is now one of the best markets in the west in which to procure the supplies needed for the interior towns, and will compare favorably with the larger markets in the extent and variety as well as prices of its merchandise of all kinds."³² This prosperity suffered from the panic of 1873 and again from that of 1884, but it recovered quickly in each instance, so that by the end of the period Peoria held second position in the state as a trading center.

³¹ Report of the Trade and Commerce of Chicago, 1888, p. xiv, xv, xvii. ³² Report of the Trade and Commerce of Peoria, 1875, p. 12.

XVII. MANUFACTURES IN ILLINOIS, 1870-1890

A LTHOUGH Illinois in 1870 was still primarily an agricultural state, in the very wealth of its agricultural products lay the basis of an expanding and enduring industrial development. Able to draw upon the great wheat and corn belts, the manufacturers of Illinois have utilized their products in building up a variety of great industries; upon these chiefly rests Illinois' industrial prosperity. But these primary industries have been well complemented by others; although the state is singularly lacking in metallic resources, its clays were early utilized in the manufacture of brick, and its abundant supply of coal has been made to furnish sufficiently high caloric to smelt and work the iron shipped in from neighboring states.

Before this period the manufactures of Illinois had been relatively insignificant, the state ranking fifteenth in the union in this respect in 1850. The decade 1860-1870 was one of great expansion, the value of the products showing almost a fourfold increase, so that by 1870 the state ranked sixth. In this decade a new era in manufacturing may be said to have begun. With the barriers of distance almost eliminated by improved railroad transportation and by the telegraph and improved postal facilities, the sphere of competition widened. With the repeated inventions of new processes of manufacture, with the growth of population and the enlargement of the market, the factory system supplanted the old neighborhood and hand methods of production, and manufacturing was carried on upon an ever-enlarging scale. The changes in the industrial system, the growth of corporations, and the differentiation of capital and labor were even more far-reaching.

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Each of the next two decades saw the value of the manufactured products double, passing that of agricultural products in 1880 and far outdistancing it ten years later. By 1890 Illinois was the most important manufacturing state west of the Alleghenies and of all the states in the union was surpassed only by New York and Pennsylvania. The value of Illinois' manufactured products in this year exceeded that of the products of agriculture, mining, and fisheries combined.¹

The beginning of modern industrialism which occurred in Illinois in 1860-1870 was to a certain extent simply a reflection of what was taking place all over the country at this time. The Civil War had created a suddenly increased demand for certain commodities such as food, clothing, arms, and the like. The rise in prices occasioned by the overissue of legal-tender paper money acted as a stimulus to the production of goods for future sale; as long as prices were rising it was difficult for a manufacturing enterprise to fail unless grossly mismanaged. And finally the imposition of heavy war tariffs on practically all imported manufactured goods gave a great advantage to domestic producers in the United States by reserving for them the home market. Illinois felt the force of all these factors; but it was affected even more directly by the development of the west. The growth in population, the increasing production of grain and cattle, the building of railroads, the construction of cities and various city improvements, and the general betterment of the material conditions of the people were creating a vast home market for manufacturers and at the same time were increasing the purchasing power of the people. It is noticeable that while the most important manufacturing industries of Illinois were based upon the state's

 $^{^1}$ For table showing comparative growth of manufactures, agriculture, and mining see appendix, p. 504.

possession of unrivaled sources of raw materials, especially grain and livestock, there were also many others which grew in response to local needs, the products of which were too bulky or too heavy to stand transportation from the industrial centers of the east.

The substantial progress made by Illinois manufacturers during these years is the more impressive when it is remembered that it was on the whole a period of falling prices, tending to depress industrial enterprise. Even in the years of recovery from the panics of 1873, 1884, and 1893 complaints were frequently heard that times were dull and profits low, and some large plants were shut down.²

A more detailed study of the leading industries of the state in 1870 reveals the close relation which existed between manufactures and the extractive industries, that is, the utilization of natural resources. There were in this year thirty-four industries with an annual output of over \$1,000,000,3 of which seven turned out over \$5,000,000 a year each, or almost half (47 per cent) of the aggregate value of products. These seven leading industries were, in the order of their importance, flour and grist mills, meat packing, agricultural implements, clothing, distilled liquors, planed lumber, and carriages and wagons - all except one closely connected with the extractive industries. The manufactures of flour and of whisky were based upon the plentiful supplies of wheat and corn; meat packing upon livestock and corn as fodder; agricultural implements, carriages and wagons, and planed lumber upon the large supplies of wood from the neighboring states of Michigan and Wisconsin and upon the great market in Illinois for agricultural supplies. Clothing alone of these industries may be

² See Western Manufacturer, 10:237, 12:226; Report of the Trade and Com-merce of Chicago, 1882, p. xiv; American Artisan and Patent Record, January 19, 1889, p. 235; June 22, 1889, p. 12. ³ For table see appendix, p. 504.

called a product of the factory system rather than of a plentiful and cheap supply of raw materials.

If, however, the sixteen manufacturing industries which produced more than \$2,000,000 but less than \$5,000,000 in 1870 be taken, this characteristic is less marked and a larger proportion of them are found to be "pure" manufactures, that is, industries in which the process of manufacture adds largely to the value of the raw material which is worked up. These were, in the order of their importance: sawed lumber, malt liquors, iron castings, forged and rolled iron, chewing and smoking tobacco, furniture, machinery (not specified), woolen goods, saddlery and harness, cooperage, sashes, doors, and blinds, boots and shoes, tin, copper, and sheet-iron ware, machinery for railroad repairing, curried leather, and tanned leather. In general, however, they were industries which involved the working up of large masses of raw materials by means of machinery or relatively simple processes, rather than those which called for numerous hands or laborious workmanship.⁴ Their presence in Illinois may in most cases be explained by the existence of special facilities or of a local market for the product.

It is evident that Illinois owed what advance it had secured in manufacturing prior to 1870 to the preparation of food, drink, and clothing—the great staple commodities needed by a growing agricultural community which demanded the satisfaction of its primary necessities in ever-increasing degree, but which as yet had little to spare for the luxuries and superfluities. Most of the manufactures went to satisfy a local demand; and, in addition to those produced at home, vast quantities were imported into the state from Europe and the east. As yet little was produced for sale in distant markets

⁴ Department of Agriculture of Illinois, *Transactions*, 1869-1870, p. 200.

except in the case of a few specialties as, for instance, agricultural implements, packed meats, and the like. Indeed, in 1870 Illinois had by no means passed out of the system of neighborhood and hand industry, as is witnessed by the fact that "home manufactures" were still returned in the agricultural schedules as constituting part of the products of the farm household.

By 1870, then, the foundations had been well laid for an industrial commonwealth, but, after all, little more than the foundations can be recorded. The next twenty years were to witness the full development of the characteristic features of modern industrial organization and an expansion of enterprise that brought the state to third rank in the union in manufactures.

There is probably no single change which so sharply differentiates the modern factory system from the old hand methods as the use of nonhuman power. Only when machines were invented which could be driven by nonhuman poweranimal power, water, and finally steam - was the human race emancipated. How great an addition to its productive capacity a community secures by the use of steam or water power may be realized when it is remembered that one "horse power" is equivalent to that of twenty-one men. Judged by this standard, Illinois in 1870 had not yet developed the factory system of manufactures. Although ranking fourth in population, sixth in value of products and number of establishments, the state occupied seventh place in the use of power, surpassed by Pennsylvania (363,918 horse-power), New York (334,363), Massachusetts (184,356), Ohio (174,323), Michigan (105,-851), and Indiana (100,369). In that year Illinois developed only 86,044 horse-power, of which 85 per cent was steam power and the remaining 15 per cent was water power. It is evident that the immense wealth of coal and the vast amount of

natural water power of the streams of Illinois had as yet scarcely been drawn upon to furnish the motive power for the manufacturing industries of the state.

During the next twenty years a tremendous change took place. New labor-saving machines were constantly being invented, improvements made on the old ones, and new ways were devised of securing the power to drive them.⁵ The same amount of human labor could now produce many times as large an output, and the larger quantities found ready sale in the widened market created by the expansion of the railroads. The old limited hand labor methods were rapidly forced to the wall; unless manufacturers had the capital to invest in new devices, they were doomed to speedy extinction in the struggle for survival. It became less easy to set up new establishments and increasingly easy for factories equipped with machinery to enlarge their scale of operations. Thus the outstanding characteristic of the period was the immense increase in the capital invested and the output as compared with the number of establishments - in other words, the growth of large scale factory production with its numerous economies.

In 1870, the number of establishments had reached 12,597, almost four times what it had been two decades before; the increase during the next decade was slight, less than two thousand, in spite of a decided increase in all the other factors involved --- capital, labor, and output. By 1890 it had reached only 20,482.6 Clearly a great many establishments were forced entirely out of the running in the first years of readjustment; obviously, too, those which remained were producing on a larger scale than before. The following table con-

⁵ Western Manufacturer, 10:29. Over a thousand patents were issued to residents of Illinois in 1881, probably a fairly typical number. ⁶ For table see appendix, p. 505.

veniently shows the change which took place in the average establishment:

Item	1850	1870	1880	1890
Number of establishments	3,162	12,597	14,549	20,482
Average hands per establishment	3.6	6.5	8.2	15
Average capital per establishment	\$1,966	\$ 7,491	\$ 9,668	\$24,509
Average output per establishment	\$5,229	\$16,322	\$28,515	\$44,363

GROWTH IN SIZE OF AVERAGE ESTABLISHMENT, 1850-1890

In contrast with the very moderate increase in the number of establishments during the twenty years is the consistent and rapid increase in the amount of capital invested, from something over \$94,000,000 in 1870 to over \$500,000,000 in 1890. Naturally, certain industries required or attracted a larger share of this capital than did others. The heaviest investment was in the manufacture of agricultural implements, gas, grease and tallow, iron, distilled liquors, machinery for railroad repairing, meat packing, and woolen goods; but a number of other industries such as cooperage, gunsmithing, and the like were carried on upon a small scale and with only a very light investment of capital.

The number of wage earners engaged in manufacturing and mechanical industries grew from 11,559 in 1850 to 82,979 in 1870 and 312,198 in 1890, a rate of increase several times as rapid as that of the population. The percentage of the total population engaged in manufactures exhibited a corresponding increase for these same years from 1.4 to 3.3 and to 7.3.

More striking than the growth in the total number of wage earners, however, was the change in the composition of this group. Down to 1870 there were almost no women employed in manufactures in Illinois, their number being only 493 in 1850 and falling to 479 in 1860; by 1870, however, the number of women had increased to 6,717. The change in the character of the labor force was initiated by the withdrawal from industrial pursuits of a large proportion of the male population for military service during the Civil War and the consequent necessity of filling men's places with women and children. But such a shift would not have been possible upon such a scale if the previous decade had not witnessed the introduction of machinery and labor-saving devices which made feasible the utilization of the labor of physically less capable workers—a characteristic feature of the factory system.

The principal industries in which the women found employment were clothing and textile industries and to a lesser degree bookbinding, millinery, printing and publishing, tobacco manufacturing, and watchmaking, all calling for deftness and delicacy of touch. Children under the age of sixteen years were enumerated for the first time in the census of 1870, when it was ascertained that 3,217 were employed in manufacturing establishments. This number had almost trebled by 1880, but in the following decade it was greatly reduced as a result of child labor legislation. Most of these children found employment in the same occupations which engaged the women, though in addition the brick, confectionery, furniture, iron, and lumber interests employed a good many boys.

The total amount paid in wages to the factory workers in Illinois showed a steady growth during this period, which was, moreover, more rapid than the increase in numbers, so that the average per capita wages also showed an improvement. The average yearly wage, which had been only \$279 in 1850, was \$375 in 1870 and \$509 in 1890. While these figures are not high, they represent about the average remuneration which workers at that time were receiving in the United States.

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Since the manufacturing industries of Illinois were based upon the utilization of valuable raw materials and did not carry the process of working over these materials through many subsequent stages, the value of material bulks large in the value of manufactured products. In 1850 it constituted 54 per cent of the final value of the finished goods, in 1870 it made up 62 per cent, and 58 per cent in 1890. At each decennial investigation it was shown that it made up more than half of the value of the finished product. The latter showed a wonderful growth, increasing from \$16,534,272 in 1850 to \$908,640,280 in 1890. More significant, however, of the development of the factory system than the increase of the gross value of the manufactured products is that of their net value after deducting the value of the raw materials incorporated in them; this increased from \$7,574,945 in 1850 to \$78,020,595 in 1870, and \$379,621,191 in 1890.7

Typical of American industry during this period was the development of economical methods of extracting, handling, transporting, manufacturing, and marketing the natural resources of the country. In the Lake Superior region there were being opened up the iron ranges, from which an excellent quality of iron ore could be transported cheaply and easily to Chicago. To handle this, improved devices and boats were developed. The manufacture of steel rails, which began in this country in 1867 and rapidly supplanted iron rails in railroad construction, permitted the carrying of heavier loads, while the use of steel in the construction of locomotives and cars led to a great increase in the size and capacity of the average train. These improvements permitted the carriage of coal, grain, and similar commodities in large quantities and

⁷ For table showing the rank of manufacturing industries in Illinois for each of the three census periods 1870, 1880, 1890, the net value of whose production in 1890 was over \$1,000,000, see appendix, p. 506.

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facilitated their utilization as the basis of manufacturing industries which should deal with materials in the mass.

The iron and steel industry in Illinois dates from about the sixties. Although Pennsylvania has always been the leader in this industry, competing enterprises were able to develop in Illinois because they were nearer the growing western market and had a slight advantage with regard to the raw material. At first Hardin county gave promise of an abundant supply of iron ore, and companies were organized to exploit the mines, but these works were soon abandoned.8 The Iron mountain district of Missouri was next drawn upon, but since the eighties the chief sources of supplies for Illinois furnaces have been the Lake Superior iron ranges. Coal was obtained from Pennsylvania, Indiana, and southern Illinois.9 The total production of iron and steel within the state showed a tremendous expansion from 25,761 tons in 1870 to 417,967 tons in 1880, and to 1,657,325 tons in 1890. Illinois ranked fourth among the iron and steel producing states in 1880, having made a great stride since 1870, when it ranked fifteenth; by 1890 it had attained third place.

The iron industry at Chicago, the present center, dates from 1857, when Captain E. B. Ward of Detroit built the Chicago Rolling Mill on the right bank of the Chicago river, "just outside of the city." It was built to reroll iron rails and formed the nucleus of the North Chicago Rolling Mill Company. This company was incorporated in 1869, and at that time it was reputed to have manufactured about one-third of all the iron and steel produced in the country. The first furnace in this district dates from 1868, in which year two were built by the Chicago Iron Company. In the following

⁸ Department of Agriculture of Illinois, *Transactions*, 1871, p. 156; the furnace at Elizabethtown is said to have been established in 1839. Swank, *The American Iron Trade in 1876*, p. 146.

⁹ Department of Agriculture of Illinois, Transactions, 1871, p. 89-93.

year two more were built by the North Chicago Rolling Mill Company. At Joliet, thirty-seven miles southwest of Chicago, the Joliet Iron and Steel Company, established in 1871, had built two furnaces by 1873. In addition to these, two others near St. Louis and three in the coal region about Grand Tower were reported in 1876.¹⁰ There were thus eleven large furnaces using bituminous coal and coke as fuel. In the same year there were in the state nine rolling mills, chiefly for rerolling railroad iron. Of the total output of rails in the United States in 1875, Illinois produced almost a quarter (23.75 per cent), ranking second to Pennsylvania. In the production of pig iron, however, Illinois ranked seventh.

Chicago claims the distinction of having the first Bessemer steel made in this country; it was rolled by the proprietor of the North Chicago Rolling Mill in 1864. The Union works were put in operation in 1863 as an iron rail mill, but later a Bessemer steel plant was added. The South Chicago works were opened for the production of Bessemer steel in 1882. The Joliet works, established as an iron mill in 1870, added a steel rail mill in 1873. These four Illinois mills together with one in Milwaukee were consolidated in 1889 when a holding company was organized under the name of the Illinois Steel Company. In 1890 the total output of all the mills of this company was 680,274 tons, and the number of employees was about ten thousand. It operated also seventeen coke blast furnaces.¹¹

In addition to those owned by the Illinois Steel Company, there were in the state at this time only two other blast furnaces, one of which was operated by the Calumet Iron and Steel Company, and the other by the Iroquois Furnace Com-

¹⁰ Western Manufacturer, 2:19; Swank, The American Iron Trade in 1876, p. 146; Report on the Manufactures of the United States at the Tenth Census, 2:106.

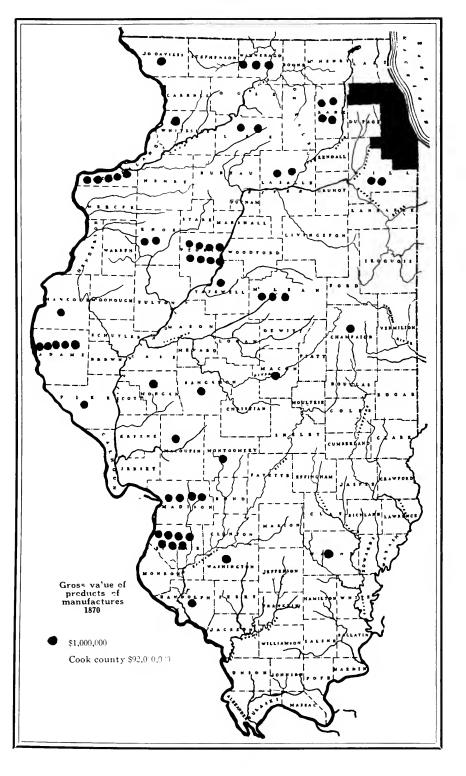
¹¹ Chicago Journal of Commerce, August 15, 1883; Flinn, Chicago, 308.

pany, both of Chicago. Of steel plants there were, however, in addition to the four consolidated mills of the Illinois Steel Company, thirteen others in Chicago and vicinity. It was estimated that in 1890 the Chicago steel mills turned out over one-third of the entire steel rail production of the country.¹² At the same time the local consumption of pig iron, aside from that converted into steel, amounted to about 400,000 tons.

But the iron and steel products of the state were not limited to pig iron and steel rails and structural shapes. There were in 1890 over one hundred foundries in Chicago alone and many more in other towns which produced car wheels, machine castings, car castings, stoves, architectural iron, plumbers' supplies, hardware, and numerous other articles. Illinois establishments also manufactured on a large scale such products as cut nails, horse nails, wire nails, bridge building parts, wire, tin plate, locomotives, and steel ships. None of the last named were manufactured in the state prior to the formation of the Chicago Shipbuilding Company in 1890.

The iron and steel industry was the basis of many other industries, and its expansion was indicative of the general industrial development of the state. To handle and work up large masses of raw materials into staple goods on a large scale, special machinery and labor-saving devices were necessary, and to provide these had ever been one of the leading features of Illinois manufactures. By the end of this period foundry and machine shop products and iron and steel stood third and fifth respectively in the list of Illinois industries.13 They were providing the technological apparatus for carrying on other branches of industry. This period witnessed, too, the application on a large scale of the principle of interchange-

¹² Cope, The Iron and Steel Interests of Chicago, 7. ¹³ For table showing the rank of manufacturing industries in Illinois the gross value of whose production in 1890 exceeded \$5,000,000, see appendix, p. 507.



able parts. This system was revolutionizing the manufacture not only of machinery itself, but also of ammunition, locomotives and railroad machinery, watches, clocks, and agricultural implements, in the production of all of which except the first Illinois took a leading place. Illinois shared the benefit of these improvements with other industrial states, but none was more profoundly affected by them.

As plentiful and cheap supplies of coal are an essential condition to the development of the iron and steel industries, the capacity of Illinois to meet this demand may be noted at this point. Before the advent of railroads the coal supplies for southern Illinois came from the east by way of the Ohio river and for the northern part of the state by lake to Chicago. The coal deposits of Illinois, situated for the most part in the southern counties, were then entirely unworked, or were worked only for local consumption as fuel in homes. Even after the development of railroads much coal continued to be shipped into the state from Pennsylvania, Ohio, and Indiana. But gradually the more important coal fields in Illinois were opened and railroads were built to market their product. The opening of the iron mines of Missouri led to a demand from St. Louis for large quantities of coal for manufacturing purposes, and hence gave an impetus to coal mining in southern Illinois. Railroads-were pushed across the state to Belleville and other important mining centers, and by 1888 over one hundred important bituminous coal mines in Illinois at distances ranging from eight to eighty miles from East St. Louis were furnishing that city and St. Louis with their supplies of soft coal.14

Chicago, too, began to draw its supplies of coal in increasing measure from domestic sources. With the development

¹⁴ Report of the Trade and Commerce of St. Louis, 1888, p. 25. For discussion of mineral products see chapter 18.

of wheat shipments from the upper Superior districts the vessels began to carry coal from Pennsylvania and other eastern places on their return journeys to those districts. Accordingly, the shipments of eastern coal to Chicago by water fell off, just as the mines in southern Illinois were opened up and began to supply in heightening degree the expanding needs of Chicago manufacturers. This has been especially true since about 1880. Peoria and other industrial cities of Illinois owe a large part of their growth as manufacturing centers to their proximity to cheap fuel. Practically no part of the state is out of reach of coal mines from which fuel for domestic and industrial purposes can be derived.¹⁵

The typical and leading industries of Illinois, however, were based rather upon the products of the corn belt than of iron and coal mines. Slaughtering and meat packing and distilled liquors, the first and second on the list of manufactures, as well as malt liquors, which rank lower down, owe their preëminence to the state's ability to produce corn and other grains cheaply. Agricultural implements were in special demand on the rich level prairies of Illinois, where they found one of their best markets. But of all these industries the one most closely identified in the popular mind with the industrial development of Illinois was the slaughtering and meat packing industry.

Before the consolidation of the Chicago stockyards in 1865, meat packing was in its infancy. The cattle and hogs had to be packed in the winter season and the product kept until the spring when navigation was resumed. Naturally, few could engage in an industry involving so many risks. But when railroad transportation began to supersede lake traffic and the livestock trade was consolidated, the meat packing industry in Chicago began to thrive. Various other influences

¹⁵ For table showing growth of coal trade see appendix, p. 508.

assisted the development of the industry. Chief of these was the refrigeration process of preserving meat, begun in the sixties: this rendered summer packing possible,¹⁶ though for many years only the large packers undertook all-the-year packing. In 1867 the first experiment made in shipping fresh meat in refrigerator cars proved successful.¹⁷ This method of caring for meat, together with the development of minute utilization of by-products, revolutionized the meat packing industry.

The export trade of cattle and packed meats began in the sixties, but the shipments were greatly increased when the process of refrigeration and refrigerating cars made the transportation of fresh meats feasible. In 1867 the foreign exports of dressed hogs constituted about 25 per cent of the aggregate weight of hogs slaughtered in the west that season, while in 1873 the exported product represented 60 per cent of the total. The first fresh beef shipment to Europe was made in 1875, when 36,000 pounds were exported. Since the improvement in the processes of curing and canning meat in the seventies the exportation of provisions has continued to increase,¹⁸ except during the eighties, when a boycott on American packed meats was practically declared by the French and German governments. In 1883 and again in 1887 these countries refused to import American salted pork on the ground that it was unwholesome.19

¹⁶ Cleaver, History of Chicago from 1833 to 1892, p. 107; Department of Agri-culture of Illinois, Transactions, 1871, p. 98. Libby, McNeill, and Libby first demonstrated the practicability of curing beef in summer. Centennial History of Chicago, 157.

 Chicago, 157.
 ¹⁷ In 1867 a car from Illinois arrived in New York laden with beef, mutton, poultry, etc., slaughtered ten days before and in good condition. American Artisan and Patent Record, July 29, 1868, p. 33.
 ¹⁸ Railway and Engineering Review, July 7, 1877, p. 5; Report of the Trade and Commerce of Chicago, 1883, p. 18. In 1874 the export trade fell off somewhat because of an advance of twenty per cent in the price of hogs. Annual Report of the Packing of the West, 1876, p. 23, 24.

¹⁹ Report of the Trade and Commerce of Chicago, 1883, p. 13; 1887, p. xxviii.

The effect of the utilization of more and more of the by-products was not only to insure the permanent success of the industry in Chicago, the chief manufacturing city of the west, but to accelerate the concentration of the industry in a few hands. The inevitable tendency toward combination asserted itself early in the history of the industry in Chicago. The first association of packers was formed in 1865 for the purpose of guarding their interests; the weeding out of the small packers began a few decades later. A consolidation of packing houses was attempted in 1890, when Fowler Brothers, Limited, an English corporation, was organized to acquire the business of one firm in Liverpool, two in New York, and the Anglo-American Refrigerator Car Company of Indiana and the Anglo-American Provision Company of Chicago.²⁰ This was followed in 1892 by the organization of the International Packing and Provision Company, Limited, incorporated in London, which acquired several packing and commission concerns of Chicago: the International Packing Company, T. E. Wells Company, Allerton Packing Company, John Cudahy, J. C. Hately, Hately Brothers, and Jones and Stiles. This consolidation was unsuccessful and the company sold its property and interests to the Consolidated Packing Company.

Flour and grist mill products, which headed the lists of both gross and net products in 1870, sank lower by degrees as the center of wheat production gradually passed farther west and the great flour mills were established in the spring wheat section of Minnesota. Flour milling had been one of the earliest industries to develop in Illinois. As proximity to raw material is an essential factor in this industry, it had flourished as long as Illinois was an important wheat producing state. In 1871 the Illinois mills were reported to have had a grinding capacity of 100,000,000 bushels of wheat annually. But with

²⁰ Chicago Tribune, January 1, 1865; Investor's Manual, May, 1902, p. 70.

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the shifting of spring wheat production to the northwest, flour production in this state gradually declined. In spite of the excellent situation of Chicago as a market for flour, the number of mills in the city decreased from fifteen in 1869 to eleven in 1870. When six of these were destroyed in the fire of the following year they were not rebuilt. The local mills have not been able since that date to supply the local demand.²¹ Before 1870 Peoria had also been an important flour milling center, but here too the industry declined. In the southern part of the state, where winter wheat still held its own, some seven or eight mills which were owned and operated by St. Louis millers maintained themselves and even increased their output from 653,820 barrels in 1882 to 1,457,103 barrels in 1892.22 But as a whole the industry was distinctly a declining one.

Other industries which showed declines were: between 1870 and 1880, carpentering (12 per cent), carriages and wagons (17 per cent), and planed lumber (33 per cent); between 1880 and 1890, electrical machinery and apparatus, and grease and tallow (48 per cent). This last was more than offset by the growth of the manufacture of soap and candles, in which forms the grease and tallow, by-products of the packing industry, now reached the market. The decline in the lumber industry was more significant, for it denoted an exhaustion of forest resources. Probably the decline in carpentering and in carriages and wagons was due to the same cause.

The clothing industry, which in 1890 held fourth rank according to the net value of the product, and sixth according to the gross value, may be regarded as more typical of the

²¹ Department of Agriculture of Illinois, *Transactions*, 1871, p. 98; annual review of the trade and commerce of Chicago in *Chicago Tribune*, 1869, p. 101, 1870, p. 23. The amount of flour milled in Chicago has been as follows by five year intervals: 1870, 443,967 barrels; 1875, 249,653 barrels; 1880, 196,041 barrels; 1885, 575,165 barrels; 1890, 430,609 barrels. 22 Report of the Trade and Commerce of St. Louis, 1882, p. 78; 1892, p. 162.

development of pure manufactures. In Illinois down to 1860 the manufacture of men's clothing, as well as of that for women and children, had been mainly a household industry. But with the introduction of the sewing machine it was transferred to the shops and the factories. An impetus was given the industry during the Civil War by the great demand for army clothing, a demand which was reflected also in the increase of sheep raising and the manufacture of woolen goods (amounting to \$2,700,000 in 1870). With the large influx of Russian Jews into this country, beginning in the seventies, the sweating system, unfortunately still characteristic of this industry, was introduced. Indeed, the factory system of making clothing may be said to have been based upon a large supply of cheap and ignorant labor. Of this labor supply Illinois was already obtaining her share, many of the immigrants settling in Chicago. By 1880 the number of natives of Russia and Poland in the state was 8,238 and in 1890 it was 37,285. In the latter year the total value of the products of the men's clothing industry amounted to \$35,500,000, to which may be added \$6,400,000 of women's factory-made clothing. Chicago boasted already of having the largest factory for the manufacture of men's ready-made clothing in the United States, which meant in the world.

Other industries in which Illinois took high rank among the other states of the union were newspaper printing and publishing, and brickmaking. Two states only, New York and Pennsylvania, had a larger circulation of newspapers than Illinois, which in 1890 boasted a combined circulation of 7,891,219. In the manufacture of brick and tile Illinois held fourth place with a total value of products for 1890 of \$6,399,492. Lacking metallic resources, the manufacturers of Illinois early began to transform the clay deposits into bricks, tiles, and cements, which with steel are the basis of

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modern building construction. Another rapidly growing industry was the factory production of butter, cheese, and condensed milk. In 1870 about 71 per cent of the cheese was produced by factories, but all the butter (except 4,348 pounds) was as yet made on the farms. By 1880 over 95 per cent of the cheese and one-third of the butter was factory made, a proportion which still prevailed in 1890. By this time the manufacture of condensed milk had been added to the other two, the value of the products of the three amounting in 1890 to \$8,004,991.

In tracing the progress of manufactures in Illinois two very interesting movements which deserve somewhat fuller treatment disclose themselves. These are, first, the localization of manufactures in certain sections of the state and second, the growing concentration of certain industries in larger establishments.

In 1870 the manufacturing industries of the state were widely distributed. Flour milling, which was the leading industry, was the principal manufacture in seventy-four counties, and was scattered impartially throughout the state from Lake county in the northeast to Alexander in the southwest corner. Sawed lumber was the leading industry in eight scattered counties, mostly in the south; agricultural implements in five northern counties; distilled liquors in five corn producing counties of the northern section. Meat packing (pork) led in Cook and Marshall; carriages and wagons in De Witt and Edwards; pig lead in Jo Daviess; saddlery and harness in Ford; freight and passenger cars in Kane; railroad repairing machinery in Marion; woolen goods in Schuyler; and furniture in Stephenson. If flour and grist mill products be excluded from this list as being extractive rather than pure manufactures, all but two of the counties involved would be situated in the northern half of the state.

In 1860 there were only 10 counties—Jo Daviess, Winnebago, Cook, Rock Island, Peoria, Fulton, Hancock, Adams, Morgan, and St. Clair—which had over 100 manufacturing establishments, and 11 which turned out over \$1,000,000 of products in that year. By 1870 manufactures had been widely introduced throughout the state, and the number of counties with over 100 establishments had grown to 40, a figure which remained constant for 1880. This latter year probably saw the most widespread distribution of manufactures which had yet existed, for while the number of establishments remained constant, the number of counties in which over \$1,000,000 was produced was greater in 1880 (33) than in 1870 (26). In 1890 the markedly industrial counties were Cook, Will, Peoria, St. Clair, Madison, Winnebago, Kane, La Salle, Rock Island, Adams, and Sangamon.

This localization of industry in the northern and central counties, principally those with large cities, was made possible chiefly by the improvement of transportation facilities. Factories started up at points where there were especial advantages for shipping; and in turn the more factories there were in a certain town, the more profitable it became for transportation concerns to provide additional facilities. Moreover, since in any case the market for each single establishment was no longer confined to its immediate locality, competition was not particularly affected by the grouping in the same city of a number of establishments making the same kind of product.

Chicago, of course, offers the most striking illustration of this tendency of manufactures to group themselves at points having good shipping facilities. The real industrial development of this city began after the panic of 1873; in the next five years its 690 factories increased to 2,000, and by 1890 they numbered over 3,000.²³ Not only were various indus-

²³ Report of the Trade and Commerce of Chicago, 1873, p. 9.

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tries centralized in the city, but within the city itself particular localities came to be given over to special manufactures. Thus the tanneries and distilleries began to cluster around the north branch of the river, and stonecutting near the south branch. The south division of the city also contained the stockyards, the railroad warehouses, and the shipbuilding establishments.²⁴

As the number of new establishments increased, moreover, so that there was little room left in the city for manufacturing plants, new groups were formed in the suburbs or outskirts. One of the first and most significant of these was the district south of the city, where, after the fire of 1871, the heavy iron and woodworking industries grouped themselves. Here were located the Chicago Stove Works, the Wells and French Bridge and Car Works, the Columbian Iron Works, Barnum and Richardson's Car Wheel Works, Swan and Clark's Furniture Factory, F. E. Candee and Company's Car Works, and other establishments. An important accession came in 1872, when the McCormick works were removed to the community.

High rental and the need of space and easier transportation facilities soon impelled other industries to establish themselves quite beyond the limits of the city; as a result there have grown up such manufacturing towns as Chicago Heights, Pullman, Steger, Hegewisch, Cicero, Maywood, Waukegan, Grand Crossing, and Hammond, Indiana.

Within Chicago and its environs, then, was concentrated a high proportion of all the manufactures of the state. In particular the meat packing industry was definitely centralized in the city; the wagon and carriage industry, too, was largely localized here, it being reported in 1879 that nine-tenths of all the wagons and carriages in the United States were manufactured in Chicago or within a radius of 250 miles. In the latter part

²⁴ Chicago Times, October 9, 1872; Chamberlin, Chicago and Its Suburbs, 138-140.

of the period under survey the iron and steel industries came strongly to the fore; the rolling mills alone turned out a product valued at \$24,000,000,²⁵ while the iron foundries, machine, engine and boiler shops, car wheel and stove works became increasingly important and increasingly concentrated in the Chicago district. Everything considered, it is not surprising to find that in 1870 Chicago produced about 44 per cent of all the manufactures of the state—and that in 1880 this proportion rose to 60 per cent, and to 72 per cent in 1890.

As the new methods of manufacture tended more and more to remove the old-time limits of production, competition between firms in the same line rapidly became sharper. Each establishment in its effort to maintain for its product a market wide enough to allow large scale production, with its consequent economies, would go to almost any length in order to drive rivals from the field. So disastrously did this system of cutthroat competition defeat its own ends that manufacturers soon began to seek to limit production by concerted action rather than by warfare.

The form of organization first resorted to in order to eliminate competition was the pool. Some of the important industries in which conditions led to the adoption of this device were nail making, pig iron, steel, iron pipe, stoves, wooden ware, chairs, sashes, doors, blinds, plows, and wagons, starch, linseed oil, lumber, screens, copper, glass, and brewing.²⁶ Most of the associations in which Illinois industries were represented comprised western manufacturers only, as the Western Pig Iron Association, the Western Wagon Makers' Association, and the Chicago and Milwaukee Breweries Association.²⁷ So

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²⁵ Western Manufacturer, 7:56; Report of the Trade and Commerce of Chicago, 1888, p. xiii.

²⁶ This list has been gathered from the Western Manufacturer, Chicago Journal of Commerce, and American Artisan and Patent Record.

²⁷ Western Manufacturer, 8:54; 12:114.

ineffective were these loose associations, however, in controlling prices or production that combination into one concern was next resorted to.

This development was decidedly marked in the case of slaughtering and meat packing, the making of agricultural implements, cooperage, leather, distilled and malt liquors, and soap. While the total number of manufacturing establishments in the state was rapidly increasing, in every one of the industries just enumerated the number actually declined between 1870 and 1890, although the size of the remaining plants grew enormously and the total output was enlarged. There was thus a marked movement toward combination and consolidation of hitherto competing businesses in these lines, in all of which large scale production could be very effectively practiced.

The course of development in the manufacture of agricultural implements was particularly significant. The land of Illinois is so level, so fertile and well watered, that the state early attracted this branch of manufactures. In 1850 Illinois had ranked fourth among the states in the manufacture of agricultural implements, based on the number of operatives employed; by 1870 it ranked third, and by 1890 it had achieved first place. In 1870 the industry was more widely distributed than at any other decennial date, being carried on in thirty-two counties; but fifty per cent of the output was produced in the three counties of Cook, Rock Island, and Winnebago. The largest plants were situated in Chicago, among them being the Furst and Bradley Manufacturing Company, which employed about 600 men and produced plows, hayrakes, cultivators, harrows, cotton planters, and other farm implements; another was the William Deering and Company's harvesting machine works, established in 1870, employing about 4,000 men and producing mowers, reapers, rice harvesting machines, and the like, its specialties being the Marsh harvester and the Whit-

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tington wire binder.²⁸ The McCormick works were removed to Chicago in 1872, where they gave employment to about 800 men.

Outside of Chicago the more important pioneer enterprises were the John Deere and Company Plow Works;29 the Moline Plow Company, founded in 1865; 30 the Barnard and Lease Manufacturing Company, whose farm machine works were established in Moline in 1860;³¹ the Keystone Manufacturing Company, incorporated in 1870 at Sterling and Rock Falls to manufacture farm implements;³² B. D. Buford and Company, whose plow works at Rock Island were established in 1855 and were purchased by the Rock Island Plow Company in 1884; the Rock Island Plow Company, founded in 1841;³³ and the Sandwich Manufacturing Company.34

Other factories of considerable importance producing farm implements in the eighties were the following : the United States Wind Engine Company, Batavia; the Brown Corn Planter Works at Galesburg; the Harrison Manufacturing Company of Belleville; Brewster, Dodge, and Hase, Peru; the Pekin Plow Company; the Weir Plow Company, Monmouth;³⁵ N. C. Thompson, Rockford; the Ellwood Manufacturing Company, Sycamore; King, Hamilton, and Company, and Briggs and Enoch of Rockford; Pierreport and Tuttle, Bush-

²⁸ Cope, The Iron and Steel Interests of Chicago.

²⁹ Originally located at Grand Detour, where it was founded in 1837, it was removed to Moline in 1847. By 1878 the number of employes was 600. Western Manufacturer, 7:11; Western Agriculturist, January, 1877, p. 8-9. See biograph-ical notice of John Deere on the occasion of his death on May 17, 1880, in Chicago Tribune, May 18, 1880. ³⁰ In 1877 they employed about 400 men. Western Agriculturist, February,

1877, p. 9.

³¹ In 1877 they employed from fifty to sixty men. Ibid., January, 1877, p. 9. ³² The number of employees in 1880 was about 200. Western Manufac-

turer, 9:13. ³³ Ibid., 7:934; 8:8; 12:232. ³⁴ In 1883 they employed about 200 men. Chicago Journal of Commerce, October 31, 1883; Western Manufacturer, 8:181. ³⁵ Removed to Peoria in 1898 and incorporated as the Kingman Plow

Company.

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nell; the Peru City Plow Company;³⁶ the Vandiver Corn Planter Company, Quincy; Hapgood Plow Company, Alton;³⁷ the Knowlton Manufacturing Company of Rockford; and the Avery Planter Company, Galesburg.³⁸

Plows, harrows, cultivators, reapers, and corn planters were the chief implements produced. Plow manufacture does not require a large factory organization, and consequently this branch of the industry was not so concentrated as was the manufacture of mowers, reapers, and harvesters, which are most economically produced on a large scale. The town of Moline, nevertheless, was already a center for the production of steel plows. In 1870 there were made in Illinois almost two-thirds (63 per cent) of all the corn planters in the United States and one-fifth (20 per cent) of all the plows. An interesting change was taking place during this period in the kind of agricultural implements manufactured. In 1870 one harrow was produced to every 125 plows, and in 1880 one to every 7 plows; in 1870 one cultivator was made to every 5 plows, and in 1880 one to every 2 plows. This indicates clearly that much of the labor formerly performed in the preparation of the land for crops by plowing was now done by harrows and cultivators and similar implements, at a great saving in labor and cost.

As time went on the number of separate establishments engaged in the implement business in the state was rapidly reduced through competition and combination from 294 in 1870 to 100 in 1890. The size of the average establishment,

³⁶ In 1886 they employed from seventy to one hundred men. Western Manufacturer, 14: 106.

³⁷ Established in 1873. They employed from 175 to 200 men in 1880. *Ibid.*, 8:139.

³⁸ Ibid., 14:138. The Avery Manufacturing Company removed to Peoria in 1883 and employed from 800 to 1,200 at that time. Two other manufacturers of farm implements in Peoria established more recently are the R. Herschel Manufacturing Company and the Acme Harvesting Machine Company. Cf. Rice, *Peoria, City and County*, 1:464.

on the other hand, showed a truly remarkable growth.³⁹ In 1890 Illinois ranked first among the states of the union in the production of agricultural implements, turning out almost onethird of the total product of the United States. Almost half of the Illinois output (\$24,609,660) was manufactured in Chicago (\$11,883,976); and there, with the exception of the wholesale trade, it was confined to three large establishments manufacturing harvesters, binders, plows, mowers, cultivators, rakes, and similar implements and giving employment to about 4,000 men.⁴⁰ Peoria came second with a product of \$519,611 in 1890. Her factories devoted themselves principally to the production of wagons, plows, binder twine, harvesters, and threshing machinery.

In the case of distilled spirits there was an even greater localization and concentration of the industry, as it was carried on in only fifteen counties in 1870, of which two—Cook and Peoria—turned out 60 per cent of the total amount produced in the state. The reduction in the number of establishments between 1860 and 1870 from 52 to 45, and in the number of counties where the industry was carried from 29 to 15, was undoubtedly due to the effect of the excise duties imposed by the federal government during and after the Civil War. Prior to these acts the business of distillation was entirely free from excise taxation, and instead of being localized at a few centers

³⁹ The following table shows the increase in size of the average establishment manufacturing agricultural implements in Illinois:

Item	1870	1880	1890
Number of establishments	294	220	100
Average number employees	13	33	104
Average capital	\$18,201	\$51,395	\$486,394
Average product	\$30,205	\$61,357	\$246,096

⁴⁰ Report on Manufacturing Industries in the United States at the Eleventh Census, part 1, p. 119; part 2, p. 649. was prosecuted everywhere. An appreciable portion of the disposable surplus of corn found its way to the local still, as the business was simple and did not call for a large investment of capital. The product was used not only as a stimulant, but also served in large measure as the raw material of many manufactures. The price was exceedingly low, falling in August, 1861, to thirteen cents a gallon in the Cincinnati market.

The imposition of the excise duties, which were increased from time to time and which fluctuated greatly, had the effect at first of depressing the distilling industry.⁴¹ As soon as an advance in the tax became probable, however, the business of distilling was renewed very actively in order to take advantage of the enhanced prices. When the period of speculation was over, in 1868, there was a surplus capacity for manufacture in the country, and it was impossible for some of the distillers to continue in business. At the same time the increase in price of alcohol led to its disuse in the arts, where its place was taken for some purposes by petroleum, for others by animal and vegetable oils. These causes tended to keep the distilling business in a comparatively depressed condition during the latter part of the sixties. "Even as early as 1870 or 1871 the distillers felt themselves compelled to enter into an agreement to limit their distilleries to two-fifths production; and all north of the Ohio, with two or three exceptions, made such an agreement." This did not have any decisive effect, however, and gradually the less profitable establishments went out of business, while the development of an export trade absorbed the surplus production of the others. Between 1878 and 1882

⁴¹ The rates per gallon were as follows: 1863, 20 cents; 1864, 60 cents; 1865, \$1.50; 1866, \$2.00; 1868, 50 cents; 1872, 70 cents; 1875, 90 cents; 1894, \$1.10. Not until the act of 1894 did the new tax apply to whisky already in bond; hence there would be every effort made under the earlier acts, down to 1868, and again from that date to 1875 to increase production just before a change.

especially, on account of poor crops in Europe, a heavy export demand sprang up. This led in turn to the running of the existing distilleries at full capacity and even to the building of some new ones. "After 1880, good crops in Europe, poor crops at home, with some changes in the tariff laws of leading European countries, especially discriminating duties against the United States, cut off this demand, and left the distilleries of this country with a capacity sufficient to produce four times what the home market needed."⁴²

In order to limit production and maintain prices a pool was formed in November, 1881. This was maintained, with frequent suspensions and reorganizations, until 1887. In that year a "trust" was organized, modeled upon that of the successful standard oil trust, under the name of the "Distillers' and Cattle-Feeders' Trust." Nearly all the distilleries in the former pool, to the number of more than eighty, became members of the trust.⁴³ In order to limit the output to the demands of the market and to maintain prices, most of these distilleries were gradually closed, until in 1889 twelve distilleries alone were producing all the distilled spirits placed upon the market by the trust. Of these, six were located at Peoria, which was stated to have at least a 10 per cent advantage over a distillery located at Chicago, and nearly 20 per cent over one located at St. Paul.⁴⁴ The effect of the organization of the trust upon the industry in Illinois is seen in the sudden drop in the number of establishments, in the decade 1880-1890, from

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⁴² Jenks, "The Development of the Whiskey Trust," Political Science Quarterly, 4:296 (299, 300). For an interesting account of the industrial and financial effects of the excise tax on distilled spirits see Wells, Practical Economics, 152-234.

⁴³ Report of the Trade and Commerce of Peoria, 1883, p. 15; 1884, p. 16; 1885, p. 15; Jenks, "The Development of the Whiskey Trust," Political Science Quarterly, 4:296 (308). The feeding of cattle on the slop from the distilleries is an important adjunct to the distilling business.

⁴⁴ Jenks, "The Development of the Whiskey Trust," Political Science Quarterly, 4: 296 (312).

36 to 7, with a very great increase in size and capital, and especially in output.⁴⁵ Illinois was the leading producer of distilled liquors in the United States, turning out nearly onequarter of the world's supply. As just stated, six of these distilleries were located at Peoria;⁴⁶ the other one was that of Shufeldt and Company of Chicago, an independent concern and the most formidable rival of the trust.

There is no doubt that the formation of the whisky trust resulted in certain economic gains. Only the most favorably situated establishments were maintained, and these were run at full capacity instead of at 25 to 50 per cent, as was the case beforehand; the expenses of management were thus lessened. At the same time the price was maintained fairly steadily at a point somewhat above production. Probably few other industries furnish such a striking object lesson in the economies of industrial combination and of concentration of manufacture.

In contrast with the industries just described there were some manufactures which, so far from showing any tendency toward concentration, tended to spread out over a wider area and to distribute themselves more generally in small establishments; in some cases indeed the average individual plant grew steadily smaller. This characteristic is to be noted in the case of brass and bronze products, bread and other bakery products, flour and grist mill products, leather goods,

⁴⁵ The following table shows the number and average size of establishments
producing distilled liquors in Illinois between 1870 and 1890:

ITEM	1870	1880	1890
Number of establishments Average number employees Average capital Average product	21 \$ 56,000	36 59 \$ 95,500 \$405,500	7 146 \$1,248,800 \$7,428,100

⁴⁶ The number of barrels of spirits and liquors shipped from Pecria was as follows: 1872, 105,959; 1877, 127,580; 1882, 217,884; 1887, 216,201; 1892, 303,268. Report of the Trade and Commerce of Peoria.

In no industry has the tendency to scatter been more pronounced than in the case of tobacco manufactures. Here the number of establishments grew very steadily (from 274 in 1870 to 730 in 1890), and these were widely distributed over the whole state. There was a decline, on the other hand, in the average number of employees per establishment (from 10 to 7), the average capital invested (from \$7,170 to \$5,686), and the average output (from \$15,765 to \$12,287), during the period 1870-1890. This was an industry which necessitated only a comparatively small investment of capital, as hand methods still largely prevailed, and in it, too, there was no great economy effected by concentrating the industry in a single large plant.

XVIII. DEVELOPMENT OF MINERAL WEALTH

I LLINOIS' splendid gifts of fertile soils and clement weather so overshadow her other natural resources that it comes as a surprise to many to read that more than five per cent of the nation's total mineral production has been contributed in recent years by this state, and that only two other states in the union can boast of more.

For abundant mineral resources one is usually inclined to look to mountainous places difficult of access rather than to richly productive farm lands like those of Illinois with their flat prairies and thick soils deeply burying all signs of solid rock. But, fourth in production of petroleum and clay products, third in brick and tile as well as in coal production, surpassed only by Pennsylvania in the manufacture of Portland cement, and leader in the fluorspar, sand and gravel, and tripoli industries, Illinois presents excellent proof that agricultural wealth and mineral poverty do not necessarily go hand in hand.

Though agriculture is and doubtless always will be the dominant feature of the economy of Illinois, the mineral industries of the state are gradually gaining in relative importance. Excluding coke, pig iron, and some other values that cannot honestly be credited to Illinois because the raw materials do not originate within its borders, the total value of mineral production in 1917 was somewhat more than one-third as great as agricultural production, whereas in 1905 the ratio was only as one is to four.¹ The actual increase from 68 to 238 million dollars during the same period is indeed striking, but even

¹ For table see appendix, p. 510.

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more impressive is a list of minerals and their production in Illinois in the hundredth year of its existence as a state as compiled by the United States and state geological surveys.

PRODUCT	Quantity	Value
Asphaltshort tons	110,756	\$ 1,317,855
Cement, Portlandbarrels	4,378,233	6,090,158 a
Clay products		19,565,420
Clay, rawshort tons	188,616	632,383 b
Coal " "	86,199,387	162,281,822
Coke " "	2,289,833	14,455,539 b
Fluorspar " "	156,676	1,373,333
Iron, pig " "	3,458,126	91,094,541 b
Lead " "	1,439	247,508
Lime " "	83,409	529,451
Mineral paints, lead and zinc pigments		9,465,176 e
Mineral watersgallons	1,370,461	66,042
Natural gas	4,439,016	479,072
Natural-gas gasolinegallons	4,934,009	866,033
Peat	с	С
Petroleumbarrels	15,776,860	31,358,069
Potash	c	с
Pyriteshort tons	24,596	89,998
Sand and gravel ""	9,120,698	3,658,799
Quartz (silica) " "	386,866	630,256
Silverfine ounces	7,186	5,921
Stone		3,322,041
Sulphuric acid		3,902,831 d
Tripolishort tons	16,133	31,338
Zinc " "	4,267	870,468
Miscellaneous		867,892
	Total value	\$228 .86 600

MINERAL PRODUCTION OF ILLINOIS, 1917

Total value. \$238,186,690

a Exclusive of natural cement, value of which is included under "miscellaneous."

b Value not included in total value.

c Value included under "miscellaneous."

d From zinc smelting.

c Only that part of this total not duplicated elsewhere is included in the total for the state.

Of these products probably but one, coal, could have been among the mineral resources that the explorers and earliest settlers desired and sought for. The glamour of gold and silver doubtless still occupied a place in the background of the explorer's mind—a heritage from the days of the Spaniards—and tales of pieces of copper found lying on the surface by the Indians long inspired the hope of metal mines; a real but all-inadequate recognition of the value of iron and coal kept newcomers on the lookout for such deposits; and salt as an immediate necessity was early developed. But beyond coal, salt, and the metals, the desires of the early visitors did not go, and little did they realize the importance to be achieved by the very one of these looked upon with least favor. Before the sixties coal production increased almost imperceptibly and other industries lagged equally or even more. But with the passing of the third quarter of the century the variety and value of developed resources began to give promise of their present magnitude.

A legitimate question is very naturally an inquiry as to the reasons for the slowness with which Illinois responded to the opportunities that lay hidden in her soils and rocks. The adventurous early visitors to the region may not have been willing to stay their restless feet for minerals less alluring than gold and silver, but with the arrival of the first home-makers, unafraid of toil and willing to win a livelihood slowly, lack of development cannot be laid to the unromantic character of the minerals of Illinois.

The early failure to utilize state mineral resources was due rather to certain geologic conditions and to lack of transportation. The transportation question is so intimately entangled with the history of the development of the coal industry that the idea can be more profitably discussed later; at this point a glance at the illustration opposite page 422 will suffice to corroborate the assertion that development of mineral industries was forced to wait for development of adequate transportation.

Certain geologic aspects reacted directly on mineral devel-

opment in Illinois. In the broad central portion of the state the thick layers of drift deposited by glaciers of the Pleistocene epoch effectively concealed bed rock and the mineral resources contained therein; and even in the unglaciated and driftless counties in the extreme northwest and south and in the border counties where major streams had in many places cut through the drift to rock, recognition and utilization were delayed by the almost universal cover of swamp vegetation and forests over the alluvial plains and the bordering areas of the Mississippi, the Kaskaskia, and the Illinois valleys. Further, the early settlers long kept to forested areas, influenced as much by fear of the prairies and ignorance of their possibilities as by need of transportation and of wood for fuel and construction, these being afforded them only near streams.

Even if glacial drift had not lain thick over the central part of Illinois, and even if forests and adequate transportation had attracted settlers at once to the heart of the state, mineral development would nevertheless have progressed from the borders inward just as it did. For it happens that it is only in the counties lying near the boundaries of the state that the spoonlike structure of the rock layers brings to the surface the pre-Pennsylvanian beds, with their thick fine limestones, and the better coal and clay beds of the Pennsylvanian period, leaving similar beds in the broad central area generally deeply buried by younger shales of little value.

It was during the third quarter of the nineteenth century that the most substantial progress was made in overcoming hindrances due to lack of transportation and restricted mineral distribution and the description of mineral development here given is focused on this period to illustrate the point. The order adopted for presentation of the ensuing brief historical sketches of individual mineral industries follows, as closely as the dates are known, the order of their appearance in the state.

The earliest mineral utilized must have been water, but like soil, this resource is so universally needed, used, and distributed that it is not a commodity except under unusual conditions, and therefore, in its most important aspect, is not an industry. It is true that statistics are given for a nominal water industry, but these figures give no conception of the true amount and value of water taken from the rocks and soils.² Compare them, for example, with the estimate made by Leverett in 1896, when population was smaller than it is now, that "the total supply from this source [shallow wells] is about \$40,000 barrels for household consumption and 700,000 barrels for stock, or about 1,500,000 barrels per day. About onehalf the population of the State is thus supplied with water for cooking and drinking, the other half being supplied mainly from Lake Michigan and from the streams, deep wells furnishing the supply for but a small part of the population."^a

It is a significant fact that even in the area which is dominated by the lake, deep (or artesian) wells are sources of water for industrial purposes. It would seem that the original cost of drilling a two-thousand-foot well with its smallest diameter from six to twenty inches, and the continual expense of upkeep and pumping would eliminate wells as a source of supply in a district where water is as abundant as it is in the region of Lake Michigan. And yet in Chicago during the summer of 1914 there were in active service 125 wells over 1,000 feet deep, with a pumpage of over 30,100,000 gallons per 24 hours; and within a circle of a half-mile radius in the stockyards district 26 wells delivered 13,450,200 gallons, or 44.3 per cent of the total daily deep-well pumpage in the city.⁴

² For table see appendix, p. 516, columns 49 and 50.

³ Leverett, "The Water Resources of Illinois," in United States Geological Survey, Seventeenth Annual Report, 1896, part 2, p. 769.

⁴From an unpublished paper on the artesian water supply of northeastern Illinois, written by Carl B. Anderson for the Illinois State Geological Survey.

Industries in other parts of the state are forced to depend upon deep wells for water supplies, but such statistics as these for the Chicago district where an alternative source is at hand demonstrate clearly the real importance and value of deep underground water supplies. Deep-well sources are destined to become of ever-increasing importance, especially outside the lake cities, as a direct consequence of the increasing danger of the pollution of shallow sources that accompanies the growth of population.

After water, the next resource used by human beings prior to 1818 was salt. Its production, once the sole industry of Illinois, had far-reaching effects on the early settlement of the Mississippi valley, but long before 1870 the Saline river brines had so demonstrated their incapacity to compete with West Virginia and Ohio brines that the salt industry was practically, and a few years later, actually, a closed chapter in the mineral history of the state.

The lead and zinc industry, too, had its beginnings before 1818; but, though small amounts of lead and zinc still come from northern Illinois and, as a by-product of the fluorspar mining operations, from southern Illinois, this industry of romantic history is of very small importance at present.

The stone industry, based on another mineral resource used prior to 1818, has persisted to the present, the 1917 production exceeding three million dollars in value. Large though this figure is, the increase in the past quarter of a century is surprisingly small when compared with that of other minerals.⁵ The reasons are probably that Portland cement and clay products, such as brick and terra cotta, have been largely substituted for stone in construction work; and that the Bedford limestone quarries of Indiana, opened during the nineties and very favorably situated with reference to the

⁸ For table see appendix, p. 516, column 43.

Illinois market, supply a product far superior to Illinois limestones.

Since 1890 clay products have doubled their values, while cements have increased fifteen times over, and as much of this production has been substituted for stone in structural work, it is not surprising that Illinois' rank in production of building stone is now only fourteenth, although for many years prior to 1896 the state ranked first in the country for marketed production of that class of stone.

The general absence of surface limestone over the broad central portion of the state, due to the spoonlike structure of the bed rock layers that carries the limestone beds hundreds of feet below the surface in the middle of the state, and the almost unbroken continuity of the drift curtain there, mean that the state must continue to look to border counties for structural limestone and for road metal. The latter is of increasingly vital importance to the prairie population since the advent and rapid increase in the use of automobiles has forced the construction of good roads.

Though the monetary value and the distribution of the limestone industry have changed but little, the use of the product has changed remarkably. Whereas in 1890 approximately half of the total production was building stone, in 1917 almost the same proportion was sold for concrete and more than half as much again for road making and as railroad ballast. Furthermore, in production of building stone Illinois has fallen in rank from first to last place, and in value from more than a million dollars to about ten thousand, or one per cent of its former value, during a period when in every other use of limestone there has been a marked increase.

An immediate corollary to production of limestone for building must have been the development of the lime industry, for wherever stone or bricks are used in construction work,

limestone must be burned into lime for mortar. And as a second corollary to the stone industry, another ingredient of mortar, namely sand and gravel, demands mention among mineral resources utilized in 1818. The first lime was made at Alton and that city and the surrounding district held supremacy in the lime industry for many years, owing to the excellence of the product, the concentration of the earliest population in the general region, the cheap river transportation, and the early abundance of fuel wood and later of coal.6

By the seventies, however, it was recognized that the Mississippi lime business was losing its supremacy, the reasons being that the center of population and therefore the principal market was shifting northeast to the Chicago area.7 The production continued to be large, of course, for the St. Louis demand persisted; but its unchallenged leadership was no more until the period of abnormally rapid growth in the northeastern counties of the state was over, when the Mississippi district was reinstated as leader. Statistics for the years after 1893, which are the earliest complete ones available, reveal steady production with no great increases during the quarter century.⁸ In the union Illinois ranks low, fifteenth in 1917 and as low as twenty-second in 1907.

In sand and gravel production, the second chronological corollary to limestone production, it surpasses all other states. In the sand and gravel lenses, pockets, and strata of its thick drift sheets, and in the St. Peter sandstone that outcrops in La Salle county, Illinois has perhaps its bulkiest mineral resource and one of no mean value, the marketed production for 1917 being valued at more than \$2,580,000. It is widely distributed, being produced for sale in over one-third of the

⁶ Geological Survey of Illinois, 1: 324.

⁷ *Ibid.*, 325. ⁸ For table see appendix, p. 516, columns 47 and 48.

counties, and doubtless it is taken out for local use in at least as many more counties.

The varieties of sand are so many that discussion of individual kinds is precluded; the subject must be inadequately dismissed with the statement that the industry is likely to continue to grow in importance with the increase in the variety of its uses and as the result of discovery of new kinds of sand in Illinois' well-nigh inexhaustible supply.

The story of coal, the last of the pre-1818 resources, reveals as in a mirror the correlative development along other lines, and therefore deserves far more detailed consideration than is possible in this chapter, especially as it is the most valuable mineral product in the state. In 1917, Illinois' 86,199,387 tons, valued at \$162,281,822, were produced from 810 mines. Of these, 324 shipped ninety-eight per cent of all the coal away from the vicinity of the producing mines while 486 more mined two per cent of the total production for local use. In 1917 these many mines were places of employment for 80,893 men, each of whom was responsible, on an average, for bringing to the surface almost 1,000 tons of coal during the year. In 1913, the last year unaffected by the European war, Illinois had to its credit five per cent of the world's coal production and was surpassed by but three countries in the world, one of them the United States.

The history of the growth of the coal industry to such impressive magnitude is divisible into two great periods, railroad and ante-railroad. So marked is the transition from one to the other that from the curve for statistics of production could be read the date of beginning of railroad development even though the curve for railroad mileage had been omitted.⁹

Transportation of a bulky commodity like coal over any great distance was well-nigh impossible except by water until

⁹ See illustration opposite p. 422.

railroads came to solve the problem, and shipping mines and their markets were confined during all the period to the vicinity of streams. The first macadamized road in the state, almost fourteen miles long, was built between Belleville and St. Louis, probably directly in response to the needs of transportation in the coal industry; and the first railroad, built in 1837 by Governor Reynolds between St. Louis and a coal mine on the Mississippi bluff, was avowedly a direct response to the development of coal resources.¹⁰

The whole face of the situation changed with the development of railroads. The date 1850 is but an approximation of the time of beginning of the railroad era, for the first railroad was built in 1837, thirteen years previous, and it was not until 1854 that the coal mining and railroad industries became interdependent and the railroad era was unquestionably begun. "Until 1854, coal was hauled by wood-burning locomotives and the greatest impetus given to expansion of the coal industry after the construction of railroads was the purchase by the Galena and Chicago railroad in that year of five locomotives 'guaranteed to burn bituminous coal mined in Illinois.'"11 The success of this departure was largely responsible for the immediate and marked expansion of coal production in direct response to the increase in railroad mileage, though it is true that even with wood-burning locomotives the figures for coal production doubtless would have mounted with astonishing rapidity.

All through the third quarter of the nineteenth century the railroads were masters of the coal and railroad situation, for main-track mileage was increasing at a higher rate than was coal production. It was essentially a case of development of mines where railroads were built during the pre-1893 years,

 ¹⁰ Andros, Coal Mining in Illinois, 28.
 ¹¹ Ibid., 35 ff.

but after that time, as the graph clearly shows, coal production became dominant; the rate of increase of main-track mileage decreased from year to year, while that of coal tonnage increased by leaps and bounds.

An additional basic factor in the great increase in coal production in the latter half of the railroad period was the impetus given to steel production by the establishment in 1870 of the Bessemer process of steel manufacture. Though the chemical quality of Illinois coal does not permit its use as blast furnace fuel, the iron and steel industry has played a leading part in the huge increase of coal production in the past twentyfive years, for coal enters into almost every phase of manufacture and industry that depends for existence on steel, which means that the coal industry is interdependent with practically all industry and grows in proportion to the growth of aggregate manufactures and the conditioning steel industry.

The great increase of population, the enormous growth of manufactures, the improvements in transportation facilities, the increase in wealth, and the rise in the people's standard of living, the magnitude of which is oftentimes not appreciated, are all so dependent upon the iron and steel industry that the abundance of iron is commonly taken as a measure of national wealth. But, as J. Russell Smith says: "Coal is the twin of iron in the production of the new world commerce, because this commerce is carried in vehicles made chiefly of iron, driven by power derived from coal. Coal also furnishes heat for the reduction of iron, and power for driving the machinery employed in its manufacture."12 And so the abundance of coal must be regarded as a second measure of the wealth of a people, coördinate with iron. Indeed, though the two are interdependent in the present scheme of industrial economy and therefore are of equal importance, coal is perhaps even

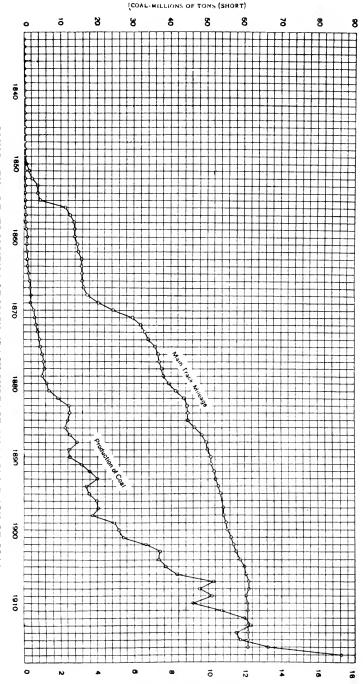
¹² Smith, Commerce and Industry, 139.

better entitled to be the final measure of wealth in any area: witness the manufacture of Lake Superior iron ores in distant eastern coal field centers like Pittsburg, and the smelting of Missouri lead and zinc in cities of the Illinois coal fields.

The iron and coal industries of today have many points of similarity: both are developed only where manufacturing is well advanced, both require good transportation facilities, and both are fundamental to good transportation. Both require many laborers and large markets such as only concentrated population can give, and both may be regarded as industrial barometers. As true for coal as for iron is Smith's statement that "it very distinctly is *not* a frontier industry."¹³ Thus there is to be read from the rising curve of coal production¹⁴ not only the rise of coal mining itself but, more important, the advance of Illinois from the frontier stage of fifty years ago to its present high rank in modern industrial civilization.

As there has been little change in the number of coal producing counties for thirty-five years or more, it seems safe to assume that all potentially important producers are now developed. But the further natural conclusion that the counties have maintained a corresponding constancy of rank in coal production is belied by the facts.

Five counties — St. Clair, Sangamon, Madison, Macoupin, and Vermilion — appear among the ten leading counties every year since 1880, their continued prominence resulting from great abundance and a sufficiently good quality to enable them to hold their positions year after year. Comparing the years 1880 and 1917, the other five are in no instance identical, La Salle, Will, Fulton, Peoria, and Rock Island counties completing the list of ten for 1880, and Franklin, Williamson, COINCIDENT DEVELOPMENT OF MAIN TRACK MILEAGE AN PRODUCTION OF COAL



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Saline, Montgomery, and Christian counties completing that for 1917. Those of the 1880 list are all Illinois or Mississippi river counties and owe their early start and prominence as much to their location, which is favorable to transportation, as to the abundance or good quality of their coal. Conversely, the fact that none of the five new counties of the 1917 list is on an important river shows the modern release of coal production from the early restrictions imposed upon it by lack of railroads into the interior; it also gives evidence of the new scientific methods of search, such as efficient methods of test drilling, mine planning, and managing under the supervision of geologists and engineers as contrasted with the early practice of drifting into a valley bluff wherever an outcrop presented itself. The rise of Franklin and Williamson counties to first and second place, respectively, in 1917, from no production at all in 1900 for the former and ninth place for the latter, is a particularly good example of the effect of modern methods in an old industry.

Another sign of increasing efficiency is seen in the decrease of the total number of mines during the past decade.¹⁵ The number of mines fell from a maximum of 1,018 mines of all types in 1906 to 810 in 1917, while at the same time the total production doubled. Both local and shipping mines have decreased in number and increased in tonnage, the greater increase for the latter class probably depending upon the fact that the shipping mines are also the larger mines worked by the better organized and capitalized companies.¹⁶

Comparisons drawn on the basis of the relation between number of men and production are less simple. For the period from 1893 to 1917 more rapid *relative* increase in efficiency is indicated for local mines than for shipping mines by these

¹⁵ For table see appendix, p. 512, column 4. ¹⁶ For table see *ibid.*, columns 1, 2, 3, 5, 6.

data, but the per capita production for the former is actually still far below that for the latter and throughout the period shows the efficiency of shipping mines to be actually greater.¹⁷ The fact remains, however, that the gap between shipping and local mines in this regard is slowly narrowing.

One factor in producing such a result may be the organization and expansion of local mines as municipal enterprises or of private enterprises simulating these in scope. Another factor is that the hindrance imposed by competition upon efficient operation is felt more by shipping mines than by local mines.18

The idea that competition must force efficiency is so generally accepted, so almost axiomatic, that the failure of the principle in this instance requires an explanation. The remarkable development of coal carrying railroads and the low tonmile rates made for long hauls have permitted the more cheaply produced eastern coals to move into Illinois and set prices that are too low to permit efficient development. The ease of opening new mines causes scores of them to spring up with every period of unusual prosperity, and with the slack spring and summer seasons or with the return of normal or subnormal prosperity the effort of each of the many operators to keep his own mine going even at a slight loss results in excessive and unfair competition. Proper organization or consolidation could of course partly remedy such difficulties, but to a certain extent they are unavoidable, as Illinois coal stocks very poorly and therefore labor rates must be high to cover the consequent period of summer idleness even though mines be reduced to a number conducive to efficiency. All these conditions have led to a steady decline in the margin of profit, a feature that

¹⁷ For table see appendix, p. 512, columns 1, 2, 3, 7, 8, 9, 10. ¹⁸ Rice, "Mining Wastes and Mining Costs in Illinois," in Illinois State Geological Survey, Bulletin 14, p. 212 ff.

is injurious to the interests of both producer and consumer when it is carried too far.¹⁰

In spite of the hindrance of excessive competition, there are numerous examples of increasing efficiency in the coal industry of Illinois. Since 1900 there has been a notable increase in the number of mines using machines, and in the number of machines in use in each mine. This has resulted in a fourfold increase in tonnage for mines so equipped as compared with a twofold increase for all other mines during the past seventeen years.20

Again, in protection of miners against injury and loss of life the coal mining industry shows improvement. The actual increase in nonfatal accidents and in the number of lives lost is not great, and in the number of tons of coal produced to each life lost a measure of the progress may be seen;²¹ for, whereas in 1883 only 90,000 tons of coal were taken out for each life lost, 381,000 tons, or more than four times as much coal was mined in 1917 for each man lost.

Nominally closely related to the coal industry, but actually in this case utterly distinct, is the coke industry. The decline of Illinois in coke production from eighth place among the states in 1880, and perhaps from an even higher rank in earlier years, to twenty-third place in 1904 and 1905, and its rise to fourth place in the following decade, implied by the fall and rise of production totals for the period, is entirely different from the history of production of other Illinois mineral prod-In the years of the earlier, lesser maximum of proucts.²² duction, after timber in sufficient abundance for charcoal was practically exhausted, the iron furnaces of the state were compelled to use coke produced locally, regardless of what the

 ¹⁹ Andros, Coal Mining in Illinois, figure 67, p. 221.
 ²⁰ For table see appendix, p. 513, columns 22, 23.
 ²¹ For table see *ibid.*, columns 18-21.

²² For table see ibid., p. 515, columns 34, 35.

quality of coke from Illinois coals chanced to be. Better coke was to be had in the east, but the high cost of transportation in the days of few railroads outweighed the advantage of eastern over Illinois coke, and iron smelters were content to establish themselves in the midwest centers of population near the supplies of raw material for their coke. And so for many years the coke industry thrived on Illinois coal, quantities of fuel for blast furnaces being manufactured at Carterville, St. Johns, Brussels, Equality, Brookside, and Streator. Especially was the industry important in the Big Muddy valley, favorably situated south and east of St. Louis, for in the Big Muddy coal field was found some of the very best coal for coking purposes in the state. With the marvelous cheapening of transportation that marked the decades following 1890, New river and Pennsylvania cokes moved at so reasonable a cost into the markets fed by the Illinois product that consumers found it economy to use the superior eastern article in place of the inferior product from the impure Illinois coals. By 1893 attempts to make metallurgical coke from Illinois coal were abandoned and the little that was made was chiefly for use in the manufacture of water gas and for domestic use as crushed coke. The coke manufacturers were not even permitted to enjoy that small market undisputed, and the decline continued into the early years of the new century. The prodigious increase after 1904 was heralded by the completion at South Chicago in 1905 of a bank of 120 Semet-Solvay byproduct ovens using coal drawn from the field of Fayette county, West Virginia.23

Prior to 1900 the concentration of enormous coke production in the beehive coke oven fields of Pennsylvania and West Virginia rendered impossible the absorption of more than a small fraction of the gas and other potentially valuable

23 United States Geological Survey, Mineral Resources of 1905, p. 740.

materials evolved in coke manufacture, and the enormous remainder was not readily transportable to outside areas. A solution for the difficulty was found in the transfer of the raw material from the good coke-coal fields to such places for manufacture as Chicago, where great quantities of coke were demanded by near-by steel mills and where the by-products, particularly the gas, might find a market that would more than pay coal transportation costs.

With the importation into Illinois of the state's new coke industry in 1905, then, the ends of conservation were served by stopping one of the great criminal wastes of the nation's natural resources involved in the use of the beehive coke oven and at the same time Illinois gained a great industrial asset.

Another early industry, more normal in its development and therefore having a history more nearly analogous to that of coal mining than has the coke industry, is that of clay mining and the manufacture of clay products. During the period when coal production increased fourfold clay products increased fully threefold, and in both subdivisions of the industry - pottery, and brick and tile --- there was an approximately commensurate relative increase. The two are not of equal importance by any means, however, brick and tile manufactures having far outranked pottery for many years. The reverse was true in the early days, for neither the great bulk of the state's clay resources nor the need for brick for construction and tile for drainage was discovered while the population was still confined to the wooded areas along major stream lines. With expansion into the prairies, however, the brick and tile phase of the industry promptly achieved preëminence.

The brick and tile industry is itself subdivided into so many small and diverse branches that for brevity's sake it is necessary to restrict discussion to common brick and draintile, the former representative of the brick and the latter of the tile industry, and each of leading importance in its class.²⁴

With its sixty-seven per cent of the state's total production of common brick in 1917, Cook county leads all others by a great margin, in consequence of its density of urban population and its plentiful supply of glacial clay. Kankakee county also ranks high in production of common brick but it ranks still higher in draintile manufacture, producing almost a fourth of the state's output. The rapid reclamation of the extensive marshes and swamps of Kankakee county serves to insure its leadership, for it involves the use of enormous quantities of The factors that induce such large production in these tile. two counties are at work elsewhere in the state, though in less degree. They are mainly geographic and geologic, and that they are widespread is shown by the fact that in 1917 fifty counties reported production of draintile and fifty-five reported production of common brick.

In the case of common brick a considerable demand throughout most of the state is occasioned by the lack of good building stone in the northern part and by the lack of stone in sufficient quantities, even where locally of suitable quality, in most other parts of the state. In the case of draintile the almost state wide demand is explained by the fact that although the sheet of glacial drift with which Illinois is gifted is especially abundant and rich, its surface contains so many depressions that swamps and marshes large and small abound, and natural drainage is generally inadequate. Even the southernmost counties and some of those of the western tier, where effects of glaciation play an inconspicuous part, have their drainage problems because of the broad flood plains of the Mississippi, the Ohio, and the Wabash. Singularly enough, the universal demand in the state for common brick and draintile is matched

24 For table see appendix, p. 514, columns 27-31.

by an almost universal supply of raw material suitable for their manufacture. The relation is particularly noteworthy in the case of draintile: glaciation is responsible for poor drainage conditions, but at the same time glacial deposits afford inexhaustible quantities of clay for draintile with which to remedy the defect.

More significant even than the gradual increase in production, amounting to at least twofold in the years since 1893, is the almost unbroken decrease in the number of manufacturers of clay products from a maximum of 697 in 1894 to a minimum of 216 in 1917. This progressive change is one of the clearest examples of the tendency toward concentration and centralization which is typical of many phases of the state's mineral industry. What with raw materials, coal for kilns, easy transportation from without the state for certain raw materials necessary for more refined products, and a market to absorb an enormous quantity of all varieties of clay products, it is not to be wondered at that in total value of clay products Illinois is surpassed only by Ohio, Pennsylvania, and New Jersey.

Another mineral industry supplying structural material and developed during the first fifty years of the past century, is the production of cement, both natural and Portland. The manufacture of natural cement is of necessity restricted to places where the raw materials are to be had near the surface. It was Illinois' fortune to have an abundant source of natural cement materials at Utica on the Illinois river. No more favorable position than this vicinity could well be imagined for such a resource: in the ante-railroad days the Illinois river furnished a ready line of transportation to the markets west and south where most of the population lay; later, with the building of the Illinois and Michigan canal, in the construction of which natural cement from Utica played an extensive part, an easy way was opened to the markets in growing Chicago as well as at points east by way of the lakes; still later, the great markets of the prairies were opened when railroad lines focused themselves on the La Salle-Utica area, attracted by glass-sand quarries, cement plants, and abundant supplies of coal, the last constituting still another factor in making the Utica area almost ideal for natural cement manufacture. Indeed, when Portland cement plants arose to contest victoriously the right of natural cement to supremacy, they were established early in this very area and the two have continued to exist side by side in La Salle county.

The natural cement industry in Illinois was one of wide extent in the past, shipments going far from the state in the days when cements were more difficult to obtain than they are now; but especially in the upbuilding of the large cities of Illinois natural cement played an important part.

In spite of the excellence of the Utica product, the standardization possible in the artificial cement, combines with the far wider availability of the necessary raw materials to make the Portland cement industry supreme. The beginning of Portland cement production in the state was a slow, tedious process, compared with its successful growth in later years. Construction engineers were naturally slow to take up with a new substitute for the old, tried, natural cement, but when once it was proved satisfactory, the rapidity of increase in production was phenomenal.²⁵ As the manufacture is centralized in five large plants, it is relatively easy to gauge production and to prevent flooding of markets with excess stock—in striking contrast with the coal industry, for example.

The close of the first half of the century in 1868 saw the birth of no industries other than those that have been discussed. By that time the foundations had been laid for three industries of great importance—water, clay products, and

25 For table see appendix, p. 515, columns 37, 38.

coal; and by that time the salt and the indigenous iron industries,²⁶ which, though once thriving, were not on sufficiently sound foundations to persist in the face of later development in other states, were fast dying out. In short, the law of the survival of the fittest operated in the first fifty years: those industries that were based on Illinois' possession of abundant resources unexcelled in nearby areas lived; those that were not so favored died. All through that period lack of adequate transportation hampered development so markedly that the growth in the next fifty years when the state was suddenly freed from this restraint is fairly startling.

Of the three mineral resources - petroleum, natural gas, and fluorspar-developed during the third quarter of the century, fluorspar easily has precedence. Until 1896 the only production of this mineral in the United States was from the deposits of Hardin county, which are known the world over as among the greatest yet discovered. In 1896 mines were opened in the adjacent Kentucky district, and a decided slump in Illinois production followed for five years. A strong revival of production began about 1902 and tonnage has increased, with considerable fluctuation, from that time to the present.27

Fluorspar is used mainly in supplying the American market with spar for foundry work and steel making and its production consequently increases or decreases as the steel industry thrives or declines. Only a very small fraction-that containing less than one per cent silica-can be used in the enameling, chemical, and glass trades. A still smaller fraction of the material is sufficiently flawless and in pieces of adequate size for use in optical work.

The commercial importance of the Illinois fluorspar district is bound to grow with the expansion of steel manufacture, for

²⁶ Geological Survey of Illinois, 1:365.
²⁷ for table see appendix, p. 516, columns 44, 45.

not only are the deposits of this state unexcelled, but they are nearer great steel manufacturing centers than are the small mines of Colorado, New Mexico, and New Hampshire.

Omitting details of discovery in the dozen or so scattered fields, the history of oil and gas production in Illinois may be made extremely brief; for every field in every state the story is the same in outline - a rapid rise in production almost immediately upon discovery followed by a slower but sure decline to exhaustion not many years later. Unless new large fields for both oil and gas are discovered, which scarcely seems probable, the decline begun in 1910 and which has been but temporarily interrupted, is likely to continue unbroken.²⁸ For the time being, however, the oil and gas industry in Illinois is of major importance, as statistics for 1917 show. Of natural gas the state produced almost four and one-half billion cubic feet, valued at almost \$500,000, while of petroleum it produced more than fifteen and three-fourths million barrels, valued at more than \$31,000,000. Indisputable testimony to the excellence of Illinois oil is the fact that for some years its value has kept it one notch higher in the scale of states based on total value of production than it is on the basis of quantity produced.

The enormous risk of capital involved in oil and gas prospecting and the great cost of pipe lines and refining plants make it clear that the petroleum industry does not belong to a frontier civilization, and helps to show why even slight development was delayed till 1882 and maximum productiveness until 1904, near the close of the hundred years succeeding the admission of Illinois to statehood. Remembering that fluorspar, too, had to wait for extensive development until the frontier stage was well past, the contention made that the mineral resources developed after 1868 would be of that nature

28 For table see appendix, p. 514, columns 32, 33.

seems to have been borne out by the group of industries dating their rise within the third quarter of the century.

The fourth and last group, belonging to the 1893-1918 period, support this contention with even greater clearness. Silica (tripoli), mineral paints, pyrite, sulphuric acid, asphalt, and natural-gas gasoline are the six industries of the group. Three of them, mineral paints, sulphuric acid, and asphalt, though rightly termed mineral industries, can more properly be considered under the head of manufactures so far as Illinois is concerned. A paragraph in regard to each, however, will not be out of place.

In 1917 mineral pigments were made in Illinois directly from the ores at Collinsville, Chicago, Argo, and East St. Louis, the total value being \$9,465,176.

The sulphuric acid produced in Illinois is a by-product of zinc smelting at La Salle, Peru, Collinsville, and Danville, in which process the waste gases, sulphur dioxide and sulphur trioxide, are converted into acid. A product which as waste would be extremely harmful is thus turned to good account, amounting in 1917 to \$3,902,831.²⁹

In Illinois asphalt is derived from crude petroleum in refineries. The entire product—110,756 tons in 1917, worth \$1,317,855—is marketed for road oil and for flux.³⁰

Of the other three industries, all are independent, not byproducts in processes of manufacture involved in other mineral industries. Illinois tripoli has been used for some time as a paint, wood filler, metal polish, in soaps, cleansers, glass manufacture, and for facing foundry molds. The annual production fluctuates considerably, the \$30,000 value for 1917 being unusually low.

Next oldest is the pyrite industry, dating from 1907, so

²⁹ For table see appendix, p. 511. ³⁰ For table see *ibid*.

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far as statistics show. Especially in Vermilion county, where production was almost one hundred per cent of the state's total, is the industry developed, since the pyrite can be easily saved incidental to coal mining, as it occurs in the coal of this district in distinct lenses and bands instead of being finely disseminated throughout the coal as it is in most parts of the state. That 24,596 tons worth \$89,998 were mined in 1917 shows the possibilities of an industry that is merely incidental. Pyrite is used in the manufacture of sulphuric acid, a product of great importance at all times.

The youngest mineral industry that has attained real industrial importance in the state is the production of gasoline from natural gas. Production figures have mounted so rapidly in 1917 almost five million gallons valued at \$866,000—that certainly the experimental stage must be safely passed. The recovery of gasoline from gas promises to become a flourishing business, for large quantities of gas now wasted may be turned to profit by the process.

It is readily recognized that the nine mineral industries which have originated in Illinois during the fifty years since 1868 differ greatly in their essential character from those industries originated in the earlier half of the century. Every one of them is an industry requiring at least one of the following factors for its development: large population to afford market, adequate transportation facilities, an advanced stage in the manufacturing industry, or abundant capital for establishment and upkeep. Clearly none of them could be a frontier industry. The contrast presented by the earlier group in comparison with the later is, then, a strong one: on the one hand, the older industries, though now no longer of frontier character, were developed under frontier conditions and persisted through the frontier period, proving their adaptability to such conditions; and, on the other hand, the younger industries were not adapted to and could not have been established in pioneer times. The older industries were, very logically, the development of mineral resources necessary to the simplest forms of living in a frontier country, having to do with fuel and structural materials; the younger industries involved the development of resources necessary only to a higher civilization and possible only after frontier conditions had disappeared.

A final word in regard to the response of Illinois to demands placed on mineral resources of many kinds by the war may be pertinent. The remarkable increase in production along many lines in 1916 and 1917, and especially in 1917, offers general evidence.³¹ The end of the production curve for coal³² presents a picture of what happened in those years not only in coal but in aggregate mineral industry as well, but a few specific instances will show this in greater detail.

Even before the United States entered the war two Illinois industries, fluorspar and clay, were directly affected by the stoppage of German trading. Before the war the whole supply of clear, colorless, flawless pieces for optical instruments for scientific work passed through the hands of German optical dealers, and its stoppage promised to be a serious matter. At once, however, Illinois producers and the country's optical manufacturers were informed of the need and of the source of supply in Hardin county, and the danger was averted.

The cutting off of certain German refractory clays directed attention to deposits in southwestern Illinois, among other places, and geologists and ceramic engineers soon found that one variety of Union county clay was even superior to that formerly sought in Germany. And so another gap was stopped.

Almost immediately upon our entrance into the war the small fleet of ships plying between Spain and the United States

²¹ For table see appendix, pp. 511-516.

^{\$2} See illustration opposite p. 422.

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and bringing back quantities of pyrite from the rich Spanish deposits were arbitrarily transferred to service more essential to the winning of the war. Since pyrite is a source of sulphuric acid, which is not only vital to industry in general but to manufacture of explosives in particular, at first glance the action of the government seems a strange step. But the administration, knowing well that adequate supplies existed undeveloped in this country, rightly surmised that producers would rise to meet the need. Furthermore, zinc smelting was revived in connection with war manufacture and the sulphuric acid by-product of this process was bound to increase in quantity. In both phases of the increase Illinois had a part, for the zinc smelters of the state increased their production, and coal operators took advantage of the opportunity to save pyrite, hitherto considered only as a waste; thus they increased their earnings while mining a cleaner, better coal and supplying a raw material without whose manufactured product our part of the war could not have been carried on.

Another effort to conserve was the attempt to substitute Illinois, Indiana, and western Kentucky low-sulphur coals wholly or in part for coal and coke from the east, hitherto used exclusively in the important coal and water gas industry. Curtailment of the eastern supply by order of the United States fuel and railroad administrations was directly responsible for the attempt, but it is probable that experiments and investigations begun with the aid of gas engineers and geologists will continue, with the eventual result of a permanent decrease in the dependence of Illinois on the east, and a great saving of energy in transportation of coal and coke from Pennsylvania and West Virginia.

The most phenomenal increase in production was that of coal, and the work of Illinois miners deserved the high praise granted it by the fuel administration, for it frequently happened that when other states were behind in their apportionments, Illinois had enough and to spare. There is no need to mention the far-reaching effect adequate fuel production has on power to increase manufactures that they may stand the strain of excessive war time production. A fitting climax, indeed, to the first century of mineral production in Illinois, is found in the realization that the mineral industries of the state did not fail to play their full part in successful prosecution of the war.

XIX. LABOR ORGANIZATION

THE good times which had prevailed in industry during the period since the Civil War were abruptly ended by the panic of 1873. Immediately the demand for goods began to fall off, factories were closed down, men were thrown out of work, and all the familiar incidents of a financial and industrial crisis were set in motion. Within a week after the crash came, the first effects on the workingmen were reported by the newspapers. The Chicago and Northwestern railroad not only was unable to pay its shopmen their August wages, but announced a seven per cent reduction in wages, whereupon the men quit work. In other cases the men were discharged and the establishments closed. By November the number of unemployed in Chicago alone was estimated between ten and fifteen thousand. Two months later the Relief and Aid Society made a canvass of the manufacturing establishments in the city to ascertain the extent of unemployment. From the data furnished by ninety-eight firms, which gave the number usually employed and those then at work, it concluded that thirty-seven per cent of the workingmen were without work.1 These figures did not include the building trades, usually the first to feel the effects of a period of depression, and consequently did not fully measure the distress. Moreover it must be remembered that many families had as yet scarcely recovered from the losses of the fire of 1871, which had swept the workingmen's district and rendered many homeless.

This situation was quickly utilized by the radical elements

¹ Chicago Times, October 2, 1873; Real Estate and Building Journal, November 15, 1873; Chicago Tribune, February 17, 1874.

for purposes of agitation. Foremost in this work was Der Sozial-Politische Arbeiterverein, a German organization which had been formed in 1868 by some Chicago followers of Lassalle under the name of Der Allgemeine Deutsche Arbeiterverein, but which in 1871 had changed its name and adopted as its creed the communist manifesto of 1848. This organization called a mass meeting for Sunday evening, December 21, at Vorwaert's Turner Hall on West Twelfth street. Between five and seven thousand people representing "workingmen of all nationalities and trades" filled the hall to overflowing. The meeting was addressed in English, German, French, Swedish, and Polish, all the orators urging city aid for the unemployed. Resolutions were adopted demanding work or assistance and the use of the city's credit if the funds on hand were insufficient. A committee was appointed to present these demands to the common council at its session the following day, and another one was authorized to draw up plans for the immediate organization of the "workingmen's party."²

On the following day a crowd of ten thousand workingmen accompanied the resolutions committee to the city hall. Der Sozial-Politische Arbeiterverein marched in a body and for the first time in the history of Chicago raised aloft the red flag of socialism. The workingmen were assured by the common council that a joint committee would meet the next day to consider the matter, but when it met they were told the city had no money. They were advised to take up the matter with the Relief and Aid Society, which might be induced to turn over part of its funds to the city for temporary relief work. But this society, when appealed to, declared that such a step would be both inexpedient and unlawful.³ Despairing of relief from organized channels, the workingmen now decided that they

² Chicago Tribune, December 22, 25, 1873. ³ Ibid., December 23, 24, 27, 1873.

must go to the ballot box and elect men of their own stamp in order to get laws according to their needs.

From this time on the work of organizing an independent political party went on rapidly; and on January 12, 1874, a committee on "platform and plan of organization" submitted a program. The name of the proposed organization was to be the "workingmen's party of the state of Illinois." The platform, after declaring that all men "have an equal right to the necessaries of life," demanded the prevention of monopoly, the public ownership of all means of transportation and communication, state management of savings banks and fire insurance, the deposit of public moneys in state banks, abolition of contract system on public works, weekly payment of wages, abolition of prison labor except on state works, compulsory education of children from seven to fourteen years of age, abolition of child labor under fourteen years in factories, abolition of the fee system, recall of officials, and the organization of workingmen's associations.⁴ Somewhat later a provision was added declaring for the abolition of all indirect taxes and the introduction of a progressive income and property tax.⁵

Outside of the initial statement, there was nothing alarmingly radical in these demands. The platform was undoubtedly drawn with the necessary reserve in order to win the coöperation of the farmers who, under the name of the independent reform party of Illinois, were making similar demands. In the newly established party organ, however, a clear statement of the ultimate goal of the organization was given as the socialist state, which was to be achieved by the formation of workingmen's associations with state credit in accordance with the scheme of Lassalle, the German socialist.⁶

⁴ Ibid., January 12, 1874; Vorbote, February 14, 1874.

⁵ Ibid., September 19, 1874.

⁶ The Vorbote was founded and appeared on February 14, 1874, as a weekly paper.

At first the progress of the party was rapid. By March there were fifteen German sections, three Bohemian, three Polish, and one American. In the spring elections it ran a eandidate for collector on the north side, who received 975 votes against 4,410 cast for his opponent, a fusion candidate. In the fall elections, however, when the workingmen's party put a full ticket in the field, their vote showed a great falling off. Then, too, an attempt which had been made to coöperate with the independent reform party of the farmers at their convention at Springfield in June had failed completely, for the interests of the two groups were too diverse for such a movement to be successful.⁷

Faith in political action consequently began to decline, and in the following March the party voted not to nominate candidates. Soon afterwards it abjured the milder socialism of Lassalle and became a revolutionary Marxian group. A new platform was accordingly adopted, which, in addition to indorsing most of the demands of the former program and adding some new ones as purely palliative reforms, also laid down the more radical principles of direct legislation, popular administration of justice, common ownership of all means of production and communication, state organization and regulation of the productive processes according to the needs of the people, cultivation of the soil according to scientific methods, and universal and equal state education.

The adoption of this revolutionary program, however, made the party so much like the North American Federation of the International Workingmen's Association that the union of the two groups became inevitable; and they finally united under the name of the workingmen's party of the United

⁷ Forbote, February 28, April 11, June 6, 13, 20, July 18, November 28, 1874; Chicago Tribune, April 11, 1874. A section consisted of at least twenty-five members.

States.⁸ Soon afterward the Illinois party declared itself dissolved; its sections became sections of the new organization and the Vorbote became the latter's property and official organ.

New life seems to have been injected into the local party as a result of the national fusion. The Chicago section of the workingmen's party of the United States reported a membership of seven hundred and fifty members; two new women's groups were added and two more newspapers were started, one Scandinavian and the other German. The continued depression, moreover, was a potent incentive for movements to better the economic condition of the working class. Wages fell steadily between 1873 and 1877; according to the reports made to congress average wages declined eight per cent during this period, and in many instances the decrease was more than fifty per cent. Thus shoemakers suffered a fifteen per cent reduction in 1874, a similar cut in 1875, and another in 1877. Silversmiths earned twenty-five dollars a week in 1872 and ten dollars in 1879; coopers received twenty-five cents a barrel in 1873 and ten cents in 1879; typesetters saw their pay fall from fifty-five cents per thousand ems in 1876 to thirty-six cents in 1879; and the coal heavers suffered a reduction from twenty cents a ton in 1873 to eight cents in 1878.9

In 1877 the labor unrest, which was general throughout the country, blazed out into open opposition. The immediate occasion was a ten per cent reduction in wages on the leading railroad systems after several reductions had already been made. On July 23 the switchmen on the Michigan Central

⁸ Vorbote, March 26, 1875, July 29, 1876. ⁹ House Report of Special Committee on Labor, March, 1879, *ibid.*, December 11, 1875, August 17, 1878, March 15, 1879; *ibid.*, October 14, November 25, 1876, March 3, 17, 1877; "Report on Wholesale Prices, Wages, and Transportation," Senate Documents, 52 congress, 2 session, report 1394, p. 1. The new German paper was first known as the Chicagoer Sozialist, later as the Illinois Volkszeitung, and finally as the Arbeiter-Zeitung. Except for a brief interruption in 1886 it has had a continuous existence since.

quit. The next day, under the leadership of the socialists and radical trade-unionists, they persuaded the trainmen on other lines to strike, then marched to the manufacturing centers of the city and shut down lumberyards, brickyards, foundries, shoe factories, and stockyards. Open conflict with the police followed during the next two days in which some nineteen persons were killed and possibly a hundred wounded.¹⁰

The failure of this movement led the workingmen again to seek relief at the polls, and in November the socialists cast approximately 7,000 votes. Soon afterwards the name of the party was changed to the socialist labor party. A new official paper, *The Socialist*, was established in Chicago as the organ of the English section of the party. Moreover, in the spring of 1878 the socialists cast about \$,000 votes and elected two aldermen to the common council and in the fall elections four members of the general assembly. In 1879 they cast 11,576 votes for their candidate for mayor and elected three aldermen.¹¹

Chicago was now the undisputed center of the socialist movement in the country. The local section contained 870 members in good standing. It published four socialist papers: the *Chicagoer Arbeiter-Zeitung* and the *Vorbote* in German, the *Socialist* in English, and the *Nye Tid*, the only Scandinavian socialist paper in the country. The return of industrial prosperity in 1879, however, put an end to the success of the party at the polls. At the fall election of that year the socialist vote fell to 4,800, and only one candidate was elected.¹²

Moreover, forces were at work which were to cause a split in the party. Disagreements arose first over a military

¹⁰ Chicago Tribune, July 22, 25, 27, 28, 1877; Pinkerton, Strikers, Communists, Tramps and Detectives, 404.

¹¹ Ibid., November 8, 1877; Forbote, November 10, 1877, January 19, April 13, September 21, November 9, 1878, April 5, 1879. ¹² Ibid., November 8, 1879; Commons, History of Labour in the United States,

¹² Ibid., November 8, 1879; Commons, History of Labour in the United States, 2:282.

organization called the Lehr- und Wehrverein, which the German socialists had established for the purpose of drilling and arming the workingmen for the coming social revolution, but to which the American socialists were opposed. More fundamental, however, was the antagonism between the political opportunism of the American faction and the class-conscious socialism of the German group. The question of supporting the candidates of other parties, to which the Germans were opposed, first presented itself in 1879; in the following year the quarrel broke out again over the question of uniting with the greenback labor party and finally resulted in a complete breach. The Germans reorganized as a more distinctly tradeunion party, while the Americans united with some greenbackers to launch the Chicago Labor Union, an organization chiefly for purposes of discussion.13

The greenback movement was never important in Chicago, as it was primarily a farmers' movement. The first attempt at coöperation between the farmers and the workingmen was made, as has been mentioned, in 1874 at the Springfield meeting of the independent reform party, a farmers' organization which a year later extended "a cordial invitation to all industrial organizations and individuals to join in every effort to throw off the burden imposed on the industrial classes by the encroachment of aggregate capital in the hands of monopolies."14 In 1876 at Decatur it showed its interest in the workers by declaring for "measures providing for the health and safety of those employed in mining, manufacturing, and building pursuits."15

In 1875 announcements of meetings of persons "in favor

¹³ Vorbote, May 29, 1875, June 22, 1878; Arbeiter-Zeitung, July 6, 10, Octo-ber 4, 28, December 28, 1880, January 4, 1881; Chicago Tribune, December 27, 1880, January 3, 1881. 14 Illinois State Register, January 22, 1875.

¹⁵ Chicago Tribune, February 17, 1876.

of a greenback currency" began to appear in the Chicago papers. In March of the following year a Central Club announced that the independent greenback party would "enter in the field in the forth-coming municipal contest with a full city ticket composed of candidates possessed of strict integrity, unquestionable honesty, and acknowledged ability;" but this plan failed to mature. A short time later, however, the Workingmen's League of Illinois, subsequently changed to the Chicago Labor League, was launched. It was to be composed of delegates "from trade, labor, and ward organizations," and its object was to bring the various working elements "into close communion with each other;" to disseminate information among them; to protect them from discriminating and unjust legislation; "to ascertain and make known the views of candidates for office on questions of interest to its members; to cement brotherly feeling among those laboring for wages and their employers; and to scrutinize and discuss all matters affecting the conditions of the laborer." 16 This league, which owed its existence chiefly to A. C. Cameron of the Workingmen's Advocate, was to be used to bring together the workingmen in behalf of the greenback cause. At one time the organization was said to have numbered in its membership forty-two labor organizations, which, however, appear to have done little to further the greenback cause; for Peter Cooper, the greenback candidate for United States president, received but 276 votes in Cook county in the fall of that year.17

It was not until the workingmen felt the full effects of the depression which culminated in the railroad riots of 187718 that they turned to greenbackism. On August 23 the Labor League held an open-air meeting, repudiated the democratic

¹⁶ Workingmen's Advocate, April 22, 1876; Pomeroy's Democrat, November 11, 1876; Chicago Tribune, April 15, 1877. ¹⁷ See above, chapter 5. ¹⁸ See above, chapter 6.

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and republican parties, and voted to form a separate party. It adopted a platform calling for the repeal of the resumption act of January 14, 1875, remonetization and free coinage of the silver dollar, the perpetuation of treasury notes as legaltender, and several other reforms and improvements which were circulating at the time. The platform also contained a number of labor planks: an eight-hour day, arbitration of industrial disputes, abolition of contract convict labor, prohibition of child labor for those under twelve years of age, the enactment of a law compelling employers to pay the wages earned in a certain month not later than the fifteenth of the succeeding month, and the establishment of state and national bureaus of labor. Some time later the league changed its name to the "workingmen's industrial party of the United States."¹⁹

This party soon became a source of encouragement to other labor groups to form parties of their own. The socialists were already in the field. After the Chicago Labor League had become the workingmen's industrial party, the independent greenback party, together with disgruntled democrats who had subscribed to greenbackism, made an abortive attempt to organize the independent party of Cook county, based on the "coöperation of all classes of citizens, irrespective of past party ties and affiliations." A. C. Cameron and William McNally, a democratic politician, were leaders in this coup. Meanwhile another set of workingmen organized the National Workingmen's Organization of Illinois, which was to be nonpartisan. Its purpose was not to put a ticket in the field, but "to bind the workingmen together for the support of the best men who should be nominated by either of the two great parties." Later on it appeared that republican politicians were welcome guests at its meetings.

There were now bidding for the labor vote five different ¹⁹ See above, p. 124 ff.

elements: the disgruntled democrats who had subscribed to greenbackism; the greenbackers proper, who were the intellectuals of the movement, counting among their number J. A. Noonan, editor of the *Telegraph*, "Doctor" Taylor, "Judge" Layton, "Colonel" Ricaby, "Professor" Corcoran, and "Professor" Jackson; the industrials who were the workingmen; the nonpartisan workingmen with a republican bias; and finally the socialists.

Each of these parties now tried to win over the others. The democrats made an offer to the industrials which fairly staggered them. Out of thirteen county officers to be elected they offered them the nomination of seven—mostly, however, to the minor offices. At first the industrials rejected the offer; but it was so tempting that when they met in convention they more than carried out the democratic designs; with some exceptions, they nominated a democratic ticket. As the election approached, the other labor groups turned one by one to support the democrats.²⁰

A small group of industrials, together with a small group of greenbackers, bolted the democratic alliance and, for the next few years, agitated labor greenbackism under the name "industrial-greenback party." In some instances, with the aid of the democrats, they elected some of their candidates. Their highest independent vote was cast in the fall of 1878, when 5,479 votes were polled for their candidate for sheriff.

With the return of prosperity the political organizations of the workers for the redress of their grievances lost strength and finally disintegrated. As employment became more general interest shifted from legislation to more practical problems of hours and wages and conditions of work. Trade-unionism took the place of political organization and dominated the labor movement during the next few years. The long period

20 Chicago Tribune, August 24, September 12, 20, October 14, 19, 26, 31, 1877.

of depression which followed the panic of 1873 with its attendant lack of work or irregular employment, low wages, and unsatisfactory conditions, came to an end about 1879 and in its place followed an era of prosperity and expansion which continued with little change until 1893 except for a brief interruption from the panic of 1884. The resumption of specie payments in 1879 removed the specter of greenbackism, while the silver purchase act of 1878 was generally regarded at the time as a help to business by making money easier.

So marked was the change in general business conditions that even the official organ of the labor movement in Chicago noticed it. "The transactions of the clearing house," said the Arbeiter-Zeitung in August, 1880, "have grown weekly since . . . The sale in groceries has grown well January 1. nigh 35 per cent over the preceding six months. . The drug trade has added about 20 per cent. . . . For hides Chicago has become the chief American market. In the course of the last six months 40 or 50 per cent more hides were received and shipped here than ever before in the same period. The sale of iron has become so rapid, that it appears absolutely impossible to keep a big supply of it on hand. And as in these branches so has business grown in practically all others."21 With this improvement in conditions of employment the workingmen now became more interested in the maintenance and further improvement of these conditions. They abandoned politics, which sought only legislative reforms, for tradeunionism which stood for the practical betterment of the wage scale, for shorter hours, and similar demands.

Already in 1877 the workingmen began to organize along trade-union lines and in December of that year brought into existence the progenitor of the Chicago Federation of Labor. The delegates who met for this purpose represented unions,

²¹ Arbeiter-Zeitung, August 19, 1880.

mostly German, of the upholsterers, cigar makers, printers, stonecutters, silver gilders, coopers, molders, tailors, blacksmiths and machinists, carpenters, furniture workers, cabinetmakers, painters, brickmakers, shoemakers, and stair builders. There were present also some "amalgamated workingmen"— "the Chicago alias of the secret organization which seeks to control the labor movement throughout the country." This description seems to indicate that these men were members of a local of the Knights of Labor, which was then a secret organization. The question at once arose as to the admission of secret organizations and was decided in the negative under the influence of the trade-unionists. It was voted to organize a trade council consisting of trade-unions only. Albert A. Parsons was elected president of the new body.²²

The aims of the Trades Council, according to a circular published somewhat later bearing the title "Principles and Platform of the Council of Trade and Labor Unions of Chicago and Vicinity," were: the organization of labor unions of all branches of trade and labor; the local, national, and international amalgamation of all labor unions; repeal of all conspiracy laws; reduction of the hours of labor; higher wages; factory, mine, and workshop inspection; abolition of contract convict labor and the truck system; responsibility of employers for accidents caused by neglected machinery; prohibition of child labor; the establishment of labor bureaus; and labor propaganda by means of labor press, labor lectures, and the employment of organizers.

Although the secret societies had been kept out of the Trades Council in 1877, the question came up again two years later and this time their supporters were strong enough to secure the admission of three such organizations. These were the Sons of Vulcan, the Washington Benevolent Society, and

22 Chicago Tribune, December 2, 16, 1877.

the Sons of Freedom. The machinists' and blacksmiths', the furniture workers', and the engineers' unions protested. These societies were secret, their membership was unknown, and they leaned to democratic politics. The council refused to revoke its action, however, and the result was a split. The furniture workers withdrew their delegates and were followed by several other unions. Some fifteen dissatisfied unions finally met and voted to organize a trade and labor council "made up only of delegates from trade unions." By this move the trade-unionists won their point. A few months later the old council made a bid for union and consented to eject all secret organizations and to proceed on a strictly trade-union basis.23 The name Trade and Labor Assembly was adopted for the united body, a name which was retained until the nineties brought another upheaval, when the present name of the Chicago Federation of Labor was adopted.

The same forces that brought into being a central labor body also favored the organization of local unions. The council in 1879 named organization committees for the north, west, and south sides of the city to found new labor unions; and shortly afterwards the establishment of unions among the wood polishers, the machine woodworkers, the painters, and the glaziers was reported. The various carpenters' locals held a mass meeting to organize a single carpenters' union, and a similar move was made in the boot and shoe industry by some of the members of the lodges No. 7 and No. 39 of the old order of St. Crispin.24 This movement is well illustrated by a calendar of trade-unions published by the Arbeiter-Zeitung during these years. In the first list of September 4, 1879, twelve unions were listed; forty-five on April 1, 1880, fifty on

²³ Morgan manuscripts; Arbeiter-Zeitung, December 12, 16, 19, 26, 1879, January 16, May 7, 1880. 24 Ibid., October 10, November 3, 10, December 1, 22, 1879.

April 1, 1881, and twenty-nine on March 16, 1882. These figures may not be exact, but they indicate the rise and fall of trade-unionism for this period.

The first general demand made by these organizations was for a reduction of hours for a day's work from ten to eight. Early in 1879 the St. Louis Trade Assembly adopted resolutions "that all Trade and Labor organizations unite in one body, and on July 4, 1879 proclaim to the world that eight hours shall be a normal day's work." The Chicago Trades Council indorsed the proposition and held mass meetings to bring it before the public. When the Fourth of July arrived it held a three days' demonstration in its favor at which speeches were made by Ira Steward, the Nestor of the eighthour movement, and others.25

Ira Steward's vision of an eight-hour day as bringing more leisure, increased wants, higher wages, reduced profits, and the emancipation of labor may have influenced some of the eighthour advocates; but the more practical consideration, that shorter hours would create more jobs, undoubtedly moved most of them. Only seldom did the labor papers and labor orators mention the former virtues of an eight-hour day, but they continually harped on the latter. The Chicago Trades Council in indorsing the reduction of hours stated that such a reduction was "well calculated to create a demand for labor by placing a limit upon the supply of labor."26 The socialists supported the eight-hour day "as a check upon the exploiting-power of capital" and "as a bridge to the system of regulating labor by law."27

An Eight-Hour League was organized to promote the idea of an eight-hour day, while the Furniture Workers' Trade

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Forbote, April 12, May 4, 1879.
 Chicago Tribune, May 19, 1879; Arbeiter-Zeitung, July 5, 1879.

²⁷ l'orbote, September 13, 1879.

Union of North America took the first step to make it practical. The Chicago union demanded it of their employers, and on July 5 nine factories employing 765 men announced an eighthour day and three others employing 230 men declared that they had no objection to it. By the next day the number of factories that granted the reduced hours had risen to forty. But now a reaction set in. The Brunswick and Balke firm locked out its men until they agreed to a ten-hour basis. A week later some thirty-five manufacturers met and resolved that "the interests of the manufacturers as well as the workingmen will be most secure as long as the ten-hour working day remains in force." As a result of this opposition the movement for a shorter working day failed.28

After the failure of the eight-hour movement the workingmen next turned their attention to raising their wages. Of the strikes that occurred during the four years from 1879 to 1882 three-fourths were for higher wages. The most important of these were the following: in 1879 the cigar makers struck over a new wage scale, and the packing house employees for higher wages and then for the closed shop; in 1880 the chair makers demanded a fifteen per cent increase in wages, and the brickmakers a revised bill of prices considerably beyond existing rates; in 1881 the boiler makers struck for a ten per cent increase, the street car conductors and drivers for a twenty per cent increase, the molders for a twenty-five per cent increase, and the switchmen for the same; in 1882 the iron and steel workers demanded a ten per cent increase and the brick laborers struck to maintain wages at the existing rates.29

The latter strike is an indication of declining prosperity in this year. It was the first slump since 1879 and it again drew

 ²⁸ Arbeiter-Zeitung, July 8, 10, 18, 19, 1879.
 ²⁹ Reports of the Bureau of Labor Statistics of Illinois. See also Report of the Commissioner of Labor, 1887, p. 100 ff.

the workingmen into politics. The Trades Assembly in this year decided to run its own legislative candidates; and the elements that a few years earlier had participated in the greenback movement now, with some others, organized the antimonopoly party. In September was held a meeting which the Chicago Tribune described as a "motley gathering composed of relics of all the third, fourth, and fifth parties which have bubbled up at election times during the last ten years." There were present socialists, land and labor agitators, trade-unionists, Knights of Labor, and "a quantity of Greenbackers." The platform adopted was broad enough to include all these elements. It called for public ownership by the government of "the resources of life," national control of railroads and telegraphs, governmental issue of all money "whether of paper, silver, or gold," abolition of "all monopoly of land by individuals or corporations and its ultimate absorption by the State for the benefit of the whole people," purchase by the government of all inventions worthy of adoption and their gift to the people, and the submission of constitutional amendments on prohibition and woman suffrage to the vote of the people. Candidates for county offices, state senate, and congress were nominated, and the legislative candidates of the Trades Assembly indorsed. In the November elections both tickets went down to defeat, the antimonopoly candidate for sheriff receiving only 364 votes; the legislative candidates of the Trades Assembly made a better showing, but the most successful of these received only half as many votes as the winner.³⁰ This movement was only a sporadic one and had neither a permanent basis nor a lasting result.

When, after this temporary lapse into politics, labor again began to concern itself with working conditions, it did so under the leadership of a new organization — the Knights of Labor. ³⁰ Chicago Tribune, September 11, 26, 1882; Arbeiter-Zeitung, July 5, 1879. This organization had appeared earlier, but it now took the dominating position in the field.

The spirit of trade-unionism was not so strong among the American workingmen as it was among the foreign born. For the most part the former were unskilled or, if skilled, shifted their trades rather easily, while the latter were trained mechanics with a highly developed trade feeling. This fact is well illustrated by the racial composition of the trade-unions in Illinois in 1886. According to the bureau of labor³¹ only 21 per cent of the members were Americans, while 33 per cent were Germans, 19 per cent were Irish, 10 per cent English, Scotch, and Welsh together, 12 per cent Scandinavians, and the remaining 5 per cent Poles, Bohemians, and Italians. It is clear that the United States was drawing its supply of skilled labor mainly from abroad, owing in large measure to the breakdown of the apprenticeship system in this country. A new form of organization was therefore developed in the United States, peculiar to this country and growing out of the conditions of the times, the principle of which was the amalgamation of all workers in one organization. The interests of all workingmen were held to be identical, and the ideal was to have an organization that would embrace them all. To accomplish this aim the Noble Order of the Knights of Labor was founded.

This body was organized by U. S. Stephens among the garment cutters of Philadelphia in 1869 as a secret society, and from there spread to other parts of the country. It is not known just when the order obtained a foothold in Illinois, but by the summer of 1877 the local assemblies were numerous enough to organize a district assembly. "D. A. 13," wrote Powderly, long the head of the national organization, "was organized August 1, 1877, at Springfield, Ill., with assemblies

²¹ Report of the Bureau of Labor Statistics of Illinois, 1886, p. 227.

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Nos. 271, of Springfield; 346, of Hollis; 360, of Kingston Mines; 415, of Limestone; and an assembly from Peoria."32 It is noteworthy that Chicago does not appear on the list. The only Knight of Labor in Chicago at this time was Richard Griffith, a shoemaker and at one time officer in the Knights of St. Crispin. Under his leadership Local Assembly 400 was organized on August 19, 1877. In its membership it included many men who later rose to prominence in labor and politics. There were Thomas Kavanaugh of the workingmen's industrial party of the United States; George Rogers, who later held the presidency of the Chicago Trade and Labor Assembly for several years; Philipp Van Patten of the socialist labor party; Miles Kehoe, at one time city clerk; and George A. Shilling and Albert R. Parsons, the latter a participant in the Haymarket riot. Besides these, hundreds of others "sojourned" here until they split off and formed separate locals. Thus Local Assemblies 522, 525, 800, 828, 852, 976, 1,307, and 1,483 had their origin in Local Assembly 400. The following year more locals were organized and District Assembly 24, a delegate body of locals, was established.33

Nothing in the structure of these locals or the district assembly was peculiar to Illinois or Chicago. It was prescribed by the national body or general assembly, the local organizations having the power to make by-laws only. Any ten persons, three-fourths of whom were wage earners, could form a local. Liquor dealers, lawyers, doctors, and bankers were specifically barred from membership; later professional gamblers and stockbrokers were added to the list of undesirables, but the admission of doctors was made optional with each local.34

³² Powderly, Thirty Years of Labor, 1859-1889, p. 221-222.

³³ Knights of Labor, December 23, 1886, January 29, 1887; Arbeiter-Zeitung, February 16, 1887. ³⁴ Constitution for local assemblies adopted at Reading, Pennsylvania, Janu-

ary 1-4, 1878; ibid., revised in 1881.

The purposes of the organization, as set forth in the preamble, were "to bring within the folds of organization every department of productive industry" and "to secure to the workers the full enjoyment of the wealth they create, sufficient leisure in which to develop their intellectual, moral, and social faculties." To secure these objects they demanded the referendum; the establishment of bureaus of labor statistics; coöperative associations, productive and distributive; the reservation of public lands for actual settlers; health and safety legislation for those engaged in mining, manufacturing, or the building trades; the abrogation of unequal laws; weekly payment of wages; a mechanics' lien law; abolition of the contract system on public works; substitution of arbitration for strikes; prohibition of the employment of children under fourteen years of age; abolition of contract prison labor; equal pay for equal work for both sexes; an eight-hour day; and "a purely national circulating medium, based upon the faith and resources of the nation, and issued directly for the people,-which money shall be legal tender in payment of all debts, public or private."35

The early years of the order in Chicago gave no hint of its future prominence in that city. Its growth was slow so long as it remained a secret order, but after the veil of secrecy was removed in 1881, it entered boldly upon the work of organization. Myles McPadden of Pennsylvania, general organizer, came to Chicago and, with the assistance of at least eight local commissioned organizers, in a short time established fourteen local assemblies. Some of these were among the less skilled workers, such as sewing women, dry goods clerks, candy makers, butchers and packing house men, brickmakers, quarrymen; others included the more skilled

³⁵ Constitution of the general assembly, district assembly, and local assemblies, adopted at Reading, Pennsylvania, January 1-4, 1878.

workers such as the bricklayers, iron molders, tin and sheet iron workers, machinists, blacksmiths, assortment workers and solderers, pattern makers, and bakers. In 1882 District Assembly No. 24 opened headquarters and a labor bureau, and the Progressive Age, the official organ of the Trade and Labor Assembly, became also the official organ of the Knights.³⁶ The order was now definitely established in Chicago, but during the next three years of depression it grew slowly. District Assembly No. 57 was organized to cover the towns of Lake, Cummings, Pullman, and a part of Chicago, but as this drew from the same territory as did No. 24, there was no real gain. Assembly No. 24 had 1,464 members on October 1, 1879; 1,518 in 1880; 766 in 1881; and 1,192 in 1882; the combined membership of the two assemblies was 1,715 in 1883; 1,607 in 1884; and 1,906 in 1885.

In 1886 there occurred a most startling and rapid growth of the order. District Assembly No. 24, which in July, 1885, had 13 locals with a membership of 551, had 88 locals a year later with 14,019 members; while District Assembly No. 57 grew less rapidly from 6 locals with 1,355 members to 43 locals with 7,734 members. Two months later they claimed 164 locals in Chicago with "at least 45,000 members." The Knights of Labor was established as a monthly paper in February, 1886, and in May it was converted into a weekly. In June the management of this paper bought out The Chicago Daily Sun and devoted it also "to the interests of the laboring people."37 Nor was the growth confined to Chicago alone. In the state of Illinois as a whole there were 214 local assemblies in July, 1886, with 34,974 members. Reckoned accord-

³⁶ Progressive Age, March 4, April 22, July 1, 1882. ³⁷ Proceedings of the General Assembly, Richmond, Virginia, October 4-20, 1886, p. 326; Knights of Labor, June 12, September 11, 1886. This estimate is considerably higher than the figures given below for the state as a whole, taken from the Report of the Bureau of Labor Statistics of Illinois, 1886.

ing to country of birth the membership was 45 per cent American, 16 per cent German, 13 per cent Irish, 10 per cent British, and 5 per cent Scandinavian. Distributed according to occupations they fell into the following groups: day laborers, 7,498; coal miners, 3,557; garment workers, 1,987; packing house men, 1,780; brickmakers, 1,394; machinists, 1,222; iron molders, 1,203; shoemakers, 934; coopers, 930; painters and paper hangers, 816; box factory men, 506; rolling mill laborers, 404; watch factory workers, 394; the remainder belonged to more than one hundred different occupations. Evidently the less skilled and those lacking in bargaining strength flocked to the Knights as their deliverers.³⁸

The causes of the extraordinary growth of this order are to be found in the general economic and industrial movements of this period. The late seventies and early eighties were years of marvelous industrial expansion. The rapid extension of railways widened the market and brought new areas into touch with each other, machinery was introduced on an unprecedented scale into manufacturing industries, the tide of immigration swelled to heights beyond any previous level, and the volume of our agricultural, manufacturing, and mining products made new records. But this prosperity was interrupted by the panic of 1884, and a period of depression set in, marked by unemployment and reduction of wages. It was found, moreover, that the very factors mentioned above exposed the workers to new forces of competition and tended to create large classes of unskilled and semiskilled labor with inferior bargaining power. At the same time the disappearance of the frontier about 1880 and the exhaustion of the best lands in the public domain closed to the surplus labor of the cities this outlet, which in all previous periods of depression had afforded a safety valve and had helped to keep up wages.

³⁸ Commons, History of Labour in the United States, 2: 382.

THE power secured by the laborers through organization soon made itself manifest in an increased and successful use of the strike. As a means of redressing grievances it proved a far more effective weapon than political agitation and encouraged in the workers generally a strong belief in a policy of direct action.

Strike statistics have been gathered by the United States commissioner of labor since 1881, and during the period from this year to 1886 they showed a fairly steady increase in Illinois except for a falling off after the panic of 1884.¹ But the year 1886 saw almost as many strikes as any three preceding years, the number having grown from 271 in 1881 to 1,060 in 1886. In the first four years of this period most of the strikes were for an increase of wages, but in 1885 the largest number of strikes was recorded against a reduction of wages. Many of these were among the unskilled, as, for instance, a strike at Lemont and Joliet in 1885 of 2,000 quarrymen, a polyglot mass of Swedes, Bohemians, Poles, Norwegians, and Welshmen. In the six years ending with 1886 the stone quarrymen to the number of over 9,000 took part in strikes throughout The workers who formed the center of the indus-Illinois. trial disturbances were the unskilled packing house employees and those engaged in allied occupations (with 36,744 persons involved), the irregularly employed and poorly paid miners (30,489), the turbulent workers in metals and metallic goods (24,611), those employed in the unstable building trades

¹ A few important data for Illinois are summarized in a table in the appendix, p. 508.

(18,852), and those engaged in lumbering (12,011). Such elements turned to the Knights of Labor as the champions of the mass of workers, a rôle which the skilled trade-unionists had never essayed. The Knights had, moreover, won great prestige by their success in the strikes of 1885 on the two Gould railways, the Union Pacific and the Wabash. In general, throughout the state the great majority of the strikes had been successful between 1881 and 1885, and such a spirit of confidence in their newly found power had been engendered among the rank and file that they were inclined to use that power in a reckless and even ruthless fashion.²

The year 1886 accordingly saw a widespread use of this weapon. For the first time in the history of Illinois the number of strikes within the year rose to over a thousand, of which almost exactly half (501) succeeded in securing a reduction of hours. A national movement was inaugurated this year for a shorter working day, and in accordance with this program strikes were started in Chicago and other Illinois cities on May 1. It was estimated that 80,000 persons took part in the strike at Chicago, which was the center of the movement. In addition, some 35,000 Chicago packing house employees, about 5,000 workers in the building trades, and 2,000 machinists secured shorter hours from their employers without a strike.³

At the very beginning of the struggle, however, there occurred a catastrophe in Chicago which at once made its success impossible, alienated public sympathy, and set back the eight-hour movement a decade. This was the explosion of the Haymarket bomb. For this the anarchists were held responsible. But to understand this event and their part in it,

² Commons, History of Labour in the United States, 2:367; Report of the Commissioner of Labor, 1887, p. 738-740. See table in preceding note.

³ Bradstreet's, volume 13, part 1, 290, 394.

it is necessary to trace somewhat more carefully the anarchist movement in Chicago.

The International Working People's Association had been organized in London in July, 1881, by European anarchists; and in the fall of the same year an attempt was made to unite the revolutionary elements in the United States. A convention was held at Chicago on October 21, at which delegates were present from fourteen cities. A national information bureau was authorized to be established at Chicago, but this was not organized until 1883. In this year it was decided to hold another national convention in order to unify the movement; this was held in Pittsburg in October. The delegates from Chicago, Albert R. Parsons, August Spies, George Meng, and Balthasar Rau, represented the trade-union wing of the revolutionary movement in the country, while Johann Most, the New York delegate, represented the anarchists, most of whom were centered in the east. The name International Working People's Association was adopted,⁴ and a manifesto To the Workingmen of America was framed along approved anarchistic lines. It drew a passionate picture of the miscrable condition of the workers under capitalism and condemned the state, the church, and even the school to destruction as barriers to reform. "The political institutions of our time," it said, "are but the means in the hands of the propertied classes to support the predatory rights of your exploiters; any reform in your behalf would curtail these privileges. To this they cannot give their consent, for it would be committing suicide! We know therefore that the ruling classes will not voluntarily renounce their privileges and will make no concessions. Under all these circumstances there remains but one recourse --force!"

The Pittsburg manifesto has been accepted by anarchists ⁴ Arbeiter-Zeitung, February 26, August 7, October 22, 1883. in this country as one of the clearest statements of their aims, so that it is worth while to repeat their demands. These were put with exemplary brevity.⁵ "What we would achieve is, therefore, plainly and simply:

"First: Destruction of existing class rule, by all means, i.e., by energetic, relentless, revolutionary and international action.

"Second: Establishment of a free society based upon coöperative organization of production.

"Third: Free exchange of equivalent products by and between the productive organizations without commerce and profit-mongery.

"Fourth: Organization of education on a secular, scientific, and equal basis for both sexes.

"Fifth: Equal rights for all without distinction of sex or race.

"Sixth: Regulation of all public affairs by free contracts between the autonomous (independent) communes and associations, resting on a federalistic basis."

The indorsement of this program definitely committed the Chicago workers to anarchism, and the city became the center of the Black International, as it was called.⁶ The particular brand of anarchism professed by them was that developed by Michael Bakounine, according to which society was to consist of independent, autonomous groups of free workers. Both in method and in spirit the Chicago anarchists were Bakouninites. They were vituperative, relentless, fanatical. Their arch enemy was the state, and force, their hope. From the Chicago information bureau there soon radiated a lively

⁵ Alarm, October 4, 1884.

⁶ It was given this name to distinguish it from the "Red International," or International Workingmen's Association, a secret organization composed chiefly of native Americans established in San Francisco in 1881.

agitation, which bore fruit in the immediate vicinity. Clubs sprang up in the different parts of the city and in the suburbs, numbering fourteen by February. In addition to the Arbeiter-Zeitung, Vorbote, and Fackel, which were already preaching anarchist doctrines, two new papers were established -The Alarm in October, 1884, and The Anarchist in January, 1886. Of these The Alarm was the only one published in English, the rest being German. Besides these there was a wholesale distribution of books, pamphlets, and circulars; in the ten months ending November 1, 1885, the information bureau reported that it had distributed 387,527 such items throughout the United States.⁷ When to these methods of propaganda are added the weekly open-air meetings held in Grant Park during the summer months and the numerous club meetings for discussion, some notion is gained of the forces that were capitalizing the discontent of the workingmen and of the intellectual and emotional environment in which they were working out their problems.

The gospel of the new movement was force. The military Lehr- und Wehrverein, which had been organized in 1875, was maintained as the armed contingent of the organization. In the American group there was organized the International Rifles. Articles on the use of dynamite began to appear in anarchist papers. In these doctrines the Internationalists found strong allies in some of the radical trade-unionists. A point of contact between the two was found in the organization of a radical city central union. Prior to 1884 the influence of the revolutionary movement in Chicago upon the trade-unions had been slight. The Amalgamated Trades and Labor Assembly, in which most of the unions were centralized, was a conservative organization, as was also the Knights of Labor, with which

⁷ Arbeiter-Zeitung, March 3, 1884; Alarm, November 28, 1885; Chicago Tribune, July 24, 1886. it was on the friendliest terms. Some of the radical elements were dissatisfied with this state of affairs; and in May, 1884, the Progressive Cigar Makers Union No. 15, itself a split from a more conservative parent organization, issued a call to the trade-unions in the city to establish a central labor union with a progressive policy. A meeting was held at which delegates were present from the unions of the cigar makers, made up chiefly of Jews, Bohemians, and Germans, and the German typographers, metal workers, cabinetmakers, and carpenters. The Central Labor Union was organized, and a radical declaration of principles was later adopted.8

The Central Labor Union was from the beginning essentially anarchistic. It drew its membership from the foreign elements of the city, who were under the influence of the International Working People's Association, and was on very friendly terms with the International itself. Germans, Bohemians, and Jews organized the Central Labor Union, and later there were added the Bohemian hodcarriers, lumberyard men, and carpenters, German bakers, brewers, and butchers, and an association of Young Polish Workers. About a year after it was organized the Central Labor Union claimed some 12,000 members, as compared with 15,000 of the Trades Assembly. In the spring of 1886, after the tremendous expansion of all labor organizations, the membership of the former was given as 20,000 and that of the latter as 28,000.9

The local trade-unions belonging to the Central Labor Union espoused without reservation the doctrine of force. For some cigar makers the Progressive Union was not radical enough, so in the spring of 1885 they organized the Revolutionary Cigar Makers Association. These bodies sent dele-

⁸ Arbeiter-Zeitung, May 24, June 6, October 23, 1884; Alarm, October 17, 1885; Chicago Tribune, July 25, 1886. ⁹ Vorbote, May 20, 1885, March 17, April 28, August 12, 1886; Knights of Labor, August 7, 1886, January 8, 1887.

gates to the Black International and devoted their dues entirely to the work of "Agitation, Organization, and Rebellion."10 The metal workers were the most truculent; and in April, 1885, they carried out a successful experiment in violence at the McCormick harvester plant. The occasion was a strike for the restoration of their former wages, which had been cut 15 per cent in January. This was one in a long series of wage reductions extending back to 1868. In that year the machinists received 50 cents a beam and made ten beams a day. The first cut was 10 cents a beam. To meet this the men sped up their production and turned out eleven beams a day. A further cut of 4 cents was made, and the men again sped up, but again met with cuts until in 1884 they were receiving 25 cents a beam and making fourteen beams a day. That the increased productivity of the workers was due in large measure to the introduction of improved processes and labor-saving machinery was ignored by the agitators. In the fall the price was further reduced to 17 cents, and in January, 1885, 15 per cent of that was taken off, with a promise to restore this last cut on March 1. When the company failed to keep its promise the men struck, about 1,500 skilled and unskilled going out. The company hired strike breakers and trouble began. After several clashes between the strikers and the strike breakers and Pinkerton detectives, in which the men were victors and claimed to have captured a number of rifles and revolvers, the company offered to compromise. The men, however, insisted on complete restoration and the company finally yielded.11

Force had apparently vindicated itself. At a jollification meeting of the Metal Workers Union No. 2 one speaker declared that the members should use the recently won 15 per cent raise in wages and buy a good weapon with it. Shortly

¹⁰ Vorbote, May 27, June 24, August 19, 1885. ¹¹ Ibid., April 11, 15, 1885; Alarm, April 18, 1885.

afterwards the Armed Section of the Metal Workers Union of Chicago was formed to secure weapons and learn to handle them and so "prepare for the ever more approaching conflict between labor and capital." Some of the carpenters also favored arming, declaring that "the arms question' is the weightiest of the 'eight hour movement.'"¹²

This was the situation when trouble began again at the McCormick plant. After its defeat the previous year the company had proceeded to discharge various objectionable characters and had also made cuts in the wages of others. The men, now thoroughly organized, demanded the restoration of wages to the scale of the previous year and the reëmployment of the discharged union men.¹³ The first point the company conceded but refused to consider the second. On February 16, 1886, it declared a general lockout.

Thus began the long struggle which ended in the Haymarket tragedy.¹⁴ The loss of its leaders and the arousing of antagonistic public opinion was too powerful a blow for the Black International to survive; after this event it practically collapsed. The workingmen who had supported it deserted the movement, and it shrank to a mere handful of intellectuals.¹⁵

After the Haymarket tragedy two movements may be traced in the history of labor in Illinois-one a return to politics and the other the disintegration of the Knights of Labor and the organization of labor along trade lines. Of these the political movement may be noticed first. Several factors combined to direct the efforts of the workingmen into political channels. The year 1886 had seen the eight-hour strike and the Chicago building trades strike end in failure;

¹⁵ Arbeiter-Zeitung, November 11, 12, 1887.

 ¹² Vorbote, April 22, June 24, 1885; testimony of Gustave Lehmann in anarchist trial in Thomas J. Morgan files.
 ¹³ Vorbote, February 24, 1886.
 ¹⁴ For narrative of this event, see above, p. 168 ff.

after the explosion of the bomb the employers became better organized and more determined in their opposition to the unions; antilabor legislation was enacted by the legislatures and many union members were convicted by the courts of boycotts, conspiracy, intimidation, and rioting; and in the mind of the public, little distinction was made between the anarchists and Knights of Labor or trade-unions. There was a general shifting of emphasis by labor throughout the country from strikes and other industrial disturbances to political action, and nowhere was this more marked than in Illinois. Thus the number of strikes in the state fell from 112 in 1887 affecting 1,569 establishments to 60 strikes in 689 establishments in 1888, and to 43 strikes in 165 establishments in 1889. But while the political movement turned to the single tax in New York and to greenbackism in the middle west, in Chicago it remained pure labor politics. The labor party brought into existence at this time was the most successful that had appeared in the city.

Already in the heat of the anarchist trial a call had been issued for a conference of delegates "for the purpose of discussing the situation and taking such independent political action as our joint wisdom may dictate." On August 21 some 251 delegates representing 47 trade and labor organizations, 41 Knights of Labor assemblies, and an organization called the People's Party Club met and organized for independent political action. This body took the name of united labor party and confined the membership to delegates from trade-unions and Knights of Labor assemblies. It thus became truly a labor party. Hardly was it organized, however, before a split occurred between the radical elements—the anarchists, socialists, single taxers, and other reformers—who insisted upon independent political action, and the less radical republican and democratic workingmen who wanted to bargain with the old parties. The latter nominated a mixed ticket under the name Cook county labor party.¹⁶ The radical group, which had retained the original name, nominated an independent state and county ticket made up, with but few exceptions, of workingmen. At the polls this party scored a victory; it cast 24,845 votes, elected seven members to the state assembly and one to the senate, five judges out of six whom it indorsed, and fell short of electing a congressman by only 64 votes. Moreover, it defeated the democratic party and helped turn the country over to the republicans.

The united labor party now organized anew so as to keep itself free from old line politicians and to insure its management by members of trade and labor unions and Knights of Labor assemblies only. Thus closely guarded from intrusion by other political parties, the united labor party went into the spring campaign with a municipal labor ticket. This was regarded as the most important contest of the year by an independent labor party, and the attention of the whole country was directed to it. Four papers championed its cause-the Knights of Labor, the Chicago Labor Enquirer, The Star, and the Arbeiter-Zeitung. Its platform called for municipal ownership of public utilities, equal assessment of property for taxation purposes, redistricting the city on the basis of population, the election of the city council on the minority plan, abolition of the contract system on public works, better school accommodations, and the extension of public property in the hands of the public. The two old parties, however, uniting on city candidates and in some instances on others, made the issue "the red flag versus the American flag," and violently denounced labor candidates as anarchists. As a result the labor party went down to defeat, receiving about 23,500 votes out of 75,000 and electing only one alderman in the fifth ward.¹⁷

This election marked the climax in the life of the party. Its subsequent history is largely a record of its disintegration. One of the chief factors contributing to its decline was the dissension which split it into two opposing factions. One group which appropriated the original name by securing a state charter, but which was popularly known as the "free lunch" party, bargained with the democrats and indorsed their candidates in the fall election of 1887. The other faction openly advocated socialism; it remained independent, but polled only 7,000 votes. After the fall election it changed its name to the radical labor party.¹⁸

The spring elections of 1888 were even more disappointing to those who thought labor reform was to be secured by political action. The split between the socialists and the conservatives continued. The former ran their own radical labor party ticket but secured only 3,600 votes. It is clear from the light vote that the party did not receive the support of even the socialists. The conservatives, under the name of the united labor party, fused with the democrats where feasible, but where it ran its own candidates it did no better than the socialists. In the presidential election in the fall of 1888 a further split among the labor forces occurred. A new party appeared on the scene in the form of a national union labor party, organized in February, 1887, at Cincinnati, and made up largely of the old greenbackers. At first it did not attract the workingmen of Chicago, and an attempt to combine the united labor party and the union labor parties failed. But as the presidential election drew on the former withdrew from the campaign, and the latter nominated its own candidates for

¹⁷ Knights of Labor, March 5, April 9, 1887. 18 Arbeiter-Zeitung, January 30, 1888.

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national, state, and county offices. The largest vote obtained in Chicago was 2,183 for president of the county board.

This marks practically the end of the independent political movement of organized labor. Most of the conservatives voted the democratic ticket, while the socialists returned to their own organization, campaigning under the name of the socialist labor party in the spring election of 1889. Their candidate for mayor received, however, but 167 votes. The reform element made one final effort to rally labor to the support of an independent ticket under the name of the joint labor party, but with the failure of this attempt the political movement may be said to have ended. The socialists, however, made one more effort in the spring of 1891, and issued a call for delegates to a central nominating committee. Some of the organizations that responded were the furniture workers, cigar makers, tanners, metal workers, butchers, bakers, sash, door, and blind makers, the Turner Society, and the Central Labor Union. Thomas J. Morgan was nominated as the mayoralty candidate but received only 2,300 votes.¹⁹ It was evident that labor had lost faith in purely political action.

The second significant event in the labor world, which may be dated from 1886, is the disintegration of the Order of the Knights of Labor. Many factors contributed to this end. The anarchist trial discredited the whole labor movement, and although T. V. Powderly endeavored to make clear the disapproval of violence by the Knights by discountenancing any resolutions of sympathy with the condemned men,²⁰ the Knights suffered along with the trade-unions in popular esteem.

More important in reducing the organization in Chicago

¹⁹ Knights of Labor, March 16, 23, 1889; Arbeiter-Zeitung, March 23, April 4, 1889, December 4, 1890, April 13, 1891. ²⁰ Powderly, Thirty Years of Labor, 1859-1889, 544-545; Proceedings of the General Assembly, Richmond, Virginia, 1886, p. 228; ibid., Minneapolis, 1887, p. 1723-1724.

was the conduct of the packing house strike and lockout in 1886. Some 35,000 men obtained an eight-hour day without a strike in May. But shortly thereafter, upon the initiative of Armour and Company, the packers formed an employers' association and in October notified the men that beginning with the eleventh of the month they would return to the ten-hour day. The men yielded, but in November a strike broke out over the eighthour day. The packers not only refused to give up the tenhour day, but declared that in the future they would employ no Knights of Labor. The Knights thereupon declared a boycott upon the Armour products. The men seemed to be winning the struggle, for on November 10 the employers had rescinded their decision not to employ Knights, when on November 15, Powderly sent a telegram ordering the men back to work. Moreover, the message was an open telegram instead of a cipher one, so that its contents were known to the packers even before it reached the assembly. The men returned to work, disgruntled over what they regarded as Powderly's "treacherous act," feeling that he had wrested a victory from them which was already within their grasp.²¹

In other trades employers' associations, which had as their main purpose the defeat of the Knights, were formed. Lockouts began to be more generally employed and the use of the "blacklist" and the "iron-clad agreement," according to which the men were forced to agree not to belong to any labor organization, was introduced in this policy of repression. As they grew more powerful the employers refused even to arbitrate disputes. Thus out of 76 attempts at arbitration investigated by the Illinois bureau of labor, 38 offers were rejected— 6 by the workers and 32 by the employers. Other causes for the decline of the Knights were the failure of the insurance schemes, the failures of coöperation, the recession of the inde-

21 John Swinton's Paper, November 14, 1886.

pendent political movement in which the Knights participated, and, finally and most important of all, the clash with the trade-unions.²²

It has already been pointed out that the Knights were composed largely of the unskilled and the trade-unions of the skilled workers. Between the aims of these two groups there was a fundamental antagonism. "The skilled men stood for the right to use their advantage of skill and efficient organization in order to wrest the maximum amount of concessions for themselves. The Knights of Labor endeavored to annex the skilled men in order that the advantage from their exceptional fighting strength might lift up the unskilled and semiskilled."²³ The Knights endeavored to absorb the existing trade-unions in order to make them subservient to the interests which they represented. This antagonism of interests led to bitter conflicts between the two orders.

The struggle between the trade separatism of the unions and the labor solidarity of the Knights found expression in Chicago in a struggle within the latter order itself. The local assemblies of the Knights, which were organized along trade lines, began to demand that members in the trade belonging to mixed assemblies leave these and join their respective trade assemblies. A committee appointed in District Assembly No. 24 to investigate this proposal reported in favor of it. But as this would involve a complete reorganization of the district assembly, it was voted to compromise by putting the trade members belonging to mixed assemblies under the same rules concerning initiation fees, dues, and assessments as applied to trade assemblies. That this suggestion did not solve the matter is indicated by the fact that several months later it was reported that the mixed assemblies were waning, owing

to the insistence of the trade assemblies that their fellow craftsmen come into their organizations.24

Another struggle, which had originally begun in New York in 1886, broke out in Chicago in 1888 between the International Cigar Makers Union and the cigar makers of the Knights of Labor. Powderly ordered a Knights of Labor coöperative cigar factory to cease using the blue label of the International and to use instead the Knights of Labor label. But when the Illinois State Federation of Labor met a few weeks later it indorsed the blue label and declared the Knights of Labor label a fraud. The Chicago Trades and Labor Assembly expressed a like opinion. Thereupon, District Assemblies Nos. 24 and 57 of the Knights ordered all local assemblies to withdraw from the other two organizations. A number of them did so, but a large number instead reorganized into trade-unions and continued in the Trades and Labor Assembly. Some of the mixed locals even gave up their charters and reorganized as federal labor unions in order that they might remain in the Trades and Labor Assembly. All these struggles, internal and external, reduced the Knights of Labor in Chicago to a mere shadow of their former strength. Where there had been 25,000 Knights in District Assembly No. 24 in 1886, there were about 3,500 in 1887, and about 500 in 1889.25

The Trades and Labor Assembly had been almost swamped by the rise of the Knights of Labor and had opened its membership to the latter. When the latter disintegrated after 1886, the former did also. As the membership of the two bodies was much the same, their fortunes were closely linked. It was not until about 1888, when the local assemblies were ordered to withdraw, that the Trade Assembly began to lead an inde-

 ²⁴ Arbeiter-Zeitung, August 6, 1887.
 ²⁵ Knights of Labor, November 20, 1886, August 10, 1889; Arbeiter-Zeitung, January 10, 1888.

pendent existence. After this, and especially after the end of the independent labor political movement the following year, the Trade Assembly began to grow. By 1890 a large number of trades, including the molders, car makers, machinists, garment workers, woodworkers, brewers, telegraphers, freight handlers, and women workers, had revived their old organizations or brought new ones into existence. By February, 1891, no fewer than thirty labor organizations were reported to have been founded. The membership grew from about 15,000 in 1889 to about 50,000 in 1893.²⁶

To the various associations of organized labor already described there was added during the early nineties the Trades Council. This grew out of the increasing separation of occupations, so that as industry developed a trade was divided into numerous lesser branches or new ones were added to those already existing. While these trades were independent, they were nevertheless closely related, and a controversy in one disturbed all the allied trades. It seemed desirable, therefore, to bring together in a single group these allied trades, so that they could settle in their own organization their jurisdictional disputes and also present a united front against the employers. As early as 1882 Joseph Gruenhut, tenement house and factory inspector in Chicago, had urged through the columns of the *Progressive Age* the organization of allied trades, and a mass meeting of workers adopted a plan to organize the transportation services, the building, the garment, printing, teaching, jewelry and ornamental, food and provision trades, and even the clerks "from cash boy up to bookkeeper." This plan came to nothing, however, probably because of the rise of the Knights of Labor, which proposed the amalgamation of

²⁶ Knights of Labor, September 4, 1889; Arbeiter-Zeitung, February 6, 1893; Rights of Labor, February 28, 1891. This paper had formerly been the Knights of Labor, but the editor, George E. Detwiler, fell out with Powderly and changed the name in 1890.

all labor in a single association. An appeal issued by the Carpenters' and Joiners' Benevolent Association of Illinois about the same time "to the workers in the building trades of the city for the formation of a federation of those crafts" also proved barren.²⁷ Five years later the question was again agitated in the building trades, and this time the Amalgamated Council of the Building Trades was organized. Its life was short, however, and it was not until 1891 that a permanent organization of this sort was established. From this time on the Council of Allied Trades has held an important position in the organization of union labor in Chicago.

The most important of the councils as well as the first in point of time was that formed in the building trades. In 1886 the workers in this field had secured the eight-hour day, but not an equivalent increase in wages. The reduction of two hours in time was therefore tantamount to a reduction of onefifth in wages. In the spring of 1887 some of the trades sought to increase their rates. Thus the carpenters wanted 35 cents an hour instead of 30 cents, the plaster hodcarriers 30 cents instead of 25, the brick and mortar hodcarriers 25 cents instead of 22, the painters 35 instead of 271/2, and the lathers $3\frac{3}{4}$ and 4 cents a yard in place of $2\frac{1}{2}$ cents. The carpenters were the most numerous and the most insistent in their demands and were the first to strike. But their stoppage of work involved a number of allied trades which had made no demands of their own and rendered common action necessary. The result was the formation of the Amalgamated Council of Building Trades.

This body began with thirteen unions and declared its object to be the centralization "of the united efforts and experience of the various societies engaged in the erection and alteration of buildings" in order to prevent that which was

27 Progressive Age, January 7, 28, 1882.

injurious and to secure that which was advantageous. The constitution described in detail the method of action. The council was to be made up of three delegates "from all the societies in the building trades." Any organization was allowed to demand higher wages and shorter hours on its own responsibility, but if its demand involved the other members of the council it had first to secure the latter's sanction by a two-thirds vote of the societies present at any meeting. It was the special duty of the council to impress "scabs" into the trade-unions to which they naturally belonged, and for that purpose it could by a two-thirds vote call off any and all trades employed on a job of an offending employer. While a two-thirds vote was necessary to involve the council in the case just cited, a mere "demand of a union" obliged it to call a general strike to secure the reinstatement of a striker who was discharged for having participated in a strike. The council was to meet weekly and to carry out its orders through committees and walking delegates.28

The carpenters' strike lasted about two weeks and resulted in a doubtful victory due to the yielding of the smaller employers. About 3,000 hodcarriers were still on a strike for higher wages, when the United Order of American Bricklayers and Stone Masons of Chicago, without consulting the employers, adopted a resolution providing for the payment of wages on Saturday instead of Tuesday. This trivial demand was the culmination of a series of exactions which had marked the arrogant policy of the union, and determined the master masons to make it the occasion for a fight against the union itself. The bricklayers had increased their wages from \$1.50 a day in 1877 to \$4.00 on the ten-hour basis. In 1886 the union secured the eight-hour day. It also insisted on the closed shop and a limitation of the number of apprentices. It charged an

28 Knights of Labor, April 16, 1887.

excessive initiation fee and kept down the number of bricklayers available. And now it wished to prescribe the pay day. The Master Mason and Builders' Association decided to break the union and to that end secured the coöperation of the other associations of builders and material men. They ordered a general lockout of all the building trades, affecting some 30,000 men. This lockout lasted from May 10 to June 11.

The new organization of the master builders was called the Central Council of Builders and comprised the master plumbers, steam fitters, plasterers, roofers, masons, painters, carpenters, blacksmiths, stonecutters, cornice makers, brickmakers, terra cotta and tile manufacturers, real estate agents, architects, and the Traders' and Builders' Exchange. They adopted a declaration of principles which avowed the individual agreement of each workingman with his employer instead of a collective agreement and the abolition of restrictions on apprenticeship. The master masons and carpenters also announced that hereafter they would institute the ninehour day instead of the eight. The council of builders was materially aided in this lockout by the National Builders Association, whose executive committee came to Chicago to counsel with it. The Amalgamated Council of Building Trades, on the other hand, took alarm at this intrusion of the national organization and issued a call for a national convention of workingmen in the building trades to be held in Chicago on June 28. At that time the National Building Trades Council of North America was organized.

Before this date, however, the lockout had been ended. Some of the contractors were willing to make concessions, the material men were unwilling to lose the whole building season, and the bricklayers on their side withdrew their demand for Saturday pay. Finally the master masons consented to arbitration. The outcome must be regarded as a defeat for the

union. Although the principle of the organization on the part of both employer and employee was affirmed and the eight-hour day was retained, the closed shop had to be given up, the powers of the walking delegate were curtailed, and a standing committee of arbitration was provided for. This board was to decide on differences that might arise between the two parties involved, establish a minimum wage, name a pay day, fix the rate of pay for overtime, determine the number of hours of work per day, and lay down regulations for apprenticeship; but during the period of arbitration it stipulated, "work shall go on continuously, and all parties interested shall be governed by the award made or decisions rendered."29 This system remained in force until 1897, and was one of the earliest stable trade agreements in an important trade covering a local field. The settlement thus effected between the bricklayers and the master masons emphasized the value of the joint agreement as an antidote to strikes, and the Amalgamated Council of Building Trades was allowed to lapse the following year.

The stability thus secured for the bricklayers did not extend to the other less skilled building trades. The carpenters were at odds with their employers for years, and in May, 1890, struck for higher wages; while they made a partial settlement, friction continued during most of the summer and buildings all over the city were tied up, with consequent interruption of work to other trades. The need for common action again became clear. Then, too, the World's Fair was about to be built in Chicago; united action would be necessary to secure the best terms. It was under these conditions that a union of the allied building trades was again called into existence, but this time under the name of the Building Trades Council.

²⁹ Second Annual Convention of the National Association of Builders of America, Report, 1888, p. 21.

In point of purpose and organization this council did not differ from its predecessor, though it assumed somewhat greater powers. It was hereafter to give out all union cards; it was to have one general inspector and two assistants, who were to investigate and report on all cases that were not clear. There was a considerable centralization of power in the council, whose decision was final and could be revoked only by a twothirds vote of all the delegates present at a meeting following eight days' notice.³⁰

Following the organization of the Building Trades Council a number of other councils appeared in the period 1891–1893. These were the United Mill Workers Council, Marine Trade and Labor Council, Machinery Trades Council, Allied Printing Trades Council, Woodworkers Council, and Garment Workers Council. By 1894 the councils had become important enough to elicit suggestions from some quarters that in the future the Trades Assembly be made up of delegates from the trades councils instead of from the trade-unions.³¹

The statistics of strikes during the latter eighties and the early nineties show the usual fluctuations. After the strenuous years 1887 and 1888, during which the number of strikes in the state rose to the highest figures yet reached, but which were also marked by the greatest number of failures, the labor movement entered upon a quiet stage in its history. The number of strikes fell to the lowest point in 1889, perhaps as a result of the stability introduced into the building trades by the bricklayers' trade agreement. But the year 1890 made a new record with 138 strikes affecting 2,496 establishments. Of these some 385 were for reduction of hours alone, the largest number for this cause in any year except 1886, and 496 for reduction of hours and increase of wages. This was the

 ³⁰ Constitution reprinted in Arbeiter-Zeitung, February 18, 1891.
 ³¹ Ibid., October 4, 1894.

result of the effort made by the carpenters' union under the direction of the American Federation of Labor to secure an eight-hour day, not only in Illinois but throughout the country; strikes were undertaken in 141 cities. The next two years saw a return to more normal conditions, but in 1893 the number of establishments affected again swelled to large proportions, although the number of separate strikes was but little larger than in the two preceding years. Most of the strikes were successful.³²

32 A table showing in brief the main facts concerning strikes in Illinois between 1887 and 1893 is found in the appendix, p. 509.

PERCENTAGE OF FARM POPULATION IN ILLINOIS OF GIVEN NATIONALITY

YEAR	Native	German	British	Seandi- navian	Canadian	All other
1870	80 6	10.0	7·7	1.9	1.2	1.6
1880		10.0	6.4	2.1	.7	.2
1890		11.2	6.5	3.1	.6	.1

FARMS AND FARM ACREAGE, 1870-1890

Year	Number of farms	Area in farms (acres)	Improved area in farms (acres)	Per cent of land area in farms	Per cent of farms improved
1870	202,803	25,882,861	19,329,952	72.2	74.7
1880	255,741	31,673,645	26,115,154	88.3	82.5
1890	240,681	30,498,277	25,669,060	85.0	84.2

VALUE OF AVERAGE ILLINOIS FARM, 1870-18901

			Average va	Average value of		
YEAR	Average acres per farm	All farm property	Land and buildings	Implements and machinery	Domestic animals, poultry, and bees	buildings per acre per farm
1870 1880	127.6 123.8	\$4,358 4,598	\$3,631 3,948	\$136 132	\$591 518	\$28.45 31.87
1890	126.7	6,140	5,247	143	750	41.41

¹ Thirteenth Census, Abstract, 653.

FIELD CROPS IN ILLINOIS, 1875-1894

Period		Distribution (per cent)			
	Average value of field crops	North division	Central division	South division	
1875-79	\$171,818,211	39.7	40.7	19.6	
1880-84	195,192,305	45.0	36.5	18.5	
1885-89	169,447,711	42.1	39.1	18.8	
1890-94	163,382,170	50.7	34.4	14.9	

	Percentage of field crops				
PERIOD	Cereals	Hay and pasture	Horti- cultural	Miscel- laneous	
1875-79	73.8	20.6	4.3	1.3	
1880-84	70.6	22.5	5.5	1.4	
1885-89	67.3	27.0	4.3	1.4	
1890-94	69. 9	25.3	3.6	1.2	

CEREAL CROPS IN ILLINOIS, 1860-1895

Period		Distribution (per cent)			
	Average value of cereal crops	North division	Central division	South division	
1870-74	\$104,329,794				
1875-79		36.9	42.7	20.4	
1880-84	137,990,605	42.3	38.6	19.1	
1885-89	114,087,394	38.1	42.7	19.2	
1890-94	114,157,166	47.2	37.9	14.9	

Average for - Period	Percentage of cereal crops						
	Corn	Wheat	Oats	Rye	Barley	Buckwheat	
1870-74	59.1	27.4	10.7	1.2	1.5	.1	
1875-79	62.4	23.9	11.6	1.3	.7	. I	
1880-84	55.3	23.8	18.6	1.8	-4	a	
1885-89	54.5	17.7	25.9	1.4	-4	a	
1890-94	59.0	15.2	24.3	1.2	.2	a	

a Less than one per cent.

	CORN CROP IN	ILLINOIS, IN	870-1894		
	Awara na wiald	Increase	Distr	ibution (per	cent)
PERIOD	Average yield (bushels)	(per cent)	North division	Central division	South division
1870-74	180,732,000	29.4	32.7 a	50.7 a	16.6 a
1875-79	265,872,785	47.2	42.7 b	45.5 b	11.8 b
1880-84	199,760,138	- 24.8	46.2	43.4	10.4
1885-89	213,784,400	7.0	41.4	46.0	12.6
1890-94	178,671,877	- 16.5	47.0	42.5	10.5
P	Bushels per acre	Price per bushel	Profit per acre		
1870-74	29	\$.34	\$.47 C		
1875-79	31	.30	1.22 C		
1880-84	27	.37	.02		
1885-89	30	.29	.76 c		
1890-94	29	.38	2.18		

a Estimated to follow acreage instead of yield. b For last year in period. c Signifies a deficit.

WINTER	WHEAT	IN	ILLINOIS,	1877-1894
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			Distribution (per cent) a			
PERIOD	Average yield (bushels)	Increase (per cent)	North division	Central division	South division	
1877-79	29,120,860		1.9	49.5	48.6	
1880-84	28,850,373	0.9 b	3.0	51.2	45.8	
1885-89	27,800,504	3.0 4	2.9	55.8	41.3	
1890-94	27,187,495	2.2 b	6.3	45.4	48.3	
PERIO	Bushels per acre	Price per bushel	Profit per acre			
1877-79	16	\$1.10	\$7.44			
1880-84	ю	1.09	.96			
1885-89	15	.69	.09			
1890-94	17	.62	.14			

a Given for last year of period, except for 1890-1894. b Signifies a decrease.

Sprin	NG WHEAT IN	ILLINOIS,	1870-1894			
Period			Distribution (per cent) a			
	Average yield (bushels)	Increase (per cent)	North division	Central division	South division	
1870-76	10,133,207		80.0	19.2	o.8	
1877-79	2,687,049		80.8	17.3	1.9	
1880-84	790,795	70.5 b	75.3	12.5	12.2	
1885-89	1,555,426	96.7	93.0	6.3	0.7	
1890-94	831,089	46.6 b	88.9	9.2	1.9	
Perio	Bushels per acre	Price per bushel	Profit per acre			
1870-76						
1877-79	11	\$1.10	\$2.54			
1880-84	9	1.30	1.43			
1885-89	16	.69	.98			
1890-94			15	.67	.16 l	

a Given for last year only of period, except for 1890–1894. b Signifies a decrease or deficit.

	A	Increase	Distri	bution (per cent) a			
Period	Average yield (bushels)	(per cent)	North division	Central division	South division		
1870-74	37,463,400	11.8					
1875-79	58,456,821	56.0	58.3	28.3	13.4		
1880-84	87,467,958	49.7	59.7	29.0	11.3		
1885-89	126,184,456	44.3	55.7	32.4	11.9		
1890-94	103,551,443	17.8 <i>b</i>	63.6	29.1	South division 13.4 11.3		
Pr	Bushels per acre	Price per bushel					
1870-74			27	\$.30	\$1.21 b		
1875-79	30	.25	2.10 b				
1880-84	37	.29	1.05				
1885-89	• • • • • • • • • • • • • • •		36	.23	1.22 b		
1890-94	• • • • • • • • • • • • • • • •		33	.27	.19 b		

a Given for last year only of period, except for 1890–1894. b Signifies a decrease or deficit.

Profit per acre Average yield (bushels) PERIOD Rye Barley Buckwheat Rye Barley \$.04 a \$5.27 1870-74.... 2,151,800 2,138,000 151,100 1875-79..... 1.87 166,042 1.75 a 3,237,371 1,445,029 5.08 1880-84..... 807,344 50,056 .06 4,192,158 2.08 a 1.10 1885-89..... 3,532,503 981,927 51,584 1890-94..... 2,592,817 593,835 49,97 I .38 a .34 a

RYE, BARLEY, AND BUCKWHEAT IN ILLINOIS, 1870-1894

a Signifies a deficit.

FORAGE	Crops	1 N	Illinois,	1875-1894
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Period	Average value		e impor- ce of	Distrib	Distribution (per cent) a				
	oferop	Hay	Pasture	North division	Central division	South division			
1875-79 1880-84 1885-89 1890-94	\$35,426,173 43,721,542 45,815,444 41,331,920	63.0 62.1 58.3 58.8	37.0 37.9 41.7 41.2	52.7 54.2 53.4 63.0	32.8 31.2 31.3 25.9	14.5 14.6 15.3 11.1			

a Given for last year only of period, except for 1890-1894.

VEGETABLE PRODUCTS IN ILLINOIS, 1870-1894

		Average yield	Percentage of all vegetables in value				
	Irish potatoes (bushels)	Sweet potatoes (bushels)	Minor root crops (value)	Irish potatoes	Sweet potatoes	Minor root crops	
1870-74 1875-79 1880-84 1885-89 1885-89	7,641,000 8,733,351 9,506,702 10,542,632 6,365,154	130,467 <i>a</i> 212,040 287,842 295,610	\$385,240 535,511 347,956 213,689	88.7 87.3 88.7 89.8	2.6 2.8 4.1 5.2	8.7 9.9 7.2 5.0	

a For 1877-1879 only.

Period Apples (bushels		Average yield	Percentage of all orchard fruits				
	Apples (bushels)	Peaches (bushels)	Pears (bushels)	Apples	Peaches	Pears	
1877-79.	5,398,284	345,206	11,987	93.3	6.1	0.6	
1880-84.	6,106,057	242,328	14,277	94.7	4.9	0.4	
1885-89.	3,437,046	86,355	8,108	96.4	3.1	0.5	
1890-94.	1,398,308	103,746	7,675	90.6	8.7	0.7	

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TOBACCO IN ILLINOIS, 1870-1894

Period	Average	Increase	Distrib	ution (per	r cent) a	Pounds	Price per
	yield (pounds)	(per cent)	North division	Central division	South division	per acre	pound (cents)
1870-74	6,807,400	- 58.4				809	9
1875-79	6,379,081	- 6.3	37.8	3.4	58.8	668	7
1880-84	2,548,729	- 60.0	28.6	1.7	69.7	648	8
1885-89	4,071,302	59.8	15.4	2.3	82.3	750	5
1890-94	1,691,344	- 58.5	31.0	1.7	67.3	782	7

a Given for the last year only of the period, except for 1890-1894.

Period	Broom corn (pounds)
1877-79	9,684,717
1880-84	19,801,718
1885-89	20,644,400
1890-94	17,157,600

BROOM CORN PRODUCTION, 1877-1894

	MISCEL	LANEOUS	CROPS	IN	Illinois,	1870-1890			
YEAR	Hemp (pounds)	Cotton (pounds)			ax fiber ounds)	Flax see (bushels		(pounds) 136,873 8 80,193	
1870 1880 1890	348,000 122,000 1,112,000	8	,000 ,928 a	2,204,606 167,807 57,776		280,04 1,812,43 35,01	8		
Yea	AR	Maple sirup (gallons)	Sorgh siru (gallo	р	Clover seed (bushels)	Other grass seed (bushels)	Bean (bushe	s Cow peas ls) (bushels)	
1870 1880 1890		10,378 40,077 13,978	1,960, 2,265, 1,110,	993	10,486 156,599 375,648	153,464 263,788 518,062	115,8 64,3 21,30	17 4,931	

a Crop of 1879 as given in Statistical Report of Illinois State Board of Agriculture, 70. The crop was not reported by the census after 1870. b Included under beans.

GROWTH O)F	LIVESTOCK	ON	VALUE	Basis,	1870-1890
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CENSUS YELD	Walue of	Distribution (per cent)					
CENSUS YEAR	Value of	North	North Central South				
	livestock	division	division division division				
1870	132,437,762	42.7	41.0	16.3			
1880		44.2	40.4	15.4			
1890		44.4	41.8	13.8			

a Reduced to a gold basis, 80 per cent of currency values.

	Hors	ES I	IN IL	LINOIS, 1	840	-1870)			
					Increase					
Census	Horses (number)		Rank	State	;	Nor divis			ntral vision	South division
1840 1850 1860 1870	199,235 <i>a</i> 8 267,653 8 563,736 2 853,738 1		34- 110. 51.	6	17.4 194.5 69.2			21.1 85.2 53.5	2.1 61.6 33.1	
Census	מ	listr	ibutio	n		Ave	rage	num	ber per	farm
	North division		ntral vision	South division	S	State	Nor divis		Centra division	
1840 1850	14.5	1 .		38.0 27.7		b 3.5	b 3.0		b 4.0	<i>b</i> 3.5
1860 1860		3	7.6 8.0	21.2 18.7		3.9 4.2	4. 4.	0	4·4 4·3	3.2 2.9

a Includes mules; figures are comparable for there were only 10,573 mules in 1860. b Data on number of farms lacking.

DAIRY	Cows	IN	Illinois,	1870-1890	
Dunki	00110	•••	,	//-	

Year			Distri	bution (pe	r cent)	Average	
	Number	Increase (percent)	North division	Central division	South division	number per farm	
1870 1880 1890	640,321 865,913 1,087,886	22.5 35.2 25.5	52.3 55.3 60.3	30.0 28.5 25.3	17.7 16.2 14.4	3.2 3.4 4.5	

DAIRY INDUSTRY IN	Illin	015, 1877	-1894		
0	Avera	ge value	Distribution (pcr cent)		
Period	dairy products sold		North division	Central division	South division
1877-79	\$ 7,0	012,120	84.3	11.4	4.3
1880-84				87.0 9.0 85.4 8.3	4.0 6.3
1885-89					
1890-94	18,3	03,015	89.6	5.7	4.7
PERIOD		Percent	age of tot	al dairy	products
I ERIOD		Milk	Butter	Cream	Cheese
1877-79		36.4	53.5	1.0	9.1
1880-84		45.3	42.1	6.9	5.7
1885-89		54.5	32.2	11.2	2.1
1890-94		69.9	21.7	7.7	0.7

MILK SOLD IN ILLINOIS, 1877-1894

Period	Average	T	Distril	bution (pe	r cent)	Price per
	. F '11	Increase (percent)	North division	Central division	South division	gallon (cents)
1877-79 1880-84 1885-89 1890-94	42,727,402 57,359,014	61.5 34.2 70.3	94.4 96.5 93.5 93.8	3.8 2.5 2.3 1.7	1.8 1.0 4.2 4.5	9.6 10.7 12.2 13.1

BUTTER, CREAM, AND CHEESE	SOLD		1015, 1877-	-1894		
Period	amo	erage ount of er sold	Increase (per cent)	Average amount of cream sold (gallons)		
1877-79 1880-84 1885-89 1890-94	22, <u>9</u> 20,6	565,368 ;36,924 595,281 ;47,601	- 8.2 2		146,827 <i>a</i> 1,594,881 2,930,913 2,385,123	
Period		Increase (per cent		t of sold	Increase (per cent)	
1877-79. 1880-84. 1885-89. 1890-94.			5,420,2 5,401,0 2,403,9 1,172,2	038 958	- 0.2 - 55.5 - 51.3	

BUTTER, CREAM, AND CHEESE SOLD IN ILLINOIS, 1877-1894

a 1878–1879.

OTHER CATTLE	E IN	Illinois,	1870–1890
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Year	Number	Increase	Distril	Average		
	other cattle	(percent)	North Central South	South division	number per farm	
1870	1,055,499	8.7	47.5	39.0	13.5	5.2
1880	1,515,063	43.5	50.6	35.6	13.8	5.9
1890	1,968,654	29.9	51.2	36.6	12.2	8.2

CHARACTER OF ILI	LINOIS CAT	TLE, 1890					
	Percentage of kinds of cattle						
Kind	State	North division	Central division	South division			
Pure-blooded (recorded)	1.4	1.3	1.6	0.9			
One-half pure-blooded or higher	24.5	23.4	31.7	11.5			
Common	74.1	75-3	66.7	87.6			
All neat cattle	100.0	100.0	100.0	100.0			
	Distribution of breeds						
Кінд	State	North division	Central division	South division			
Pure-blooded (recorded)	100.0	54.9	36.7	8.4			
One-half pure-blooded or higher	100.0	51.9	42.0	6.1			
Common	100.0	55.1	29.4	15.5			
All neat cattle	100.0	54.4	32.5	13.1			

BEEF CATTLE SOLD IN ILLINOIS, 1879-1894

	Average	Increase	Distribu	ition (per	Price	Gain per	
	number	(per cent)	North division	Central division	South division	per animal	animal if fed on corn b
1870-74	3 57, 262	25.8 C	49.5	34.8	15.7	55.90	11.90
1875-79		12.9	43.5	43.8	12.7	43.25	4.50
1880-84	463,607	15.0	52.0	34.5	13.5	50.10	2.22
1885-89	545,314	17.6	51.3	36.7	12.0	37.05	58
1890-94	422,069	- 22.6	56.4	31.3	12.3	36.10	- 12.92

a Given for last year of period only, except for 1870-1894. b The method used in estimating the comparative profitableness of feeding corn to cattle or of selling it directly was as tollows: the average price of a bushel of corn and the average price of a beef steer for the period 1860-1914 were calculated, giving 37 cents as the average price of corn and \$47.70 as the average price of a beef; that is, a beef was worth 129 bushels of corn at these figures, which were assumed to be normal. The gain or loss was then calculated for each succeeding period, on the basis of the changing prices for both corn and beef. This method was worked out in *Wallace's Farmer* (May 12, 1916, p. 733) and the monthly results plotted on a chart. c Gain over 1865-1869.

	SWINE IN I	LLINOIS, 1	1870-1890)		
Year	Number	Increase	Distrit	cent)	Average	
	swine	(per cent)	North division	Central division		number per farm
1870 1880 1890	2,703,343 5,170,266 5,924,818	8.0 91.3 14.6	33.0 43.0 44.5	42.4 40.2 43.3	24.6 16.8 12.2	13.3 20.2 24.6

SWINE IN TUUNOIS 1870-1800

HOGS SOLD IN ILLINOIS, 1875-1894

PERIOD Average number solo	A	Increase	Distribu	tion (per	cent) a	Price	Gain per
		North division	Central division	South division	per hog	hog if fed on corn b	
1870-74	2,104,955	39.3 C	39.0	44.0	17.0	\$13.62	\$2.75
1875-79	2,220,695	5.5	44.0	40.0	16.0	11.82	2.25
1880-84	2,538,262	14.3	40.5	41.6	17.9	12.11	.30
1885-89	3,088,399	21.7	44.5	43.3	12.2	9.33	.09
1890-94	2,530,928	18.5	47.2	39.6	13.2	9.75	2.39

a Given for last year of period only, except for 1890-1894. b See note b, p. 491, for method of calculating. c Gain over 1865-1869.

Year	Number	Increase	Distri	Average number per farm		
	of sheep	(per cent)	North Central South division division division			
1870 1880 1890	1,037,073	103.8 - 33.8 - 11.0	15.2 41.0 28.2	58.2 35.7 47.4	26.6 23.3 24.4	7.7 4.1 3.8

SHEEP IN ILLINOIS, 1870-1890

SHEEP SOLD IN ILLINOIS, 1870-1894									
PERIOD Number sold	Number	T	Distribu	ution (per	cent) a	Price	Gain per		
	Increase (per cent)	North division	Central division	South division	per sheep	sheep if fed on corn b			
1870-74 1875-79 1880-84 1885-89 1890-94	226,087 186,026 235,106 174,193 158,763	-50.5 c -17.7 26.4 -25.9 -8.9	36.6 38.4 31.3 28.2 34.2	33.0 35.8 39.8 47.4 41.8	30.4 25.8 28.9 24.4 24.0	\$3.91 3.82 3.45 3.09 3.42	\$.20 .54 59 06 74		

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a Given for last year of period only, except for 1890–1894. b See note b, p. 491, for method of calculation. c Gain over 1865–1869.

WOOL C	CLIP I	n Ii	LINOIS,	183	70-1890
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	Wool shorn	Average of fleece (pounds)	Distribution (per cent) a		
Year	(pounds)		North division	Central division	South division
1870 1880 1890	6,093,066	3.66 5.87 4.87	38.5	42.2	19.3

a Average for 1877-1895.

BUSINESS FAILURES IN ILLINOIS²

		Illinois	Chicago		
Year	Number	Liabilities	Number	Liabilities	
1872	. 185 329 332 409 434 454 470 194 91 108 158 328	\$11,470,000 7,109,000 7,510,000 8,218,470 6,079,710 8,117,091 7,672,931 3,396,480 483,802 585,718 1,193,740 3,188,733 5,714,951	199 206 362 83 43 37 103 277 329	9,164,200 10,065,300 12,926,800 2,237,300 780,154 1,980,700 2,239,586 13,203,279 6,946,986	
1885	372	3,510,241 3,923,672	312	2,348,612 4,263,684	
1887 1888 1889 1890 1891 1892 1893	308 318 376 335 342 226	2,459,744 2,216,438 2,428,798 1,928,881 1,545,246 2,651,638 18,777,462	273 320 360 341 308 289 254	4,33,304 5,997,478 6,712,900 4,857,567 7,856,550 4,758,568 4,995,562	

There was a steady decline in the number of liabilities of failed establishments between 1877 and 1880, from \$8,218,470 to the low water mark of \$483,802.

² Financial Review, 1875-1894, passim.

GENERAL NOTES TO TABLE ON PAGES 304-305

All figures for the table found on pages 304-305 are taken from the statements of warrants drawn on the state treasurer in the reports of the state auditor of public accounts.

The obscurity of some of the items in the auditors' reports, and the grouping in many cases of unlike items, often made it difficult to get exact figures for distinct items. In such cases the nearest possible approximation to exactness was made which careful examination could give.

The biennium 1875–1876 was only twenty-two months in length, owing to the fact that in 1876 the accounts were closed on September 30 instead of on November 30. Before 1876, the bienniums extended from December 1 to November 30 of the even numbered years; after 1876 they extended from October 1 to September 30 of the even numbered vears.

The items included under the various headings in the table are as follows:

Column I:

This column includes salaries of governor, lieutenant governor, secretary of state, treasurer, auditor of public accounts, and attorney-general, and the salaries of their regular clerks and assistants. Casual expenditures for "extra clerk hire" are not included, the object being to include only those items which are continuous from the beginning to the end of the period.

Column Ia:

This column includes all expenses other than salaries connected with the administrative departments, together with the "contingent fund of the governor," the state board of equalization expenditures, cost of the civil service commission, and a few other minor administrative expenses.

Column II:

This column includes per diem, mileage, allowance for postage and stationery of the members and officers of the general assembly, and the expenses of those employees of the general assembly who were employed by that body, but not those employees who were appointed by the secretary of state on account of the general assembly. The salaries of the latter are included in IIa.

Column IIa:

This column includes all expenses connected with the general assembly, and not included in II. It includes the expenses of committees appointed by the general assembly, expense of distributing the printed laws and journals, and other matters.

Column III:

This column includes the salaries of all the judges in the state supreme, appellate, and circuit courts, and those of the state's attorneys in the several counties of the state, together with pay of stenographers, clerks, and reporters of the state supreme court after 1895–1896. Salaries of judges of the superior court of Cook county are also included during the whole period.

Column IIIa:

This column includes the expenses of the reporter and reports of the supreme court, expenses of the court of claims (costs and expenses of state suits), and all other judicial expenditures not included in III.

Column IV:

This column includes expenses of "printing, paper, and stationery," "public printing," "public binding," publishing notices, cost of revision of statutes, and expenses and salaries of state printer expert and his assistants.

Column V:

"Educational institutions" includes normal schools, state university, state library, state historical library and natural history museum, and the state entomologist. The latter is included because in the earlier period the appropriations for his work are included with those for the state university. "Current expenses" includes salaries, cost of supplies, etc. all those expenses which are used up once and for all time during the year or what are commonly called "ordinary expenses."

Column Va:

This column includes all expenditures for grounds, buildings (construction and repair), and equipment, and all other expenses not included in V.

Column VI:

"Charitable institutions" includes all insane asylums (except the asylum for the criminal insane), schools and homes for feeble-minded, deaf and dumb, and the blind, the soldiers' orphans' home, soldiers' and sailors' home, soldiers' widows' home, and all other charitable institutions main-

tained by the state. The expenses of the state board of administration and the state architect are also included in this group because the cost of charitable institutions is the largest single item of expenditure which they control.

Column VIa:

This column includes all expenses for charitable institutions not included in column VI. These expenditures represent buildings, grounds, equipment, and all other expenses for more or less permanent objects.

Column VII:

"Penal and correctional institutions" includes the two state penitentiaries, the state reformatory, the state school for delinquent boys, the state home for juvenile female offenders, and the asylum for insane criminals.

"Current expenses" includes the cost of labor and supplies in running the state penal and correctional institutions, together with the expense of conveying convicts to and from these institutions, and the expense incurred in the apprehension and delivery of fugitives from justice.

Column VIII:

"Militia and military affairs" includes the salaries and office expenses of the adjutant general and his assistants, and all the expenses upon the Illinois national guard.

Column IX:

This column includes all expenses of construction, repair, equipment, and maintenance of the statehouse and the executive mansion.

Column X:

This column includes the expenditures from the special school fund, plus the cost of the department of public instruction, which is paid from the revenue fund. This expenditure is for the maintenance and support of the common school system of the state and is separate and apart from the expenditures for state normal schools and the state university.

Column XI:

This column includes all expenses incurred by the state board of health, and a few other minor expenses connected with public health. *Column XII:*

This column includes all expenditures for canal commissioners and canals, money spent out of the canal redemption fund for bridges over the Chicago river, which were destroyed by fire in 1871; cost of construction of an armory, arsenal, and museum at Springfield, the geological survey

and commissioners, expenses of the state highway commission and for state aid roads, public lands and drainage commissioners, and the rivers and lakes commission.

Column XIII:

This includes the expenditures of the state board of agriculture, and the assistance granted to local agricultural boards.

Column XIV:

This column includes the railroad and warehouse commission, state humane agents, commissioner of labor statistics, state board of livestock commissioners and state veterinarian, mine inspectors and mine examiners, and various other boards, committees, and commissions, dealing in one way or another with state regulation and supervision of private industries.

Column XV:

This column contains the amounts of taxes refunded by the state treasury to the county and local officials, because such amounts had been paid by mistake.

Column XVI:

This column includes the amounts paid by the state as interest and principal on local bonds issued by cities, counties, drainage districts, townships, etc.

Column XVII:

This column includes the expenditures for fish and game conservation in the state.

Column XVIII:

This column includes all expenditures of Illinois for historical monuments, celebrations, and exhibits of all kinds. No expenditures of this class appear before 1887–1888.

Column XIX:

This column includes the payments of principal and interest on the state debt.

Column XX:

This column includes everything not included in one of the preceding groups. The most important continuous groups placed in this column are what are called in the reports "incidental expenses" and special appropriations, which are unclassifiable elsewhere. The former varied from \$98,000 to \$27,000, and the latter from \$282,000 to \$13,000, but there was no regularity in the variations in either case. Another item which began in 1871 and disappeared after 1884 was the expenditures for

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"field notes and surveys," for the purpose of plotting new townships; it ranged from \$10,000 to \$350, gradually decreasing until it disappeared. Still another item was the "unknown and minor heirs fund," which began in 1877–1878 and continued until 1907–1908; expenditures on this account varied from \$54 to \$2,348 without any regularity.

Column XXI:

1871-1872: This large total is due chiefly to the payment of almost \$4,000,000 on the state debt, and the large expenditures on internal improvements.

1873-1874: Expenditures on state debt and internal improvements will also account for this large total.

1875–1876: For ten years from this date there seems to have been strict economy in the state expenditures, probably due to financial depression during the seventies.

1885–1886: Expenditures show on the whole a gradual and steady increase for twenty years from this date.

EXPENDITURES AND STATE TAXES, 1870-1893³

Date	Appropriations	Amount state taxes
1870		\$2,919,071
1871		4,177,711
1872		3,527,377
1873	\$6,648,188	3,793,270
1874		2,578,422
1875	6,475,207	2,861,374
1876		2,755,978
1877		2,961,773
1878		2,917,047
18 79		2,123,239
1880		2,840,807
1881	6,605,399	3,706,323
1882		2,847,810
1883	7,342,742	2,534,028
1884		2,739,799
1885		3,142,307
1886		2,707,327
1887		4,083,618
1888		3,358,693
1889		2,884,876
1890		2,823,504
1891		2,630,930
1892		2,948,569
1893	9,032,314	2,524,131

⁸ Report of the Efficiency and Economy Committee, 117.

MILES OF LINE IN ILLINOIS, 1839-1893 4

Year	Miles of line	Increase
1839	. 22	22
1850	111	59
1860	2,790	9
1870	4,707	666
1871	5,904	1,197
1872	6,361	457
1873		228
1874		170
1875		350
1876		176
1877		59
1878		114
1879		130
1880		273
1881		409
1882		416
1883		192
1884	1 '	40
1885		-4
1886		371
1887	1 11-13	326
1888	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	106
1889	, ,,-,	122
1890	,,,,,,,	384
1891		10
1892		123
1893		62
••••	10,408	02

" Miles of line " includes main line and branches but not double track or side track.

* Poor's Monual for successive years for the data up to and including 1887. Data for the years since 1887 are from annual "Statistics of Railroads" published by the interstate commerce commission.

FREIGHT RATES IN ILLINOIS, 1877-1895 5

Year				Ra	te			
1877	1.88 ¹ /2	average	receipt	s per	mile	per	ton	
1878	1.58	""	"	"	"	"	"	
1879	1.92	"	"	"	"	"	"	
1880	1.38	"	"	"	"	"	"	
1881	1.26	rates in	cents p	er ton	per	mile	for	freight carried
		by prine	cipal ro	ads	-			
1882	1.20	rates in	cents p	er ton	per	mile	for	freight carried
		by prine	cipal ro	ads	-			
1883	1.09	• •	-		per	mile	for	freight carried
2		by prine	cipal ro	ads	•			0
1884	1.12	• •	-		per	mile	for	freight carried
•		by prine	cipal ro	ads	-			-
1885		(none g	-		еp.	329)		
1886	1.16	average						
1887		(no rep	ort pub	lished)			
1888	1.06	average	charge	e per 1	ton p	oer n	nile	
1889	.836	revenue		· ·	-			ile
1890	.832	"	^		"	•	"	
1891	.8775	"	"		"		"	
1892	.8618	"	"		""		46	
1893	.931	"	"		"		"	
1894	1.213	"	"		"		"	
1895	1.232	"	"		"		"	

⁵ Reports of the Illinois Railroad and Warehouse Commission, 1877-1895.

LIVESTOCK	Receipts	AND	Shipments	AT	Chicago,	1870-1895 ⁶
		((000 omitted)		

,	Cattle			Hogs			Sheep		
Year	Re- ceived	Shipped	Con- sumed in city or packed	Re- ceived	Shipped	Con- sumed in city or packed	Re- ccived	Shipped	Con- sumed in city or packed
1870	532	391	141	1,693	924	769			1
1875	920	696	224	3,912	1,582	2,330		1	
1880	1,382	886	496	7,059	1,394	6,665	335	156	179
1885	1,905	744	1,161	6,937	1,797	5,140	1,003	260	743
1890	3,484	1,260	2,223	6,663	1,985	5,678	2,182	929	1,252
1895	2,588	785	1,803	7,885	2,100	5,784	3,406	474	2,932

⁶ Compiled from annual reports of Chicago Board of Trade.

Shipments of Meats from Chicago, 1870-1895 7

Year	Beef (packages)	Pork (barrels)	Other cured meats (pounds)
1870. 1875. 1880. 1885. 1890. 1895.	60,454 117,203 122,100 145,897	165,885 313,713 367,324 393,363 392,786 300,029	112,433,000 262,931,000 958,036,000 705,944,000 823,801,000 698,201,000

7 Compiled from annual reports of Chicago Board of Trade.

LUMBER TRADE OF CHICAGO, 1870-1895 8 (000 omitted)

Year	Lumber (in	board feet)	Shingles (number)		
1 EAR	Receipts	Shipments	Receipts	Shipments	
1870 1875 1880 1885 1890 1895	1,018,999 1,147,193 1,561,779 1,744,892 1,941,392 1,638,130	583,491 628,485 925,682 818,474 812,655 773,983	652,019 635,708 649,546 795,248 515,575 352,313	666,248 299,427 134,375 55,654 108,822 298,835	

⁸ Compiled from annual reports of the Chicago Board of Trade.

Year	Manufactures	Agriculture	Mining
1850 1860 1870	\$ 16,534,272 57,580,886 205,620,672	\$210,860,585 <i>a</i>	\$152,598,994 b
1880 1890	414,864,673 908,640,280	203,980,137 184,759,013	17,110,317

VALUE PRODUC TO OF MALL INDUCTOR - ---

a All farm products, including betterments and additions to stock. b Mining, including quarrying, oil boring, and peat cutting.

LEADING	MANUFACTURES	IN	ILLINOIS,	1870 ⁹
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Rank	Industry Va	ue of product
1	Flour and grist mill products	\$43,876,775
2	Meat, packed, pork	19,818,851
3	Agricultural implements	8,880,390
4	Clothing-men's and women's	8,407,005
5	Liquors, distilled	7,888,751
6	Lumber, planed	7,290,465
7	Carriages and sleds, children's, wagons	6,106,291
Ś	Lumber, sawed	4,546,769
9	Boots and shoes	4,443,794
10	Liquors, malt	4,145,224
11	Iron, castings (not specified)	3,788,953
12	Iron, forged and rolled	3,430,746
13	Furniture (not specified), chairs, and refrigerators	2,982,522
14	Machinery (not specified)	2,818,797
15	Woolen goods	2,725,690
16	Saddlery and harness	2,581,416
17	Cooperage	2,501,531
18	Sash, doors, and blinds	2,316,620
19	Tin, copper, and sheet-iron ware	2,194,812
20	Machinery, railroad repairing Leather, curried Leather, tanned	2,183,013
21	Leather, curried	2,134,389
22	Leather, tanned	2,013,774
23	Confectionery	1.948.710
24	Bread, crackers, and other baking products Brick	1,732,885
25	Brick	1,638,764
26	Marble and stone work (not specified)	1,559,675
27	Oil, animal	1,488,700
28	Grease and tallow	1.412.900
29	Printing and publishing, newspaper	1,400,314
30	Machinery, steam engines and boilers	1,396,984
31	Tobacco, cigars	1,313,947
32	Soap and candles	
33	Oil, vegetable, linseed	1,154,033
34	Cars, freight and passenger	

⁹ Ninth Census, "The Statistics of the Wealth and Industry of the United States," 3:510-512.

DATE	1850	1860	1870	1880	1890
Number of establishments	3,162	4,268	12,597	14,549	20,482
Capital	\$ 6,217,765	\$27,548,563	\$ 94,368,057	\$140,652,066	\$502,004,512
Average number of hands employed-					
Males 16 years and over	11,066	22,489	73,045	120,558	270,760
Females 16 years and over	493	479	6,717	I 5,233	36,012
Children under 16 years	a	a	3,217	8,936	5,426
Total amount paid in wages during the year		\$ 3,204,336 \$ 7,637,921	\$ 31,100,244	\$ 57,429,085	\$171,523,579
Cost of material	\$ 8,959,327	\$35,558,782	\$127,600,077	\$289,843,907	\$529,019,089
Value of products, including custom work and repair- ing	repair- \$16,534,272	\$57,580,886	\$205,620,672	\$414,864,673 \$908,640,280	\$908,640,280
Net value of product	\$ 7,574,945	\$22,022,104	\$ 78,020,595	\$125,020,766	\$379,621,191
Per cent of total population engaged in manufactures.	4.1	1.3	3.3	4-7	7.3

MANUFACTURES IN ILLINOIS, 1850-1890¹⁰

a Not reported separately. ¹⁰ United States Census, 1850, 1860, 1870, 1880, 1890.

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INDUSTRY	Net va (in mi	lue of p llions of c	oroducts dollars)
	1870	1880	1890
Liquors, distilled	3.0	4.5	48.0
Slaughtering and meat packing	2.9	13.2	30.4
Foundry and machine shop products	a	6.4	21.5
Clothing, men's, including shirts	2.8	6.8	16.3
Agricultural implements	5.2	6.7	14.5
Printing and publishing, newspaper	1.6	4.3	13.3
Liquors, malt	2.1	2.5	9.0
Lumber, planed	1.8	1.0	8.7
Furniture and refrigerators	1.9	4.0	8.5
Iron and steel	1.5	5.5	8.1
Cars, steam railroad	.5	a	7.0
Car and general shop construction	1.2	2.5	6.2
Flour and grist mill products	8.4	5.9	6.2
Brick and tile	1.2	2.1	5.3
Carriages and wagons	3.8	2.6	5.3
Gas, illuminating and heating	I.4	a	4.3
Tobacco, cigars, and cigarettes	•7	2.0	4.0
Boots and shoes	2.3	2.4	4.0
Bread and other bakery products	.8	1.2	3.9
Tin, copper, and sheet iron	1.1	1. 8	3.5
Clothing, women's	•3	.5	3.1
Clocks and watches	•5	1.1	2.5
Leather, tanned and curried	.9	1.6	2.4
Soap	.3	•5	2.4
Paint and varnish	-3	•7	2.2
Marble and stone work	1.0	I.I	2.2
Lumber, sawed	2.3	1.9	2.1
Musical instruments	3	.3	2.0
Cooperage and wooden goods	1.4	1.5	1.9
Confectionery		.6	1.7
Glass	.1	.6	1.6
Brass and bronze products		.0 .5	1.6
Butter, cheese, and condensed milk	 	.5 1.0	I.4
Patent medicines	.1	.2	1.2
Baking powders and yeast	.04	.z .I	1.0
Coffee and spice, roasting and grinding	.1		1.0
	••	•5	1.0

.

NET VALUE PRODUCTS OF MANUFACTURES IN ILLINOIS, 1870-1890

a Not reported.

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Gross	VALUE	PRODUCTS	OF	MANUFACTURES	IN	Illinois,	1870-189	0
-------	-------	----------	----	--------------	----	-----------	----------	---

INDUSTRY	Gross va (in mill	alue of p lions of d	roducts ollars)
	1870	1880	1890
Slaughtering and meat packing	19.8	97.8	200.4
Liquors, distilled	7.8	14.6	51.9
Foundry and machine shop products		13.5	38.8
Flour and grist mill products	43.8	47.4	37.9
Iron and steel	3.4	20.5	37.1
Clothing, men's, including shirts	7.4	20.1	35.5
Agricultural implements	8.8	13.4	24.6
Lumber, planed	7.2	4.8	20.4
Carpentering	6.7	5.9	20.3
Printing and publishing, newspapers and periodicals	2.7	7.1	17.3
Cars, steam railroad	1.0	а	17.1
Masonry, brick, and stone	.3	2.9	15.7
Printing and publishing, book, job	1.0	a	14.5
Furniture and refrigerators	2.9	7.6	14.5
Liquors, malt	4.1	5.7	13.6
Clothing, men's, custom work and repairing	a	a	13.5
Cars and general shop construction	2.1	2.5	12.2
Slaughtering, not including meat packing	4.2	a	11.8
Soap and candles	1.2	3.9	9.3
Coffee and spice, roasting, grinding		3.0	9.3
Carriages and wagons	6.1	5.0	9.0
Bread and other bakery products	1.7	3.8	8.8
Boots and shoes	4.4	5.1	8.7
Leather, tanned and curried	4.I	7.7	8.2
Cheese, butter, and condensed milk	.5	3.8	8.0
Tobacco, cigars, and cigarettes	3.0	3.7	6.9
Tin, copper, and sheet iron	2.1	3.9	6.8
Plumbing and gas fitting	.2	.8	6.4
Clothing, women's	.9	1.5	6.1
Brick and tile	1.6	3.0	6.3
Painting and paper hanging	.3	1.8	6.2
Iron work, architectural and ornamental	a	.3	5.4
Gas, illuminating and heating	2.0	a	5.2
Lumber, sawed	1	5.0	5.0
······			

a Not reported.

GROWTH OF COAL TRADE IN ILLINOIS, 1870-1890 11

	Receipt	Receipts of coal in tons at				
Date -	St. Louis	Chicago	Peoria			
1870	957,259 1,378,666 1,675,694 2,135,483 2,779,089	887,000 1,641,000 2,706,000 3,979,000 4,737,000	29,646 57,034 136,841 339,381 591,838			

¹¹ Compiled from Reports of Trade and Commerce of St. Louis; Reports of Chicago Board of Trade; Reports of Trade and Commerce of Peoria. The figures for Peoria are for 1872 and each succeeding quinquennium.

			Causes		
Year	Number of establish- ments affected	Succeeded	Partly succeeded	Failed	For increase of wages
1881	271	154	35	82	237
1882	206	116	9	81	152
1883	576	454	28	94	381
1884	429	359		70	91
1885	226	106	10	110	148
1886	1,060	310	204	546	141
Tot al	2,768	1,499	286	983	1,150

A SUMMARY OF STRIKE STATISTICS 12

-					
с.	а	u	s	e	s

For increase of wages and reduction of hours	For reduction of hours	Against reduction of wages	All others	
I	7	7	19	
9	• • •	22	23	
132		32	31	
304		22	12	
		38	40	
180	501	27	211	
	l			
Total626	508	148	336	
	1	1 1		

¹² Taken from "Strikes and Lockouts," Third Annual Report of the Commissioner of Labor, 1887, p. 690-691, 919-920.

1887-1893
ILLINOIS,
NI
STRIKES

				Kesults			Causes	
YEAR	Number of strikes	Number of establish- ments affected	Succeeded	Partially succeeded	Failed	For increase of wages and reduction of hours	Against reduction of wages	All other
1887	112	1,569	5#	39	986	659	21	889
1888	60	689	499	ы	188	261	12	416
1889	43	165	35	1/	59	4	72	49
1890	138	2,496	855	509	1,132	1,429	306	761
1891	611	1,11,	851	32	228	808	40	263
1892	124	707	427	94	186	373	36	298
1893	129	1,382	1,047	154	181	546	47	789

APPENDIX

Year	Mineral production	Agricultural production	Ratio of value of mineral to agricultural production
1905	\$ 68,025,560	\$272,794,107	24.9
1906	72,723,572	253,409,404	28.7
1907	93,539,464	280,666,020	33.3
1908	92,765,688	276,614,637	33.5
1909	98,840,729	322,144,944	30.7
1910	98,891,759	297,976,709	33.2
1911	106,275,115	311,525,706	34.1
1912	123,068,867	285,249,557	43.2
1913	131,825,221	288,613,140	45.9
1914	117,145,108	289,781,140	40.4
1915	114,704,587	486,561,355	23.5
1916	146,780,236	496,178,000	29.6
1917	238,186,690	854,896,000	35.8

COMPARATIVE VALUE OF MINERAL AND AGRICULTURAL PRODUCTS

	1909	1910	1191	1912	1913	1914	1915	1916	1917
Sulphuric acid:									
Quantity									
short tons, 60° Baumé			144,805	1 60,378	195,145	243,457			
Value			\$958,591	\$1,064,564	\$1,303,986	\$958,591 \$1,064,564 \$1,303,986 \$1,551,876 \$2,036,311 \$2,999,548	\$2,036,311	\$2,999,548	\$3,902,831
Asphalt:				- 1					
Quantityshort tons						4,553	188,575	188,575 IS5,406	110,756
Value						\$340,862	**	\$1,285,470	\$1,317,855
Natural-gas gasoline:									
Quantitygallons			a	ø	581,171	1,164,178		I,035,204 2,260,288	4,934,009
Value			a	a	\$67,106			\$80,049 \$262,664	\$866,033
Pyrite:									
Quantityshort tons	5,600	8,541	17,441	27,008		22,538			24,596
Value	\$17,551	\$23,159	\$47,020	\$62,980	\$31,966	•,	\$22,476	\$51,432	\$89,998
Tripoli:									
Quantity short tons					12,994	10,387		33,187	
Value \$38,262	\$38,262	\$33,390	\$45,910	\$27,339	\$128,892	\$59,394	\$59,390	\$82,968 b	\$31,338
	\$38,202	\$33,390	445,910	\$27,339	\$128,892	\$59,394	\$59;3	8	190 \$82,968 0

STATISTICS OF THE YOUNGER MINERAL INDUSTRIES

a Less than three producers; statistics concealed. b Estimated.

APPENDIX

STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917

						Coal a	1					
	1	fines		Min	es of s			age	Ton	nage		
YEAR	Total num- ber	Shipping	Local	Less than 1,000 tons	1,000 tons to 50,000 tons	50,000 tons to 100,000 tons	100,000 tons to 200,000 tons	More than 200,000 tons	Total	Shipping	Local	Total value
1	2	3	4	5	6	7	8	9	10	11	12	13
		Per cent	Per cent						Short tons	Per cent	Per cent	
1883	639			209	366	39	10	15	12,123,456			
1884	741			262	421	38	16	4	12,208,075			\$13,164,976
1885	778			286	433	40	13	6	11,834,459			11,456,493
1886	787			316	415	44	11	3	11,175,241			10,263,543
1887	801	1		320	419	42	18	2	12,423,066			11,152,596
1888	822			327	423	47	20	5	14,328,181			13,309,030
1889	854			321	455	55	20	3	12,104,272			12,496,80
1890	936			398	456	54	24	4	15,292,420		1	12,883,548
1891	918			402	421	52	37	6	15,660,698			13,069,090
1892	839			332	390	65	46	6	17,862,276			15,158,430
1893	788	39	61	282	372	75	47	12	19,949,564	97	3	17,827,59
1894	836	38	62	312	413	61	44	6	17,113,576	94	6	15,282,11
1895	855	37	63	319	421	61	45	9	17,735,864	93	7	14,239,15
1896	862	37	63	330	408	63	45	16	19,786,626	96	4	15,809,73
1897	853	36	64	346	370	79	41	17	20,072,758	97	3	14,472,52
1898	88 I	37	63	351	395	86	42	7	18,599,299	95	5	14,567,59
1899	889	36	64	346	384	77	57	25	24,439,019	96	4	20,744,55
1900	920	35	65	340	418	70	65	27	25,767,981	96	4	26,927,18
1901		36	64	313	432	79	58	33	27,331,552	95	4	28,163,93
1902	915	36	64	314	415	76	72	38	32,939,373	96	4	33,945,91
1903		38	62	313	413	75	87	45	36,957,104	96	4	43,196,80
1904	932	41	59	301	415	72	98	46	36,475,060	96	4	39,941,99
1905	990	40	60	321	446	83	88	52	38,434,363	97	3	40,577,59
1906	1,018	41	59	336	449	89	97	47	41,480,104	97	3	44,763,06
1907		44	56	260	407	91	95	80	51,317,416	97	3	54,687,38
1908		44	56	248	402	98	92	82	47,659,690		3	49,978,24
1909	886	43	57	270	373	66	90	87	50,904,990		2	53,522,01
1910	881	44	56	261	364	87	94	75	45,900,246		3	52,405,89
1911	845	46	54	235	351	82	101	76	53,679,118		3	59,519,47
1912		43	57	266	347	70	91	105	59,885,226		2	70,294,33
1913	840	41	56	239	339	66	82	114	61,618,744		2	70,313,60
1914		43	57	236	298	64	95	103	57,589,197		2	64,693,52
1915	779	36	64	268	286	56	65	104	58,829,576		2	64,622,47
1916	803	35	65	304	280	48	60	111	66,195,336		2	82,457,95
1917	. 810	40	60	226	283	52	70	139	86,199,387	98	2	162,281,82

a Coal statistics, excepting columns 10 and 13, are based on data from the annual coal reports published by the state of Illinois, department of mines and minerals. The remainder of the data for the table comes from statistical reports published by the United States geological survey.

STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917-(Continued)

				Co	al (contin	nued) ·				
	Men er	nployed			Aec	ridents		Machine	mining	
Total number	Shipping mines	Local mines	Tonnage per man	Non- fatal	Fatal	Tons per death	Deaths per 1,000 men	Mines	Ton- nage by ma- chines	Year
14	15	16	17	18	19	20	21	22	23	24
	l'er cent	Per cent	Short tons			Short tons			Per cent	
23,939 25,575 25,946			506 438 456	231 197 176	1 34 46 39	90,474 265,393 303,448	5.6 1.8 1.5			1883 1884 1885
25,846 26,804			432 463	171 180	52 41	214,909 303,002	2.0 1.5			1886 1887
29,410			481	179	55	260,512	1.9			1888
30,076			466	201	42	333,745	1.4			1889
28,574			535	294	53	288,203	1.9			1890
32,951			475	367	60	261,012	1.8			1891
33,632			531	370	57	313,372	1.7			1892
35,390	81	19	564	403	69	289,124	1.9			1893
38,477	81 81	19	445	521	72	237,688	2.2			1894
38,630		19	459	605	75	236,478	2.3			1895
37,057	76	2.1	534	672	77	256,969	2.3			1896
33,788	93	7	594	518	69	290,910	2.0			1897
35,026 36,991	9 2	8	531	438	75	247,991	2.1			1898
39,384	93 92	7 8	634	597 611	84	278,982	2.3	6		1899
			639		94	267,595	2.4	67	22	1900
44,143 46,005	93	7	603	422	99	269,044	2.2	63	22	1901
49,814	93 94	7 6	653 702	406 410	99	303,245	2.2 3.1	64 68	22	1902
54,774	9 4 94	6	677	507	156	224,073 236,165	2.9		22	1903
59,230	94	6	628	535	157 199	186,851	3.4	67 76	19 22	1904
62,283	94	6	615	480		247,210	2.5		1 1	1905
66,714	95	5	717	636	155 165	289,689	2.5	85 101	25	1906
70,841	95	5	696	819	183	269,248	2.6	101	33	1907 1908
72,733	96	4	676	894	213	230,816	2.9	107	33	1903
74,634	96	4	653	742	406	119,997	5.4	114	38	1909
77,410	96	4	648	709	157	319,523	2.0	126	40	1911
79,411	96	4	724	800	180	319,524	2.3	139	40	1912
79,497	97	3	778	1,025	175	353,407	2.2	140	49	1913
80,035	97	3	758	1,071	159	381,860	2.0	141	52	1914
75,607	96	4	762	1,013	180	320,009	2.4	131	59	1915
75,919	96	4	839	1,305	165	385,900	2.2	139	62	1916
80,893	96	4	976	1,634	207	381,563	2.6	151	60	1917

STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917-(Continued)

Year	Num- ber of firms		Petroleum					
		Total valu c	Common brick		Drain tile	Pottery	Quantity	Value
			Quantity	Value	Value	Value	Quantity	value
25	26	27	28	29	30	31	32	33
			Thousands				Barrels	
1883								
1884								
1885								
1886								
1887								
1888							1,460	\$ 4,706
1889 1890	1						900	ψ 4,/00
1891							675	
1892	ļ						521	
1893] .						400	
1894	697	\$8,474,360	825,845	\$4,495,613	\$1,418,572	\$8,414,360	300	1,800
1895	678	7,619,884	717,079				200	1,200
1896	566	5,938,247	586,506	2,831,752	517,684	5,441,765	250	1,250
1897	570	5,498,574	516,263	2,376,498	531,993		500	2,000
1898	616	6,866,715	573,450	3,205,674	823,847		360	1,800
1899	643	7,259,825	664,684				360	1,800
1900	569	7,708,859	685,161	1			250	1,500
1901	550	9,642,490					250	1,250
1902	515	9,881,840					200	
1903	502	11,190,797				10,291,064		
1904	492	10,777,447	999,310				-99.	(- (-
1905	469	12,361,786		1		11,418,779	181,084	1.5
1906	466	12,634,181				11,651,278	4,937,050	
1907	417	13,220,489	1			12,216,323		
1908	400	11,559,114	1	1	1	10,752,100		
1909		14,344,453	1	1		13,305,898		
-	1				1	13,353,200		
1911 1912	1	14,333,011				13,353,200		
1913	-	15,195,874	1	1		14,279,031		
1914		13,318,953				12,538,374		
1915	-	14,791,938	1		1	13,843,046		
1916		17,633,351	1			16,507,845	}	
1917		19,565,420		5,138,822		17,994,158		

STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917-(Continued)

Coke			Cement	INDUSTRIES, I	Sand an		
Quantity Value		Natural Portland		rtland	Quantity	Value	Year
		Quantity	Quantity	Quantity Value			
34	35	36	37	38	39	40	41
Short tons		Barrels	Barrels		Short tons		
13,400	\$ 28,200						1883
13,095	25,639						1884
10,350	27,798						1885
8,103	21,487						1886
9,108	19,594						1887
7,410	21,038	332,055					1888
11,583	29,764	350,000					1889
5,000	11,250	363,117					1890
5,200	11,700	409,877					1891
3,170	7,133	472,876					1892
2,200	4,400	522,972		\$ 540			1893
2,200	4,400	466,267	300	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			1894
2,250	4,500	491,012	750	1,325			1895
2,600	5,200	5+1,326	3,000	5,250			1896
1,549	2,895	510,000	I 5,000	26,250 d			1897
2,325	4,686	630,228	d				1898
b 2,370 c	b 5,565 c	537,094 369,276	53,000	79,500			1899
			240,442	300,552			1900
C	c	469,842 607,820	528,925	581,818	278,626	\$ 148,317	1901
c c	c c	543,132	767,781	977,541 1,914,500	552,493	315,836	1902 1903
	9,933	360,308	1,257,500 1,326,794	1,449,114	1,206,671	689,740	1903
4,439 10,307	27,681	368,645	1,545,500	1,741,150	1,627,403	693,772	1904
268,693	1,205,462	365,843	1,858,403	2,461,494	2,657,559	1,043,041	1906
372,697	1,737,464	284,599	2,036,093	2,632,576	4,550,991	1,367,653	1907
362,182	1,538,952	188,859	3,211,168	2,707,044	6,657,748	I,503,022	1908
1,276,956	5,361,510	c	4,241,392	3,388,667	9,155,229	1,949,497	1909
1,514,504	6,712,550	c	4,459,450	4,119,012	8,586,508	1,730,795	1910
1,610,212	6,390,251	c	4,582,341	3,583,301	8,488,683	1,990,922	1911
1,764,944	8,069,903	c	4,299,357	3,212,819	6,957,901	1,929,822	1912
1,859,553	8,593,581	c	5,083,799	5,109,218	7,992,140	2,070,491	1913
1,425,168	5,858,700	с	5,401,605	5,007,288	7,696,130	1,859,519	1914
1,686,998	7,016,635	c	5,156,869	4,884,026 e	7,708,012	1,984,569	1915
2,320,400	10,619,066	c	3,642,563	3,386,431 e	8,365,225	2,587,437	1916
1,030,706	6,806,930	с	4 6 5 9, 9 9 0	6,090,158 e	9,120,698	3,658,799	1917

b Includes Indiana. c Less than three producers; statistics concealed. d Factory of Chicago Portland Cement Company destroyed by fire, February 3, 1898. e Value of shipments.

STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917-(Continued)

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	STATISTICS OF THE OLDER MINERAL INDUSTRIES, 1883-1917-(Continued)										
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	Neus	Stone	Fluor	spar	Natural gas	Lime		Mineral water			
42 43 43 40 10 10 10 10 Short tonsGallonsIB83Gallons 1884 $4,000$ $20,000$ $1,200 f$ Short tons 1885 $5,000$ $22,000$ $4,000 f$ $1.200 f$ 1886 $5,000$ $22,000$ $4,000 f$ $1.27,500$ $127,500$ 1889 $9,500$ $45,835$ $10,615$ $100,615$ 1889 $9,500$ $12,250$ $8,000$ $12,988$ $173,360$ $24,937$ 1892 $2,240,000$ $10,044$ $78,330$ $6,000$ $14,000$ $118,800$ $8,440$ 1894 $2,266,684$ $7,500$ $14,000$ $14,000$ $228,220$ $228,230$ $228,330$ $17,662$ 1897 $1,27,150$ $18,300$ $5,000$ $228,220$ $228,330$ $17,662$ 1897 $1,49,497$ $2,500$ $18,300$ $5,000$ $228,220$ $228,330$ $17,662$ 1897 $1,49,497$ $2,500$ $18,300$ $5,000$ $228,220$ $228,330$ $17,662$ 1897 $1,29,207$ $2,500$ $18,300$ $5,000$ $2246,575$ $738,300$ $59,670$ 1901 $2,302,703$ c c $2,498$ $127,156$ $419,760$ $23,917$ 1901 $2,302,703$ c c $1,825$ $504,018$ $738,300$ $59,670$ 1903 $3,232,564$ $18,360$ <	IXAR	Value	Quantity	Value	Value	Quantity	Value	Quantity	Value		
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	42	43	44	45	46	47	48	49	50		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			Short tons			Short tons		Gallons			
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	1883		4,000	\$ 20,000							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			4,000								
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			5,000	22,500	\$ 1,200 f						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			5,000	22,000	4,000 f						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			5,000	20,000	6,000 f						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			6,000	30,000							
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			9,500	45,835	10,615						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	-	\$2,208,503	8,250	55,328	6,000						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	-	2,040,000	10,044	78,330	6,000			127,500	\$13.725		
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		3,192,500	12,250		12,988						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		2,321,859	12,400	84,000	14,000				8,440		
1895 $1,694,220$ $4,000$ $24,000$ $7,500$ $164,785$ $164,550$ $29,375$ 1896 $1,276,420$ $4,000$ $32,000$ $6,375$ $145,294$ $49,972$ $10,236$ 1897 $1,497,407$ $2,500$ $18,300$ $5,000$ $228,220$ $228,330$ $17,662$ 1898 $1,434,820$ c c $2,498$ $127,156$ $419,760$ $23,391$ 1899 $2,082,616$ $8,500$ $75,000$ $2,067$ $194,773$ $858,950$ $101,090$ 1900 $1,900,292$ $3,690$ $8,900$ $1,700$ $246,575$ $101,990$ 1901 $2,302,703$ c c $1,825$ $504,018$ $738,300$ $59,670$ 1902 $3,232,564$ $11,413$ $57,620$ $3,310$ $479,801$ $1,118,240$ $149,978$ 1904 $3,199,267$ $17,205$ $122,172$ $4,745$ $108,881$ $461,088$ $392,800$ $38,096$ 1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909		2,566,684	7,500	47,500	15,000		\$387,973	196,454			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		1,694,220	4,000	24,000	7,500		164,785		29,375		
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1806	1,276,420	4,000	32,000	6,375		145,294		10,236		
18981,434,820 c c 2,498127,156419,76023,39118992,082,6168,50075,0002,067194,773858,950101,09019001,900,2923,6908,9001,700246,575194,773858,950101,09019012,302,703 c c 1,825504,018738,30059,67019023,254,80818,360121,5321,844485,644508,01629,64019033,232,56411,41357,6203,310479,8011,118,240149,97819043,199,26717,205122,1724,745108,881461,088392,80038,09619053,541,00533,275220,2067,22398,907421,589425,75647,99519062,961,45628,268160,62387,211121,546534,118574,45377,28719073,789,34225,128141,971143,577124,784559,305720,40691,76019083,134,77031,727172,838446,07792,549393,951685,76358,90419094,261,81841,852232,251644,401104,260454,682639,46049,10819103,853,42547,302277,764613,642113,239503,5811,117,62083,14819113,467,95068,817481,635687,72692,169423,7621,304,95082,330 </td <td></td> <td>1,497,407</td> <td></td> <td>18,300</td> <td>5,000</td> <td></td> <td>228,220</td> <td></td> <td></td>		1,497,407		18,300	5,000		228,220				
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			1		2,498		127,156				
1900 $1,900,292$ $3,690$ $8,900$ $1,700$ $246,575$ 101 1901 $2,302,703$ c c $1,825$ $504,018$ $738,300$ $59,670$ 1902 $3,254,808$ $18,360$ $121,532$ $1,844$ $485,644$ $508,016$ $29,640$ 1903 $3,232,564$ $11,413$ $57,620$ $3,310$ $479,801$ $1,118,240$ $149,978$ 1904 $3,199,267$ $17,205$ $122,172$ $4,7455$ $108,881$ $461,088$ $392,800$ $38,096$ 1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,01$		2,082,616	8,500	75,000	2,067		194,773		101,090		
19012,302,703 c c 1,825504,018738,30059,67019023,254,80818,360121,5321,844485,644508,01629,64019033,232,56411,41357,6203,310479,8011,118,240149,97819043,199,26717,205122,1724,745108,881461,088392,80038,09619053,541,00533,275220,2067,22398,907421,589425,75647,99519062,961,45628,268160,623 $87,211$ 121,546534,118574,45377,28719073,789,34225,128141,971143,577124,784559,305720,40691,76019083,134,77031,727172,838446,07792,549393,951685,76358,90419094,261,81841,852222,251644,401104,260454,682639,46049,10819103,853,42547,302277,764613,642113,239503,5811,117,62083,14819113,467,95068,817481,635687,72692,169423,7621,304,95082,33019123,841,504114,410756,653616,46798,450394,8921,143,62574,44519134,140,95385,854550,815574,01595,977433,3311,216,44268,54919142,934,07873,811426,063437,275 <t< td=""><td></td><td>1,900,292</td><td>3,690</td><td>8,900</td><td>1,700</td><td></td><td>246,575</td><td></td><td></td></t<>		1,900,292	3,690	8,900	1,700		246,575				
1902 $3,254,808$ $18,360$ $121,532$ $1,844$ $485,644$ $508,016$ $29,640$ 1903 $3,232,564$ $11,413$ $57,620$ $3,310$ $479,801$ $1,118,240$ $149,978$ 1904 $3,199,267$ $17,205$ $122,172$ $4,745$ $108,881$ $461,088$ $392,800$ $38,096$ 1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 191		2,302,703	c	c	1,825		504,018	738,300	59,670		
1903 $3,232,564$ $11,413$ $57,620$ $3,310$ $479,801$ $1,118,240$ $149,978$ 1904 $3,199,267$ $17,205$ $122,172$ $4,745$ $108,881$ $461,088$ $392,800$ $38,096$ 1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,4455$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$		3,254,808	18,360	121,532	1,844		485,644		29,640		
1904 $3,199,267$ $17,205$ $122,172$ $4,745$ $108,881$ $461,088$ $392,800$ $38,096$ 1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,4455$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$	-		11,413		3,310		479,801	1,118,240	149,978		
1905 $3,541,005$ $33,275$ $220,206$ $7,223$ $98,907$ $421,589$ $425,756$ $47,995$ 1906 $2,961,456$ $28,268$ $160,623$ $87,211$ $121,546$ $534,118$ $574,453$ $77,287$ 1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$ $75,290$, -	3,199,267	17,205	122,172	4,745		461,088	392,800	38,096		
1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $222,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$ $75,290$		3,541,005	33,275	220,206	7,223	98,907	421,589	425,756	47,995		
1907 $3,789,342$ $25,128$ $141,971$ $143,577$ $124,784$ $559,305$ $720,406$ $91,760$ 1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $232,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$ $75,290$	1906	2,961,456	28,268	160,623	87,211	121,546	534,118	574,453	77,287		
1908 $3,134,770$ $31,727$ $172,838$ $446,077$ $92,549$ $393,951$ $685,763$ $58,904$ 1909 $4,261,818$ $41,852$ $212,251$ $644,401$ $104,260$ $454,682$ $639,460$ $49,108$ 1910 $3,853,425$ $47,302$ $277,764$ $613,642$ $113,239$ $503,581$ $1,117,620$ $83,1148$ 1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$ $75,290$	-	3,789,342	25,128	141,971	143,577	124,784	559,305		91,760		
1910.3,853,42547,302277,764613,642113,239503,5811,117,620 $8_{3,148}$ 1911.3,467,95068,817481,635687,72692,169423,7621,304,95082,3301912.3,841,504114,410756,653616,46798,450394,8921,143,62574,4451913.4,140,95385,854550,815574,01595,977433,3311,216,44268,5491914.2,934,07873,811426,063437,27587,603383,9891,760,03081,3071915.2,907,410cc350,37188,604352,9541,559,48975,290		3,134,770	31,727	172,838	446,077	92,549	393,951	685,763	58,904		
1911 $3,467,950$ $68,817$ $481,635$ $687,726$ $92,169$ $423,762$ $1,304,950$ $82,330$ 1912 $3,841,504$ $114,410$ $756,653$ $616,467$ $98,450$ $394,892$ $1,143,625$ $74,445$ 1913 $4,140,953$ $85,854$ $550,815$ $574,015$ $95,977$ $433,331$ $1,216,442$ $68,549$ 1914 $2,934,078$ $73,811$ $426,063$ $437,275$ $87,603$ $383,989$ $1,760,030$ $81,307$ 1915 $2,907,410$ c c $350,371$ $88,604$ $352,954$ $1,559,489$ $75,290$	1909	4,261,818	41,852	232,251	644,401	104,260	454,682	639,460	49,108		
19123,841,504114,410756,653616,46798,450394,8921,143,62574,44519134,140,95385,854550,815574,01595,977433,3311,216,44268,54919142,934,07873,811426,063437,27587,603383,9891,760,03081,30719152,907,410 c c 350,37188,604352,9541,559,48975,290	1910	3,8 53,42 5	47,302	277,764	613,642	113,239	503,581	1,117,620	83,148		
19123,841,504114,410756,653616,46798,450394,8921,143,62574,44519134,140,95385,854550,815574,01595,977433,3311,216,44268,54919142,934,07873,811426,063437,27587,603383,9891,760,03081,30719152,907,410 c c 350,37188,604352,9541,559,48975,290	1911	3,467,950	68,817	481,635	687,726	92,169	423,762	1,304,950	82,330		
19134,140,95385,854550,815574,01595,977433,3311,216,44268,54919142,934,07873,811426,063437,27587,603383,9891,760,03081,30719152,907,410cc350,37188,604352,9541,559,48975,290	1912	3,841,504	114,410	756,653	616,467	98,450	394,892	1,143,625	74,445		
19142,934,07873,811426,063437,27587,603383,9891,760,03081,30719152,907,410cc350,37188,604352,9541,559,48975,290	1913	4,140,953	85,854	5 50,8 1 5	574,015	95,977	433,331	1,216,442	68,549		
			73,811	426,063	437,275		383,989		81,307		
1916 3,403,094 c c 396,357 80,012 369,038 1,777.711 04.056	1915	2,907,410	c	C	350,371	88,604	352,954	1,559,489	75,290		
	1916	3,403,094	c	c	396,357	80,012	369,038	1,777,741	94,056		
	1917	3,322,041	156,676	1,373,333	479,072	83,409	412,184	1,370,461	66,042		

c Less than three producers, statistics concealed. f In terms of value of coal displaced.

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