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FARMERS' ALLIANCE HISTORY

AND

AGRICULTURAL DIGEST.

Marion

WRITTEN BY A BOARD OF EDITORS.

EDITOR-IN-CHIEF.

N. A. DUNNING,

AUTHOR OF "THE PHILOSOPHY OF PRICE," AND "THE HISTORY OF THE UNITED STATES DOLLAR"; AND ASSOCIATE EDITOR OF "THE NATIONAL ECONOMIST," THE NATIONAL ORGAN OF THE FARMERS' ALLIANCE.

"In the great household of Nature, the farmer stands at the door of the bread-room, and weighs to each his loaf."- Emerson.

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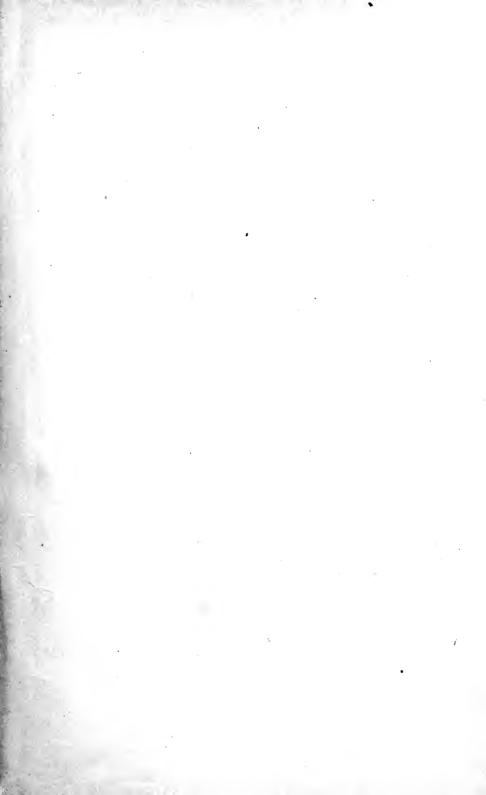
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THE FIRST ALLIANCE BANNER.

PREFACE.

THE organization known as the Farmers' Alliance has assumed such vast proportions, and attracted such widespread attention, that a detailed, authentic history of its origin, growth, aims, and purposes, has become a necessity. At the urgent solicitation of many of the brethren, and moved by a desire to serve the best interests of the order, I have undertaken the task of placing before the public, and within reach of all, a work of this character.

In doing so, I have enjoyed exceptional facilities for obtaining correct information and original documents and records, and have also had the hearty co-operation and aid of many of the best members of the order. The number and value of the contributions from this source, found in this book, will bear testimony to these statements. I have thus been enabled to drink at the fountain-head of all Alliance information, regarding its conception, advancement, and its present status. All this I have tried to present faithfully and truthfully, for the consideration of my readers.

The history which I have given proves the saying that "Truth is stranger than fiction," and that the hand of Providence can be seen in the shaping of the conditions of men.

This book is written to make men and women better; to teach them their duties as citizens; to inculcate brotherly love and neighborly kindness; to propagate truth and discard wrong; to increase the power of education, and thereby decrease the disasters of ignorance; to clearly show that the doctrine and

teachings of the Alliance are in perfect harmony with such sentiments. I have had no foes to punish, or friends to unduly reward, but have given every one a fair hearing, and endeavored to be just to all.

Believing that my position enabled me to perform the task as well if not better than many others, I have conscientiously tried to discharge my full duty, firmly believing that my brethren in the order, and my friends outside the order, would in the end appreciate my efforts. Realizing the difficulties which wait upon authorship, yet having an abiding faith in the ultimate triumph of truth, I consign this book to the care and consideration of my brethren and friends.

Articles not written by me bear the names of their authors.

N. A. DUNNING.

Washington, D.C., May 1, 1891.

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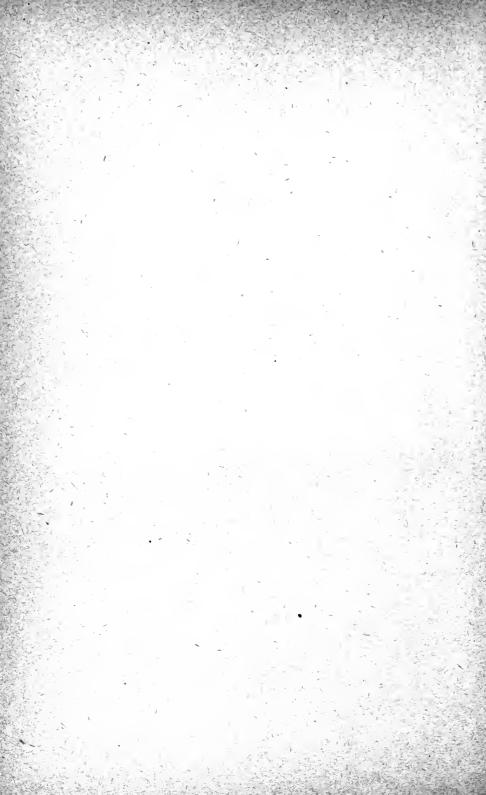
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DIVISION I.

AGRICULTURAL ORGANIZATIONS.

CHAPTER I.

INTRODUCTORY HISTORY.

RECENT investigations among the tombs and monuments of antiquity disclose the fact that, as far back as 700 B.C., tradesunions existed in great numbers. History also reveals the fact that these trades-unions have continued to exist until the present time. Their methods, purposes, and results have differed, and their seasons of prosperity and adversity have alternated; yet, in some manner and in some form, the ideas of trades-unionism have been preserved. Not so with organizations relating to agriculture. C. Osborne Ward, in his researches touching this subject, has found indisputable evidence that agricultural organizations existed in great numbers at this time, and actually confederated with the trades-unions in matters of mutual benefit. The number of inscriptions found on the old tombs and tablets confirms the idea that these organizations among farmers were not only numerous but important. Of course nothing of detail can be found, but the fact of their existence at this early period, and their subsequent extinction, is an indication that the ancients were, after all, far in advance of the recent past in some respects. It is a fact worthy of notice that, from the beginning of the Christian era to the present century, no trace of agricultural organizations can be found.

After the fall of Rome, and during the Dark Ages, nothing is known of special interest concerning agriculture, save what has been handed down through the records of the Church, and

2 AGRICULTURAL ORGANIZATIONS.

these contain no mention of such organizations. The feudal system seemed to mean a social organization based upon the owner-It was in reality a condition in which public relaship of land. tions were dependent upon private relations, and political rights upon landed rights, and the land was concentrated in the hands of a few persons. While this situation admitted of little or no chance of organization among those who tilled the soil, it is quite clear from the old records that at certain times, and in many countries, their protests have been heeded and their demands granted. These movements, however, were in no sense political. So far as agriculture is concerned, the conditions have always been unfavorable to combinations or organizations, for any purpose whatever, among farmers in Europe. The system of government, social relations, and tenure of land, have conspired to keep the farmer out of politics, and relegated him to the task of feeding and clothing those who did make the laws, and, as a rule, compelled him to bear the burden of taxation as well.

Just in proportion as the people have been granted political rights and privilege's, the agricultural portion of the community has made its influence felt in public affairs. It is a conspicuous fact, acknowledged by all, that agriculturists have uniformly manifested good judgment and a spirit of conservatism, in all their political efforts. In nearly every European country reforms have been demanded, at various times, by the rural population. Such demands have often been followed by bitter contentions, because they were usually of a special or class character, requiring the redress of special grievances, or the granting of special privileges. For centuries before the discovery of America, an undercurrent of unrest is traceable among the rural population, and, as the enlightenment which waited upon the progress of civilization became more and more diffused, this discontent increased. There is no doubt that the hard times which had fallen to the agriculturists of Europe hastened the settlement of the New World. Political and religious freedom seemed to be the object of nearly all immigration to this continent. Agriculture being the basis upon which this structure of human liberty was to be built, the founders of the nation, as well as the Pilgrim Fathers before them, granted to the farmers equal

rights with all other citizens. These rights have been recognized since the first settlement in America, and were plainly and solemnly consented to by the compact entered into on board the *Mayflower*. These rights should be maintained inviolable, because, when once invaded, that portion of American citizenship is made to serve and not to share.

It is nevertheless true, as has been charged, that a certain amount of aristocratic ideas found their way to the shores of the New World, and became a factor in its first settlement. This element has been permitted to thrive to a greater or less extent, and remains with us at the present time. As a rule, however, it has been confined to the Atlantic seaboard, where it first located, and has not as yet extended very far into the interior. It is rarely seen, in its full un-American sense, except in large cities, where business relations are in constant touch with the East. One of the relics of aristocracy that has been handed down to us is the United States Senate, a branch of our government whose uselessness is only equalled by its aristocratic In connection with this old-time, blue-blooded aristocracy, and supplemental to it, has sprung into existence, in almost every part of our country, another species of aristocracy, which follows the acquirement of large fortunes. It has come to be an accepted idea, that the accumulation of money will, in some manner, divorce its possessors from the taint of plebeian birth, obscure beginnings, or former social relations, and at once change the inner as well as the outer individual.

Aristocratic ideas, backed up by intelligence and refinement, may serve a good purpose in toning down the untamed spirit, and broadening the nature of a native American; but when this station in society is reached through the medium of a bank account, human nature revolts, and the average person becomes disgusted. This spirit of avarice, or desire to make money, has become the bane of our social relations, and threatens the perpetuity of the government itself. The desire for wealth is increased as the power and privileges which it brings become more clearly understood. When the brains of a Webster or a Calhoun must wait unnoticed in the anteroom, while the plethoric pocket-book of some conscienceless speculator, monopolist, or trickster, brings to its owner the privileges of the parlor,

and the softest seat at the feast, intelligence and moral rectitude will always be at a discount, while fraud and corruption will bring a premium. In order that such conditions may exist, some portions of the people must suffer. This becomes a self-evident truth to all who will give the matter even the least consideration. The possession of wealth may be assumed, as a rule, to bring about the differences that are seen in society, and, because of this, becomes the essential object for which a large portion of our people are contending.

It is evident that all cannot be rich, and it is also true that none should be poor because of economic conditions. economists agree that labor is the sole producer of wealth. If this proposition be true, it might be proper to ask: Why does not the producer of this wealth possess it, after production? What intervening cause steps in between the producer and this wealth, and prevents his owning and enjoying what his brain and brawn have created? No one seems to question the right or justice of each individual enjoying the fruits of his own labor. But the recognition of this right does not prevent the separation of production and possession, nor does it indicate a remedy for the evil. The idea of labor in production, at the present time, is associated with only a portion of our people. It represents, under the prevailing ideas of society, an undesirable condition, from which all, or nearly all, seek to be freed. The man or woman does not live who desires to labor every day in every year of their whole sojourn upon earth. Such a desire would be unnatural, a sin against the future, and a libel upon the past. Nine-tenths of the labor performed at the present time is done with the belief that this hard labor will bring about future ease and comfort. But when these efforts are honestly and earnestly continued for a series of years, and the anticipated reward does not come, and the plain fact is demonstrated that labor brings no reward, some give up in despair, while others determine to ascertain the cause, if possible.

It was to satisfy the American farmer that his calling had either become obsolete, or his environment unnatural, that agricultural organizations, for political or economic purposes, were brought into existence. Up to 1860 the economic privileges of the farmer were somewhat near a parity with other

branches of productive industry. The systematic spoliation of the present was, to a large extent, practically unknown. Special laws and privileges, which operated directly against the national interests of agriculture, existed only in a mild degree. At that period immense fortunes were almost unknown, and aristocracy was confined to the better educated and more refined. Neither poverty nor crime existed in the same proportion as now, and the general trend of events was toward conservatism in all economic conditions. Moderate fortunes, moderate sized farms, and moderate business enterprises, were not only the rule of the times, but were maintained under the protecting care of society's consent. Of course there were exceptions, but not in the offensive and disturbing sense in which they now exist. All must admit that the parasitic age had not begun at this date, and that labor in production paid less tribute than at the present time. Emerson says: "The glory of the farmer is that, in the division of labors, it is his part to create. All trade rests at last on his primitive activity. He stands close to Nature; he obtains from the earth the bread and the meat. The food which was not he causes to be." It is because of the truth contained in this statement that the farmer complains. It is because he simply creates for others, with but a feeble voice, if any, in determining the measure of his remuneration, that he has at last been compelled to enter an earnest protest. Willing as he is to create, and anxious to serve all other classes with the fruits of his industry and skill, yet the farmer has learned, by sad experience, that his toil has gone unrequited, and his anxiety has been construed into servility. The American farmer, in his present condition, is a living example of the folly and disaster which inevitably follow, where one class of citizens permits another class to formulate and administer all In other words, he is the victim of miseconomic legislation. placed confidence, and has at last undertaken to regain his lost advantages and rights. The late Civil War gave an impetus to all productive labor. All efforts in that direction were profitable for a time, and the business of agriculture was looked upon with much favor. Vast sums of money were expended in the purchase and improvement of farming lands, and the success of that branch of industry seemed assured. The war ended in the

spring of 1865, and that year closed amid universal prosperity in the North, East, and West. The people were out of debt, all labor was employed, and all the conditions which wait upon a prosperous and industrious people were seen on every hand.

The people of the South had begun the task of repairing the ravages of war and rebuilding their shattered fortunes with a determination which admitted of no failure, and the whole country echoed with the busy hum of industry. During the year which followed, these conditions continued, but in the latter part of 1867 a change was observed. It had been brought about quietly. No one seemed to know how, but the effects were none the less positive. Agriculture was the first to feel this changed condition, and undertook to counteract it by a closer economy and increased production. The first compelled the manufacturer to curtail his production or lessen its value. Either course reduced the remuneration of the laborer, and compelled him to purchase less or buy cheaper. This reacted upon the farmer. The second overstocked the market, and reduced the price of the whole product, and enabled those who could to dictate their own terms. This condition has obtained among the farmers to the present time. In the vain endeavor to extricate themselves from their surroundings, having faith in the prospect of better times, the farmers borrowed money on note or mortgage to tide them over, only to find that the future brought no relief. This dark cloud of debt and disappointment hung lower and lower each succeeding year, until the storm of 1873 swept over the country, leaving in its course the wrecks of many thousand financial disasters.

In 1867 the first agricultural organization of promise appeared in the Grange, or Patrons of Husbandry. This organization sought to better the condition of the farmer by eliminating the so-called middleman,—the merchant or dealer. It assumed that the profit, which lodged somewhere between the producer and consumer, was the cause of nearly all the disaster that waited upon agricultural effort. This idea took hold of the people, and the result was an immense organization, with every promise of success. The experiment, aside from its educational results, was almost an entire failure.

Since this time the causes which have depressed agriculture

have been discovered, throughout the length and breadth of the land, by those who were interested, those who sympathized, to be the politician and the demagogue; but the discovery produced little or no effect. It remained for the farmer himself, after several ineffectual attempts, to solve the problem, and in so doing challenge the respect and admiration of the thinking world. The solution of this question, and the demand for its enactment into law, have no parallel in all history. It is an uprising of the conservative element of the people, the brain and brawn of the nation. It is a protest against present conditions; a protest against the unequal distribution of the profits arising from labor in production; a protest against those economic methods which give to labor a bare living, and make capital the beneficiary of all life's pleasures and comforts. a protest against continual toil on the one hand, and continual ease and comfort on the other. It is a protest against forced economy, debt, and privation to the producer, and peace, plenty, happiness, and prosperity to the non-producer.

The farmers have learned the secret, that organization, unity of action, and continuity of purpose, on their part, will in the end unite all sections, enrich all communities, and make every citizen equal before just laws. Intelligence to organize, fellow-feeling enough to unite, and manhood sufficient to stand firm, are the necessary requirements to bring this about. Organization is now the order of the day. It is the motive power that rules and guides the world. Without it the best of causes will not succeed, while with it the worse cause may prosper for a time. In the great struggle of life, as society is now constituted, organized evil must be met with organized good; organized greed with organized equity. In the combination of kindred forces lie the astonishing results of modern undertakings.

Individual enterprises are at a discount in the commercial world for many reasons. The individual may die and the whole business pass necessarily into the hands of those less competent to direct; or the individual may make a false move and thereby jeopardize the entire venture through an error in his single judgment; or, again, he may fall under the influence of bad habits and wreck the business through neglect or fast living. All these contingencies are impossible with an organi-

zation properly constituted. Members of the organization may die, but the organization continues. The aggregate business intelligence of the whole membership is used, and not the single ideas of one. Organizations go on, live on; gathering experience which is stored up; gathering special information which is safely put away; increasing in wealth of which the outside world has no knowledge; using their power when least expected, and for objects that require years of patient waiting and calculation to perfect and mature. These considerations not only recommend a system of organization to all progressive minds, but make them absolutely necessary for success in modern business. One thing is certain, - organization as a factor of our modern civilization has come to stay. It cannot be eliminated, but may be, to a greater or less extent, confined in its operation within legitimate bounds. Its benefits will be sought under all conditions and by all classes of people, and those who ignore its power or underestimate its strength are sure to have cause for regret in the end.

The difficulty of organization among farmers is not wholly confined to a want of information, but shows itself in neighborhood factions of numerous kinds, individual or local jealousies, family or political differences, and a multitude of other insignificant but annoying obstructions that have to be avoided, smoothed over, or settled. These are never met with among men who organize from a business standpoint. The farmers, as a class, have been betrayed in almost everything, with a regularity truly astonishing. They have struggled against all odds, and have submitted to the result with a fortitude absolutely wonderful, but the time has come when something must be done. Some united action is demanded in defence of their own rights, and the maintenance of agriculture. This fact is too plain and too imperative to be longer ignored. It is a question now between liberty and serfdom, and must be decided without delay. Some will ask: What shall we organize for? For the same reasons that our enemies do; for individual benefits through combined effort. Organize to watch them, to consider their motives, and, if possible, checkmate their designs, when aimed at you or your business. This is a selfish world, and they who fail to realize this fact are quite sure to find it out

when too late. Organize for better laws; for through legislation comes prosperity or adversity.

During the past quarter of a century, the farmers of this country have labored, and others have made the laws. What has been the result? The non-producer has thrived while the producer has grown poor. Not only have the non-producers organized against the farmers, but almost all other producers. There is hardly a manufactured product, or even a raw material, that is not subject to the guidance of an organization or combination of the whole, excepting the products of the farm. This means the spoliation of all who cannot meet this force with similar power. That being true, the farmer becomes the easy prey of all, and receives the treatment his own neglect brings upon him. All non-producers are the avowed enemies of producers, and should be so considered in all propositions of economics. When they organize, it is for the purpose of increasing their strength, which in turn makes them a correspondingly more dangerous enemy, and increases the necessity of stronger defence. In the vast amount of national legislation of the past twenty-five years, there is not one single act which was passed in the interest of the farmer. Search through the whole mass, and not one will be found that was introduced, passed, and put upon the statute books, for the sole benefit of agriculture. Until this is changed, and labor in production is made to bring a reward, industry is useless and economy is folly.

Because of these facts and conditions, some action on the part of the farmers toward legislative reform became necessary. The National Farmers' Congress, which was organized in 1875, seems to have been the first to formulate ideas in conformity with such a proposition. At each annual session, the necessity for some change in agricultural legislation became more and more apparent. This congress, which may be considered the pioneer, gave way to the Farmers' Alliance, of which we shall now undertake to give a history.

CHAPTER II.

UNRECORDED HISTORY OF THE ALLIANCE.

The origin of the Farmers' Alliance is not so clearly defined as to leave no room for conjecture. Nearly every other reform movement can date back to some particular time when the first efforts were made that resulted in forming the organization. The Knights of Labor, the Grange, the Farmers' Mutual Benefit Association, the Wheel, the Farmers' Union, all have the satisfaction of giving the details of their initial meeting. Not so with the Alliance. Until recently, it has been an accepted theory that it started in the States of New York and Texas at about the same time, in 1874 or 1875. It was believed that the Alliance, originating in New York, found its way to the west, and that it is now represented by what is designated as the Northwestern Alliance; while the one which originated in Texas was taken east and north, and is now known as the National Farmers' Alliance and Industrial Union.

This coincidence of origin has always appeared unnatural, and considerable speculation has been indulged in the attempt to clear up the seeming mystery. But nothing tangible has been reached until recently. Whether this is a true solution or not remains to be more clearly proven. It seems quite plausible at least, and the reader can take it for what it is worth. Mr. G. Campbell, of Kansas, claims that the Alliance originated in that State, and makes the following statement to substantiate its correctness:—

"It will be remembered that, early in the sixties, Congress granted the M., K. & T. and the L., L. & G. railway companies a tract of land in and through the State of Kansas, to aid in the construction of their roads. At the time this grant was made, there was a tract of land lying in the southeastern part of the State, known as the Osage ceded lands, which was reserved from the operation of the grant, inasmuch as it was not a part of the public lands of the State. When the roads were built, however, these lands had been treated for and were a part of the public domain, and were patented to the respective railway companies.

"The settlers in the meantime settled upon these lands in '64, '68, '69, and 70, in good faith, thinking that they were government lands, and were so informed by the Interior Department at Washington, D.C. Many of the settlers made valuable improvements on what proved to be lands covered by the patents from the government to the railway companies, either as lands included in the original grant, or indemnity lands, and the railway companies required the settlers to pay the value of their own improvements, besides a high price for the lands. This the settlers refused to do, and prepared to resist the railway companies in the courts, and with physical force if need be. The legal point involved, briefly stated, was this: The railway companies claimed that their grants took effect when their roads were built in and through the State of Kansas,' and that when these roads were constructed, the Osage ceded lands were a part of the public lands of the State, and subject to their grants. The settlers, on the other hand, claimed that these lands were open to pre-emption settlement, by the proclamation of the President of the United States; that in pursuance of such proclamation they had entered upon these lands as innocent parties in good faith, and had erected lasting and valuable improvements thereon, and that the grants of land to the railway companies did not extend beyond the limits of what was the public lands of the State of Kansas at the time the grants were made by act of Congress. This is the case briefly stated: The settlers organized openly at first to resist the encroachments of the railway companies upon their rights; but the companies were posted as to all the settlers' movements and defeated them. The closed organization was then adopted, early in '72, which was called 'The Settlers' Protective Association,' but which was generally known as the Settlers' League, or Alliance. They took upon themselves political action; they instructed and pledged their congressmen, and through the members of the Legislature their senators. The result was that an' act was passed by Congress, early in the seventies, known as the 'Enabling Act,' which authorized the settlers to bring an action in the name of the United States to set aside the patents issued by the government to these railway corporations, so far as they related to the Osage ceded lands, and the United States District Attorney was instructed, in company with the settlers' attorneys, to prepare the case for the United States court.

"About this time, George R. Peck, who was a railway lawyer, was appointed United States District Attorney, which greatly incensed the settlers, and under the pretence of consulting the Hon. George R. Peck, the 'Grand Council' got him to come to Parsons, and the settlers 'pledged him.' I shall not say how it was done; he can tell if he desires; but I will say that he was true to his pledges, and to the interests of the settlers, and is entitled to a greater reward than that he has received at their hands. I sent our plan of organization to New York, my native State, where they attempted to organize, but with little success, as they were soon swallowed up by the Grange; but they preserved their identity, and after the Grange movement had subsided it began a growth as a trade organization. The agent who transacted the Alliance business in New York State, I believe, bore the name of Johnson,

and resided in New York City. Several families who were members of this league, or alliance, went from this section during our controversy, and settled in Texas, and a man by the name of Tanner, who lived west of this city, is said to have organized the first Alliance in Texas, as a trade organization, which was one of the features of this movement; and hence we hear it said that the Alliance originated in Texas and New York at the same time, while the facts remain that it originated in Kansas.

"This Alliance never did take up the questions of money, transportation, and land, and confined itself to purchasing its supplies at wholesale, and was an open organization, both north and south, consisting of discontented local alliances which sprang into existence in different parts of the country, east, west, north, and south; but there was no central organization; in other words, it was without a head, and that is the case yet in some localities.

"In the spring of 1875 we got our decision from the Supreme Court of the United States, setting aside the patents granted to the railway companies to the Osage ceded lands, and opening them to pre-emption settlement. Many of us were very poor at this time, having spent what little we brought with us in the fight for these lands, and the price of all property was greatly depressed in consequence of the panic of '73, brought on by the contraction of the currency. As a sample of the prices prevailing for property at that time, I remember of husking my corn and hauling it sixteen miles to Parsons with my team of oxen, and then could not sell it for ten cents per bushel in cash, and had to get it stored until such time as it would sell, or haul it back. I preferred the former. In this dilemma we began to say that the government ought to give us this land, or make some arrangements by which it would loan us money to pre-empt with. Finally the government came to our aid, and allowed us to pay \$50 on the quarter section, and gave us one, two, and three years on the deferred payments, by paying \$50 a year and 5 per cent interest. This was virtually a loan of \$150 on each quarter section at 5 per cent interest, and this was the first 5 per cent money the people of Kansas ever borrowed, and this is the first instance that I now call to mind where the government has ever loaned its money to the people. But it demonstrated the practicability of such a system, and in 1876 I issued a circular, and set forth the system that New York had adopted in loaning its school fund to the farmers, upon real estate security, and demonstrated the practicability of such a system for the United States.

"I selected one post-office in each county of the United States, and sent a few of these circulars, to be handed out by the postmaster, and I had the satisfaction of seeing farmers' clubs springing up in all parts of the country. This circular is the first, so far as I am informed, ever written and circulated since the Constitution of the United States was adopted, advocating government loans to the people, upon real estate security."

This statement bears the marks of candor and directness, that will no doubt convince many of its truthfulness. Be that as it may, it discloses an attempt to correct economic evils in that

State, at an early date. The movement thus inaugurated continued to increase in strength, and finally culminated in the campaign of 1890. There is not a single one of the many great States organized into this grand agricultural demand for "Equal rights to all and special privileges to none," that would take from Kansas an iota of the credit she may justly claim. If this Alliance Movement originated in Kansas, well and good; she has proved herself worthy of that honor.

The history of the movement in New York has been given in another chapter, and will doubtless be read with interest in connection with the above. It is to the Alliance in Texas that the attention of the reader is invited. To the brethren in Texas belongs the credit and everlasting honor of placing the Farmers' Alliance before the country and the world. To them the toilers of the earth can bow in gratitude, for originating, through distress, organizing under great difficulties, and perfecting with consummate wisdom, the most powerful reform organization that has ever been known in the history of the race. All hail to the grand State of Texas, the mother and protector of the Alliance!

The wave of civilization and development swept the world, from east to west; and when it reached the western border, it was reflected back as a great reform movement. It is the reflex wave of a higher civilization which promises to improve all existing countries, as the present civilization improved upon barbarism; the difference being that the march of civilization apprised the world of the use of power, and this great reform movement is to teach the world the power of justice.

The credit due to those who participated in the first struggles of the Farmers' Alliance is not as great as the present size and importance of the order would indicate. It was started as a local organization, for local purposes, and has developed by the work it has been called upon to perform. The earliest conception of its object seems to have been to organize landowners to resist the efforts of land-sharks, who set up fraudulent titles to their lands, and brought suit to either dispossess the owner or secure from him a payment for a compromise. A great amount of land litigation of this kind was rife in Texas, on account of grants claimed to have been issued by the Mexican government, prior to the independence of Texas.

The next purpose of this order seems to have been to organize cattle and horse rescuers, so as to enable them to detect and catch thieves, and to find estrays. At that time one of the declarations of purposes was, "To assist the civil officers in maintaining law and order." This was very important to the whole people of Texas. At that time gangs of horse-thieves were stealing horses and running them through the country. It was necessary that the sheriff should know whom to trust. The Alliance had in its secret work a formula for catching a horse-thief. It is not now in use. Sheriffs knew that Alliance men could be depended upon to help them. If a horse-thief stopped for the night with an Alliance man, he always entertained him, and if the sheriff was on his track, he did not have to confer with the Alliance man to secure his co-operation. They had signals and hailing signs for that purpose.

For the purpose of finding estrayed cattle, the State Alliance of Texas adopted a brand which all members placed on the necks of their cattle, in addition to their regular brand. If a stray came into a neighborhood, with the Alliance brand upon it, it would be reported at the next meeting of the Alliance, and the secretary would send a list of such strays to the State Secretary, who, by referring to his record of brands, was enabled to notify the owners where to go to get their cattle.

As the Alliance spread into districts more devoted to farming, its members were not so much exercised about their lands or their stock, but felt most oppressed by the excessive prices which they were compelled to pay for the commodities they bought, and the low prices they received for the produce they had for sale. The great discrepancy between the markets of the world and their home markets led them to believe that organization and co-operation on their part would enable them to buy cheaper and sell dearer. The universal establishment of the credit system had abolished all competition in merchandizing, and had given the merchant who possessed the necessary means, or the credit, a practical monopoly in both buying and selling. Like all other monopolists, such merchants found themselves constantly deciding, on the one hand, between their greed and avarice, and, on the other, how much oppression the people would bear. This naturally

but surely developed conditions destructive to the perpetuation of such a system.

The conditions under which the people were living were so unequal and distressing that the idea of relief from some source became the general theme of conversation. It was discovered at all times and under nearly all circumstances, and resulted in an effort to bring about the reforms that were unmistakably needed. The Alliance of Texas originated in Lampasas County, about fifteen miles north of the present village of Lampasas. The date of the first organization is given as some time in 1874 or 1875. There is considerable vagueness about the date of its formation, which doubtless is unknown at the present It was probably the result, as an old member states, of an attempt to formulate a plan for purchasing supplies, that was made directly after the panic of 1873. This attempt led to a partial organization of a sort of farmers' club, which enabled those early settlers to consult together in matters of mutual interest.

The financial disasters of that period drove many northern people to the West and South, and quite a number settled in this portion of Texas. The feeling engendered by the war had not fully died out, and there was a certain restraint between the newcomers from the North and the old settlers, which was quite plainly seen at certain times. Soon, however, a common danger threatened all alike. What is known as the land-shark made his appearance, and with him came litigation over land-Expensive law-suits followed, which the impoverished settler could not stand. Settlements were made with one set of these people, only to be repeated by others of similar character, until forbearance ceased to be a virtue, and a determination to unite upon some plan of defence began to obtain among them. Nothing was more natural than recourse to those trade clubs, which had fallen into disuse to a large extent. After discussing the situation thoroughly, it was decided to use peaceful means, if possible, but to defend their homes at all hazards. Here were men from the North and South banding together for mutual protection, under the name Land League, which soon took the more proper designation of Farmers' Alliance. The old members of these organizations point with pride to the fact

that this was the first formal burial of the "bloody shirt," and the first acknowledged alliance between the sections. The land-sharks were told in plain terms that further difficulties would be settled with Winchesters and revolvers. These organizations soon made use of the safeguard of secrecy, and formulated certain signs, grips, and passwords. These were improved upon as time passed, until a ritual with three degrees was adopted, together with a declaration of principles, constitutions, and by-laws.

The question of land-titles was not the only one that confronted these pioneers. Cattle and horse thieves infested the country and committed depredations continually, to the great loss and annoyance of the people. A united action against these outlaws was instituted through these organizations, and pushed with vigor. One of the degrees of the Alliance, at that time, consisted of a minute description of the methods of capturing a horse-thief. It described the duties of the officer in pursuit, and the farmer at whose house the thief might be stopping; just what the wife must do, how she must hold the candle so as to guide the officer to the room of the thief, and at the same time shield him from view; the signals that could be given at certain times, and the firing of a gun or revolver, or blowing a horn at others, in order to caution and give information. Many a horse and cattle thief has known to his sorrow how completely and successfully the lesson of this degree has been acted upon.

Of course it required some time to perfect the organization, crude as it was. The first three clubs, as they were called, were organized in Lampasas County; the fourth club was organized in Hamilton County, joining Lampasas on the north, at some point on Partridge Creek. This club took the name of Partridge Creek Alliance, and is believed by many to have been the first to adopt that name. It must be remembered that it was purely an organization of farmers, and they being few in numbers, and much scattered, its growth was necessarily slow. Its effects were felt at once by the lawless, adventurous portion of the community, being the first moral and material support that the officers of the law could depend upon in that border county.

Captain L. S. Chavose seems to have been a prominent organ-

izer in this movement. He did much in bringing about the development of the order in Lampasas, Hamilton, and Coryell Having originated in Lampasas County, its greatest increase was in that county. In fact, this first attempt at organization never extended beyond the three counties named above. The first meeting of the Grand County Alliance was held at Pleasant Valley, Lampasas County, February 22, 1878. Captain L. S. Chavose, President; W. C. Gober, A. A. Carter, D. T. W. Nance, W. B. Weir, John R. Allen, W. T. Baggett, and William Thompson were also members of this County Alliance. These gentlemen were officers in the County Alliance; also a committee to form a Grand State Alliance. Their respective offices I am unable to give. One old member puts the number of alliances in this county at nineteen, and another at thirteen. Doubtless neither is absolutely correct. Captain L. S. Chavose turned over the work in Hamilton County to J. H. Myers, who succeeded in perfecting an organization on Little Cowhouse Creek, and another on Neel's Creek. After these were organized, the first County Alliance was held with the Partridge Creek Alliance. This was in the spring of 1878. officers were, Yancey Pierce, President; H. Carter, Vice-President; T. E. Glover, Secretary; J. H. Myers, Lecturer and Organizer.

Some time after this a co-operative meeting was held with the Lampasas County Alliance, on School Creek, at which meeting considerable business of importance was transacted, and an organizer sent into Coryell County, who succeeded in organizing a few alliances there. I have been unable to find the names of the County Alliance officers, and it is said that there never was a county organization perfected in that county. Evan Brooks, D. White, W. White, W. T. Baggett, and H. Lankford were members of the order in that county. As said before, the order was confined to these three counties.

The Grand State Alliance was organized at Pleasant Valley, Lampasas County, May 4, 1878, with the following officers: L. S. Chavose, President; J. W. Reeves, Secretary; W. W. Saylor, Treasurer; W. T. Baggett, Doorkeeper; W. Rodgers and H. Dobbins, Delegates. The constitution called for two other officers called "Grand Smokeys." These were kept secret from

all save the president. Their peculiar functions have been forgotten.

This Grand State Alliance held another meeting, in 1879, which proved to be the last. This body adopted a declaration of principles, which forms the basis of those upon which the Alliance stands to-day. It adopted a constitution which conformed to the times, and the three degrees of the order. it not been for an unwillingness on the part of the members to wait the results of education, it might have prospered instead of being a failure. Politics was permitted to creep in, and the usual disaster followed. The Greenback campaign of 1876 started a movement in Texas which culminated in 1878. Our pioneer brethren mistook the dangers of agitation for the real fruits of education, and some of them cast their lot with that reform movement. This made bitter dissensions in the order, and led to its immediate destruction. These brethren were actuated by right motives, but their methods were unfortunate. As soon as their determination to enter politics was known, the dominant party took effective measures to crush the life out of the movement. This disaster has served a good purpose, as a warning to the present organization.

There are many incidents that might be given, in relation to this initial movement, that would no doubt be interesting, but space will not permit their relation. Suffice it to say, that these pioneer brethren were honest, earnest, and brave; that they laid the foundation upon which the present grand superstructure has been built. This first effort was necessary, and no doubt its failure was a blessing in disguise. When the final triumph of ultimate truth shall be proclaimed throughout the land, no one will refuse to render to these brethren the full meed of praise to which they are so justly entitled.

In the spring of 1879, W. T. Baggett, a member of one of the first alliances in Coryell County, moved into Parker County, taking with him some of the printed matter connected with these organizations. He began teaching school at Poolville, and also to discuss matters relating to the Alliance in the section from which he came. The failure in Lampasas County, and the political tendency of the order, made it very difficult to do anything in the way of organization. Finally, in connection

with J. N. Montgomery, J. W. Sullivan, J. T. Reeves, Jefferson Womack, George W. McKibbens, and a few others, the preliminary meeting was held at Poolville, Parker County, July 29, 1879. The old Lampasas declaration of principles was amended so as to eliminate the political features, and the Alliance started out as a non-partisan organization.

Parker and adjoining counties were largely settled by enterprising farmers from the North and East. These men watched earnestly the progress of the organization, until they were convinced that it must do good, and intended good to their fellowman, and that it had already accomplished much good, and could accomplish more if they would join in the well-begun work, which they did, and thus was the Alliance formed, and from that day to the present it has retained the name Farmers' Alliance. A second Alliance was soon formed at Central, Parker County, and a third in Jack County. From this the order grew in numbers, until it was thought best to perfect a State organization.

It will be noticed that there were no county organizations. It was at that time thought best to conduct it with a machinery similar to that of the Knights of Labor. This idea was abandoned, probably on account of the establishment of county trade agencies. There were a number of meetings held during the summer of 1879, previous to the State meeting, but they are hardly worth the space for details, as the meetings of the State Alliance, which convened monthly, disclose all their methods and purposes. The men who founded the last Alliance profited by the disasters which overtook the first, and thereby rendered a service to the present organization, for which they deserve the thanks of all those who labor, wherever found.

CHAPTER III.

HISTORY OF THE ALLIANCE IN TEXAS.

Happily for those who may desire an authentic history of the early days of the Alliance, I have been so fortunate as to obtain possession of the original record books of the State Secretary, dating from December 27, 1879, to February 5, 1884, containing full and complete data concerning those early times. It is a matter of pleasure as well as of curiosity to note the incipient efforts made, seemingly with but little forethought, that have finally culminated in the grand movement for agricultural reform, that is to-day the wonder of the age, and the admiration of all who labor in production.

Shakespeare says: --

"There's a divinity that shapes our ends, Rough-hew them how we will."

In contemplating the inception, the first failure, the second attempt, the trials, repulses, dismal prospects, and final triumphs of the Alliance, all must admit that the hand of Omnipotence can be clearly discerned. No cause unaided by God could have withstood the mistakes, bad management, vicious foes, and traitorous friends, and come out purified, stronger, and better for the ordeal, as has the Alliance. Whatever its future may be, whatever may be the results of its teachings, those of the present, as well as those who are to come after us, are and will be interested in its early history and methods.

The record that lies before me states that "The Grand State Alliance met at Central, December 27, 1879. President J. N. Montgomery called the house to order, and declared the body ready for business." No further minutes of this meeting are recorded. Immediately follows the statement that the Grand State Alliance met at Poolville, January 10, 1880; at New Hope Church, January 24; at Central, February 21; at Shiloah, March 13; at Shiloah, April 10. The next meeting was at Jasper

Creek, of which there is a complete record. It should be remembered that only twelve Sub-Alliances had been organized during the entire year, or, from the date of the first meeting, July 29, 1879, to June 12, 1880. To be sure, the meetings had been frequent, but the results had not been satisfactory, in regard to the increase in numbers. An old member writes that party prejudice, and the failure in Lampasas County, made organizing almost impossible; that the meetings were poorly attended, and a sort of general distrust prevailed against the order.

Under these conditions, the growth of the order was of necessity slow. Brother S. O. Daws, a member of Alliance No. 13, in his excellent "History of the Origin of the Alliance," says that the first State meeting of the Alliance was held at Central, Parker County, late in 1879. That meeting is doubtless the one referred to as being held December 27, of that year. minutes of these meetings are said to be in existence, although the fact is disputed upon good authority, and the charge made that all such data have been manufactured since the order has assumed considerable proportions. Be this as it may, it is a matter of but little importance. The first officers of the Grand State Alliance, from January 1, 1880, to July of the same year, were as follows: W. T. Baggett, President; J. N. Montgomery, Vice-President; J. H. Dover, Secretary; George McKibben, Assistant Secretary; G. B. Patton, Lecturer; John W. Sullivan, Treasurer; William Shadle, Doorkeeper; A. E. Robertson, Assistant Doorkeeper; J. F. Hood, Chaplain; C. C. Pope, Assistant Chaplain. Below is the full text of the first bond given by an officer of the Alliance, and it will doubtless be read with interest. Its amount - \$250 - seems rather small when compared with the last bond given by the National Treasurer. date places it within the first seven months of the existence of the order. It is doubtless the oldest authentic document relating to the business of the Farmers' Alliance.

[&]quot;STATE OF TEXAS

[&]quot;PARKER COUNTY

[&]quot;Know all men by these presents That I John W Sullivan as Principal and A E Robertson and J S Reeves his assurities are held and firmly bound unto the Grand State Alliance in the sum of \$250 Dollars to the payment of which

well and truly to be made we bind ourselves our heirs and legal Representatives Jointly and severaly & firmly by these presents In Witness where of we have hereunto subscribed our Names and affixed scrolls for seals this the 21st day of February A D 1880

"The conditions of the above obligation are as follows to Wit where as the above bounden principal John W Sullivan shall and truly well pay over all money belonging to the grand State Alliance and make Reports of all money that may be paid into his hands to the Secretary of the Grand State Alliance this bond shall be null & void otherwise to Remain in full force & effect

"J. W. SULLIVAN

"John S. Reeves

"A. E. ROBERTSON

"The above bond examined and approved this February the 21st A D 1880

"W. T. BAGGETT, Pres.

"J. H. DOVER, Secretary."

It must be remembered that the Grand State Alliance consisted more in its title than in its membership or importance, since it sometimes held its meetings at a country school-house, with perhaps five or ten delegates from adjacent Alliances. Business was completed usually in one day, and the outside world took but little interest in its affairs. It gradually grew in members and developed a plan of campaign, as well as a code of principles that began to attract the attention of the best class of farmers in that part of the State. Organization among the agricultural portion of the people was such a prime necessity that no effort in that direction, of very long continuance, could remain unsuccessful. Our early brethren acted upon this belief, and seemed to be more anxious to start right, with proper rules, regulations, and sound doctrine, than to gain members. They fully realized, no doubt, that correct methods and just principles would bring a sufficient membership, and ultimately lead to success; while a large following, guided by an ill-advised system and a false doctrine, must sooner or later end in disaster. That these brethren acted wisely, the present status of the order is ample proof.

It must also be remembered that these brethren were farmers, compelled to do their thinking amid the daily efforts of hard labor; that they were not trained in the school of political economy, and were, therefore, unacquainted with the fine spun

THE ALLIANCE IN TEXAS.

theories which emanate from such a source. They were taught in that greater school of experience, nurtured and broadened by grim necessity; and they formulated certain methods to better their condition, through such means and by such guides as a kind Providence has given to deserving men. Their business was conducted with a directness that admitted of no mistake, and their resolutions and demands were drawn with that candor which admitted of only one construction. They practised direct methods, and, as a natural result, met with deserved success. The minutes of the first recorded meeting are given below:—

"Proceedings of the Grand State Alliance of Texas, held at Jasper Creek, June 12, 1880.

"President W. T. Baggett called the house to order. The Assistant Doorkeeper being absent, J. S. Welch was appointed in his place, and ordered to take up the word, finding all persons correct. The Alliance was opened in due form. W. T. Baggett, President, J. N. Montgomery, Vice-President, J. H. Dover, Secretary, G. B. Patton, Lecturer, A. E. Robertson, Doorkeeper, answered to roll call. J. W. Sullivan, Treasurer, absent. Excuse rendered by W. T. Baggett. William Shadle, Assistant Doorkeeper, no excuse: fined 50 cents. George McKibbins, absent; excuse rendered by W. T. Baggett. President appointed committee to examine credentials, consisting of J. N. Montgomery and G. B. Patton, who reported for No. I, nothing; No. 2, B. F. Hemphill, G. M. Plumlee, and W. P. Stone. James W. Sullivan, excuse rendered and received; No. 3, S. M. Welch and W. H. Chancelor; No. 4, blank; No. 5, defunct; No. 6, J. S. Reeves; No. 7, blank; No. 8, F. Fridley, present, Y. M. Pullen, absent: fined 50 cents; No. 9, I. A. Culwell; No. 10, blank; No. 11, C. F. Kinconon; No. 12, blank.

"On motion of G. B. Patton and G. M. Plumlee, J. S. Cox was permitted to represent Boon's Creek, No. 4. On motion of Fred Fridley and J. S. Reeves, lecturing was postponed until business was over. On motion of F. Fridley and A. E. Robertson, each Sub-Alliance was appointed a committee to revise the constitution, and report the same at the next meeting at Goshen. On motion of J. S. Reeves and G. M. Plumlee, all Sub-Alliances failing to send up marks and brands of their members, and estray lists, would not be allowed representation in the next meeting of the Grand State Alliance. Adjourned for dinner.

"After dinner financial reports showed: -

Jasper Creek, No. 3, paid					\$.50
Garrett's Creek, No. 4, paid					2.00
Mt. Pleasant, No. 9, paid					2.75
Peaster's Springs, No. 6, paid					
Wright's School House, No. 12, paid	•			•	1.75

Goshen, No. 8, paid.	•	•		•	•	•	•	•	•	•	•	•	•	\$3.35
Shiloah, No. 7, paid.														.60
Central, No. 2, paid.	•		•					•	•		۰.			2.00
Total amount paid														\$13.15

"On motion of G. M. Plumlee and J. S. Reeves, the Secretary was ordered to buy books, stationery, etc., useful to his office, with the money on hand. On motion of G. B. Patton and A. E. Robertson, the Secretary was allowed one dollar per month, from January, 1880. On motion of J. A. Culwell and John Stratton, each member was allowed to retain one dollar for each Alliance organized by him. On motion of J. N. Montgomery and J. A. Culwell, voted that each member that had organized Alliances be paid. W. T. Baggett had organized about 9, but only claimed \$2.25 which he had spent, which was ordered paid. On motion of J. A. Culwell and J. H. Dover, L. G. Oxford was empowered to organize Alliances until July 16. On motion of C. F. Kinconon and J. S. Cox, Fred Fridley was empowered to organize until July 16. On motion of G. M. Plumlee and John Stratton, J. S. Welch was empowered to organize until July 16. There being no other business, the Alliance adjourned to hear a public lecturer, to meet at Goshen, July 15 and 16, 1880.

(Signed) "W. T. BAGGETT, President, "J. H. DOVER, Secretary."

The above is a literal transcript of the minutes of the Grand State Alliance of Texas, as recorded in the Secretary's book. It discloses but twelve Sub-Alliances, with four of them unrepresented. The methods of doing business, while somewhat peculiar, were straightforward, and appear to have been quite satisfactory. The names and location of these twelve Sub-Alliances were:—

Poolville, Parker County								No.	I	
Central, Parker County										
Jasper Creek, Jack County									3	
Boon Creek, Jack County									4	
College Hill, Parker Coun	ty							"	5	
Peaster's Springs, Parker	Co	un	ty					"	6	
Shiloah, Parker County .										
Goshen, Parker County .										
Mt. Pleasant, Wise Count	y							"	9	
Springtown, Parker Count	ty							"	10	
Garrett Creek, Wise Coun	ty							"	11	
Wright's School House, P										
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From this it is seen that the order had made but little progress outside of Parker County. The next meeting was held at Goshen, on the 16th of July, 1880. Four new Alliances had been organized since the last meeting, three in Wise County, and one in Parker. Considerable business of importance was transacted at this meeting. A test oath was formulated, and a large number of amendments to the constitution were offered, and laid over, under the rules, until the next meeting. The following are the minutes as taken from the record:—

"The Grand State Alliance met at Goshen, Parker County, July 16th, 1880. W. T. Baggett, President, called the house to order and ordered the word taken up. Finding all correct, opened the Alliance in the third degree. Roll call; W. T. Baggett, President, J. N. Montgomery, Vice-President, J. H. Dover, Secretary, J. W. Sullivan, Treasurer, answered to roll call. G. B. Patton, Lecturer, absent; excuse rendered by G. C. Span, and the same received by the Alliance. George McKibbins absent; fined 50 cents. A. E. Robertson absent; fined 50 cents. William Shadle absent; fined 50 cents. The Secretary ordered to notify William Shadle he was due 50 cents for non-attendance at Jasper Creek, June 12th. Appointed a committee to examine credentials, consisting of J. N. Montgomery and J. W. Sullivan, who reported, for No. 1, nothing; for No. 2, W. J. Sullivan, B. F. Hemphill. F. M. Brown, and J. W. Potts; No. 3, J. S. Welch and R. Lyons; No. 4,-; No. 5, -; No. 6, Sam Guerry; No. 7, A. S. Brown; No. 8, J. C. Gilliland and J. M. Parker; No. 9, L. G. Oxford and J. A. Culwell; No. 10, nothing; No. 11, T. M. Culwell; No. 12, G. C. Span; No. 13, O. G. Peterson; No. 14, W. P. Gilliland; No. 15, -; No. 16, -. Lecturing by W. T. Baggett. Adjourned for dinner, to meet at 2 o'clock P.M. Met at 2 P.M. A committee consisting of Fred Fridley, John Boss, H. Rechburgh, to examine and compare estray list. Then a letter from George McCormick, Attorney General, was read.

"New business, amendment to Art. 1, Sec. 1, by L. G. Oxford, on motion of O. G. Peterson and J. A. Culwell, tabled; by O. G. Peterson to Art. 3, Sec. 2, 3, and 4, tabled; by L. G. Oxford to Art. 4, Sec. 2, tabled; by O. G. Peterson, resolution, tabled; L. G. Oxford to Art. 4, Sec. 5, tabled; by Dr. O. G. Peterson, supplement, tabled; next, by O. G. Peterson, supplement, tabled; next, amendment of J. N. Montgomery, tabled; (April the 10th brought up and became a law). Adjourned to meet at 7 P.M.

"After supper roll call dispensed with. Estray list read by Fred Fridley. On motion of G. C. Span and J. H. Dover, non-members of the Farmers' Alliance pay 50 cents per head for finding stock through Farmers' Alliance; next by Dr. O. G. Peterson, supplements, tabled; by Dr. Peterson, resolutions, tabled. A motion to adjourn to meet to-morrow at 9 A.M. Met at 9 A.M. Saturday. Roll call; four officers absent; six delegates absent. On motion of J. S. Welch and Dr. Peterson, to rescind an act passed yesterday, charging non-members 50 cents a head for finding stock. Resolution by J. S. Welch, tabled. On motion of J. H. Dover and Dr. Peterson, the President be em-

powered to appoint a committee to organize Farmers' Alliances until December, 1880. On motion of Dr. Peterson and J. H. Dover, the President appointed a committee to frame a test oath. Test oath received and committee discharged. By J. N. Montgomery, a supplement, tabled. The President appointed a committee to criticise the constitution and correct it, - L. G. Oxford, J. N. Montgomery, G. B. Patton, and Dr. O. G. Peterson. W. T. Baggett added. Election of officers. W. T. Baggett was nominated and elected by acclamation. For Vice-President, J. N. Montgomery, 3 votes; L. G. Oxford, 3 votes; O. G. Peterson, 3 votes. For Secretary, J. H. Dover, 15; G. W. Bond, 4; Assistant Secretary, G. W. Bond, 13; J. C. Gilliland, 6. Lecturer, L. C. W. Patton, 2; J. A. Culwell 8, and Dr. O. G. Peterson, 2; J. C. Gilliland, 2. Assistant Lecturer, J. C. Gilliland was nominated and elected by acclamation. Treasurer, J. W. Sullivan, 12; and J. N. Montgomery, 6. For Doorkeeper, J. S. Welch, 9; and G. C. Span, 9. The President gave the casting vote to J. S. Welch. For Assistant Doorkeeper, J. N. Montgomery, 10; B. F. Hemphill, 2, G. C. Span, 4; John W. Potts, 2. Names of members appointed by the President to organize Alliances: Dr. O. G. Peterson, G. M. Plumlee, Fred Fridley, S. M. Guerry, to organize till August 6th, 1880. No other business appearing, the Alliance was closed in due form to meet again at Friendship Church, in Wise County, Texas, August 5th, 6th, and 7th, 1880.

(Signed)

"W. T. BAGGETT, President, "J. H. DOVER, Secretary."

The next meeting was held August 5, 1880. This meeting proved to be the most important of all that had been held, as it marked out a course that the Alliance has since pursued. Officers were elected for the term of one year. A constitution was revised and ordered printed. The number of Alliances had increased, and the work of organization had been carried into an adjoining county. The minutes of the meeting, as taken from the record, are as follows:—

"The Grand State Alliance met at Friendship, Wise County, Texas, August 5, 1880. W. T. Baggett, President. House called to order by the President and opened in the third degree. Delegates present: No. 9, J. B. Roberts and H. C. Richburg; No. 12, A. M. Green and G. C. Span absent. No. 14, W. P. Gilliland; No. 8, J. M. Stacks, J. W. Brisco absent. No. 6, C. H. Dodson; No. 13, B. F. Heasley; No. 17, J. W. Patterson; No. 7, H. M. Jones; No. 3, W. C. Thompson and J. E. Harris; No. 18, A. L. Kiter; No. 19, J. H. Gains; No. 11, J. W. Culwell. Sundry Laws, which were tabled at last Grand State Alliance, were adopted and marked such. Adjourned till Friday morning at eight o'clock.

"The Grand State Alliance met Friday at 8 A.M., August 6th. President called the house to order and renewed business in the third degree. Roll call:

W. T. Baggett, President; G. W. Bond, Assistant Secretary; L. G. Oxford, Vice-President; J. A. Culwell, Lecturer; J. C. Gilliland, Assistant Lecturer; J. W. Sullivan, Treasurer. J. H. Dover was absent and fined 50 cents. Minutes of previous meeting read and adopted. On motion such business as is necessary to go in the constitution is to be made a law from date. offered by Dr. O. G. Peterson passed and became a law from date, to elect officers for one year, etc.; resolution by Dr. O. G. Peterson, that officers be elected Tuesday after the first Sunday in August of each year, or as soon after as possible; resolution offered by H. C. Richburg made a law from date; resolution offered by L. G. Oxford that each subordinate Farmers' Alliance be required to purchase one copy of 'Cushing's Manual of Parliamentary Usages,' made a law from date. On motion, a committee was appointed to get up new work on the secrets of the Alliance, consisting of A. Dunlap, L. G. Oxford, O. G. Peterson, J. N. Montgomery, J. S. Welch, and W. T. Baggett; on motion, agreed to fine a member of the committee on secret work two dollars, should he fail to meet the committee at Peaster's Springs, September 10, 1880; on motion, adjourned till 2 P.M. Grand State Alliance met at 2 P.M. House called to order by President. Alliance Nos. 1, 2, 4, 5, 15, and 16, the above numbers absent, their delegates fined 50 cents each for non-attendance. On motion, the corrections made in the constitution by the committee appointed for that purpose, were received by Grand State Alliance committee, L. G. Oxford, G. W. Bond, O. G. Peterson, J. N. Montgomery, and W. T. Baggett. A committee was appointed to scrutinize the constitution and prepare it for the press: G. W. Bond, J. A. Culwell; and on motion J. M. Stacks and J. N. Montgomery were appointed to contract for the printing of 1000 copies of the constitution. On motion, J. M. Stacks and J. N. Montgomery were ordered to borrow the money to pay for the printing of the constitution, in case they could not get it done on time, and we, as a Grand State Alliance, stand good to them for the money they may borrow for that purpose. On motion of O. G. Peterson, went into the election of officers, which resulted in the election of J. N. Montgomery, President; W. T. Baggett, Vice-President; J. H. Dover, Secretary; J. C. Gilliland, Assistant Secretary; L. G. Oxford, Lecturer; Andy Dunlap, Assistant Lecturer; John W. Sullivan, Treasurer; J. S. Welch, Doorkeeper; W. G. Thompson, Assistant Doorkeeper. The next meeting of Grand State Alliance to be at Peaster's Springs, September 11, 1880.

"No other business; the Alliance was closed.

(Signed)

"W. T. BAGGETT, President,

"J. H. Dover, Secretary.

G. W. BOND, Acting Secretary."

The officers elected at the previous meeting in July were chosen for the usual term of six months, but under the resolution passed at this meeting a new set of officers was elected at this August meeting, to serve for the term of one year; hence the seeming conflict of electing officers in July and August. It

will be noticed that the Alliance met each month, but it should be understood that the Grand State Alliance was confined almost entirely to one county. The next meeting was at Peaster's Springs, Parker County.

The following is a copy of the declaration of purposes ordered printed by the Grand State Alliance, at its meeting held in Friendship, Wise County, August 5, 1880. It should be read by all who are interested in the history of the Alliance, as it shows plainly the germ that has sprouted and grown into the present grand organization.

"DECLARATION OF PURPOSES.

- "Profoundly impressed that we as the Farmers' Alliance, united by the strong and faithful ties of financial and home interest, should set forth our declaration of intentions, we therefore Resolve:
- "I. To labor for the Alliance and its purposes, assured that a faithful observance of the following principles will insure our mental, moral, and financial improvement.
- "2. To endorse the motto, 'In things essential, Unity, and in all things Charity.'
 - "3. To develop a better state, mentally, morally, socially, and financially.
- "4. To create a better understanding for sustaining our civil officers in maintaining law and order.
- "5. To constantly strive to secure entire harmony and good will among all mankind and brotherly love among ourselves.
- "6. To suppress personal, local, sectional, and national prejudices, all unhealthy rivalry and all selfish ambition.

"THE MEETING AT PEASTER'S SPRINGS.

"The Grand State Alliance assembled at Peaster's Springs, Parker County, Texas, September 11, 1880, at ten o'clock A.M. House called to order by President J. N. Montgomery. The doorkeeper being absent, the president appointed F. M. Brown doorkeeper pro tem., and ordered the word taken up. Finding all correct, the Alliance was opened in the third degree. Roll call: J. N. Montgomery, President; J. H. Dover, Secretary; L. G. Oxford, Lecturer; J. W. Sullivan, Treasurer; W. C. Thompson, Assistant Doorkeeper, answered to roll call. W. T. Baggett, Vice-President; J. C. Gilliland, Assistant Secretary; Andy Dunlap, Assistant Secretary; J. S. Welch, Doorkeeper, were absent. J. S. Welch's excuse rendered and received by the Grand State Alliance. Baggett, Dunlap, Gilliland, were fined 50 cents each. Delegates from Wise County Alliance: W. L. Garvin and J. A. Culwell. Culwell was absent, and fined 60 cents. For Parker and Jack Counties: Alliance No. 1, H. H. Nookes; Central, No. 2, J. W. Potts and J. M. Brown, present; W.

B. Shults and G. M. Plumlee, absent. Plumlee's excuse rendered and received. Shults fined 50 cents. Jasper Creek, No. 3, R. Lyons and M. F. Gray. Gray absent; excuse rendered and received. Boon's Creek, No. 4, suspended; Shiloh, No. 7, blank; Goshen, No. 8, R. E. Tackett and J. R. Montgomery. Montgomery absent, and fined 50 cents. Wright's School House, No. 12, R. A. Wright and J. S. Erwin; East Grindstone, No. 19, blank; fined 50 cents; Springtown, No. 10, suspended.

"Minutes of last meeting read, amended, and adopted. On motion of J.W. Potts and F. M. Brown, G. W. Bond was fined 50 cents for negligence of duty in leaving J. N. Montgomery's excuse out, and leaving out the name of I. S. Welch, and not charging him with a fine, etc. Next the president appointed a finance committee to examine the books of secretary and treasurer of Grand State Alliance, consisting of L. G. Oxford, R. E. Tackett, and W. L. Garvin. On motion of L. G. Oxford and R. Lyons, that the Grand State Alliance adopt some form of burying the dead; carried. The president appointed R. Lyons, Andy Dunlap, and Dr. O. G. Peterson to get up the work and report at the next meeting of the Grand State Alliance, November 13, 1880. The committee appointed at Friendship, on secret work, made their report, which was received, and the committee discharged. With the twining around stricken out; first, Peace; second, Social; third, Love. The Finance Committee reported that they found the secretary's and treasurer's books in good condition. On motion of R. E. Tackett and L. G. Oxford, each Subordinate Alliance was taxed \$1.25 to pay for the printing of the constitution, etc.; the same to be paid by the first of October, 1880. W. L. Garvin, A. J. Caston, and W. J. Womack were authorized to organize Farmers' Alliances till February, 1881. There being no other business, the Alliance was closed with usual ceremonies, to have a called meeting at Garrett's Creek, Wise County, Saturday, November 13, A.D., 1880, at ten o'clock A.M. Said meeting was called for the purpose of receiving the report of the committee appointed to get up the work on burying the dead, and any other business that may come before the Grand State Alliance.

(Signed) "By J. M. Montgomery, President, "J. H. Dover, Secretary."

Brothers Dawes and Garvin, in their history further say: -

"It will be seen that the Farmers' Alliance, when first organized, was not a chartered institution; but it was soon learned, meeting with so many obstacles arising from deep prejudices which existed in the minds of so many people against a farmers' organization, that they could not perpetuate and carry out successfully the great and grand objects of the order with open doors to politicians and demagogues; hence an application was filed with the Secretary of State, asking for a new charter, that the Farmers' Alliance might become a chartered institution, and receive that protection and enjoy the benefits accorded to all other chartered institutions. A charter was granted, and the Farmers' Alliance took its place in the world's history as the first

organization that active, operative farmers ever formed for their own protection, benefit, and enjoyment, acting under the following original charter:—

"'State of Texas. Charter. J. N. Montgomery et al.

"STATE OF TEXAS, COUNTY OF PARKER.

- "'Know all Men by These Presents: That we, L. S. Tackitt, J. H. Dover, and G. M. Plumlee, citizens of the State and county aforesaid, and such others as they may hereafter associate with them, have heretofore, to-wit: On the 12th day of August, 1880, formed themselves, with J. N. Montgomery, J. C. Gilliland, J. W. Sullivan, L. G. Oxford, Andrew Dunlap, J. S. Welch, William Thompson and others, into an association and organization under the name of "Farmers' Alliance," said association being formed for the purpose of encouraging agriculture, horticulture, and to suppress personal, local, sectional, and national prejudices, and all unhealthy rivalry and selfish ambition. The business of said corporation is to be transacted in the city of Weatherford, county and State aforesaid. The term of existence of this association is fixed at twenty-five years, from August 12, 1880.
- "'The Trustees, to-wit: J. H. Dover, W. T. Baggett, and L. S. Tackitt, residents of Parker County, were duly elected for the first year ending August 12, 1881.
- " Said society has no capital stock, and the estimated value of the goods, chattels, lands, rights, and credit owned by said association is fifty dollars.
- "'The following persons were elected officers for twelve months from August 12, 1880:—
 - " President J. N. Montgomery.
 - "' 'Vice-President W. T. Baggett.
 - " Secretary J. H. Dover.
 - "' Assistant Secretary J. C. Gilliland.
 - "' Lecturer L. G. Oxford.
 - "Assistant Lecturer A. Dunlap.
 - " 'Treasurer J. W. Sullivan.
 - "' Doorkeeper J. S. Welch.
 - " 'Assistant Doorkeeper William Thompson.
- "'In witness whereof, we, as citizens of the State of Texas, have on this the 6th day of October, 1880, subscribed our names.

(Signed)

"L. S. TACKITT,

"'J. H. DOVER,

"G. M. PLUMLEE."

"'THE STATE OF TEXAS, COUNTY OF PARKER.

"'Before me, J. M. Richards, Judge of the County Court of Parker County, State of Texas, this day personally appeared L. S. Tackitt, J. H. Dover, and G. M. Plumlee, citizens of Texas, to me personally known, and acknowledged that they signed the above and foregoing instrument of writing after the contents of the same had been fully made known to them, and that they voluntarily signed the same for the purposes and association therein expressed.

"'In witness whereof I have thereto signed my name and set my seal of office, this 6th day of October, 1880.

(Signed)

"'J. M. RICHARDS,

[SEAL.]

"'County Judge, Parker County, Texas.

"'ENDORSED.

"' Charter of the "Farmers' Alliance" of Parker County.

"' Filed in the Department of State, October 8, 1880.

(Signed)

"T. H. BOWMAN,

" ' Acting Secretary of State.'

"'THE STATE OF TEXAS, DEPARTMENT OF STATE.

"'I hereby certify that the foregoing is a true copy of the original charter of the "Farmers' Alliance" of Parker County, with the indorsement thereon now on file in this Department.

Witness my official signature and the Seal of State, at the city of Austin, the 9th day of October, A.D. 1880.

"'T. H. BOWMAN,

[SEAL OF STATE.]

"' Acting Secretary of State."

"Our readers should bear in mind that, up to this time, the Farmers' Alliance was local in its character, imperfectly organized, with no literature or means of educating its members, and nothing wherewith to push its organization, save patriotic hearts and willing hands. Hence, it devoted itself to the social conditions and local questions affecting its members, pointing out the evils from which the farming classes were suffering and which all acknowledged, but there was no remedy to be found for them outside of a thorough organization of the farmers. The Grange had been disorganized, the farmers were scattered, divided in opinion, almost indifferent to their condition, the means employed in valuing their products, and without any means of expressing or enforcing their views as a class. And thus the Alliance employed what feeble means it had to effect an organization of the farmers.

"Called meeting of Grand State Alliance, at Garrett's Creek, November 13, 1880. All officers being absent but the secretary, on motion and second, F. M. Culwell was elected president pro tem. House called to order by President Culwell, and J. W. Culwell was appointed doorkeeper, and ordered to take up the word. Finding all correct, the Alliance was opened in due form. Roll call: J. N. Montgomery, W. T. Baggett, J. C. Gilliland, Andy Dunlap, J. S. Welch, and W. C. Thompson were fined \$1.00 each. L. G. Oxford and J. W. Sullivan were absent, but excuse rendered and received by the Alliance. President appointed J. A. Culwell and J. H. Dover to examine credentials. Report for Wise County Alliance, J. A. Culwell and H. C. Richburg; for Jack County, Lost Creek, No. 21, J. E. Overhuls; for County Line, No. 14, J. M. Rowe and S. F. Gilliland; Poolville, No. 1, W. H. Thompson. Next, call for the report of the committee appointed at Peaster Springs, September 11, consisting of Andy Dunlap, R. Lyons, and O. G. Peterson, all absent, and, on motion and second, fined 50 cents each.

motion of C. H. Richburg and J. A. Culwell, the signs and words of the three degrees were changed.

""Resolved, That any person on entering an Alliance, the doorkeeper of said Alliance shall give to such person the number of the degree in which the Alliance is at work, after which such person shall give to the doorkeeper the word of that degree,' etc. On motion and second, the same adopted. On motion and second, trade sign changed. On motion and second, the president pro tem. was empowered to appoint or authorize members to organize Alliances till the next meeting of Grand State Alliance. The president appointed, for Jack County, J. E. Overhuls and Dr. H. C. Burns; for Wise County, J. A. Culwell; for Parker County, R. E. Tackett. No other business appearing, the Alliance adjourned, to meet at Poolville, Parker County, Texas, Tuesday, February, 1880, at ten o'clock A.M.

(Signed) "F. M. CULWELL, President pro tem., "J. H. DOVER, Secretary.

"State meeting of Texas, Grand State Farmers' Alliance, held at Poolville, Parker County, Texas, February 8, 1881. House called to order at ten o'clock A.M., Vice-President W. T. Baggett in the chair. The Alliance was opened in due form, and declared ready for business. Roll call of officers: all officers present except three, - J. C. Gilliland, Assistant Secretary; L. G. Oxford, Lecturer; Andy Dunlap, Assistant Lecturer. Oxford's excuse rendered and received. Gilliland and Dunlap fined 50 cents each. All subordinate Alliances were represented except Nos. 2, 4, 5, 6, 7, 10, 12, 15, 16, 18, 19, 20, Committee on Credentials was appointed, consisting of J. M. Montgomery, W. C. Thompson, and J. R. Oxford, who reported all credentials correct. Minutes of last State Alliance were read and approved. The secretary was ordered to have charters prepared for all subordinate Alliances, and was also duly authorized to affix the signature of president to the same. Alliances that were not represented, and those due reports, were allowed an extension of three months' time, in which to make out reports as required by Art. 6 of constitution of Farmers' Alliance, and forward the same to secretary of Grand State Farmers' Alliance.

"The question of the advisability of selecting a newspaper that would give free publication to matters of interest to the order, in consideration of the united patronage of the members throughout the State, being under discussion, it was resolved that the Weatherford Herald, a live and influential newspaper, published every Friday at Weatherford, Parker County, Texas, by Messrs. Curl and Wood, be adopted; and to facilitate the rapid increase of its circulation among the members of the order, all secretaries of subordinate Alliances were instructed to act as agents for the Herald, in securing subscriptions from members of their respective Alliances. The resignation of Grand Lecturer L. G. Oxford was received and accepted. The following amendment was proposed by A. G. Culwell, to Art. 6 of the constitution of the Farmers' Alliance, that it shall be changed to read 'Each and every subordinate Alliance on record shall make out its returns, and send them to Secre-

tary of Grand State Alliance, against the stated meetings of the Grand State Alliance,' etc. No other business appearing, except fines of officers for non-attendance, J. N. Montgomery paid \$1.00; J. A. Colwell, 25 cents; J. H. Dover, 25 cents; and Vice-President Baggett pocketed the money, etc. Moved and seconded to meet at Goshen, Parker County, Texas, August 9, 1881, at ten o'clock A.M.

(Signed) "J. H. Dover, Grand Secretary."

A copy of the record of each meeting up to date has been given, in order to show the methods and earnestness of our earlier brethren, and to form a basis for comparison with the present system, and rapid growth of the order. These records disclose an honesty of purpose well worthy the emulation of all. They prove that these brethren were guided by the principles of right and justice that only come through a desire to better others besides themselves. It is upon the solid foundation of truth and love, laid deep and strong by these pioneers of the Alliance, that the present magnificent structure of agricultural organization has been built. All honor to those noble men, who lived and acted fully up to the light that a Divine Ruler had been pleased to show them! Their sphere of action was circumscribed, and their efforts at the time counted for but little; yet the effects on future conditions no man will ever be able to completely comprehend.

The next meeting was a called session held at Central School House, April 2, 1881, for the purpose of perfecting arrangements for charters, and putting a deputy grand lecturer in the field. The meeting was not largely attended, but the business was satisfactorily completed. The general situation was discussed, and all seemed impressed with the idea that better times were near at hand.

The next meeting of the Grand State Alliance was held at Goshen, Parker County, August 9, 1881. More delegates than usual were present, including those from the County Alliances of Wise and Jack. It was evident that the Alliance had come to stay, and that a rapid growth was assured. Much interest was therefore taken in the proceedings, and a general desire to avoid mistakes and correct any possible errors seemed to prevail.

The burial service, as reported by Brother O. G. Peterson was

adopted. The form of a regalia to be worn by officers and members was also considered and adopted. The following officers were chosen for the ensuing year: Andy Dunlap, President; W. L. Garvin, Vice-President; C. M. Wilcox, Secretary; B. G. Gilliland, Treasurer; D. B. Gilliland, Lecturer; M. A. Denton, Assistant Lecturer; W. H. Pearce, Doorkeeper; W. P. Dent, Assistant Doorkeeper.

Arrangements were made to revive dormant Alliances, and to push the work more vigorously. Brother J. H. Dover, Grand Secretary, was allowed \$18 for his services during the past twelve months. This was not a very large salary for one of the principal officers. Alliance No. 1, at Poolville, had died out, and a resolution was passed instructing the deputy lecturer of Parker County to visit that Alliance, and either revive it or take charge of its books and papers. This seems to indicate that the so-called "Father of the Alliance" had lost interest in his offspring. A committee was appointed to investigate certain charges against Senator Maxey; which seemed to indicate a determination to scrutinize the acts of public servants. motion prevailed, striking the word "Grand" from the charters of County Alliances. A report showed that the different Alliances were in arrears to the Grand State Alliance to the amount of \$24.60. The whole amount received at that meeting was \$61.60. From these figures it will be seen that economy was one of the virtues practised by the Grand State Alliance.

The next meeting was held at Weatherford, Parker County, February 7, 1882. All the grand officers present, except Vice-President W. L. Garvin. The membership had increased satisfactorily, and the work of organizing was being conducted quite successfully. A large increase in the attendance over previous meetings cheered the hearts of those who had stood "the heat and burden of the day." The following important resolution was adopted:—

"That the Committee on Secret Work condense the three obligations into one, and report the same to the president of the Grand State Alliance, in time for printing with the amended constitution."

This action greatly simplified the work and eliminated much useless ceremony. A resolution was also adopted, giving

"contributing members of any Alliance the right to vote in electing members in any Alliance, but no other vote as visiting members."

This proved a wise measure. Brother A. B. Woodward was appointed general lecturer at large for Northern Texas, for the purpose of extending the work in that direction.

One of the early members, writing of this meeting, says: -

"From its inception, women were admitted as members of the Alliance. As it grew in numbers, the social feature became a strong bond of union. In order to preserve this, without even a pretext of disapproval, the Alliance at this meeting inserted an amendment in its constitution, restricting its membership to white persons only. The wisdom of this measure is now admitted by all, both white and colored."

Heretofore the secret work of the Alliance had consisted of three degrees and three obligations. It was deemed by this body impracticable with a farmers' organization to make any distinction between members; that the work should be so simplified that the humblest members of any and all Sub-Alliances could enter the meetings of any County or State Alliance, and participate in the enjoyments and benefits to be derived from these meetings; therefore a committee was appointed to combine the three degrees and three obligations into one, placing all members upon an equal basis; which was reported and adopted by this meeting, and the work thus simplified remains to this day, admitting any member to the meetings of the State or National Alliances. Thus the Farmers' Alliance became the first secret order having no privileged classes, controlled by different degrees of advancement; but any of its members can enter even its national meetings, and have a voice in their deliberations.

The Rural Citizen of Jacksboro was adopted as the official organ. That was probably the first official organ of the order. Also, on motion, Brothers Dunlap and Wilcox were appointed a committee to confer with the State Grange in regard to the sale of cotton. Here was doubtless the germ of the system of the State business agents, so prevalent at the present time. By resolution, the presiding officer of each Alliance was to be addressed as "President," and the word "Alliance" substituted for "Lodge." Arrangements were made for a more perfect

understanding regarding the brands to be used on cattle, and the manner of treating estrays. The 25-cent dues were ordered to be distributed as follows: 10 cents to Sub-Alliance; 5 cents to County Alliance; and 10 cents to State Alliance. The meeting was a grand success, and the order generally was greatly encouraged and benefited.

The next meeting was held at Mineral Wells, Palo Pinto County, August 8, 1882, President Dunlap presiding. In his report, the secretary gave the number of Alliances in each county as follows: Parker, 34; Wise, 27; Hood, 21; Jack, 14; Somervell, 7; Palo Pinto, 7; Tarrant, 3; Bosque, 1; Denton, 1; Houston, 1; Cook, 1; Red River, 3; total, 120. Persons rejected, 37; persons expelled, 7.

The following officers were chosen for the ensuing year: Andy Dunlap, President; A. M. Chandler, Vice-President; C. M. Wilcox, Secretary; B. G. Gilliland, Treasurer; S. O. Daws, Lecturer; —— Hodges, Assistant Lecturer; T. B. Smith, Chaplain; C. S. Maddox, Doorkeeper; H. F. Austin, Assistant Doorkeeper.

The following important resolution was adopted: -

"That it is contrary to the spirit of the constitution and by-laws of our order to take part in politics; and further, that we will not nominate or support any man or set of men for office as a distinct political party."

This measure had a good effect, as it was the year for State elections. The topic of discussion was, the attitude of the Alliance to politics. A reward was offered for horse and cattle thieves. The salary of the secretary was fixed at \$100 per year. President Dunlap was allowed \$2.50 for postage and stationery during the past year. A new form of regalia was adopted. Adjourned, to meet at Granbury, Hood County, in February, 1883. The proposed semi-annual meeting at Granbury was a failure, on account of a violent storm and intensely cold weather. The next meeting was held at Weatherford, Parker County, August 7, 1883. Brother Daws writes of this meeting as follows:—

"But before taking up the proceedings of that meeting we will notice briefly the growth of the order up to this time. At the meeting at Mineral Wells the report of the secretary showed that there were one hundred and twenty Alliances. True, they were not all represented, and some were not taking the interest they should, yet it showed how rapidly the Alliance was coming into favor with the laboring class of people. Already it has spread over the counties of Parker, Wise, Jack, Palo Pinto, and Hood, and it was not altogether unknown in the counties of Somervell, Tarrant, Bosque, and Denton. It had spread south as far as Houston County, and east into Cooke, and even farther, into Red River County. There were fifty-six delegates in attendance, exclusive of the officers, that composed the Grand State Alliance, which shows very conclusively that the interest was rapidly increasing. There had been thirty-seven persons rejected as unfit for membership, which proves that the Alliance was not seeking to swell its ranks with any and every kind of men, but wanted good, moral men to enlist in her cause.

"At this Weatherford meeting of the State Alliance, all the State officers were absent, except S. O. Daws, Lecturer, and C. M. Wilcox, Secretary. Only thirty Sub-Alliances were represented. This was the least number of delegates in attendance upon any of the State meetings since 1880. Many were the causes of the decline of the order in the last year. The want of Alliance literature, the means to employ active lecturers to visit, instruct, and encourage the Sub-Alliances and institute new ones. In their efforts to co-operate in buying and selling, in the past, they had almost been treated with contempt by tradesmen and others, and so far had failed to achieve practical benefits from their efforts. Again, it had been a very sickly year throughout the counties where Alliances had been formed, and the year previous being a political year, a great many persons rushed into the order for the sole purpose of their own personal, political aggrandizement; therefore, after the passage of the non-political resolution at Mineral Wells, they and their personal friends lost their primary interest in the Alliance, which caused the disorganization of several Sub-Alliances during that year. While this temporarily checked the growth of the order, it fixed for all time to come the true status of the Farmers' Alliance on party questions."

A resolution favoring the establishment of Alliance libraries was passed.

The officers elected for the ensuing year were: W. L. Garvin, President; J. A. Culwell, Vice-President; C. M. Wilcox, Secretary; P. M. Hodges, Treasurer; W. C. West, Chaplain; Dr. Riley, Lecturer; —— Creekmore, Assistant Lecturer. Secretary C. M. Wilcox was allowed \$24.75 for postage, stationery, and express during the past year. This was rather small compared with the present secretary's expenses. Assistant lecturers were allowed \$5.25 for organizing Sub-Alliances. Motion adopted:—

"That when any stolen, lost, or strayed stock is reported to the secretary of the State Alliance, it shall be his duty to report the same to the secretary

of each County Alliance, and he shall report the same to the secretary of each Sub-Alliance in his county."

Bonds of treasurer fixed at \$500. Rules were adopted to ascertain the efficiency of each lecturer, and regulating their commissions. This meeting, though small, did some good work, and made arrangements to recover lost ground.

The next meeting was held at Chico, Wise County, February 5, 1884, President W. L. Garvin presiding. Previous to this meeting the condition of the Alliance became alarming to the friends of the order, and vigorous means were used to bring about a reaction. Brother S. O. Daws was sent into the field as a travelling lecturer. His work proved a success, so that delegates from more than fifty Sub-Alliances took part in the meeting. As the "Trade Store" system was proving a failure, and for the purpose of encouraging co-operation in trade, the following resolution was passed:—

"That we encourage the formation of joint stock companies in Sub and County Alliances for the purpose of trade and for the personal benefit of members financially."

The president and secretary were allowed \$10.50 for postage, etc. Brother Daws was continued as travelling lecturer, at \$50 per month. The secretary was required to give a bond for \$200. Meeting adjourned to meet at Weatherford, August 5, 1884. This meeting was rather a disappointment to the brethren, and a strong desire was manifested to push the work more thoroughly, which was done.

The next meeting of the Grand State Alliance was held at Weatherford, Parker County, August 5, 1884, President W. L. Garvin presiding. The good work of the previous six months was plainly seen, and the brethren were much encouraged. Over one hundred and eighty delegates were present, and the best of feeling prevailed. It was evident to all present that the Alliance was once more on the up grade. It looked as though the farmers of Texas had at last decided to give the Alliance a trial. Many new faces were seen at the meeting, and more than ordinary interest was manifested. Several amendments to the constitution were made, and the secret work was amended in a few minor particulars. The system of Alliance trade stores, or agen-

cies, was discussed at length, and its benefits and weak points exposed. A consensus of opinion prevailed that nothing could be done, except through vigorous efforts. In their efforts to perfect a trade system for their mutual good, through correspondence with manufacturers, they were always referred by them to their agents. In their communications to wholesale men, for trade, they were continually referred by them to the retail merchant. In the disposition of their cotton, in trying to reach the manufacturer, they were met by the "bulls" and "bears" in the cotton market. Hence the Alliance at this meeting, recommended to the County and Sub-Alliances the importance of establishing cotton yards of their own, for the purpose of bulking their cotton and selling, if possible, directly to the factories. This was done to some extent, but was violently opposed by the cotton buyers and speculators. In some towns, it is said that farmers could not purchase land to be used for such purposes, so strong was the prejudice of the merchants against the Alliance.

The officers elected at this meeting were as follows: J. A. Culwell, President; J. C. McConnel, Vice-President; Andy Dunlap, Secretary; Jacob Brown, Treasurer; W. R. Lamb, Lecturer; —— Reeves, Assistant Lecturer; J. R. Masters, Chaplain; S. O. Daws, Lecturer-at-Large.

The next meeting was held at Decatur, Wise County, August 4, 1885, President J. A. Culwell presiding. Brother Daws writes:—

"This meeting was a great surprise, even to the members of the order who had been keeping up with its progress. More than six hundred delegates were in attendance, which was the greatest body of true agriculturists that had, up to that time, ever assembled in the State. The same discussions, as in the previous meetings, relative to the cotton market and mercantile trade, were continued, as shown by the following recommendations and resolutions:—

"Resolved, That the Grand State Alliance recommend to the County Alliances that the members of all Sub-Alliances act as a unit in the sale of their produce, and to this end the County Alliance set apart a day or days in which to put their produce on the market for sale. We further recommend that a committee of correspondence be appointed by the County Alliance, who shall, if possible, make arrangements for the combined sale of the produce of members of the Alliance. We further recommend that none but members of the Alliance be allowed in this combination. The secretary of the Grand State Alliance to notify each County Alliance.

[&]quot;Adopted.

"Resolved, That County Alliances appoint a committee of three discreet members from each County Alliance, whose duty it shall be to examine cost bills of freight bills of merchants with whom the Alliance has made contracts for sale of goods at specified rates per cent. A refusal to show such bills by said merchants shall terminate and make null and void such contracts with said merchants.

"Believing that the business of the Alliance could be better transacted by a less number of delegates, and to provide against a much larger delegation next year, the number of delegates was limited to three to each county."

The effect of this meeting was to place the Alliance in a good position before the public, and to attract to its aims and purposes some of the best men in the State. Many of the old hangers-on were relegated to the rear, and fresh blood was infused into the organization. Long will the brethren of Texas, especially the older ones, look back with feelings of pride and fondness to the "Decatur Meeting." A large amount of detail work was accomplished, some few changes were made in the organic laws, and a sort of general clearing up was indulged in.

The following officers were elected for the ensuing year: A. Dunlap, President; J. S. Morris, Vice-President; C. M. Wilcox, Secretary; J. A. Landers, Treasurer; J. H. Jackson, Chaplain; G. W. Belcher, Lecturer; Z. S. Lee, Assistant Lecturer.

The next annual meeting was held at Cleburne, August 3, 1886, and marked an era in the history of the Alliance. It was by far the largest gathering ever held by the order, and great interest was manifested in the result. Extensive preparations had been made for the meeting, and a general rally of the brethren was anticipated. Eighty-four counties were represented at the meeting, by delegates, many being present for the first time. The Alliance had assumed such large proportions, and was enjoying such a rapid growth, that the politicians of the State began to look upon it with some little anxiety. Their fear was then the same as now, that it might "go into politics," and that, if it did, some one might get injured. The press of the State began to warn the brethren against any such action, and at the same time predicted that it certainly would be done. This put many of the brethren, especially those who were politically inclined, in an attitude of suspicion, which became intensified as the business of the meeting progressed.

The meeting was called to order by President Dunlap, and, after an address of welcome by Mr. Crain of Cleburne, and a response by President Dunlap and Brother McWhorter, the usual routine of business was taken up.

The meeting took hold of the business before it in earnest. Among the many resolutions was the following:—

"It is the sense of this body that we put forth our best efforts as individuals, and also as an organization, to have the Commissioner of Agriculture elevated to the position of a cabinet officer in the government, and that we ask our representatives in Congress to urge the same."

Unanimously adopted.

The following officers were elected for the ensuing year: A. Dunlap, President; D. J. Eddleman, Vice-President; H. G. Moore, Secretary; J. A. Landers, Treasurer; J. M. Brooks, Chaplain; G. W. Belcher, Lecturer.

The following resolutions were adopted, to be added to the Declaration of Purposes:—

"I. That as an organization we do not antagonize other organizations, which have for their object the amelioration of the condition of any class of our citizens. But we will not form a coalition with any other organization.

"2. That as citizens we have a right to belong to any organization, political party, or church, we may see proper, but as a Farmers' Alliance we will not consider such subjects within our body."

[The constitution was subsequently adopted without these resolutions, thereby making them statutory law. — Committee of Revision.]

The Committee on Good of the Order and Demands made the following report:—

"We, the delegates to the Grand State Farmers' Alliance of Texas, in convention assembled at Cleburne, Johnson County, Texas, A.D. 1886, do hereby recommend and demand of our State and national governments, according as the same shall come under the jurisdiction of the one or the other, such legislation as shall secure to our people freedom from the onerous and shameful abuses that the industrial classes are now suffering at the hands of arrogant capitalists and powerful corporations.

"We demand,

"I. The recognition by incorporation of trade-unions, co-operative stores, and such other associations as may be organized by the industrial classes to improve their financial condition, or to promote their general welfare.

- "2. We demand that all public school land be held in small bodies, not exceeding 320 acres to each purchaser, for actual settlement, on easy terms of payment.
- "3. That large bodies of land held by private individuals or corporations, for speculative purposes, shall be rendered for taxation at such rates as they are offered to purchasers on credit of one, two, or three years, in bodies of 160 acres or less.
- "4. That measures be taken to prevent aliens from acquiring title to land in the United States of America, and to force titles already acquired by aliens, to be relinquished by sale to actual settlers and citizens of the United States.
- "5. That the law-making powers take early action upon such measures as shall effectually prevent the dealing in futures of all agricultural products, prescribing such procedure in trial as shall secure prompt conviction, and imposing such penalties as shall secure the most perfect compliance with the law.
- "6. That all lands forfeited by railroads or other corporations, immediately revert to the government and be declared open for purchase by actual settlers, on the same terms as other public or school lands.
- "7. We demand that fences be removed, by force if necessary, from public or school lands unlawfully fenced by cattle companies, syndicates, or any other form or name of corporation.
- "8. We demand that the statutes of the State of Texas be rigidly enforced by the Attorney-General, to compel corporations to pay the taxes due the State and counties.
- "9. That railroad property shall be assessed at the full nominal value of the stock on which the railroad seeks to declare a dividend.
- "Io. We demand the rapid extinguishment of the public debt of the United States, by operating the mints to their fullest capacity in coining silver and gold, and the tendering of the same without discrimination to the public creditors of the nation, according to contract.
- "11. We demand the substitution of legal tender treasury notes for the issue of the national banks; that the Congress of the United States regulate the amount of such issue, by giving to the country a per capita circulation that shall increase as the population and business interests of the country expand.
- "12. We demand the establishment of a national bureau of labor statistics, that we may arrive at a correct knowledge of the educational, moral, and financial condition of the laboring masses of our citizens. And further, that the commissioner of the bureau be a cabinet officer of the United States.
- "13. We demand the enactment of laws to compel corporations to pay their employees according to contract, in lawful money, for their services, and the giving to mechanics and laborers a first lien upon the product of their labor to the full extent of their wages.
- "14. We demand the passage of an interstate commerce law, that shall secure the same rates of freight to all persons for the same kind of commodities, according to distance of haul, without regard to amount of shipment.

To prevent the granting of rebates; to prevent pooling freights to shut off competition; and to secure to the people the benefit of railroad transportation at reasonable cost.

- "15. We demand that all convicts shall be confined within the prison walls, and the contract system be abolished.
- "16. We recommend a call for a national labor conference, to which all labor organizations shall be invited to send representative men, to discuss such measures as may be of interest to the laboring classes.
- "17. That the president of the State Alliance be, and he is hereby, directed to appoint a committee of three to press these demands upon the attention of the legislators of the State and nation, and report progress at the next meeting of the State Alliance. And further, that newspapers be furnished copies of these demands for publication; and be it further
- "Resolved, That the president of the State Alliance have fifty thousand copies of these resolutions and demands printed and distributed to the Sub-Alliances, through the respective county secretaries.
- "Resolved, That each delegate to the State Alliance present a copy of these resolutions to each candidate for a legislative office, State or national, and endeavor to secure his indorsement and assistance in carrying them to a successful issue.

(Signed) "W. M. Mathes, E. B. Warren,
"H. T. Clark, J. H. Morrow,
"J. M. Perdue, Geo. H. Stovall."
"B. F. Rogers,

The Committee on Sale and Shipment of Cotton reported as follows:—

- "I. Recognizing that cotton is the most important crop—financially considered—that concerns the farmers of this great State; that its value for last year having been \$80,000,000, as paid by the spinners, and \$64,000,000 paid to the producers, leaving a margin of \$16,000,000, over half of which immense sum was marginal profits; that this year the crop will not vary much from that of last year; hence, if concerted action is not taken by the producers of Texas, eight or nine million dollars will again be swallowed up as marginal profits, over and above all fair charges, to liquidate expenses of transportation, sampling, weighing, inspecting, classifying, handling, etc. Eight or nine millions of dollars are lost each year to the producers of Texas, principally through false weights, defective sampling, cliques and corners, and enormous charges for transportation. Therefore your committee recommends, after careful consideration, that the cotton yard system be adopted by the County Alliances, as the surest and most immediate relief to the producers of the State.
- "2. It is recommended by your committee that the County Alliances (either singly or where a number of counties lie contiguous to an oil mill) make the best terms possible for the sale of cotton seed, and that each County Alliance

making such arrangement shall report terms of such to the secretary of the State Alliance for transmission to all the County Alliances of the State, if that officer deem said report of sufficient importance.

- "3. Your committee recommend that each County Alliance in the cotton district hold a called meeting for discussion and action on the cotton problem, as soon after receiving notice of this recommendation as possible.
- "4. Your committee suggests that the State secretary, or corresponding State secretary, if such an officer should be elected, shall write to the general agent of the pooled railroad lines in Texas as to the best rates that said pooled lines will give on cotton shipments, and report such answer to each county secretary. Also, to get statements concerning best rates on cotton from railroad lines not in the pool, for transmission to the County Alliances.

"E. D. MACREADY,

"B. F. ELLIS.

"R. M. CHAMPION."

Adopted.

The following resolutions were read and adopted: -

- "Resolved, 1. That E. D. Macready is hereby appointed corresponding secretary of the Farmers' Alliance.
- "2. That said E. D. Macready be allowed thirty dollars per month for the period of six months.
- "3. That the salary of the Secretary of the State Alliance shall be one hundred dollars per month."

Committee on Constitution and By-Laws reported, offering a substitute for the present constitution, and recommending the creation of the office of corresponding secretary for the purpose—in addition to the cotton correspondence—of keeping the order posted as to the best markets for the sale of all kinds of produce and the purchase of all kinds of commodities; and that suitable steps be taken by this body for the extension of the work into other States, with the view of organizing a National Alliance; and that suitable steps be taken to procure an amended charter, as the present one seems to be inadequate.

On motion, the report of the committee was received. The constitution was then unanimously adopted.

The following resolutions were then adopted:—

"Resolved, That no person who is an officer or owns stock in any banking corporation is eligible to membership in the Farmers' Alliance, and any such persons who belong to the organization are hereby requested to withdraw; otherwise such persons shall be dropped from the roll.

"Resolved, That we recognize the right of the laboring classes to organize, and condemn any effort on the part of any man, or set of men, who seek to proscribe the right of any man exercising his freedom by joining any labor organization having for its object the bettering of the laboring man's condition.

"Resolved, That we establish an Alliance brand; that we first establish the statutory county brand as our county brand, and in addition we establish an Alliance brand to be placed on the jaw of animals.

"Resolved, That we now proceed to the election of the executive committee provided for in the constitution just adopted."

Brothers C. W. Macune of Milam County, Evan Jones of Erath County, John H. Harrison of Falls County, were duly elected. Brothers J. R. Johnson of Dallas County, E. D. Macready of Grayson County, and C. W. Macune of Milam County, were appointed by the president as the committee to revise, correct, and have printed the constitution and by-laws.

The Alliance adjourned at 5 P.M., August 8, 1886, to meet in Waco, August 1, 1887.

A. DUNLAP,
President State Farmers' Alliance.
H. G. MOORE,
Secretary State Farmers' Alliance.

During the entire meeting there was a kind of restlessness and suspicion that could not be kept down. When the Committee on Demands reported, the storm broke, and a general heated discussion was the result. After the demands had been adopted, some were led to believe that the Alliance was about to launch into politics. Acting upon this, a secret meeting was held, and another set of State officers was elected, consisting of John H. Harrison, President; D. J. Eddleman, Vice-President; C. C. Camp, Secretary; and J. A. Landers, Treasurer. This action was kept so quiet that but few knew of it until an application was made for a charter by this new organization. They had chosen the same name as the regular Alliance, and had chosen the same vice-president and treasurer. Taken as a whole, it looked very much like a bad piece of business. President Dunlap at once called a meeting of the executive committee, and the matter was fully discussed. It was evident that only thorough work and good judgment could save the Alliance

from a long, bitter feud, and perhaps total destruction. President Dunlap, either from a want of nerve, or distrust of his ability to deal with the difficulty, resigned as president of the Alliance, which was quickly followed by the resignation of D. J. Eddleman, vice-president. This placed the entire responsibility upon the chairman of the executive committee, Dr. C. W. Macune. It was in this manner and under these conditions that Brother Macune began his career of service to the Alliance. A man with less courage would have given it up as a hopeless task. Not so with Brother Macune. Believing in the ultimate triumph of truth, relying on the just principles of the Alliance, and strengthened by that faith which comes through an honest purpose, he began at once to act vigorously in his attempt to save the Alliance. He held a conference with the dissenting brethren, and succeeded in persuading them to hold in abeyance the organization they had begun, until after a State meeting, which should be called in the near future. This was accomplished after much persuasion, and a candid discussion of the whole situation.

After further consultation, it was agreed to call a meeting of the State Alliance on January 18, 1887, at Waco. In accordance with this agreement, Acting President Macune issued his proclamation for the called session. In the meantime the politicians had not been idle. They had sown the seed of discord and distrust wherever possible, and the whole order was in a state of ferment. As the time for the called session drew near, the feeling became more intense, and the danger of serious divisions seemed imminent. In the midst of all this difficulty, Brother Macune was doing a noble work in allaying the fears of some, strengthening the faith of others, and trying by every means in his power to bring the brotherhood to a proper sense of the duties and responsibilities which devolved upon them as members of the Alliance. He succeeded in this effort so far that, to a considerable extent, the best men in the Alliance rallied to his support, and gave him their aid and advice.

Nor did his labors stop with Texas. Hearing of the Farmers' Union in Louisiana, he wrote letters to find out exactly what it was, and sent Brother Evan Jones to that State with a proposition of consolidation, which in the end proved successful.

Plans were also formulated to perfect a national organization and carry the order into other States. It was under these conditions, and for the purpose of arranging the difficulties growing out of the split in the organization, that the called session at Waco was convened. It was a remarkable meeting. A prominent member of that session says:—

"The meeting began with nearly every one ready, and expecting serious difficulty. It continued for nearly two days in a turmoil of excitement and bad feeling, and finished its labors on the fourth day amidst a regular love-feast, and with the brightest prospects."

The declaration of purposes, up to the Cleburne meeting, in 1886, consisted of six divisions. At this meeting, division number one was changed and number seven added. As will be seen in the old constitution, division one read as follows:—

"To labor for the Alliance and its purposes, assured that a faithful observance of the following principles will insure our mental, moral, and financial improvement."

The one great danger which threatened the Alliance was the introduction of partisan politics. Brother Macune, realizing the true condition, and believing that future success demanded a proper beginning, introduced the following as a substitute for this section:—

"To labor for the education of the agricultural classes in the science of economical government, in a strictly non-partisan spirit."

This gave rise to a lengthy debate, but was finally adopted, and has proved what Brother Macune declared it would, the foundation rock on which the superstructure of the Alliance has been built. The wisdom of this declaration is being demonstrated daily, and its necessity is recognized by all.

Section number seven was added without much debate, and was considered at the time of no great importance. It was written and presented to the committee for consideration, by Brother W. H. H. Shook, a school teacher from Grayson County, Texas. It has grown in favor with the Alliance, until now no member can read it, or hear it read during service, without a feeling of honest pride in being able to belong to an order that promulgates such noble sentiments. In accepting this section,

the Alliance did as in many other matters, — it built for the future.

As the proceedings of the Farmers' State Alliance of Texas, held at Waco, in January, 1887, must be of interest to every member of the order, we feel justified in giving them in detail.

- "Pursuant to call issued by C. W. Macune, chairman of Executive Committee and acting president, the Farmers' State Alliance met in the Court-House, Waco, Texas, ten o'clock A.M., Tuesday, January 18, 1887.
 - "Brother Macune occupied the chair, and opened the Alliance in due form.
- "Brother B. J. Kendrick, of McLennan County, was appointed vice-president pro tempore.
- "The acting president stated that he would order the call of the roll, and that if he found a quorum present, he would explain the object of the meeting. He then explained his decisions and rulings in regard to apparently conflicting meanings of certain clauses in the constitution, in reference to the manner in which the Farmers' State Alliance may be reconvened.
- "The roll was then called by the secretary, and it was found that seventy-one counties were represented.
- "The chair ruled that all officers and members of standing and special committees are entitled to seats during the session.
- "Brother O'Byrne of Gregg raised the question whether those officers who resigned their positions in the Farmers' State Alliance are still members of this body. The chair decided in the affirmative. An appeal from this decision was taken by Brother O'Byrne, which, after some discussion, was withdrawn.
- "The acting president then explained the embarrassment of his situation, and asked that the Alliance relieve him by electing a temporary chairman or president, to preside until President Dunlap's successor shall be elected. But it being clearly the wish of the Alliance that Brother Macune should occupy the chair for the period mentioned, no action was taken in the premises.
- "On motion, the chair was authorized to appoint a committee of twelve on Credentials. The following were appointed:—
- "W. M. Reed, chairman, McLennan County; J. M. Smith, Bell; Nat Draughan, Red River; J. B. Larry, Bosque; S. W. Hilliard, Burleson; A. S. Simmes, Leon; J. A. Ramsdale, Burnet; C. H. Alden, Travis; A. P. Cagle, Montague; J. A. Buford, Coleman; John O'Byrne, Gregg; T. M. Collie, Stevens.
- "On motion, a committee consisting of Brothers Jones of Erath, and Pickett and Dunlap of Wise, was appointed to receive and introduce the visiting brothers from the Louisiana Farmers' Union.
 - "At 12.22 o'clock, the Alliance adjourned until half-past one.
 - "The Alliance met at 1.45 o'clock.
- "A communication from Rev B. H. Carroll, pastor of the First Baptist Church of Waco, inviting the members of the Farmers' State Alliance to hear

his lecture on 'Personal Liberty,' to be given at the church at 7.30 P.M., was read, and on motion the invitation was accepted.

"Brother Jones of Erath County was called upon to tell something about the Louisiana Farmers' Union. He stated that he visited the Union in session at Ruston, Louisiana, in pursuance of an order from the acting president of the Farmers' State Alliance, where he received a most cordial reception, and found that the aims and purposes of the Union were similar to those of the Alliance.

"Some interesting communications from the president, vice-president, and lecturer of the 'National Alliance,' which recently met in Chicago, were read by the chair. On motion, a vote of thanks was tendered Brother Macune, for the interest he manifested in obtaining the information above referred to.

"A communication from Mr. J. A. Tetts, the corresponding secretary of the Louisiana Farmers' Union, was read; also a communication from the

Union, which had been sent by the hand of Brother Evan Jones.

"After spending the remainder of the day and much of the following forenoon in useless discussion, considerable ill-feeling was shown, and a desire to obstruct proceedings was manifested to an extent not to be mistaken. Finally, the acting president declared that he would entertain no further business until he had stated the object of the meeting, and called upon the body to elect a temporary president. He then read a message, stating the object of the meeting, and making some recommendations.

"Message of the Acting President.

"All the different classes and occupations of society are engaging in organization for mutual advancement and protection to a greater extent than ever before in the history of the world. In fact, we may say that every calling is organized. This thorough organization has created a new order of things. Problems in regard to a calling or an occupation are constantly being presented, as that occupation becomes more thoroughly organized, and others are being presented as other occupations with which they have dealings become organized. The peculiar relations of large organizations to their own members, to the government, and to other organizations, is a subject worthy of the most profound study by all who exercise the right of citizenship.

"However, the general relations and objects of organization we all understand, and are pledged to support. Whatever other objects an organization may have, especially an organization like our own, the grand central object, around which all others revolve, and from which they draw life, is co-operation for mutual effort and advancement. I hold that co-operation, properly understood and properly applied, will place a limit to the encroachments of organized monopoly, and will be the means by which the mortgage-burdened farmers can assert their freedom from the tyranny of organized capital, and obtain the reward for honesty, industry, and frugality, which they so richly deserve, and which they are now so unjustly denied.

"Take for example a freight question as illustrated in this way: A car-load of lumber from Galveston to Waco will probably cost you about forty dollars

freight; but if you load that very same flat car with cotton and ship to Galveston, the freight will cost about one hundred and fifty dollars. Here is a tribute that the cotton fields pay the corporate monopolies for nothing; but I hold that we have an adequate and complete remedy in co-operation. Nothing would whip them quicker or more completely than for the farmers of Texas to build cotton mills enough to manufacture what cotton goods they want to use; then plant only as much cotton as they want to manufacture, and spend their spare time in raising a diversity of products for the supply of home consumption, thus rendering themselves independent. But the possibilities of this organization exceed those of any or all other organizations combined, when we take into consideration the fact that in no part of the globe does cotton grow to that degree of perfection that it does in the cotton belt of the United States; that the necessities of the world absolutely demand the exportation of a large per cent of the crop raised in this favored section every year; and if the farmers of the cotton belt were all to unite into an organization, they could force the world to pay a just and fair price for the labor expended in raising this staple. There is no necessity for the condition that now exists; no reason why the price of your next year's crop is now set in London, by the knowledge whether the Jews — who control the money market of the world go on the market or not. The possibilities for good by enlightened co-operation are without limit.

"For some two and a half months I have been acting as your president, in order to discharge duties of that office which would otherwise have been made vacant by the resignation of President Dunlap and Vice-President Eddleman. I issued the call for this meeting. Whether I had the authority to call the meeting or not, you have responded by your presence, and I now wish as my last act in this capacity to explain the object of this meeting, and then call upon you to elect a chairman for your temporary organization. The objects of the meeting as expressed in the call are:—

"I, C. W. Macune, chairman of the Executive Committee, and ex officio president of the Farmers' State Alliance of Texas, do hereby issue this, my official call, for an extra session of the Farmers' State Alliance of Texas, to convene in the city of Waco, Texas, at ten o'clock A.M., on the third Tuesday, it being the eighteenth day of January, 1887, for the following purposes, to wit:—

"First. The election of officers to fill vacancies.

"Second. To consider the report of the 'Conference Committee' that convened in Waco, November 10, 1886, at the request of said Executive Committee, which report is to be published in the Dallas Mercury, and to be sent to the secretaries of the various Alliances throughout the State, to which attention is hereby directed.

"Third. To devise a method of sending representatives into other States of the Union, for the purpose of organizing and co-operating with other agricultural societies.

"Fourth. To consider and determine upon the propriety of adopting a second or co-operative degree, which has been considerably promulgated among the Alliances.

"Fifth. And for such other purposes as the absolute necessities of the order may imperatively demand.

"All duly accredited delegates to the regular meeting of the said State Alliance held in August, 1886, at Cleburne, Texas, are hereby notified to attend this above-called session of said State Alliance, and will be recognized as the members composing said called session, as provided in Art. 11, Sec. 6, of the constitution of said Farmers' State Alliance of Texas.

"C. W. MACUNE,

"Chairman of the Executive Committee and ex officio President of the Farmers' State Alliance of Texas.

"Thus you see this is a business meeting, and I will not consume your time by speaking. These objects need no explanation, unless it be the last. I would like to say a few words upon that.

"While filling my position as chairman of the Executive Committee, and acting as president of this association, I have been the recipient of a great number of letters from the different parts of the State, asking information or instruction in Alliance work, or offering suggestions, etc. The result has been that the imperfections and necessities of the order have been made visible, and it is to the result of information and experience gained in this way that I now wish to call your attention.

"Under the head of: 'Such other purposes as the absolute necessities of the order imperatively demand;' the following suggestions are made:—

"There should be a code of laws enacted by this body, which would constitute the statutory law of the order. The constitution, as the organic law, can only express principles, and should be supplemented by a statutory law that will explain and provide for a uniform and certain method of carrying out the principles enunciated in the constitution. Resolutions, such as it has been the custom of this body to pass, do not seem to meet the demand, and it is suggested that resolutions be passed when it is desired to express a sentiment, or as advisory measures, but that all commands of this body, prescribing anything or prohibiting anything, be enacted as laws, and have a uniform style of caption; e.g. 'Be it enacted by the Farmers' State Alliance of Texas, in regular (or called) session assembled.'

"The statutory law should embrace clear and distinct provisions defining the duties, powers, and responsibilities of the president of the State Alliance, and of every other officer, or chairman, or member of the standing committee of the State Alliance. It should prescribe a method of trial, by which the State Alliance may try a County Alliance, and one by which a County Alliance may try a Sub-Alliance. There should be a legal form for the commissions of all officers and committee-men. The present method of appointing and commissioning organizing officers has resulted in some sections having too many, and some sections are yet unorganized, and does not seem to meet the

demands of the order. It is suggested that the number in each congressional district be limited to one, and that he receive his commission upon passing a satisfactory examination before an examining board, composed of the president, secretary, and Executive Committee of the State Alliance, and that his commission be good for a specified and limited time, and that he have power and authority to appoint as many as one deputy in each county, who shall be deputies under him, and all of whose acts shall be done on his responsibilities. That the law defining the duties, powers, and responsibilities of organizing officers and their deputies, be made complete and explicit, and so changed that they may be more interested in getting good material than large numbers in the organizations, and that they be not allowed to take fifteen men as charter members without a ballot. Also the organizing officers be made members of the State Alliance.

"The order has grown in the last year and a half from 700 Alliances to about 3500, now organized; and perhaps the most potent argument that organizing officers have used in securing this rapid accession to our ranks has been the individual benefits that would accrue from concentration of trade in purchasing supplies, and the bulking of products when offered for sale. Letters of inquiry are being constantly received, asking information as to trade contracts and trade arrangements. Brethren who have joined with sanguine hope of the benefits that would come from co-operation within the order, should not be disappointed; if they are, they will leave our ranks in disgust, and our numbers will decrease as rapidly as they have increased. This body should, therefore, enact laws defining and establishing a bureau, or making it the duty of the executive or some other committee, to collect and classify the wants and desires of the order and ascertain the very best means of supplying those wants; and they should at all times be ready to give the very best information attainable as to trade contracts, and they should also keep a record of the different trade contracts and arrangements; they should also keep a record of the different contracts, and note on same the amount of success and satisfaction that attend it in its working, in order to classify same as statistical evidence as time progresses, to the end that we may determine, from the teaching of experience, which is attended with the very best results.

"This body should take effective and adequate steps to support and assist, to direct and concentrate, the efforts being made by County Alliances to regulate and reform the system of purchasing supplies and sale of products.

"There should be a plain law as to the admission of infidels, and if they are excluded, which it is hoped they will be, that the question also be settled as to whether they should be allowed to remain after they have gained admission to the order.

"Under the laws of Texas, the charter of an incorporated association rests in the Board of Trustees; and it is hereby requested that provision be made for the election of a Board of Trustees, to be composed of at least fifteen members, and that the Board of Trustees shall, when a vacancy occurs in the office of president and vice-president, fill the vacancy by appointment for the unexpired term, unless they shall deem it expedient to hold a called

session of the State Alliance; and they should as soon as possible be intrusted with the power of deciding when a called meeting of this body is necessary.

"There should be a law defining the manner of consolidating two or more Alliances, when they shall so desire.

"C. W. MACUNE,
"Chairman, Executive Committee."

The message had a quieting effect, and seemed to satisfy the brethren that the Alliance had been in safe hands, and that the best interests of the order had been conserved. The idea began to obtain that the difficulty which at one time threatened the perpetuity of the order had, under the guidance of honest and discreet officers, prompted by a sense of duty and responsibility, been made to serve the best interests of the order, and promised to be a blessing in disguise. Brother Macune was, on motion, made permanent chairman, until the successor of President Dunlap had been selected. One hundred and four counties were represented at this meeting, which showed a rapid growth during President Macune's administration.

The following officers were elected to fill vacancies: Evan Jones, President; R. F. Butler, Vice-President. W. M. Mathes and B. F. Rogers were elected members of the Executive Committee, to fill vacancies.

On motion of Brother Daniels it was

"Resolved, That we extend to Brother C. W. Macune our grateful thanks for the able manner in which he has conducted the affairs of the order since the resignation of President Dunlap, and assure him that perfect satisfaction has been given."

The following was adopted:—

"Whereas, The manner of selling our cotton, as adopted by the County Alliances, has proven unsatisfactory, and as some of the County Alliances have requested that the State Alliances adopt some plan which will bring the producer and consumer nearer together, and dispense with so many middlemen; therefore be it

"Resolved, That a committee of three be appointed to report upon the expediency of securing an agency for the sale of the coming cotton crop in the manufacturing centres."

Brothers R. J. Sledge, H. W. Wade, and B. J. Kendrick were appointed said committee.

The committee appointed to consider the Conference Report now presented their report, which was a satisfactory solution of the differences heretofore existing in the State Alliance. The report was unanimously adopted by a rising vote, amid cheers and other manifestations of deep feeling. It was felt that harmony had been fully restored, and the main object of this called session had been accomplished.

"REPORT OF SPECIAL COMMITTEE ON PROCEEDINGS OF CONFERENCE • COMMITTEE.

- "We, to whom were referred the proceedings of a number of Alliance brothers, calling themselves a Conference Committee, which met in Waco, November 10, 1886, beg leave to submit the following resolutions, which we earnestly recommend the Alliance to adopt, without debate, and in the spirit of brotherly love and kindness, as a settlement of the seeming dissatisfaction among our brothers:—
- "Whereas, There is no warrant in our constitution for any committee of conference; therefore be it
- "Resolved, 1. That the proceedings of said Conference Committee be not recognized by the Farmers' State Alliance.
- "2. That the official action of the Executive Committee in accepting the resignation of President Dunlap, Vice-President Eddleman, and Executive Committee-man Harrison, is hereby approved; also all other acts in accordance with the constitution of the Farmers' State Alliance.
- "3. That we re-indorse and reaffirm the demands passed at the Cleburne session, with the construction that they are non-partisan in a political sense.

"JACOB BROWN, Chairman. J. W. SUMNER,

"R. A. Burford, Jos. Smelser,

"D. D. Welch, John F. Emerson,

"W. F. Petty, Committee."

The committee on Acting President Macune's report said: -

"We have examined carefully the report of Brother Macune, and find it full and explicit, and in keeping with law, justice, and economy, and we recommend its indorsement. We further recommend that he be sustained in his action in calling this session, as we conceive it has been the means of protecting and preserving our noble order."

In this is found the complete vindication and approval of what had been considered by some an invasion of the rights of the order, and is a fixed example of the reward which usually follows patience and well-doing.

- "REPORT OF SPECIAL COMMITTEE ON STATE AGENCY FOR SALE OF COTTON.
- "We beg leave to make the following report: -
- "I. We respectfully recommend that each County Alliance establish at least one co-operative store, cotton yard, and lumber yard.
- "2. We recommend the selection by the Executive Committee of a person of ability and competency, in every sense of the word, who shall be the State Alliance business agent, whose duty it shall be to negotiate the sale of cotton and other products as may be placed under his charge by the Alliance, and to purchase from first hands as near as may be the supplies for the Alliance co-operative stores, recommended above; who shall be an officer of the State Alliance, holding his office until his successor is elected and qualified; subject to suspension for cause by the Executive Committee, with right of appeal to the State Alliance; entitled to the counsel and assistance of the Executive Committee, whenever necessary; his books and papers always open to the inspection of the Executive Committee, whose duty it shall be to examine them at least every quarter; under a good and sufficient bond made to the Executive Committee, for the faithful performance of the duties of his office; with such salary as the Executive Committee may deem proper, and the reception of any emolument from any other source than the Farmers' State Alliance to be sufficient cause for dismissal from office and forfeiture of bond.

"Respectfully submitted,

"B. J. KENDRICK, Chairman.

After transacting a large amount of detail business, the meeting adjourned, to meet in Waco, in regular session, the first Tuesday in August, 1887. At this point we will take leave of the history of the State Alliance of Texas, and follow that of the National Alliance. The State Alliance of Texas is at this time standing in the front ranks, amid the thirty-three sister States and Territories, that she can now point to with pride and truthfully say, "These are my children." It was the mother of the Farmers' Alliance, its protector while young, and its defender in more mature years. Every true Alliance member should think of the Lone Star State with gratitude, and always accord to her the meed of praise. God bless the State Alliance of Texas! May it ever prosper; may its noble brotherhood continue in the faith, and at last reap the reward in reserve for those who endure to the end; so say I, and so says the brotherhood everywhere.

CHAPTER IV.

HISTORY OF THE NATIONAL ALLIANCE.

DURING the morning session of the third day of the called meeting of the Texas State Alliance, at Waco, on January 20, 1887, the following preamble and resolution were adopted:—

"Whereas, One of the objects of this called session is to devise some method of sending representatives into other States of the Union, for the purpose of organization and co-operation with other agricultural societies; therefore, be it

"Resolved, That this body elect two of its members from each congressional district in the State, as delegates from the order, to meet Brother J. A. Tetts, a delegate from the Louisiana Farmers' Union, and organize a National Farmers' Alliance, with instructions to procure a charter from the government of the United States, if practicable, for a National Farmers' Alliance, or some modification of that name, and to organize themselves by electing the necessary officers and adopting a constitution and by-laws, to be submitted to the order for ratification; and, that they inaugurate an efficient system of extending the order rapidly in other States."

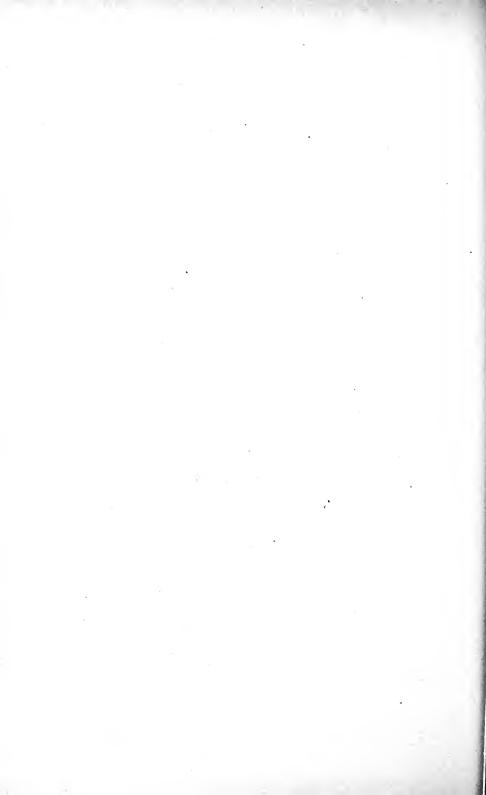
Prior to the passage of this resolution, considerable talk had been indulged in with reference to the formation of a national organization. Brother C. W. Macune, Acting President of the State Alliance, had corresponded with the officers of the Farmers' Union of Louisiana, and had ascertained that their objects, purposes, and membership were similar to those of the Alliance. Relying upon his own sense of the natural fitness of conditions, he had sent Brother Evan Jones to Louisiana, for the purpose of arranging a basis of consolidation. His mission was so successful that Brother J. A. Tetts was sent to the meeting at Waco, with full powers to act, as the following correspondence will show.

"Ruston, La., January 12, 1887.

"To the State Farmers' Alliance of the State of Texas; Greeting:

"Your distinguished representative, Brother Evan Jones, bearing credentials from Hon. C. W. Macune, ex officio president of your honorable body, honored our meeting with propositions that we send a delegate to meet your

THE CAPITOL, WASHINGTON, D.C.



body at Waco, at a called meeting to be held on and after the 18th of January.

"We, the State Union of Louisiana, appreciate the consideration shown us, and hope that the cordial relations between the two sister orders may continue to a closer union of interest and a complete harmony of action, in the near future. Having such a hope, we have submitted an outline of a union to your esteemed representative, and to further the movement have selected Brother J. A. Tetts, our corresponding secretary, to meet you at Waco, during the meeting to be held at that place.

"Brother Evan Jones gave a very clear outline of the principles and objects of your order, which we cordially adopt in our order though (we regret to say it), not as fully comprehended as they seem to be in your older and much

better posted organization.

"As the objects and principles of the two orders are identical, we see no reason why they should not be united under the same national government, and work in harmony.

"Hoping that all may work to our mutual satisfaction and benefit, we refer you for further details to Brother Evan Jones and our delegate elected to meet you.

Respectfully submitted,

"J. C. Jones,

"P. MOORE,

"J. E. VIRONY,

" Committee.

"JOHN M. STALLINGS,

"President of the State Union of Louisiana.

"L. E. RICHARDS, Secretary pro tem."

"RUSTON, LA., January 13, 1887.

"To the Officers and Members of the State Farmers' Alliance of the State of Texas; Greeting:

"This is to certify that Brother J. A. Tetts, a member in good standing of the Farmers' State Union of Louisiana, was duly elected at a called meeting of the State Farmers' Union, of Louisiana, to represent our Union at the meeting called at Waco, January 18th, of your honorable body.

"This election was held in accordance with an invitation from the chairman of your Executive Committee, extended through Brother Evan Jones,

who honored us with a visit in behalf of your organization.

"Brother J. A. Tetts is empowered by the State Farmers' Union, of Louisiana, to treat with your body in our behalf on the subject of a union of the two orders, either in the form of a union of work, or a connection through a national alliance of farmers' orders or organizations.

"John M. Stallings,

"President of the State Union of Louisiana.

"A. J. TAYLOR, Secretary pro tem."

"WACO, January 12, 1887.

"To the Farmers' State Union of Louisiana; Greeting:

"Brothers and co-laborers with us in our common cause: It is with profound pleasure that we acknowledge and receive your duly accredited delegate, Brother J. A. Tetts, from your grand body to this grand body, now in session in the city of Waco, Texas. We are profoundly impressed with his earnestness, zeal, and ability to represent both your grand body and the noble cause which he represents, and through him we desire to return fraternal greetings to your great body, and trust this friendship thus begun may ever continue.

"Respectfully,

"D. J. EDDLEMAN, Committee."

Brother Macune recognized, at this early date, the necessity of a unity of action among reform organizations. At the evening session of the same day, the matter of delegates to the National Farmers' Alliance was taken up. The different congressional districts reported their lists as follows:—

I, J. J. Fairchild, W. K. Deason; 2, W. B. Briggs, B. F. Rogers; 3, J. M. Perdue, John O'Byrne; 4, D. B. Hale, Nat Draughan; 5, A. Dunlap, Geo. B. Pickett; 6, J. B. Barry, R. F. Butler; 7, Joseph Carter, A. C. Russell; 8, Ben Terrell, E. B. Warren; 9, W. M. Reed, C. W. Macune; 10, J. W. Goodwin, W. D. Branum; 11, S. P. Burns, D. M. Rumph.

The delegates thus selected were confirmed, and these brethren, with Brother J. A. Tetts, constituted the members of the first meeting that formed the National Alliance.

The first meeting of these delegates was held the succeeding day, January 21, 1887, and the following officers were elected: C. W. Macune, President; J. A. Tetts, First Vice-President; G. B. Pickett, Second Vice-President; J. M. Perdue, Third Vice-President; E. B. Warren, Secretary; R. F. Butler, Treasurer.

These were the first officers of the National Alliance.

Work was at once begun on the formation of a National constitution. The declaration of purposes of the Texas State Alliance was selected, and the following constitution was prepared:—

CONSTITUTION.

DECLARATION OF PURPOSES.

Profoundly impressed that we, the farmers of America, who are united by the strong and faithful ties of financial and home interests, should, when organized into an association, set forth our declaration of intentions, we therefore resolve:

- 1. To labor for the education of the agricultural classes in the science of economic government, in a strictly non-partisan spirit, and to bring about a more perfect union of said classes.
 - 2. That we demand equal rights to all and special favors to none.
- 3. That we return to the old principle of letting the office seek the man, instead of the man seeking the office.
- 4. To indorse the motto, "In things essential unity, and in all things charity."
 - 5. To develop a better state mentally, morally, socially, and financially.
- 6. To create a better understanding for sustaining our civil officers in maintaining law and order.
- 7. To constantly strive to secure entire harmony and good will to all mankind, and brotherly love among ourselves.
- 8. To suppress personal, local, sectional, and national prejudices, all unhealthful rivalry, and all selfish ambition.
- 9. The brightest jewels which it garners are the tears of widows and orphans, and its imperative commands are to visit the homes where lacerated hearts are bleeding; to assuage the sufferings of a brother or sister; bury the dead; care for the widows and educate the orphans; to exercise charity towards offenders; to construe words and deeds in their most favorable light, granting honesty of purpose and good intentions to others; and to protect the National Farmers' Alliance and Co-operative Union until death. Its laws are reason and equity; its cardinal doctrines inspire purity of thought and life; its intention is, "Peace on earth and good will to man."

ARTICLE I.

Section 1. This body shall be known as the National Farmers' Alliance and Co-operative Union of America, with power to make its own constitution and by-laws.

Sec. 2. The National body shall be composed of delegates from the various organizations holding charters from, accepting the secret work of, and conforming to the constitution and by-laws of this National organization.

Sec. 3. Each State organization that complies with the above requirements shall be entitled to one delegate for each four counties, or fraction of four counties, organized in that State.

Sec. 4. No person shall be eligible to membership in the National body until he shall have attained the age of twenty-five years.

ARTICLE II.

Section I. The regular annual meeting of the National body shall be on the second Wednesday in October of each year, at ten o'clock A.M., and at such place as may from time to time be decided by the body, or such officer or committee as they may delegate that duty.

Sec. 2. The officers of the National Farmers' Alliance and Co-operative

Union shall be a President, Vice-President, an additional Vice-President for each State organized, a Secretary, a Treasurer, a Chaplain, a Lecturer and Assistant Lecturer, a Doorkeeper and Assistant Doorkeeper, and a Sergeant-at-Arms.

- Sec. 3. They shall be elected at each annual meeting, from members of the body, and shall be entitled to hold office until their successors are elected and installed; at which time the retiring officers shall immediately become honorary members of the National body, for that session only.
- Sec. 4. The duties of the officers of the National Farmers' Alliance and Co-operative Union shall be the duties usually incumbent upon and performed by officers of the same name in similar organizations.
 - Sec. 5. The President shall be the presiding officer.
- Sec. 6. The Vice-Presidents of the body shall constitute the Executive Committee and Board of Trustees.

ARTICLE III.

Dues.

- Section 1. Each State organization, under the jurisdiction of this body, shall pay, at each annual session of the body, five per cent of the gross cash receipts of the State organization.
- Sec. 2. The members of the National order are expected to present, at the regular annual meetings, reports of the numerical strength and condition of the order in the State they represent, and of the success attending their efforts in co-operation; also mental and moral improvement.

ARTICLE IV.

- Section 1. The President, Secretary, and Chairman of Committee on Secret Work shall constitute a board for the examination of brothers who wish to become organizing officers.
- Sec. 2. A brother wishing to become an organizing officer shall present to the above board of examination a recommendation from the President and Secretary of his State organization, or some other creditable authority, as to his integrity and moral character, and that he is not addicted to the excessive use of intoxicants; upon the receipt of which, it shall be the duty of the examining board to examine the applicant as to his qualification and adaptability to the work.
- Sec. 3. If he shall pass a satisfactory examination, he shall be commissioned as organizing officer by the President, which commission shall be attested by the Secretary.
- Sec. 4. There shall not be more than one organizing officer commissioned in each Congressional District, in States having no State organization.
- Sec. 5. The organizers shall work under instructions from the abovenamed examining board, and shall report to the National Secretary.
 - Sec. 6. It shall be the duty of the President to issue a charter, attested

by the Secretary, to each Alliance organized according to law and instructions, by organizing officers.

Sec. 7. It shall be the duty of the President to issue charter, attested by the Secretary, to any State organization, or any farmers in the State, when they comply with the following requirements:—

A. That they admit to membership no person unless eligible to membership, under the constitution of the State Alliance of Texas, or the State Farmers' Union of Louisiana.

B. That they have organizations in as many as three counties in the State for which the charter is desired.

C. That they will adopt and use the secret work of this National association.

D. That they will not adopt laws or usages contrary to the constitution of this National order.

E. That they have adopted a constitution and by-laws, and present a copy of same to be filed with the National Secretary.

ARTICLE V.

Section 1. All rights and powers not herein expressly delegated, are reserved to the State organizations severally.

ARTICLE VI.

Section 1. This constitution cannot be altered or amended, except upon a written resolution, clearly setting forth the change or addition to be made, which shall be read in open session on at least two separate days, and adopted by a two-thirds majority, and not then unless it be ratified by three-fourths of the State organizations of the order within one year.

NAME OF SIGNERS.

J. J. Fairchild, B. F. Rogers, John O'Byrne, G. B. Pickett, R. F. Butler, C. W. Macune, S. P. Burns, W. K. Deason, W. M. Reed, D. B. Hale, Andrew Dunlap, E. B. Warren, W. D. Branum, D. M. Rumph, W. B. Briggs, J. M. Perdue, Nat Draughan, J. B. Barry, Ben Terrell, J. W. Goodwin, J. A. Tetts.

At the evening session of January 21, the above constitution and report of organization were submitted to the Texas State Alliance, and received a unanimous ratification. The minutes of that meeting further show that the officers of the National Alliance, being called upon, made appropriate addresses, thanking the Alliance for the honors conferred upon them, and portraying hopes of a bright future for the cause.

Brother Harrison also, being called upon, responded in a feeling speech.

On motion of Brother Pickett the following was passed:-

"Resolved, That should it become necessary, the secretary of the Farmers' State Alliance is hereby authorized to draw his draft upon the treasurer of the Farmers' State Alliance for any amount not to exceed \$500, as a loan to the National Alliance, to enable its officers to organize, said amount to be refunded as soon as a sufficient sum accumulates in the treasury of the National Alliance."

The Farmers' Union of Louisiana also ratified the constitution and report at its next meeting. In this manner the National Farmers' Alliance and Co-operative Union of America began its eventful career. These brethren builded better than they knew, and brought into existence an organization that has not only proven the wonder of the age, but has developed so rapidly, through the living principles which it embodies, that its own members and followers are hardly able to keep pace with its progress. No one has been found bold enough to attempt its completion, or venture an opinion as to its final results. It is a growth, a development, that increases in size and force as the obstacles it encounters increase in numbers and importance. It is the economic conundrum of the nineteenth century, and no one has as yet fully comprehended its mission.

Directly after the close of the meeting, President Macune obtained the following charter from the General Government:—

" Acts of Incor. Liber. 4, folio 159 et seq.

"United States of America,
District of Columbia.

- "Know All Men that the National Trade Union known as the National Farmers' Alliance and Co-operative Union of America, being an association of working-people having two or more branches in the States and Territories of the United States, does by these presents file its Articles of Incorporation in the Office of the Recorder of the District of Columbia, as follows, to wit:—
- "1st. This Association is known to the trade under the name of National Farmers' Alliance and Co-operative Union of America.
- "2d. Under this name it shall have the right to sue and be sued, to implead and be impleaded, to grant and receive property Real, Personal, and Mixed, and to use said property and the proceeds and income thereof for the objects of said Corporation as in its charter defined, and to do any and all Corporate Acts.
- "3d. The legal residence and general business office of this Association is the City of Washington in the District of Columbia United States of Amer-

ica; but the general meetings of the Association, or of the Board of Trustees, or of the officers, may be at such places as may be prescribed by the Constitution or Regulations of the Association.

"4th. The term for which it is to exist is ninety-nine years.

"5th. The number of Trustees shall be three, and G. B. Pickett, who resides in Wise County, Texas, J. M. Perdue, who resides in Upshur County, Texas, and J. A. Tetts, who resides at Ruston, Louisiana, are the trustees for the first year.

"6th. This Association shall have no Capital Stock.

"7th. This Association is formed for the purpose, A, to promote the science of Agriculture and Horticulture; B, to labor for the education of the Agricultural classes in the science of economic government in a strictly non-partisan spirit, and to bring about a more perfect union of said classes; C, to develop a better state mentally, morally, socially, and financially; D, to create a better understanding for sustaining our civil officers in maintaining law and order; E, to constantly strive to secure entire harmony and good will to all mankind and brotherly love among ourselves; F, to suppress personal, local, sectional, and national prejudices, all unhealthful rivalry and selfish ambition; G, to aid its members to become more skilful and efficient workers, to promote their general intelligence, to elevate their character, the protection of the individual rights of its members, the raising of funds for the benefit of the sick, the disabled, or the families of deceased members, and to form for these purposes a more close union among all white persons who may be eligible to membership in this Association. This declaration is executed and filed by authority of the National Farmers' Alliance and Co-operative Union.

"Witness our hands and seals, using scrolls for seals, this the 27th day of January, A.D. 1887.

[SEAL.]

"C. W. MACUNE.

"President of the National Farmers' Alliance and Co-operative Union of America.

"E. B. WARREN,

"Secretary of the National Farmers' Alliance and Co-operative Union of America.

"THE STATE OF TEXAS, COUNTY OF MILAM.

"Before me, the undersigned authority, on this day came and personally appeared C. W. Macune, President of the National Farmers' Alliance and Co-operative Union, known to me to be the person who executed, and whose name is subscribed to the foregoing instrument of writing, and acknowledged to me that he executed the same for the purposes and considerations and in the capacity therein set forth and expressed.

"Given under my hand and seal of office, the 29th day of January, A.D. 1887.

(471, vol. 1, p. 158.) [NOTARIAL SEAL.]

"B. I. ARNOLD,
"Notary Public Milam Co., Texas.

"THE STATE OF TEXAS, COUNTY OF LEE.

"Before me, the undersigned authority, on this day came and personally appeared E. B. Warren, Secretary of the National Farmers' Alliance and Co-operative Union of America, known to me to be the person who executed, and whose name is subscribed to the foregoing instrument of writing, and acknowledged to me that he executed the same for the purposes and considerations and in the capacity therein set forth and expressed.

"Given under my hand and seal of office, this the 27th day of January, A.D. 1887.

[NOTARIAL SEAL.]

"C. H. JONES, J.P.L.C.B. 1204, "Ex officio Notary Public, Lee Co., Texas."

"Office of Recorder of Deeds, Ss:

"I, James C. Matthews, Recorder of Deeds of the District of Columbia, do hereby certify that I have compared the annexed copy of Act of Incorporation with the record of the original thereof, recorded in this office on the 23d day of February, 1887, at 10.30 A.M., in Acts of Incorporation No. 4, one of the Land Records of the District of Columbia, on page 159 et seq., and that the same is a correct transcript therefrom, and of the whole of said record.

"IN TESTIMONY WHEREOF, I have here hereunto set my hand and affixed my official seal this 23d day of February, 1887.

[SEAL.]

"JAS. C. MATTHEWS.

"Recorder of Deeds, District of Columbia."

At the meeting at Waco, a resolution had been passed, instructing the president to extend an invitation to all labor organizations to send delegates to the next meeting of the National Farmers' Alliance and Co-operative Union of America, to be held at Shreveport, Louisiana, during the fall of 1888. Acting upon this, President Macune sent Brother G. B. Pickett to visit the organization known as the Agricultural Wheel, then attracting attention in Arkansas and adjoining States. His mission proved so successful that delegates were sent from the National Wheel to attend the meeting at Shreveport. With his usual vigor, based upon the belief that the farmers of the South were ready for co-operation in any plan that promised relief, he sent into the various States well-trained, careful organ-It was the custom at that time to grant no one a license to organize, until he had passed a rigid examination as to his qualifications for that work. By this means the moral and intellectual standard of the men sent out among strangers to

propagate the work, was kept up, and confidence in the results of their efforts was well founded. It is well worthy of notice that these brethren received no salary, their only remuneration being the fee for organizing, which, though small, was enough to make them self-sustaining. A similar condition was never before known.

In the spring of 1887, President Macune sent these organizers into the States of Missouri, North Carolina, Alabama, Florida, Mississippi, Kentucky, Georgia, and Tennessee. Here was an attempt to organize eight States, with only \$500 in the treasury, and even that was a loan from the State Alliance of Texas. The venture was very successful, and fully met the expectation which President Macune, in his good judgment, had anticipated. From this time until the National meeting at Shreveport, the work of propagation was incessant and effective. news came in from nearly all the States, and a large National meeting became assured. As this was the first meeting after its organization, it was looked forward to with some anxiety. Visions of the fate of the Grange frequently came up, and prophets were not wanting who predicted quick and certain destruction. Filled with a determination to discharge every duty faithfully and well; anxious to avoid the rocks and pitfalls that had proved the Waterloo of other efforts of a similar nature; and, above all, trusting to the honesty, fidelity, and integrity of one another, the brethren, representing nine States, met together in regular annual session.

The brethren were unacquainted with one another, and not exactly certain of the proper methods, or the most important purposes to serve. But the meeting soon developed a large number of able men, who have since proved themselves as such, by their fidelity and constancy to the cause of the Alliance. Among these were Colonel L. L. Polk and S. B. Alexander, of North Carolina; R. T. Love, C. T. Smithson, and W. R. Lacy, of Mississippi; Moore and Ansley, of Arkansas; Oswald Wilson, of Florida; S. M. Adams and H. P. Bone, of Alabama; Tanner, Pratt, and Stallings, of Louisiana; Johnson and Despain, of Missouri; McDowell and Gardner, of Tennessee; the usual number of old reliables from Texas, and many others.

I give below the proceedings in detail.

"The National Farmers' Alliance and Co-operative Union of America met in regular session, in Shreveport, Louisiana, October 12, 1887, at ten o'clock A.M.

- "The following officers were present: C. W. Macune, President; J. A. Tetts, First Vice-President; G. B. Pickett, Second Vice-President; J. M. Perdue, third Vice-President; E. B. Warren, Secretary; R. F. Butler, Treasurer; Ben Terrell, Lecturer; B. F. Rogers, Assistant Lecturer; Nat Draughan, Sergeant-at-Arms.
- "The President filled vacancies by appointing the following brethren temporarily: W. S. Rushing of Mississippi, Chaplain; J. A. Green of Texas, Doorkeeper; O. M. Wright of Louisiana, Assistant Doorkeeper.
 - "The Alliance was opened in due form.
- "The President announced the following Committee on Credentials: Ma-Gee of Mississippi, Polk of North Carolina, and Jones of Texas.
- "By consent, T. B. Ruff of Tennessee, a member of the Agricultural Wheel, was duly initiated into the Farmers' Alliance.
- "The following committee on order of business was announced: G. B. Pickett of Texas, Linn Tanner of Louisiana, Oswald Wilson of Florida.
 - "The Committee on Credentials reported as follows:
- "We, your committee, find the following brethren entitled to seats in this body:
- "Mississippi: J. G. Hamilton, R. S. MaGee, T. E. Groom, Hazelhurst; W. B. Mosley, Chester; T. L. Darden, Fayette; W. S. Rushing, Carthage; T. W. Sullivan, Carrolton; E. L. Martin, Jackson; R. T. Love, Chester; C. T. Smithson, Newport; W. R. Lacy, Carthage.
- "Arkansas: W. H. Moore, Belfont; John A. Ansley, Prescott; George Martin, Sulphur Rock; Joseph Tisdale, Texarkana.
 - "Florida: Oswald Wilson, Marianna.
 - "North Carolina: L. L. Polk, Raleigh.
- "Alabama: J. M. Robinson, S. M. Adams, I. N. Gresham, and J. M. Langston; Six Mile Alliance, H. P. Bone.
- "Louisiana: J. C. Jones, Ruston; W. M. Vickars, Shreveport; A. T. Hatcher and L. C. McAlpin, Lula: R. L. Tannehill, Winfield; E. McDonald, Rayville; Linn Tanner, Cheneyville; P. F. B. Pratt, Bastrop; J. M. Stallings, Ruston.
- "Missouri: A. B. Johnson, W. D. Ham, Poplar Bluff; J. W. DeSpain, J. Graves.
 - "Tennessee: J. A. McDowell, Union City; A. E. Gardner, Dresden.
- Texas: J. S. Massey, F. Hoffheinz, A. M. Turnbull, J. A. Green, W. P. Hancock, J. M. Renick, R. A. Binford, J. J. Fairchild, T. M. Smith, R. P. Briscoll, N. H. C. Elliot, C. E. Cade, D. C. Whitman, L. L. Sloss, D. J. Eddleman, C. A. Leverton, Evan Jones, I. Stoddard, R. J. Wallace, R. M. Kay, S. O. Daws, Matt S. Wallace, R. J. Sledge, John O'Byrne, H. C. Maund.
 - "The Alliance adjourned until 1.30 P.M.

- "1.30 P.M. President Macune in the chair. The Alliance opened in due form.
- "President Macune delivered his annual address, which was full of interesting facts and suggestions.

"MESSAGE.

- "Brethren of the Farmers' National Alliance and Co-operative Union of America:
- "This is indeed an auspicious occasion. It is the first session of this body; and this body is the first organization of the real cotton-raisers ever inaugurated on a plan calculated to assist the poor man. It is a time in the history of cotton-raising when the price of that staple is not equal to the cost of producing it. This is a gathering of representative men from ten States; men who represent the greatest of all industries, the agricultural, assembled here, not merely for the pleasures or emoluments to be gained by their attendance, but, I trust, imbued with the proper conceptions of the great responsibility resting upon them, thoroughly alive to the conditions of the times, and firmly resolved to work out the proper and true solution of how to relieve the depressed condition of agriculture in our beautiful southland, and, when found, to stand shoulder to shoulder in one solid phalanx, till the effort is crowned with victory. As the first legislative body ever convened in the order, you will have a great work to perform, and the future prosperity of this great movement is, therefore, largely in your hands. Your attention is called to the causes that, combined, created the necessity for this organization; the plan on which organization has been effected, comprising the organic law of the order, both written and unwritten; also the objects and conditions it is expected to achieve, in the event that success attends the effort. The laws to be made by this body will be statutory, and will be based upon and explanatory of the organic law; they should be prompted by the necessities that gave rise to the existence of the order, and executed with a spirit of devotion to the objects we seek to achieve, bounded only by the limit of possibility.
- "Mr. Garvin, in his history of the Alliance in Texas, says that it was started somewhere between 1870 and 1875, in Lampasas County, by a number of farmers, who associated themselves together in a defensive league, to resist the encroachments of land-sharks, who proposed to rob them of their homes. The history of the move, from its inception up to 1886, was not attended with much interest. It had grown by August, 1885, to the number of about 700 Subordinate Alliances, and had changed its objects and workings, until they resembled very closely those of the present. From August, 1885, to August, 1886, a most prodigious growth was recorded; the increase was about 2000 Sub-Alliances. Among the reasons for this rapid growth, and probably one of the most potent, was the fact that all other occupations were either organized, or were rapidly organizing, and the farming interest was unable to cope with them, unorganized; therefore the necessity for organization for self-defence. Again, the results of combination had reduced the price of



all products the farmer had to sell to such an extent, that in many cases they would not pay hireling's wages to the one who produced them, and were really grown at a loss. The rule was, that a year spent in the most vigorous labor and rigid economy would with good management yield a bare subsistence, and in many cases it yielded less; and would finally result in a surrender of the farm to the mortgagee merchant, and the addition of one more family to the army of renters. It seemed to be an admitted fact that organization was the only hope of the farmer, and as the Alliance was presented as strictly a farmers' organization, its ranks were rapidly filled with all those who felt disposed to unite and resist the encroachments of other organizations, and who realized that it required organization to meet organized power. Such large numbers joining a secret organization in so short a time rendered proper instructions as to the principles and objects of the order impossible; consequently many joined who were not as well posted as they should have been, and vast differences were entertained as to the policy to be pursued in order to accomplish with speed and certainty the objects of the order.

"Some contended that the only hope was in the ballot-box, and that united political action was the only way for the Alliance ever to accomplish anything; others, realizing the danger to American institutions, by the introduction of a secret political party, contended that we must eschew politics altogether, and that the Alliance was a social and benevolent organization, calculated to make man a better farmer and a better neighbor. Others had different conceptions: some, that it would make all farmers' boys orators; some, that it would stop horse-stealing; some, that it would make all its members truthful and honest; and the contention between the different factions was beginning to assume alarming proportions, as a family quarrel, when the called session of the Farmers' State Alliance of Texas was held in the city of Waco, in January last. One object of that called meeting was to devise some plan of extending the work into other States. The Louisiana State Union, which had met just prior to that time, had elected and sent to that meeting a delegate, to co-operate with the State Alliance of Texas in the extension of the work. It was there shown that there was already in existence an organization in the northwestern States calling itself the National Farmers' Alliance, but that it was a very loose organization, and was nonsecret, that the door to membership was too wide for it to meet the wants of the times in the South. It was the prevailing sentiment that none but those most interested in farming should ever be admitted. It was, after a full investigation, decided that the organization as it existed in Texas, and the other States of the South, to which it had spread from and by the authority of the Texas Alliance, could accomplish nothing by joining the National Farmers' Alliance of the Northwest, and in view of the fact that the cotton belt of America was a circumscribed country, there was a necessity for a national organization of those residing in the cotton belt, to the end that the whole world of cotton-raisers might be united for self-protection. This was a grand conception, and one susceptible of results beyond our expectations. It was, therefore, decided to organize, in connection with Louisiana, a National Farmers' Alliance and Co-operative Union of America; to make it a strong national order, with the one great battle-cry of co-operation as the universal principle upon which all could unite; co-operation in its broadest sense, that is, that we will assist one another, that we will stand shoulder to shoulder in bearing the crosses and burdens of life, that we will intelligently pull together in everything; in buying and selling, in producing and consuming. There is a necessity for enlightened co-operation in everything, leaving local issues for local or State Alliances to settle.

"The necessity for the extension of the work lay in the fact that other States were in as bad a condition as Texas and Louisiana, and that, as the interests of the cotton-producers were identical, and the evils from which they were suffering general, the greatest good could not be effected without uniting the whole cotton belt. It was necessary to the local business experiments already commenced, that they be made general, and be participated in by all, in order that they prove a greater success. Single towns or counties could not inaugurate a move that would affect the cotton business much, and a whole State could not accomplish as much acting alone as it could in conjunction with the other ten. It will be seen, then, that in the organization of this national association, the object was to organize the agriculturists of the cotton belt for business purposes; and that purpose has been carried out, and has been found to give sufficient scope to the ability of all, and that the dissensions spoken of in the early history of the order, in regard to politics and other subjects, have entirely died out, and given place to an enlightened effort to accomplish something grand - a business organization.

"If we look back through the history of this and other countries, we will see that some branches of industry have always been knocking at the doors of legislation, and when weak, begging for class laws that would assist their business efforts; if they were strong, they would either demand or buy such favors; but in either case they have too often been successful. It is proverbial that the other two great classes of production, the manufacturing and the commercial, which include railroads and transportation lines, have been largely built up to their present condition of wealth and prosperity by government favors and assistance. Now, if this be true, at whose expense has the government done this, as there are only three classes of producers? It must evidently have been at the expense of the third class, which is the great agricultural. The agricultural class, then, has not only received no government favors, but has been bled to enrich other classes. This is now fully realized, and is productive of a determination on the part of our people to submit to such wrongs no longer. They do not organize a new political party to carry out their plans; they call upon the government to correct the evils, or provide protection, as the case may be. It is realized that class legislation is a great evil, because it builds up two classes at the expense of the third. Then either let the third class be the recipient, or do away with all class legislation. If a party was organized for that purpose, the party would die when that purpose was accomplished.

"Under our system of government, we should not resort to a new political

movement to carry out every reform necessary. We have the two great principles and conceptions of the genius of our institutions, as contended for by John Adams and Thomas Jefferson, as a basis for a division into two great political parties; that should suffice: let every one carry his ideas of reform to the party to which he belongs from principle. And as the agriculturists comprise a large majority of all the voters, they will necessarily comprise a majority in each party. But their greatest influence in politics can be brought to bear, not at the hustings, but in the halls of legislation, by the proper and judicious exercise of the right of petition. There they step forward as Alliance men strong and united, and demand that the government redress wrongs committed by it; but in partisan politics the members of our order should participate, not as Alliance men, but as citizens, because politics is for the citizen.

"Let the Alliance be a business organization for business purposes, and as such, necessarily secret, and as secret, necessarily strictly non-political. This is somewhat of a digression, but is made in order to show the ideas that were entertained at the time this national association was launched forth on the sea of experiment as a business organization of the farmers of the cotton belt. The plan on which organization has been effected is to some extent new; and while it perhaps contains nothing original, it is experimental, in that it combines the features of several different systems. Being a secret organization, it is necessarily to some extent like the father of all secret organizations, monarchical in form; but being a chartered association, under the law of our country, for business purposes, and being composed of a people who are familiar with, and devoted to, a republican form of government, its written law is in conformity to that system. You will, therefore, find in the construction of a code of statutory law that you must provide for a membership who occupy a dual relation to the order; that is, the constitution is the written organic law, and outlines a republican form of government. secret work is the unwritten organic law, and is co-ordinate with the written, and outlines a limited monarchy. By keeping these ideas in view, you will avoid confusion, and will find questions of law much easier of solution.

"It is a great pleasure to be able to congratulate you on the rapid extension of the work under the plan outlined. There are now State organizations in eight States, and in many States the work is progressing in a very satisfactory manner, as the report of the secretary will show. The plan of organization seems to meet the necessities, with perhaps a few modifications. There appear to be no prominent defects in the plan as a national enterprise, and as complete jurisdiction is surrendered to the State Alliances when organized, it rests with them to make laws to meet local conditions. There is a feature of the Alliance that is very important, and has always been a part of the unwritten work, that it might perhaps be well to introduce some laws and regulations in the written work, in order that it may be more universally understood. That is the trade system, and the co-operative efforts being made to act in harmony in the sale of products and purchase of commodities. On the success of this feature much of the prosperity of the order depends;

hence, some general laws and recommendations should be in print, in plain and easy-to-be-understood language, so that all may understand, and tend towards one and the same object. Much might be said as to the future of this great movement, and still it is all expressed in the single sentence. There is no limit to the possibilities. However, I call your attention to the fact that our people, owing to money pressure and the fact that cotton is our great money crop, are disposed to rely too much on it, and purchase manythings that should be produced at home; therefore this body should strongly recommend more diversity of farming, to the end that our people become more self-sustaining, and therefore less dependent.

"State Alliances should be called upon to take steps to assist their members in procuring the facilities for diversifying their products, and to assist them in the sale of their surplus; and further, these States raise 7,500,000 bales of cotton yearly; a little over two-thirds of this enormous crop is sold in Europe, and the price not only for that, but for all that is used in America, is fixed in Great Britain; and yet our government does not allow one yard of cotton cloth imported without a tax of about sixty per cent of its value. This enables American spinners to undersell the British looms, and prevents the importation of British cloth, but does not prevent British spinners from discriminating against American cotton in every conceivable manner, and in constantly crowding the price of the staple down, so as to enable them to compete with the American spinner. The condition simply is, that the British spinner fixes the price on every pound of cotton raised, and the effect of our law is to make him virtually interested in reducing the price of our cotton. Were it not for this tariff-law discrimination against him, by an ad valorem tax, he would as soon see cotton high as low; and would, perhaps, prefer it high.

"Our people occupy the ridiculous position of not only paying the New England spinner about fifty per cent more for the cotton cloth than it is worth, but they, by submitting to that law, allow conditions that very naturally reduce the price of every pound of cotton they raise.

"It is not claimed that as cotton-planters and Alliance men we should demand the abolition of all tariff; that would not be our province in that capacity. We may do that as citizens, if we choose; but as cotton-raisers and an Alliance business organization, we have a right to demand the correction of evils that afflict and sap the very life-blood from our business. Merchants, bankers, insurance men, and all others do the same. But in so doing we should be careful that we do not inflict wrongs on others, or on other interests.

"It is claimed by many intelligent and honest thinkers, that if we reduce the tariff on manufactured cotton goods, we would ruin American manufacturing; and we might with propriety reply: Which is the most essential, that the few American factories keep on paying a dividend of from twenty to forty-five per cent, and that the many farmers become tenants, serfs, and slaves; or that the manufacturer be placed upon a level with the agriculturist, and that each be allowed the fruits of his own labor, and a fair interest on the money invested? But our object is to show the effect that a reduction of the cotton tariff would have on the mills. In the first place, there is no surplus of cotton

raised in the world, and this is proven by the fact that there is no accumulation of it. Now, it is true that the old doctrine of price being regulated by demand and supply holds good in this instance, but in a country where every seventh person is either a pauper or is the recipient of public charity in some shape, the demand is very materially modified by the ability to purchase; and that whenever the ability to purchase is enhanced, the demand will be very materially increased.

"Now, if by reducing the tariff, English cotton goods were introduced, cheaper goods would increase; the ability to purchase and the increased demand would act upon the limited cotton supply by increasing the price of the raw cotton, which would, in turn, raise the price of the cloth to its present price, or perhaps higher, and still keep up the increased ability to purchase by the increased amount of money put in circulation by the cotton-producers, who would be receiving an increased price for cotton. Therefore, the result would be, not to lessen the price of cotton goods, but to increase the price of raw cotton; and it is held that the increased demand would, as far as justice is necessary, compensate the mills for the loss of profit.

"In conclusion, it is hereby recommended that this body formulate some plan of universal co-operation among our people, whereby each Sub, County, and State Alliance shall have an agent, and that a national agent be chairman of a board composed of the different State agents, and that a system be established for conducting the production and disposition of the cotton crop. Such a board could have accurate and reliable information every month, as to the condition of the crop in every neighborhood in the eleven Southern States. They could negotiate and consummate arrangements tending to an increased price; and should all negotiations prove of non-effect, they could adopt a graduated scale for the reduction of the cotton crop, which would be an injustice to none. This plan is simply offered as a suggestion, and it is hoped that something of this character will be adopted.

"C. W. MACUNE.

"A memorial to the Congress of the United States, touching the questions of protective tariff, silver, and bonds was referred to the Committee on Demands.

"A printed letter from the Knights of Labor was read, and on motion referred to the Committee on Resolutions.

"The following, offered by N. H. C. Elliot, was adopted: -

"Whereas, The farmers of North Carolina have an organization known as the State Farmers' Association, the declared objects and purposes of which are in accord with the general principles and purposes of the Farmers' Alliance; therefore,

"Resolved, That a committee be appointed to present to that body, at its next annual meeting in Greensboro, on the second Wednesday in January, 1888, the general objects, purposes, and principles of the Farmers' Alliance, to the end that the said Farmers' State Association may be induced to adopt the same and become thoroughly affiliated with us.

"Whereupon the president appointed N. H. C. Elliot of Texas, L. L. Polk and S. B. Alexander of North Carolina, said committee,

"The following paper, offered by Martin of Arkansas, was read, and on motion received and concurred in: —

"Believing that all labor organizations should be a unit in their efforts to bring relief to the toiling masses, whenever they are satisfied that their rights are infringed upon by organized capital; therefore be it

"Resolved, That the Farmers' Alliance and Co-operative Union will at all times oppose any unjust or oppressive move of any corporation, the object of which is to do an injury to any of the sister labor organizations. And,

"Resolved, That we will, in an honest, legitimate way, assist any labor organization to throw off the oppressive yoke of organized capital.

"The following, offered by J. A. Ansley of Arkansas, was, on motion, adopted:—

"Resolved, That the chair appoint a committee of four on the part of the Farmers' Alliance and Co-operative Union, to confer with a like committee to be composed of one member from each State, sent to this body as delegates or representatives by various State Agricultural Wheels. Said committee will formulate a plan upon which said bodies may consolidate. Should any plan be agreed upon, the same shall be sent by a delegate from this body, and submitted for the consideration of the National Agricultural Wheel, at its annual meeting in November next.

"The following were announced as said committee: R. F. Butler, B. F. Rogers, and Evan Jones, of Texas, and J. C. Jones of Louisiana.

"On motion of G. B. Pickett of Texas, the regular order of business was suspended, and H. C. Brown, Secretary and Treasurer of the State Agricultural Wheel of Kentucky; S. B. Erwin, President State Agricultural Wheel of Kentucky; S. H. McDowell, Secretary National Wheel of Tennessee; Alf E. Gardner, Secretary and Treasurer National Wheel, Tennessee, were introduced and initiated into the Farmers' Alliance and Co-operative Union of America, preparatory to a conference between the States represented by these brethren, pointing to a union of these orders.

"The Conference Committee made the following report: -

"Resolved, That we, as delegates of the Farmers' Alliance and Agricultural Wheel, agree to accept, as a basis of union, the secret work of the Alliance and the national constitution of the same; each State accepting this basis of union to retain such name as they now have, if they so desire.

"Resolved, That the eligibility clause in the National Alliance constitution be explained by statutory enactment, showing that the State Alliance of Texas, or the State Farmers' Union of Louisiana, have no power to change this eligibility.

"J. H. McDowell, Tenn.,
"Agricultural Wheel.

"B. F. Rogers, Tex.,

"R. F. BUTLER, Tex.,

"Evan Jones, Tex.,

"J. C. Jones, La.,

" Committee.

"The time having arrived to which the election of the officers had been set, John O. Byrne of Texas moved that each State be admitted to cast the whole number of votes to which they were entitled. Carried.

"The delegates from Florida asked the privilege, in behalf of Florida, to place in nomination C. W. Macune, as a candidate for president of the National Farmers' Alliance and Co-operative Union of America, who was, on motion, unanimously elected by a rising vote.

"A motion prevailed that Brother L. L. Polk of North Carolina inform Brother C. W. Macune of his election.

"Nominations were then declared in order for vice-presidents and such other officers as are provided for by the constitution of the National Farmers' Alliance and Co-operative Union of America, in regular order, which resulted in the election of the following brethren to the respective offices:—

"First Vice-Presidents, L. L. Polk, North Carolina; R. T. Love, Mississippi; S. B. Alexander, North Carolina; H. P. Bone, Alabama; Linn Tanner, Louisiana; W. H. Moore, Arkansas; S. B. Erwin, Kentucky; A. B. Johnson, Missouri; J. H. McDowell, Tennessee; M. D. K. Taylor, Texas; Oswald Wilson, Florida; E. B. Warren, Secretary, Texas; A. E. Gardner, Treasurer, Tennessee; J. C. Jones, Chaplain, Louisiana; Ben Terrell, Lecturer, Texas; J. A. Tetts, Assistant Lecturer, Louisiana; I. N. Gresham, Doorkeeper, Alabama; H. C. Brown, Assistant Doorkeeper, Kentucky; T. E. Groome, Sergeant-at-Arms, Mississippi.

"A motion prevailed to select the place for the next meeting of this National Alliance. Whereupon, Meridian, Mississippi, was duly and constitutionally selected as such place.

"A motion by Love of Mississippi prevailed, that a committee of one from each State represented here, be appointed to report at the next meeting of this body some plan by which we can own our organ; also, in addition, our printing establishment, for the publishing of everything necessary to the needs of Alliances, such as school-books, etc.

"The president announced as the Committee on National Organ J. H. McDowell of Tennessee, Ansley of Arkansas, E. L. Martin of Mississippi, L. L. Polk of North Carolina, Oswald Wilson of Florida, Tannehill of Louisiana, A. B. Johnson of Missouri, and Lane of Alabama.

"Resolved, That this National Alliance and Co-operative Union of America adjourn to meet in Meridian, Mississippi, on the second Wednesday in October, 1888.

"DEMANDS OF THE NATIONAL FARMERS' ALLIANCE UPON CONGRESS.

- "Resolved, That we, the National Farmers' Alliance and Co-operative Union of America, in convention assembled, advocate and indorse the following principles, as in accord with the sentiments and demands of the tillers of the soil:—
- "1. We demand, first, the recognition by incorporation, of trades-unions, co-operative stores, and such other associations as may be organized by the

industrial classes, to improve their financial condition, or promote their general welfare.

- "2. We demand that all the public lands be held in small bodies, not exceeding three hundred and twenty acres to each purchaser, for actual settlers, on easy terms of payment.
- "3. That large bodies of land held by private individuals or corporations, shall be assessed for taxation at such rates as they are offered to purchasers, on credit of one, two, and three years, in bodies of one hundred and sixty acres or less.
- "4. That, whereas, large bodies of our public lands have been sold to foreign capitalists, thus tending to the establishment of land aristocracy in this country, similar to that which has reduced the people of Ireland and other monarchical governments to a condition of abject serfdom, we demand the passage of laws forbidding the ownership of lands by aliens, whose allegiance belongs to other nations; and that the public domain be held as the heritage of our own people and our children after us.
- "5. That all lands forfeited by railroads and other corporations immediately revert to the Government and be declared open for purchase by actual settlers, on the same terms as other public lands.
- "6. We demand that all fences be removed, by force, if necessary, from public lands unlawfully fenced by cattle companies, syndicates, or any other form or name of monopoly.
- "7. We demand the extinguishment of the public debt of the United States by operating the mints to their fullest capacity, in coining silver and gold, and the tendering of the same without discrimination, to the public creditors of the nation, according to contract.
- "8. We demand the substitution of legal-tender treasury notes for the issues of national banks; that the Congress of the United States shall regulate the amount of such issue by *per capita* circulation, that shall increase and keep pace with the growth of the country's population and the expansion of her business interests. We further demand the repeal of the present national banking system.
- "9. We demand that the Department of Agriculture be made one of the departments of State; that it shall be increased in scope and efficiency, and in connection therewith there shall be established a bureau of labor statistics.
- "10. We demand the enactment of laws to compel corporations to pay their employees according to contract in lawful money for their services, and the giving to mechanics and laborers a first lien upon the products of their labor, to the extent of their full wages.
- "II. That the laws relating to the suppression of the transmission of immoral, profane, or obscene literature through the mails, be made more stringent, and be extended so as to suppress the transmission of such literature by any public carrier.
- "12. We demand that the United States Government purchase, by right of eminent domain, the telephone and telegraph lines, and operate them as adjuncts of the United States postal service.

- majority of the cotton-producers of the cotton belt of America, which belt produces over two-thirds of the cotton of the whole world; and in view of the further fact that two-thirds of the cotton in the cotton belt is demanded and used for export to a foreign power, which fixes the price on every pound of our cotton; and in view of the fact that the said power is debarred from returning to this country a single yard of manufactured cotton, thereby making said power interested in crowding down to the lowest figure the price of cotton, we hereby demand that the United States Government adopt a speedy system of reduction of the import duty on manufactured cottons, in such a way as to do justice to this, the greatest of all classes of producers.
- "14. We demand such a revision of the tariff as will lay the heaviest burdens on the luxuries and the lightest on the necessaries of life, and as will reduce the incomes from imports to a strictly revenue basis.
- "15. That as a remedy against the unjust accumulation and encroachment of capital, we demand a graduated income tax.
- "16. That as upon the intelligence of the people depend the stability and perpetuity of our own free government, we demand for the masses a well-regulated system of industrial and agricultural education.
- "17. That we oppose the continued influx of pauper labor from the monarchies of Europe, whose anarchic views and communistic doctrines are breeding discontent and disloyalty to law, order, peace, and good government, and, by an overplus of worthless labor, reducing our own laboring classes to starvation; we therefore demand more stringent laws to prevent this country being further used as an asylum for the communists and paupers of other countries.
- "18. We demand that the constitutions, both State and national, be so amended as to provide for the election of United States Senators by direct vote of the people."

The meeting closed amid universal satisfaction, and a general determination to take the order into all the cotton States. In fact, the formation of the cotton-growing States into one grand agricultural organization was as much as the most sanguine expected. It was argued that the cotton belt of the United States produced seven-tenths of the cotton of the world, and that the producers of the raw material, through combination, could force prices to where they would return a fair profit on production. Such a position was logically correct, and no doubt could be made effective. It was with this idea that many of the States joined the organization. However, it soon began to appear that the wheat and cattle raisers of the West were in the same position, and dominated by the same power. A sort of fellow-feeling was engendered through mutual distress, that

finally took shape and led to the introduction of the order into the Western States.

President Macune was fortunate in the selections for vicepresidents in the different States; also in securing the services of Brother E. B. Warren, who made a most excellent secretary. But above all, for the prosecution of such a work, he had the assistance and hearty co-operation of Brother Ben Terrell, as national lecturer. Brother Terrell labored incessantly, going anywhere and everywhere that the judgment of the president deemed necessary. Under such management, and with such coadiutors, failure was impossible. The work of organization spread rapidly. Further negotiations were held with the National Wheel, looking toward consolidation, with good success; and Brother Terrell was sent to attend their national meeting at McKenzie, Tennessee. Mutual explanations were made, and it was decided to hold a meeting at the same time and place, and try to consolidate. Meridian, Mississippi, was the place selected.

It would fill a volume to detail the immense amount of labor performed by President Macune and his corps of assistants, in the propagation of the principles of the order. Brother Macune saw clearly the benefits arising from active, effective, and successful work in the line of organization, and bent his whole energy to further that end. He seems to have been the guiding and decisive power, with every one willing and ready to assist. New States were organized, business agencies were established, and the progress of the Alliance was without a parallel in history.

Under such conditions, the time for the third annual session of the Alliance drew near. The meeting at Shreveport was a sort of getting together of the scattered forces of the Alliance into one compact organization, with mutual understandings between those who, though belonging to the same order, were comparative strangers. The meeting held at Meridian was an attempt to further extend the field of operation, by consolidating with an organization similar in character, aims, and purposes, but made up of almost entire strangers. Under these circumstances, the more timid were reluctant to run any chances of making a mistake. President Macune had looked over the ground thoroughly, and carefully considered the matter in all

its bearings, and concluded that the consolidation of these two forces into one would form a power for good that, in the end, would be irresistible. Having come to this conclusion, he made every exertion possible to accomplish this result. In this he was ably assisted by Brothers L. L. Polk, J. H. McDowell, and others.

The annual meeting at Meridian was composed of full delegations from twelve States and Territories, every one in earnest, and all flushed with the victories of the past year. I give the most important acts of that meeting, in the synopsis which follows:—

"The National Farmers' Alliance and Co-operative Union of America met in regular session in the city of Meridian, Mississippi, December 5, 1888, with the following officers present: C. W. Macune, President; L. L. Polk, First Vice-President; R. T. Love, Vice-President for Mississippi; S. B. Alexander, Vice-President for North Carolina; H. P. Bone, Vice-President for Alabama; Linn Tanner, Vice-President for Louisiana; A. B. Johnson, Vice-President for Missouri; J. H. McDowell, Vice-President for Tennessee; E. B. Warren, Secretary; A. E. Gardner, Treasurer; Ben Terrell, Lecturer; H. C. Brown, Assistant Doorkeeper; T. E. Groome, Sergeant-at-Arms.

"The president filled vacancies by appointing the following, pro tem.: J. W. Beck of Georgia, Chaplain; T. J. Bounds, Doorkeeper.

"Alliance opened in due form.

"Committee on Credentials appointed, consisting of Quicksall of Kentucky, Dimmick of Louisiana, Tracy of Texas, Bone of Alabama, and Payne of North Carolina.

"The following officers were appointed temporarily: Evan Jones, Vice-President for Texas; W. A. Wilson, Vice-President for Georgia; H. McRae, Vice-President for South Carolina; W. M. Huey, Assistant Sergeant-at-Arms; G. L. Clark, Assistant Doorkeeper. J. W. Reid, B. J. Hubbard, and J. C. DeLoach were appointed secretaries.

"While waiting for the report of Committee on Credentials, President Macune read his annual message, as follows:—

"Brethren: In presenting to you this, my annual message, to the third regular session of this body, at the expiration of my term of office, I have much to say, and feel deeply impressed with the importance of a full and free expression to you as to the past and present condition of the order, and the necessities of the future. Ours is no common struggle; upon it depend, in a great measure, the future prosperity of agriculture and the liberty and independence of those engaged in that pursuit. And, indirectly, the perpetuity of our system of government must be largely affected by our success or failure. This is true because the people whom we seek to relieve from the oppression of unjust conditions, are the largest and most conservative class of citizens of this country; they are the greatest producers, and are the permanent, stable,

and solid class, on which the prosperity of all others depends, and to which all must look to judge of the future of the land.

"Causes that tend to depress and enslave this important element of our country, which may be well designated as the foundation of the superstructure, must surely endanger the very structure itself, and tend towards ultimate dissolution and loss of all control. Strange as the assertion may sound, it is nevertheless true, that we have two classes of anarchists in this country: one the avowed anarchists, who oppose all law and order, and the other a blindly selfish class, who would loudly disclaim anarchy, but advocate conditions that so surely sap the vitals of productive labor, that the result is ten times more productive of results ripe for anarchy than all the agitation of the avowed anarchists. If our order means anything, it means justice, right, law, and order, and therefore must be the very antipode of all forms of anarchy, both avowed and disguised. So just a cause may well command great devotion and energy; but when, in addition to the justice of the principles involved in the movement, its magnitude and importance and the necessity for action are considered, the command will be recognized and accepted as imperative by all those who have allied themselves to the order. As to the magnitude and importance of the business, you, as the representatives of the membership at large, are to be congratulated upon the wonderful growth the order has made in so short a time. As will be shown by the report of your secretary, there are now about ten thousand Sub-Alliances; these are associated into about eight hundred County Alliances, and represent an individual membership of about four hundred thousand. Twelve States are working under charters from this body, and three or four more are about ready to be chartered. While this is a good showing for the time and means employed, it is but a start compared with what may be done in the same field, and may well and forcibly impress you with the importance of providing a more efficient system of securing laborers and means with which to prosecute the work. As to the necessity for action, all will perhaps admit that it exists, and that it calls for immediate activity. All other occupations are organized and are constantly striving to draw the lines of their organization closer, and the progress of material development has brought about such peculiar conditions in this day and time that to avoid organization is to refuse the benefits of enlightened co-operation, and suffer from the evil effects of trusts and combines, that seem to have no limit to their greed, and heed no resistance except organization. That this is understood and recognized by the masses is evinced by the avidity with which they embrace an opportunity to unite with the organization, and this should be carefully noted as an indication of the responsibility resting on this body to provide such laws and rules within the order as will insure to its members the benefits of enlightened co-operation in fact; and such laws as will assist them in acting as a unit to resist the encroachments of opposing organized power.

"Questions of great delicacy and importance will be presented to this body for solution, and, unfortunately, the limited time that the majority will probably agree to stay may render a proper consideration and discussion of all the subjects impossible. It is therefore suggested that you try to get all the business presented to the body on the first day and referred to the committees; that the committees be made small and expected to work and report promptly. So great an amount of work as you have before you must necessarily be done largely by committees, unless much time is consumed in its execution.

"One of the most important subjects to be considered is the basis of an organic union with the National Agricultural Wheel. This was discussed at your last regular meeting, and the national lecturer appointed to visit the National Agricultural Wheel at its regular session in Nashville, Tennessee, in December, 1887, and make overtures tending toward such union. He was courteously received and highly honored by that body, and his propositions and negotiations treated with all the respect due his important mission from this honorable body. As a result, the National Agricultural Wheel adjourned its regular session at that time and place, to meet with the National Farmers' Alliance and Co-operative Union of America, at this meeting. That arrangement has been carried out, and they are here to-day, and should have your immediate attention and consideration until you have, if possible, agreed upon a basis that will place these two great orders, that are working and striving for the same ends by the same methods, under the same jurisdiction; so that as a unit, they may press forward, shoulder to shoulder, united in one solid phalanx: one motive, right; one thought, victory; and one sentiment, fraternal love, actuating both.

"Your attention is called to the necessity of adopting and publishing the policy that will be pursued as to the extension of the organization into the Northern States.

"It will be remembered, at the time of the organization of this order as a national trade-union, the prime motive was to secure a strong organization of the producers of the cotton belt of America. It was argued that an organization of that district meant virtually an organization of the world, so far as the production of cotton was concerned; and that, therefore, in that direction was the best field to demonstrate the power and benefits of co-operation and organization. In pursuance of this doctrine, the work has been pushed with most vigor in the cotton States, until each has now a State Alliance. Other States are knocking at the door, and it seems that there can be no good cause for denying them admission. But the extension of the work into new territory, where new conditions and issues are to be met, is attended with great responsibility and danger. The danger is, that the objects of the order and the methods it proposes to work by will be misunderstood. It should be remembered that the evils which now afflict agriculture are of a general character, and have been for years developing, and consequently no spasmodic effort will relieve, neither can an effort directed by one idea alone be adequate. The relief measures must be general in character and must be applied in every possible way, and contended for with a persistence and determination that will be content with slow and partial results for the present generation, and insure the grandest benefits to posterity. Consequently, great care

must be exercised that the ship of state be kept sailing in the open waters of general reform, ready to respond to and take advantage of any favorable wind that may be presented. The shoals and rocks of special ideas must be avoided, as containing the elements of disaster.

"While all will admit that nothing will be of as great service in promoting the objects the Alliance seeks to achieve as certain legislative enactments. still nothing could be more disastrous to the order than to tie it to that one channel of reform, because by directing all effort in that direction, it would soon be recognized as the chief object of the order, and when that was accomplished, the necessity for the existence of the order would no longer remain, and it would naturally go to pieces. He who teaches as a panacea for all, either a party reform, a money reform, a land reform, or any other special reform for general conditions, must not be accepted as a guide. All the special reforms that contain good should be contended for as methods of the Alliance, but great care should be taken not to confound them with the principles which are general and are founded on ultimate truth, and as such, and in that capacity, are alone capable of meeting the general adverse conditions to be contended with. Hence the necessity, in the extension of the work into new territory, of being able to define the issues on which the methods to be pursued will depend, in plain and simple language, so that all will understand readily and indorse fully. In the cotton belt, co-operation in regulating the price of that product has been an idea that all could grasp at once and indorse it; but other sections are not favored with a product of which they have a comparative monopoly in the production, and the danger is that without some strong object of peculiar class to act as a ballast, they may attach too much importance to partisan political methods, and getting them mixed with the principles of the order, seriously injure the movement. It must therefore be extremely hazardous to extend the order into new territory without using great caution, and giving full notice to all who contemplate joining its ranks, that its objects are: 'To teach the principles of economic government in a strictly non-partisan spirit'; 'To bring about a better understanding among agriculturalists'; 'To promote mental, moral, social, and financial prosperity'; 'To bury the dead, relieve the sick and afflicted, to comfort the distressed'; and that it means 'Peace on earth and good will to man.' While it is every man's duty to his family and country, under our form of government, to be a partisan, the proper place for him to receive a true education is not in a partisan school. Let the order be the great school of truth, in which, by a thorough exchange of ideas, all may be truly educated. Let it there be agreed what great principles shall be indorsed. Leave partisanship to the individual, but study and discuss political economy as a class, and arrive at true conclusions. There need be no apprehension as to what will be the partisan policy of any people who believe and think alike, from enlightened understanding of the same subject. They would then act together and be beyond the reach of those who would try to array them to do battle on account of class prejudice. It is therefore suggested that this body, as the representative of all the Alliances now organized, pass such laws as

will prohibit Alliances from taking organized action in partisan politics or sectarian religion, under penalty of forfeiture of charter, and that all Alliances to be hereafter organized be notified of that law before charters are issued to them.

"Your attention is called to the necessity of defining — both for the information of the membership and as a guide for your executive — the genius of your laws, both organic and statutory: this will be found a task worthy of careful execution. It seems that the order is under two distinct systems of law and government, and must necessarily be so as long as it is a secret order with a written constitution — the charter from the United States government and the constitution adopted at the first meeting of this body, composed of delegates from two States and ratified by those States — comprises the organic law. Under it each State is a separate autonomy, limited only by the rights and powers expressly delegated to the national government in the constitution, thus making the order like the government of the United States, a confederated form of republican government, and authorizing its legislative branch to make laws to the extent expressly delegated by the constitution only.

"The other system of laws that governs the order, and to which it is subject, is similar to that of all other secret societies, and is of the nature of a limited or constitutional monarchy, and must ever be so as long as the secret work emanates from the general government. By authority of this system, you have in your legislative capacity, while in session, powers co-ordinate at least with the constitution. No constitution has ever prescribed a penalty for violating the obligation, still any Sub-Alliance or any president, by virtue of this last system of laws, to which the order is subject, would, on sufficient evidence, expel a member for that offence, and expulsion is the extent of punishment possible under the constitution. Your powers, then, as a legislative body, are supreme under the one system, and are only limited by the constitution under the other. You will therefore be at liberty, should you so decide, to pass a system of statutory laws, and to offer the State Alliances constitutional amendments for their adoption. It will be found a great convenience to adopt a uniform rule when enacting statutory laws; have them read by caption, numbered, and referred to appropriate committees; also require that they all commence in the same form, as, 'be it enacted.' This will save time from being wasted in useless discussion before the body. Statutory laws enacted by this body, by virtue of the authority of the unwritten law or secret work, should be supreme, controlling and being recognized and enforced by all subordinate divisions of the government. That is to say, should this body pass a law by that authority which affected the individual membership, all State, County, and Subordinate Alliances would immediately be subject to that law and responsible for its execution.

"The organic law, as embodied in the constitution, should express nothing but general principles, and should leave the provisions for applying those principles entirely to legislative enactment. This is peculiarly necessary in our form of popular government, where amendments to the constitution have to be ratified by three-fourths of the State Alliances before becoming laws.

Hence the necessity of having the constitution contain as few provisions as possible, and restrict it to a simple expression of principles so general and permanent that they will need no change; and to a definition limiting the rights and powers of all concerned. Your present constitution, therefore, needs very few changes; there are, however, three constitutional amendments submitted to your attention, as of sufficient importance to be submitted to the States, and you are requested to consider the advisability of so doing.

"First, a change as to the manner of raising, and the amount of, the revenues now derived from the States, as five per cent of the gross receipts. There is no necessity for any special elaboration on this point, as all will admit that the revenues are not adequate to meet the running expenses which must be incurred, and that this condition must seriously hamper the work. Your secretary has had a hard fight with short funds; he has received less than one thousand dollars, and is over one thousand dollars in debt. That office is economically managed when the gross expenses do not exceed thirtyfive hundred dollars per year, including stationery, postage, printing, etc. But the funds coming in under the present system have been so irregular and vague that the secretary has been compelled to manage along, relying upon other resources for the greater part of the year. He had a right to expect that in the end he would receive enough from this body to pay all indebtedness. No other officer has been allowed any expense during the past year. But all of your officers have been compelled to advance the funds from their own pockets to defray their expenses in attending this meeting. This is a hardship, and is not just; the laborer is worthy of his hire, and should at least get his own money returned to him. However, the greatest necessity for revenue is to provide a fund for the elaboration and extension of the work into new fields.

"The second amendment is in regard to representation, which, under the present plan, is cumbersome and sometimes unequal. One delegate from every four counties is not based on any ratio as to extent of territory or numerical strength of constituency. This should be remedied, so as to always keep the size of the body within the bounds of reason, and at the same time provide some uniformity as to the amount of interests represented by each member.

"The third amendment suggested is one providing for a supreme judiciary, to be co-ordinate in power with the executive and legislative branches, with appellate jurisdiction in matters of controversy between the State Alliances, and in trials for impeachment of officers of the National Alliance. Such appeals, in the latter class of cases, being taken from the findings of special committee appointed by the president, when competent; and when not, to be appointed by the Legislative Department when in session; and when not, to be appointed by the Supreme Bench. The Supreme Judiciary should have original and final jurisdiction in cases involving the constitutionality of any statutory laws, and in cases defining the legal relations of the order with other organized bodies.

"The statutory laws of the order will depend entirely upon your wisdom, and should clearly define and provide for the effective operation of every

principle of the constitution. You are to be congratulated upon having one vice-president from each of the States, and that the vice-presidents form the Executive Committee, and it is suggested that you constitute them a diplomatic council, with power to meet at any time on call of the president, and define and carry out a plan of consolidation with any kindred organization, subject to ratification and approval by the Supreme Judiciary. This would enable such business to be despatched at all times of the year.

"It is suggested that a law be passed regulating the printing of rituals and charters, and that States should not be allowed to have that work done. A reason for this is that the National Alliance, by having large numbers made, can secure better work for less money; and further, it might, by being restricted to the National Executive Committee, be made a source of revenue.

"There is great necessity for a statutory enactment that will be the means of securing full and accurate crop reports at least four times a year; and some action should be taken by this body that will impress the people with the importance of this business and secure the co-operation of all to perfect a bureau that will be absolutely correct, and can at all times be relied upon to represent the interest of the producer, whether it be simply to inform him of the best time to sell, or contradict some falsehood circulated by speculators to reduce the price of produce.

"Your attention is called to the fact that the laws of the United States, under which this National Trade Union is chartered, require that the head-quarters of the corporation be in the District of Columbia, and it is suggested that you consider the propriety of opening an office in Washington, to be the home of the corporation. The order seems now to have grown large enough to make this necessary and advisable.

"If the people of this country suffer from the effects of class legislation, if class legislation has been the result of influences and importunities brought to bear by certain classes upon the law-making powers, it seems that it might be well for agriculture to have a small, but competent and inexpensive committee to watch the motions of Congress, and present and push the influences and importunities that may be thought advisable in behalf of the members of that great class, and sound the alarm when offensive class legislation seemed probable.

"The different State Alliances, during the past year, have been organizing their business efforts and are endeavoring to co-operate on the exchange plan. This plan is pure and simple co-operation, with no joint-stock features whatever, and differs from similar plans before introduced, in several important particulars. It is calculated to benefit the whole class, and not simply those who have surplus money to invest in capital stock; it does not aspire to, and is not calculated to be a business for profit in itself, but is intended to be strictly auxiliary and supplemental to the farming efforts. Another distinctive feature of the exchange plan is that, instead of encouraging a number of independent stores scattered over the country, — each in turn to fall a prey to the opposition, whenever they shall think it of sufficient importance to concentrate a few forces against it, — this plan provides for a strong central State

head, and places sufficient capital stock there to make that the field for concentrating the fight of the opposition, and a bulwark of strength and refuge for the local store efforts. The opposition to the central exchange under this system is of course very determined and very bitter, but it has been found vastly better than the scattering fight, and certainly has a much greater advantage in repelling the attacks of the opposition, and seems competent to conquer all the attacks of the external opponents, if properly sustained by the constituency. The greatest danger comes from bombs thrown by the enemy, that cause dissension and dissatisfaction among the membership. Of course a big majority will be found firm and steadfast, but a few are always waiting anxiously to be struck by such bombs. This system has been tried longer and more extensively in Texas than any other State, and has been attended with no little strife and opposition. In the effort made in that State, it was thought best last winter to deviate from the true exchange plan; the business was just being started and did not have its capital stock paid up sufficiently to enable the central exchange to stock up with goods, and the exchange plan proper was held in abeyance, intending to develop it fully when the capital should be sufficiently paid in; and a plan was offered by the Alliances, and by them adopted, by the provisions of which a system of joint notes, made by the Sub-Alliances and secured by mortgages on the cotton crop, are given by the Sub-Alliances direct to the central exchange, under the supervision and approval of the county business agent. These joint notes ranged in amount from one hundred to five thousand dollars, and were intended to represent the amount of credit purchases that each Alliance desired to make on time during the year. All the notes were made due November 15th, and as the previous custom of the country had been October 1st, that was intended as a step toward lengthening the season for marketing the The effort contemplated making nothing fall due, on the following year, prior to the first day of January. The exchange was expected to use the joint notes, which were negotiable paper, as a basis of credit, and borrow money upon them to be used in purchasing the supplies for the makers of the notes.

"The effort was only partially successful, owing principally to the small amount of capital paid up. The notes, if ever so good, could not be used at their face value in borrowing money; the borrower must have some capital or ability to pay of himself. The amount of notes made in favor of the exchange was about four hundred and twenty thousand dollars; the amount of goods put out on credit was about two hundred and seventy-five thousand dollars; the amount of stock paid into the co-operation was about seventy-six thousand dollars; but at this time the exchange was in its greatest trouble, and received the criticisms through the press that crippled it and interfered the most with its success; "it had only received about seventeen thousand dollars cash capital on which to operate, and had put out in the neighborhood of two hundred thousand dollars' worth of goods to the brethren, or nearly twelve times its capital. - The result of the effort in Texas has probably demonstrated that that plan should not be attempted by an exchange, unless it has a large paid-

up capital. However, that plan, if carried out, is calculated to assist greatly in handling the cotton crop, because it enables the poor man to make a crop without mortgaging to the merchant. The exchange plan of Texas is now more forcibly than ever demonstrating its success. The brotherhood of the entire State have paid up their indebtedness to the exchange, closer than ever before known in a credit business, and the exchange has been enabled to liquidate its indebtedness faster than most any corporation or mercantile concern in the State. It had paid, on the first day of September, one hundred and fifty thousand dollars; and while the commercial reports every day showed private mercantile concerns, in different parts of the State, making consignments, giving mortgages, closing out, etc., in greater numbers than had been known for years, the exchange was, every day, growing more solid and getting its business in a healthier condition, and one fact that stands out prominent, and is a subject of congratulation, is, that not a single Alliance or co-operative store, that traded with the exchange, has failed.

"With a State exchange system in each State, it is quite probable that you will be called upon to consider bills for the establishment of a National Exchange, for the purpose of harmonizing the efforts of the State exchanges, and to assist and direct their enterprises. In so doing, you should exercise the greatest conservatism and extremest caution. An investigation of the subject will impress you with its magnitude and importance. Nothing visionary should be for a moment tolerated. You should not provide for a National Exchange simply because there may be a demand for it; better let it pass unless you can see positively how it will do great good, and be an efficient, successful, working enterprise, and see it so plainly that you can demonstrate it to a certainty. If a system of national co-operation can be made a success, it must, under our form of government, depend largely upon the perfection and success of the State systems that compose it; and they in turn upon the county systems; and they in turn upon the people. Therefore, there is a danger of establishing a national system too early (before it has a proper foundation), and the result of such action would be an inefficient and inoperative enterprise, from which half a million people would expect wonders, while it found itself powerless to accomplish anything, and, as a result, great injury to a just and worthy cause. Examine, therefore, carefully into the condition of the co-operative effort in each State, before considering a national plan, and should you decide to adopt one, leave no possible chance for a failure. Do this by prohibiting it from undertaking more than it can surely accomplish, and do not place a responsibility without bestowing power to discharge it.

"Your attention is called to the recent troubles in regard to a combination in cotton bagging.

"There seems no good reason why jute butts, from Calcutta, should be the only substance used to wrap the cotton crop. The effort, however, to use burlaps or corn husks as a substitute, seems to be a failure, but a bagging made of cotton is now by many regarded as a success in every way except price. If this body could take steps towards inducing the British purchaser to abolish his custom of docking American cotton six per cent for the bagging, provided it was wrapped in good substantial bagging made of cotton, it would seem to solve the question entirely. Perhaps the true solution would be to establish the cotton mills in the cotton-growing districts; but that will take time, effort, and changes in many present customs, laws, and conditions. One of the most important inducements to manufacturers is cheap money, and one of the greatest aids to cheap money are insurance companies; they control vast sums, that for absolutely safe investments, are content with low rate of interest, and interest on the money invested in a plant of three or four millions is of more importance than the freights on the cotton or coal they use. Cheap money will have to be secured before many factories are located.

"The importance of an Alliance Insurance Company, therefore, is not to be overlooked. From the moment the farmer sells his bale of cotton, it is not only insured, but everything it touches and every man that owns it is insured, and the cotton pays it all. Everything and nearly everybody in this country pays tribute to the insurance companies. Why not, then, have the strongest stock insurance company in America, with two departments, one life and one fire, the capital stock of which would be used in loans to cotton factories in the cotton States? It is certainly worthy of consideration.

"You can perhaps accomplish much good by adopting suitable memorials to Congress, expressive of your sentiment in regard to the various questions in which our order is deeply and financially interested. This important method of bringing the wants and necessities, as well as the wishes, of the petitioners before Congress, is prosecuted with vigor with other classes, and has long been neglected by the agriculturists.

"The relations with other labor organizations are satisfactory and friendly, but have not been attended with as much intercourse as is probably advisable and necessary, to insure a thorough understanding of objects and methods. You are therefore requested to provide for a committee of one for each labor organization known to exist; to officially communicate with such orders and secure any information they may be willing to give as to their objects and methods, and that such committee-men report promptly all such information to your chief executive, to the end that he may at all times be informed as to the diplomatic relations of the order, and be competent to take such action as the exigencies of the situation may require. At your last session, a committee was provided for by the body, and appointed by the chair, to visit the executive officers of the Farmers' Alliance of the Northern and Western States, with a view of negotiating a basis on which a union might be achieved. Your president corresponded with the said officers, and made an appointment with them to meet said committee at Des Moines, Iowa, in January last. No report has been received from the chairman of the committee; consequently your executive has no information to guide him in taking any further action in regard to the Alliance of the Northwest.

"The influence brought to bear by labor agitation has been productive of action by Congress, that will probably result in the establishment of a cabinet

office for a representative of agriculture, and you, as a people, are deeply interested in the selection the new President will make to fill that position.

"The relations with the world at large are not as unfriendly as many suppose. The more intelligent of all other classes realize that all are interested in the prosperity of the agricultural producer, and that their true interests do not antagonize his; conditions which tend to depress and ruin his business, must, in time, be disastrous on those who depend on him for food and clothing. But there is an element of opposition in several other classes of our country, who oppose Alliance efforts from purely selfish motives, and will spare no labor to oppose and create confusion in the ranks. However, such opposition is an evidence of the justice of the cause, and must ever be met by the right on all occasions. The order will, therefore, pass on without heeding such opposition, to the accomplishment of its glorious mission — relieving suffering humanity and melting the chains, now forged to enslave posterity, into useful implements for the promotion of equality, justice, prosperity, and happiness to all who labor honestly.

- "The Committee on Credentials reported the following list of delegates: -
- "Alabama: H. P. Bone, T. M. Barbour, R. M. Honeycutt, J. H. Harris, H. G. McCall.
- "Georgia: J. W. Beck, C. T. Zachary, D. W. Dyal, A. F. Pope, W. A. Willson, R. L. Burk, J. H. Turner.
 - "Kentucky: J. E. Quicksall, W. S. Stone.
- "Louisiana: W. M. Mann, J. M. Stallings, A. Dimmick, W. R. Womack, A. T. Hetcher, T. A. Clayton, T. S. Adams.
- "Mississippi: W. A. Boyd, Robert C. Patty, G. W. Dyer, W. M. Steel,
- J. W. Copeland, S. D. Lee, J. C. DeLoach, H. F. Simrall, F. M. Glass, D. R. Hearne, D. F. Chapman, J. H. Beaman, W. L. Mitchell, G. L. Donald,
- G. A. Tennison, H. H. Ratliffe. T. L. Darden, member Committee on Secret Work.
 - "North Carolina: J. F. Payne, W. M. White.
 - "South Carolina: J. W. Reid, A. C. Lyles, H. McRae.
 - "Tennessee: J. P. Buchanan, T. B. Harwell, J. B. Castles, W. T. Grant.
- "Texas: W. T. Baggett, B. J. Hubbard, H. C. Stephenson, G. L. Clark, Evan Jones, W. D. Ivey, F. M. Sellers, B. J. Kendrick, R. M. Flowers, M. G. York, W. M. Huey, W. W. Durham, R. J. Sledge, C. M. Wilcox, T. M. Smith, Harry Tracy.
 - "Indian Territory: Charles Roberts.
 - "Missouri: M. V. B. Page.
 - "Kansas: W. P. Brush.
- "The president gave notice that some few days ago he appointed a conference committee of three, consisting of G. B. Pickett of Texas, C. L. Smithson of Mississippi, and L. L. Polk of North Carolina, to confer with a similar committee from the National Agricultural Wheel, in reference to organic union of the two orders.
- "The Committe of Conference on Organic Union being announced, reported as follows:—

"MERIDIAN, MISS., December 5, 1888.

"To the President of the National Farmers' Alliance and Co-operative Union of America.

"We, your Joint Committee, appointed to consider a plan for the consolidation of the National Agricultural Wheel and National Farmers' Alliance and Co-operative Union of America, beg leave to submit the following report:

"1st. We most heartily recommend the proposed consolidation of the two orders.

"2d. We recommend that the name of the consolidated order be The NATIONAL ALLIANCE WHEEL AND CO-OPERATIVE UNION OF AMERICA.

"3d. We recommend that the two bodies meet in the court-house, in this city, at 3 o'clock this afternoon, in joint session or in committee of the whole, to be presided over by the president of the National Alliance.

"4th. We recommend that on all questions or matters relating to the organic laws of such consolidated body, each body shall be entitled to an equal number of votes, and on all committees appointed to perfect such consolidation, the two bodies are to have equal representation, to be determined by their respective presidents.

"L. L. POLK, E. M. NOLEN,
"G. B. PICKETT, W. H. HICKMAN,
"W. S. MORGAN, C. T. SMITHSON,
"Farmers' Alliance Committee.
"Wheel Committee.

- "Moved by Charles Roberts of Indian Territory, and seconded by J. S. Castle of Tennessee, that the rules be suspended and report be adopted.
- "After some discussion, F. M. Sellers of Texas moved the previous question, which was agreed upon, and the vote being then taken on the original motion, it was carried.
- "A committee from the National Agricultural Wheel being present at the door, bearing a message from their organization announcing their action in reference to organic union, the president instructed Brother Polk to bring the gentlemen in and introduce them. The committee, through their chairman, reported that their body had by a unanimous vote adopted the recommendations of their conference committee, which in substance means that they are in favor of union.
- "The time having arrived to adjourn, for the purpose of meeting with the National Agricultural Wheel as a joint committee, the president announced that, previous to such adjournment, he wanted the legal situation understood, and held that, as a joint committee, the body in which they were about to participate would have no power to change any laws of the National Farmers' Alliance and Co-operative Union of America, and that all action taken by the joint committee would have to be re-enacted by this body to become a law in this order, and if such action modified the constitution, it would have to be ratified by three-fourths of the State organizations within one year.
- "In the joint session of the Farmers' Alliance and Co-operative Union and the National Agricultural Wheel, the consolidation, recommended by the Con-

ference Committee, was unanimously agreed upon, and the name adopted for the proposed organization was The Farmers and Laborers' Union OF America. Pending the discussion of a constitution, the joint session adjourned to 10 A.M. to-morrow.

"The joint session resumed its work.

"The constitution was adopted *seriatim*, and an election of officers was held, with the following result: For President, Evan Jones of Texas; for Vice-President, Isaac McCracken of Arkansas; for Secretary, A. E. Gardner of Tennessee; for Treasurer, Linn Tanner of Louisiana.

"The constitution was then referred to the several State organizations of the two bodies for ratification, and it was ordered that, in the event of three-fourths of the Farmers' State Alliances ratifying the consolidation, the president of the National Farmers' Alliance and Co-operative Union shall issue his proclamation making known said ratification, and that when three-fourths of the State Agricultural Wheels shall have ratified the consolidation, in accordance with the terms of this agreement, the president of the National Agricultural Wheel shall issue his proclamation of said ratification. The consolidation shall then be officially made known by proclamation of the president of the Farmers and Laborers' Union of America.

"It was further ordered that, in the event of the ratification of the proposed consolidation, the next meeting shall be held in St. Louis, at 10 A.M., on the first Tuesday of December, 1889.

"The constitution, as adopted by the joint session, is similar to that of the Farmers' Alliance, except that the eligibility of ministers of the gospel for membership is restricted to those living in the country.

"Motion made by Patty of Mississippi that a roll of States be called, in order to find out whether delegates were instructed as to organic union with the Agricultural Wheel. Prevailed, and one State declared itself instructed to form the union.

"Motion by Patty of Mississippi, that the Chair appoint a committee of one from each State and Territory, to take into consideration the question of organic union with the National Wheel, on the basis this day agreed upon in joint session, and the said committee report to-night before 12 P.M. Adopted, and committee appointed: R. C. Patty, Mississippi; Womack, Louisiana; Quicksall, Kentucky; Willson, Georgia; Bone, Alabama; Alexander, North Carolina; Reid, South Carolina; Buchanan, Tennessee; Sellers, Texas; Roberts, Indian Territory; Brush, Kansas; Johnson, Missouri.

"The committee of one from each State, on the method by which the organic union could be perfected, made the following report, which was adopted:—

"To the National Farmers' Alliance and Co-operative Union of America: -

- "Your select committee, acting under instructions, beg leave to report the following resolutions, to wit:—
- "Resolved, 1st, That we approve the proposed constitution and by-laws this day adopted in joint session with the National Wheel, and that the same

be printed and transmitted with all convenient despatch to the several State and Territorial Alliances, for consideration.

"Resolved, 2d, That when as many as three-fourths of said State and Territorial Alliances shall have ratified said proposed constitution and bylaws, the president of the National Alliance and Co-operative Union shall make proclamation to that effect; and when concurrent action shall have been had by the National Wheel, the president this day elected by said joint session shall make proclamation providing for the organic union of State, County, and Sub-Alliances and Wheels respectively, in accordance with such regulations as he may prescribe.

"Resolved, That the present organization of the National Farmers' Alliance and Co-operative Union of America be preserved intact, until such proposed organic union shall have been effected.

"Respectfully submitted,
"Robert C. Patty, " Chairman, for the Committee.

"REPORT OF COMMITTEE ON NATIONAL ORGAN.

"The report of the Committee on National Organ was received and adopted by unanimous vote. Their report was this proposition: -

"The undersigned hereby respectfully present the following plan and proposal for your consideration and adoption: —

"We will organize a company, with ten shares of \$1000 each, paidup capital, composed of good Alliance men, and will not increase the number of shareholders, and will hold all the shares or any part of them subject to purchase at full face value by the Farmers and Laborers' Union of America, when that body has funds for investment in that enterprise. Said company will start and run for a term of ten years, more or less, a newspaper, to be not less than a four-page seven-column paper, issued weekly, and devoted to the circulation of official news and the interests of agriculture, and the general dissemination of the true principles of political economy, strictly non-partisan in politics and non-sectarian in religion; to be a clean and neat paper of high moral tone, such as will be a source of true education to the youth, of emulation to those in active middle life, and of congratulation and comfort to the aged.

"The company will execute a bond to the president of the order and his successors in office, in the sum of \$50,000, that all contracts by said corporation with members of the order, either for subscriptions or advertising, will be strictly carried out. Said company will, should you accept this proposition, locate said paper in the city of Washington, District of Columbia, and put it into successful operation on or before the first day of April, 1889, and will furnish same to all yearly subscribers at one dollar per year.

"A. B. JOHNSON, Chairman.

"BEN TERRELL,

"R. J. SLEDGE,

"C. W. MACUNE,

"W. P. BRUSH,

"R. J. SLEDGE,

"J. A. TETTS,

"HARRY TRACY,

"ROBERT C. PATTY,

Committee.

"Resolutions by Warren: That when this body adjourns, it shall be to meet at Atlanta, Georgia, the first Wednesday in October, 1889, should such meeting be necessary. Call sessions to be held at same place.

"A resolution was unanimously passed, thanking the good citizens of Meridian for their royal hospitality. It was just simply unparalleled. The entire delegation of nearly 200 were made guests of this heroic city for nearly a week.

"C. W. MACUNE,

"President National Farmers' Alliance and Comperative Union.

" B. J. HUBBARD,

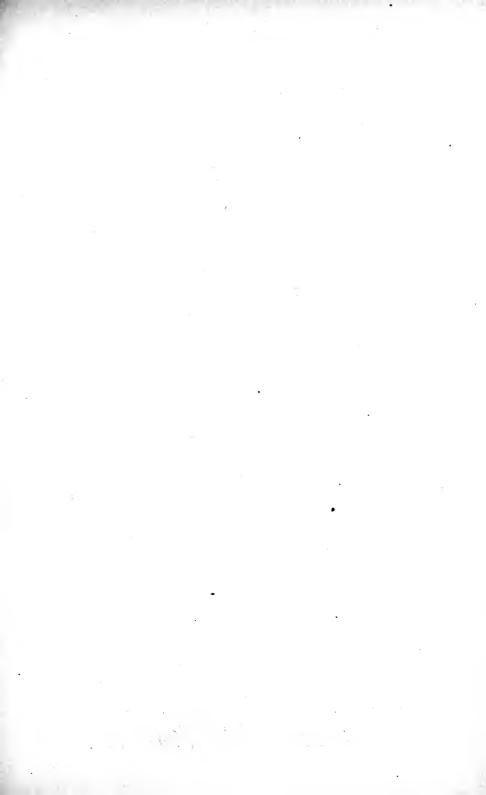
"J. W. DELOACH,

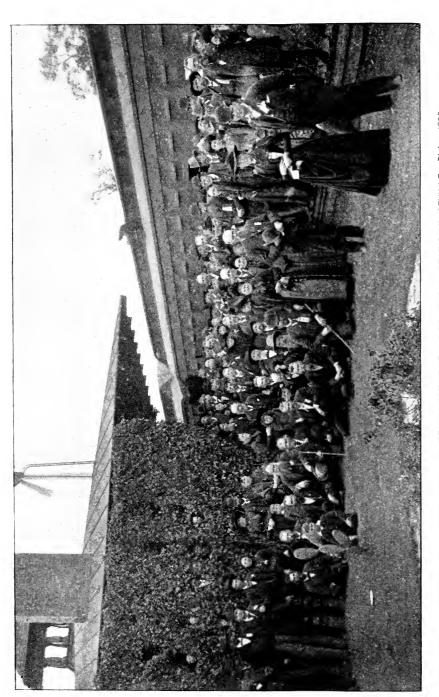
"J. W. REID,

" Recording Secretaries.

"Attest:

"ED. B. WARREN, Secretary."





MEMBERS OF THE OCALA MEETING AT THE "LOG CABIN STATION," SEVILLE, FLA., 1890.

CHAPTER V.

HISTORY OF THE NATIONAL ALLIANCE - continued.

THE work done by the convention held at Meridian, Mississippi met with general approval. A fresh impetus had been given the order, and many of the benefits predicted at the beginning were being realized. The jute bagging trust was being successfully contested, and it seemed, for the first time in history, that the farmers were capable, and determined to take care of themselves. During the early spring, a national organ, The National Economist, was established, at the city of Washington, District of Columbia, and during the summer an important meeting was called, at Birmingham, Alabama, for the purpose of considering the sale of cotton. At this meeting much important business was done; various plans for the relief of cotton-growers were formulated; and President Macune, President McCracken, and Chairman S. M. Adams were requested to issue a proclamation requesting the proper officers in the various State organizations to convene all the county organizations in their respective States, on the second Tuesday in June, 1889, for the purpose of taking proper action to carry out the plans of the convention.

At the Meridian meeting a plan of consolidation had been agreed upon and submitted to the States interested, for their action. As fast as the State meetings were held, the proposition for consolidation was ratified. When the required number had given their consent, the following joint proclamation was issued:—

"Know all men by these presents, that -

[&]quot;Whereas, The National Farmers' Alliance and Co-operative Union of America did, at its last regular meeting, to wit, on the 5th day of December, 1888, in the city of Meridian, State of Mississippi, agree upon a new constitution for the order, and that said constitution was twice read in open session on two separate days, as required by law, and then passed by a two-thirds majority, and then submitted to the States for ratification in conformity to Article VI. of the constitution now in force; and

- "Whereas, The vote of the various State Alliances on said proposition is officially recorded as follows: Affirmative; Tennessee, South Carolina, Alabama, Louisiana, Kentucky, Kansas, Missouri, Virginia, North Carolina, Georgia, Mississippi, Florida, Indian Territory: Negative; none reported. New Mexico has not reported at all, and the State Alliance of Texas ratifies conditionally. This record shows that the requisite three-fourths of the State Alliances have ratified said constitution; and
- "Whereas, The National Agricultural Wheel did, at its annual meeting, which was held in connection with the National Farmers' Alliance and Cooperative Union of America, and the Farmers' Mutual Benefit Association, in the city of Meridian, State of Mississippi, formulate a new constitution for the government of the order, and the same has been submitted to the State Wheels for their ratification; and
- "Whereas, The following State Wheels have ratified the same: Tennessee, Arkansas, Missouri, Indian Territory, Alabama, Mississippi, Kentucky, Louisiana, Wisconsin, and Texas. This record shows that over three-fourths of the State Wheels have adopted the aforesaid constitution; and
- "Whereas, The National Farmers' Alliance and Co-operative Union of America, the National Agricultural Wheel, and the Farmers' Mutual Benefit Association did pass the following resolutions, to wit:—
- ""When as many as three-fourths of said State and Territorial Alliances shall have ratified said proposed constitution, the president of the National Farmers' Alliance and Co-operative Union of America shall make proclamation to that effect, and when concurrent action shall have been had by the National Agricultural Wheel, the president this day elected by the joint session shall make proclamation providing for the organic union of the State, County, and Sub-Alliances and Wheels, respectively, in accordance with such regulations as he may prescribe'; and
- "Whereas, The said organizations, acting in joint session, did provide for a new set of officers in case said constitution should be ratified, and did elect as officers for that purpose, Evan Jones, President; Isaac McCracken, Vice-President; A. E. Gardner, Secretary; and Linn Tanner, Treasurer: Now, therefore,
- "We, the undersigned, C. W. Macune, President of the National Farmers' Alliance and Co-operative Union of America, and Isaac McCracken, President of the National Agricultural Wheel, and Evan Jones, President of the Farmers and Laborers' Union of America, do by the authority in us vested, severally and officially, issue this our proclamation to the order at large, to wit:—
- "First. The membership of the Farmers' Alliance are hereby notified that the new constitution has been ratified by the requisite number of States, and the same is hereby declared to supersede the constitution now in force, and to be in full force and effect from and after the thirtieth day of September, 1889.
- "Second. The membership of the Agricultural Wheel are hereby notified that the new constitution has been ratified by the requisite number of States, and the same is hereby declared to supersede the constitution now in force,

and to be in full force and effect from and after the thirtieth day of September, 1889.

" Third. The two national bodies now known as the National Farmers'

Alliance and Co-operative Union of America, and the National Agricultural
Wheel, are hereby declared to be merged and consolidated into one body, to
be known as the Farmers and Laborers' Union of America, said consolidation
to take effect and be in force from and after the thirtieth day of September,
1889, and to be in charge of the following officers, to wit: President, Evan
Jones of Texas; Vice-President, Isaac McCracken of Arkansas; Secretary,
A. E. Gardner of Tennessee; Treasurer, Linn Tanner of Louisiana.

"Given under our hands, in the city of Washington, District of Columbia, this, the 24th day of September, A.D. 1889.

"C. W. MACUNE,

"ISAAC McCracken,

"Evan Jones."

By virtue and under the authority of this proclamation, the two great agricultural organizations became one. Consolidation had been accomplished, and the courage, labor, and persistency of President Macune had been crowned with success. January, 1887, the State Alliance of Texas met at Waco, many predicted for the last time. In place of disaster came a great victory for the true principles of the Alliance. Instead of disintegration, the State Alliance was strengthened and the National Alliance brought into being. At once consolidation was secured with the Farmers' Union of Louisiana. October, 1887, the national meeting held at Shreveport laid the foundation for the consolidation of the Alliance and Wheel. The meeting at Meridian, in December, 1888, arranged the details, and the proclamation of September, 1889, confirmed it. Within ~ two years and eight months from the birth of the National Alliance, three national orders had been united into one, all in excellent working condition, with a system well in hand, and a membership comprising eighteen States and Territories and numbering fully one million people. This was a vast undertaking, the most stupendous and far reaching that the agricultural people of the world had ever conceived possible to accomplish. It required courage, sagacity, patience, and, above all, an abiding faith in the objects sought, and a firm belief in the ultimate triumph of truth. The task was performed nobly, grandly, and conscientiously, and the one man above all others

to whom belongs the meed of praise, and the credit of its accomplishment, is Brother C. W. Macune. Standing as he did, like the tower of strength that he is, "four square to every wind that blew," he was enabled to hand over to his successor this grand organization, as the fruit of nearly three years of labor.

During this year much had been done by way of organizing and perfecting the system of spreading the doctrines of the Alliance. The new organization was beginning to attract the attention of the political as well as the commercial world. It grew rapidly, and as the next annual meeting at St. Louis approached, the interest in the order became intensified. The next annual meeting was held at St. Louis, Missouri. The following is a synopsis of the proceedings:—

FIRST DAY.

St. Louis, Missouri, December 3, 1889.

Delegates assembled at Entertainment Hall, Exposition Building, at ten o'clock, A.M., and listened to speeches of welcome, made by Mayor Noonan and Governor Francis of Missouri, and responses by J. H. McDowell of Tennessee, and A. J. Streeter of Illinois. Convention then adjourned to 1.30 P.M. The Farmers and Laborers' Union of America met at 1.30 P.M., President Evan Jones presiding. Prayer by Chaplain J. D. Satterwhite of Missouri. The following officers were appointed: Chaplain, J. D. Satterwhite of Missouri; Steward, R. W. Tucker of Tennessee; Assistant Stewards, C. J. Higgins, Alabama; W. J. Talbert, South Carolina, and D. Ried Parker, North Carolina; Doorkeeper, J. H. Turner, Georgia; Assistant Doorkeeper, J. M. Ramsey, Kentucky; Sergeant-at-Arms, G. A. Gowan, Tennessee.

REPORT OF COMMITTEE ON CREDENTIALS.

The following are the delegates, with their post-office addresses:

Alabama: J. H. Harris, Oakbowery; C. J. Higgins, Logan; T. J. Carlisle, Brundinge; R. F. Kolb, Montgomery; S. M. Adams, Randolph; H. D. Lane, Athens.

Arkansas: L. H. Moore, Alston; John W. Lybrand, Grapevine; N. E. Chambers, Van Buren; Daniel Morgan, Magnolia; John A. Ansley, Prescott; E. F. Stackhouse, Little Rock, President State Alliance; I. P. Langley, Bee Bee; W. S. Morgan, Hardy; Isaac McCracken, Ozone, Vice-President Farmers and Laborers' Union.

Georgia: L. F. Livingston, Cora; Felix Corput, Atlanta; W. J. Northen, Sparta; J. W. Hogan, Valdosta; J. H. Turner, Lagrange.

Florida: Robert F. Rogers, Live Oak, President State Alliance; A. S. Mann, Jacksonville; Oswald Wilson, New York, State Business Agent; H. C. Randall, Purcell.

Indian Territory: R. C. Betty, Dougherty.

Indiana: R. F. Peck, Shoals.

Kansas: A. E. Dickinson, Meriden; B. H. Clover, Cainbridge; Van B. Prather, Columbus; S. J. Atkins, Ruston; John S. McKinley, Wichita.

Kentucky: H. C. Brown, Clinton; S. B. Erwin, Clinton; W. T. Winn, Fulton; W. W. Gill, Olmstead; W. R. Browder, Olmstead; S. B. Penn, Slater; J. E. Quicksall, Ezell; B. F. Davis, Ezell; G. W. Comer, Peach Orchard.

Louisiana: J. A. Tetts, Ruston; Daniel Morgan; T. J. Guice; J. D. Hunnicutt; J. D. Hammond, Bastrop: T. A. Clayton, New Orleans, State Business Agent.

Missouri: J. S. Hall; H. W. Hickman, Puxico; J. W. Rodgers, St. Louis, 713 Olive Street, State Secretary; Thomas Day; S. F. Boyden, Neosho; George W. Register, Poplar Bluff; D. F. Eskew; Marcus W. Wood, Chairman Trade Committee; George A. Handley, Belton; W. A. Taylor, Versailles, Box 45; F. L. Hogard, Belton. Maryland: N. A. Dunning, Washington, District of Columbia; Harry Tracy, Washington, District of Columbia.

Mississippi: R. C. Patty, Macon; H. F. Simrall, Vicksburg; J. H. Beeman, Ely; Frank Burkett, Okolona; F. M. Blount, Highland; A. M. Street, Boonville.

North Carolina: Elias Carr, Old Sparta, President State Alliance; S. B. Alexander, Charlotte, Chairman Executive Committee; L. L. Polk, Raleigh, State Secretary; E. A. Moye, Greenville, Member Judiciary Committee; A. J. Dalby, Oxford, Agent Tobacco Manufacturing Company; W. A. Graham, Macpelah, Trustee B. and F.; A. H. Worth, Raleigh, Business Agent North Carolina.

Nebraska: J. D. Hatfield, Clinton.

Oklahoma: W. H. Barton, Guthrie.

South Carolina: W. J. Talbert, Holmes, Lecturer; D. K. Norris, Hickory Flat; T. P. Mitchell, Member State Executive Committee; J. W. Reid, Reidville, Secretary State Alliance and Member National Committee on Secret Work; W. W. Keys, Greenville, Editor Cotton Plant.

Tennessee: J. B. Buchanan, Murfreesboro; R. W. Tucker, Nashville; J. R. Miles, Ralston Station; J. H. McDowell, Nashville; J. F. Tillman, Palmetto; B. H. Hord, Nashville; E. B. Wade, Murfreesboro; A. E. Gardner, Dresden.

Texas: B. J. Kendrick, Waco; C. M. Wilcox, Waco; E. B. Warren, Weatherford; H. S. P. Ashby, Smithfield; T. J. Anderson, Paris.

Virginia: Robert Beverly, The Plains; Mann Page, Brandon; G. H. Chrisman, Chrismann.

The following communications were received: —

From the Farmers' Mutual Benefit Association: —

Mount Vernon, Illinois, November 25, 1889.

I certify that the following resolution was unanimously adopted by the General Assembly of the Farmers' Mutual Benefit Association, in session at Mount Vernon, Indiana, November 19 to 23, 1889:—

To the Officers and Members of the Farmers and Laborers' Union of America, in Session at St. Louis:

The Farmers' Mutual Benefit Association sends heartiest greetings, and bids you God-speed. We congratulate you on your consolidation,

and wish you unbounded success. We are glad to state that our organization was never in a more flourishing condition. We are pushing the work of organization and education; our membership is encouraged and hopeful, and we will heartily join you in any effort you may make, or plan you may devise, for the amelioration of the condition of our people, or to redress the wrongs of the long-suffering and patient, but overburdened farmers and laborers of the country, and that our committee on co-operative trade be, and they are hereby, charged with the bearing of this communication to said meeting.

Given under my hand and seal of said association, the day and date above written.

JOHN P. STEELE, Secretary.

From the National Farmers' Alliance: -

St. Louis, December 3, 1889.

To the Farmers and Laborers' Union of America:

Gentlemen: The National Farmers' Alliance, in convention assembled, have duly elected a committee of conference, consisting of nine members, to meet with a like committee from your organization.

Respectfully,

J. Burrows,

President National Farmers' Alliance.

Committee from the National Alliance of the Northwest was then announced in waiting. Brothers L. F. Livingston of Georgia, Mann Page of Virginia, and L. L. Polk of North Carolina were appointed a committee to receive the visiting committee and seat them on the platform. After an interchange of views, the committee retired, and on motion, the following Committee on Conference was appointed to confer with the National Alliance of the Northwest: H. W. Hickman, Missouri; Mitchell, South Carolina; Page, Virginia; Clover, Kansas; Lybrand, Arkansas; Patty, Mississippi; Tucker, Tennessee; Anderson, Texas; and Morgan, Louisiana.

Also the following committee was appointed to confer with the Mutual Benefit Association: Davis, Missouri; Clayton, Louisiana; Gowan, Tennessee; Bird, Alabama; and Worth, North Carolina.

On motion, a committee of conference on cotton tare and bagging, consisting of one from each cotton State, was appointed.

The Committee on Conference then made a report as follows: -

The joint committee agree to recommend to our respective organizations the adoption of the following resolutions, to wit:—

First, That a joint committee of five on the part of the National Farmers' Alliance and a like number on the part of the National Farmers and Laborers' Union be appointed, with authority to formulate a plan for a confederation of said organizations and of other known agricultural and industrial organizations in the United States, to the end that immediate and practical co-operation may be secured for the accomplishment of the objects common to all.

Second, That the autonomy of said organization be preserved intact until such time as the way may be found clear to effect organic union, if the same should hereafter be found necessary.

A. J. STREETER (Ill.), Chairman, ROBERT C. PATTY (Miss.), Secretary.

SECOND DAY.

President Jones delivered his annual address: -

To the Officers and Members of the Farmers and Laborers' Union of America, greeting.

DEAR BROTHERS: This is certainly an auspicious occasion, it being the first meeting of our organization; an organization that to-day stands without a peer in its influence for good — not to the farmers and laborers only, that you represent, but to every legitimate and necessary interest of a free and independent government; and upon the perpetuation of its principles and their influence upon our people depend the prosperity and liberty of all classes, and the stability and power of our nation. An organization whose fundamental principles are founded upon equity and justice, and whose cardinal doctrines inspire peace on earth, a love of liberty, and good-will to all mankind; an organization whose rise and progress are without a parallel, and which is destined in no distant day to embrace the entire agriculture and laborers of the world, and whose power and influence shall protect their liberty and interest from the encroachment of rings, trusts, and soulless combinations, which are absorbing all of the profits of labor, and thereby paralyzing the industries of our country.

The wonderful growth of our order during the brief period of ten years, and the rapid strides it has taken in establishing its various business enterprises, based upon fair and equitable principles, have had a salutary influence upon commerce, and excited the admiration and respect of the business world.

It has also aroused the hostility of the greedy and avaricious trusts, rings, and monopolistic combinations, to such an extent that great and

persistent efforts are put forth by them to thwart us in every attempt at reform, or effort to correct the prevailing evils that now environ and threaten the destruction of our industrial classes.

Ours is no common effort. We are approaching a period of social and political development that will test the wisdom and patriotism of our whole people, and will demand the most guarded and conservative action of our greatest statesmen.

The weal or woe of our nation depends upon the intelligent action of the industrial and conservative classes, through organization, education, and co-operation.

Brethren, in view of the above facts, and recognizing you as representing the intelligence of the various State organizations in this, our highest legislative body (a creature of the National Farmers' Alliance and Co-operative Union of America and the National Agricultural Wheel, the consolidated power and influence of which make it one of the greatest organizations in the world), would call your attention to the gravity, magnitude, and importance of this occasion, and impress upon you the necessity of the most guarded, intelligent, and conservative action.

It is an evident fact that to free our industrial classes from the oppressions that now prevail so universally, will require a perfect concert of action of all sections; therefore, one of the most important subjects to be considered by this body is a basis of union or co-operation with all kindred organizations; and whereas there have been negotiations between the National Farmers' Alliance and the Farmers' Mutual Benefit Association of the Northwestern States, looking to a consolidation of these two great agricultural organizations with the Farmers and Laborers' Union of America, and as delegates from the National Farmers' Alliance and National Mutual Benefit Association are now in the city, I would recommend that you give this matter your immediate attention, and, if possible, agree upon a basis of union, or at least co-operation.

I would call your attention to the necessity of more closely guarding State rights in our constitution.

Would recommend that the work of organizing should come under the jurisdiction of State organizations, provided, however, that, in unorganized States, the president of the Farmers and Laborers' Union of America shall appoint organizers and take general supervision of the work; and

Whereas, The constitution defines the duties of an executive committee, would call your attention to the failure of its providing for the creation of same; and

THE NATIONAL ALLIANCE.

Whereas, The constitution, under the head of miscellaneous, now provides that all trials for offences shall be by the Farmers and Laborers' Union of America, while in session; and

Whereas, The time of holding said meetings is limited, and the expenses of the same great, would recommend the creation of a supreme judiciary, who shall hear and try all cases.

I would also call your attention to the necessity of bonding your secretary. Also to the more clearly defining Article VII., governing eligibility.

The advancement of civilization, the development of the natural resources of our country, the promotion and perpetuation of our free institutions, the stability, power, and influence of our republican system of government, the creation and successful operation of all our gigantic enterprises, which give strength and influence to government, depend largely, if not wholly, upon the intelligent application of the true principles of co-operation. The most, if not every failure of all the various business efforts of our order, are due to a want of a proper understanding, and a strict adherence to the business principles of co-operation.

It is the foundation that underlies the whole superstructure of our noble order, and a strict adherence to its principles will lead the membership to a degree of prosperity that shall gladden the hearts of all, and bring joy and contentment around the family circle.

I would recommend that you spare no effort in providing the necessary facilities for the better education of the membership in these great principles.

The monopolization of finance has been, and now is, the fountain from which all monopolies, rings, trusts, and oppressive organizations draw their support, strength, and power.

Money in shrinking and insufficient volume remits labor to idleness, reduces the price of products, plants mortgages on the homes of our people, bankrupts those who are forced to borrow, paralyzes our industries, and produces hard times and great privations among the masses.

It is impossible to have an equitable adjustment of capital and labor so long as money is contracted below that which is adequate to the demands of commerce; hence, if we would correct the abuses and powers that are now prostrating and enslaving our industries, lift the mortgages from the homes of our people, restore peace and prosperity to our now paralyzed and almost ruined agricultural and laboring people, we must have a circulating medium in sufficient volume to admit of transacting our business upon a cash basis.

I would therefore recommend that you demand, at the hands of the

law-making functions of our nation, a monetary system that shall conform to the interest of the producing and laboring classes, as well as the speculator and usurer; that the coinage of silver be as free as gold, and that gold and silver be supplemented with treasury notes (which shall be a full legal tender for all contracts), in a sufficient amount to furnish a circulating medium commensurate to the business necessities of the people.

There is, perhaps, no question that demands more serious attention at this time than the present condition of our land.

From its many resources flows all the wealth of our nation; and upon its proper and just distribution depend the prosperity, contentment, and happiness of the yeomanry—a class upon whom all nations must largely depend for strength and support.

During the greatest prosperity of Rome, about eighty-five per cent of her population owned titles in land. It was then that she was founded upon a rock, and was mistress of the world; but in the course of her history, through the monopolization of her lands by the few, through unjust legislation, the homes were wrenched from the hands of the masses, and when the dark death-ford was reached, upon which civilization was to die, less than two per cent of the people controlled the land; and it is said that about fifteen hundred men controlled the wealth of the world.

To-day we find in America millions of acres of her fertile lands, bought by the lives and efforts of our forefathers, which should have been held sacred for homes for their posterity, squandered upon railroads and other corporations, and millions more are owned and controlled by domestic and foreign syndicates; while a large per cent of our homes are hopelessly mortgaged, and about fifty per cent of our sons are tenants.

This wholesale absorption of land by aggregated capital must be checked, or it will finally enslave the honest yeomanry of our country, and inevitably destroy our much-loved republic. The hope of America depends upon the ownership of the land being vested in those who till the soil. Give the people homes, - theirs to improve, theirs to cultivate, theirs to beautify, and theirs to enjoy, — and our grand republic will stand as the acme of modern civilization and national greatness.

I would recommend that you demand legislation for the better protection of the lands and homes of our people, and a law prohibiting the alien ownership of land in America. Lands of America should be owned and controlled by citizens of America.

As a means of developing the many natural resources of our great

and powerful nation, and the distribution of our products for the use and comfort of our people, the railroads take the lead as a benefactor of the human family, if properly used; but the avarice and greed manifested on the part of these great corporations, have through their unjust manipulation of transportation destroyed all competition, and become oppressors rather than servants of the people for which they were created. These corporations have rights that should be protected; a right to business, to legitimate profit, to property, and restricted power. It is not the railroads of which the people complain, but the abuses of their powers, chartered rights, and privileges.

Everything they have and enjoy hangs like a plummet to its cord upon law alone; and as the law derives its strength solely from the will and obedience of the people, every rail, car, stock, bond, and charter has its security and protection chiefly from that tender homage and reverence which emanates from the hearts of our law-abiding and liberty-loving agriculturists; and in oppressing them, they are chafing the cords upon which alone hang their profits, franchises, and existence.

I would recommend that you demand such legislation, both national and State, as shall regulate and control rates and classifications of freights on all lines of transportation, that fair dealing and justice may be secured to all.

While our order, as an order, is strictly non-partisan in politics, yet Section I. in our declaration of purposes says, that "we shall labor for the education of the agricultural classes in the science of economic government, in a strictly non-partisan spirit."

It is an evident fact that the origin and power to perpetuate the existence of the various rings, trusts, and combines, that now oppress our people and threaten the overthrow of our free institutions, are due to unjust legislation, and the intimacy and influence that still exist between our representatives and these powerful corporations and combines, are such as to give good reason for serious alarm. We have reached a period in the history of our government when confidence in our political leaders and great political organizations is almost destroyed, and the estrangement between them and the people is becoming more manifest every day.

The common people are now beginning to see that there is no just cause for the now almost universal depression that pervades the laboring classes of every section of our country, and are disposed to attribute the same to the corrupting influence that these great combines and corporations exert over our leaders and political, moral, and social institutions. So long as our people neglect to inform themselves upon the

great issues of the hour, and continue to follow blindly machine politicians to the neglect of their own interest, they will continue to lose their individuality, influence, and power in our political institutions, and be wholly at the mercy of the soulless corporations that are now wielding such an influence over our government.

The very existence of our free institutions and republican form of government, the very life and prosperity of the agricultural and laboring people, depend largely, if not wholly, upon financial, land, and transportation reformation. It is a conceded fact that a republican form of government lives alone in the hearts of the people; and its destiny depends entirely upon the purity of the ballot, and as this is in the hands of every man, there can be no safety, except as is guaranteed by its intelligent use. This is the fortress of our nation's strength; and if our order would reach that high degree of usefulness for which it was created, it must, through a well-defined system of economic questions, produce this intelligence and virtue, thus preparing our people for an intelligent use of their franchise.

When the dissolution took place of the two national bodies that compose the Farmers and Laborers' Union of America, I found myself in a very awkward and embarrassing situation.

The responsibility of these two national bodies merged into one imperfect organization, with a defective constitution, and with demands coming from the various States for organizers, new rituals, secret work, and other printed matter, and having no funds in the treasury for defraying expenses, and being compelled to draw upon my own private funds for the defraying of all my office and official expenses, with considerable division and dissension in some of the States, and having no executive committee or supreme judiciary to share my responsibilities, I must confess that it was with great forebodings that I assumed my official duties.

Among my first official duties was to appoint an executive committee, composed of Brothers J. H. McDowell of Tennessee, G. L. Clark of Texas, and J. A. Tetts of Louisiana. I also arranged with Brother J. H. McDowell for the printing of 50,000 rituals and the new secret work—which were ready for distribution to State secretaries within thirty days from the issuing of our official proclamation.

During the two months of our organization, I have given the order my very best efforts, availing myself of every possible means for the harmonizing of the brotherhood in States where unity failed to exist, and to perfect our organization. There were brethren who were ever ready with their counsel and encouragement, which assisted me greatly in the discharge of my arduous duties. To them I shall ever feel grateful for their assistance, fidelity, and patriotism to the order during these trying hours.

Brethren, never before in the history of organized labor have we been confronted with graver questions of business, of greater magnitude and importance, than will be presented to this convention. You virtually hold in your hands the destiny of our order, upon whose success or failure depends the weal or woe of the patient and long-suffering agricultural and laboring people of our nation. To-day all eyes are turned to St. Louis, while millions of anxious, waiting hearts are trusting to your patriotism and wise deliberation that shall pave the way for their relief.

Feeling confident that you will meet bravely, calmly, and unselfishly the great work which now lies before you, and realizing your responsibility and the necessity of having justice done to all respecting the humble as well as the highest members of the order, thereby strengthening the ties that now bind us together in one common brotherhood, I assure you as your chairman, that my motto shall be, "Equal rights to all, and special privileges to none."

Let us, therefore, as brethren, true to our God, cause, and families, enter upon the business of this meeting with full confidence in each other and brotherly love to all mankind, and may He who doeth all things well guide us in our deliberation to the perfecting and perpetuating of our order, free our nation from corporative power, and break the shackles that now bind our industries in iron chains.

St. Louis, Missouri, December 4, 1889.

The following resolution was adopted: -

Resolved, That the National Farmers' Alliance is hereby cordially invited to visit us in a body, to listen to the address of Ex-President C. W. Macune, on the aims and principles of the Farmers and Laborers' Union of America. Adopted.

After considerable detail business, Ex-President C. W. Macune, of the Farmers' Alliance and Co-operative Union of America, delivered the following address:—

Brethren of the Farmers and Laborers' Union of America:

It is the custom when legislative bodies of this character convene, for the president to deliver an address, setting forth the exact condition of the order, telling what has been accomplished during his administration, and making such suggestions for consideration as he deems best. This has already been done by our worthy president. But this organization,

and consequently our president's active administration, is only about two months old, and prior to its formation the same interests were represented by two national organizations. As I had the honor to be president of one of those organizations, the National Farmers' Alliance and Co-operative Union of America, not only during the five-sixths of the past year, but from the very first organization of that order in January, 1887, it seems to me appropriate that I too deliver you an address. In fact, so very important do I deem the message that I have to impart to you that I offer no apology for its presentation, believing that my familiarity with all the past methods of the National Alliance will enable me to point out to you the lessons taught by the critical periods in its history, to give a clear and full conception of the writing between the lines in its present strength and condition, and to suggest certain necessary lines of action worthy of a careful consideration. A further reason for the delivery of this address is that I have, up to this time, been filling a responsible position as editor of your national official organ, the National Economist, and this position has brought me in direct weekly communication with the whole order, which has forcibly impressed me with many of the necessities of the order and shown the great importance of the consideration by this body of several questions which will be the means of outlining a policy for said official organ to be guided by during the coming year. This body, while discussing the situation and deliberating upon the policy to be pursued, should be thoroughly conversant with the history of the past efforts and the present condition of the order, and possibly suggestions as to the future by those who have filled executive offices may be of service. They are, at least, offered for consideration.

In 1886 the Alliance movement of the South was confined principally to the State of Texas. The State Alliance of that State had chartered a few Sub-Alliances in Indian Territory, and a small number in the State of Alabama. The report of the State secretary at the regular annual meeting of that year showed that the order had grown from about six hundred to over twenty-seven hundred Sub-Alliances during the year that ended in August, 1886. As a natural and unavoidable consequence of such rapid organization, the principles, objects, and methods of the Alliance were very imperfectly understood by the majority of the membership. It was an election year in that State, and partisan feeling ran high. Dissensions within the order were so great that a dissatisfied minority met and organized themselves into an opposition State Alliance, secured a charter from the State of Texas, and elected a corps of State officers. The outlook for the order at that time was indeed unpromis-

ing, and utter dissolution seemed imminent and almost certain. I was at the time chairman of the Executive Committee, and by direction of the president I succeeded in securing a conference between the officers of the State Alliance and the officers of the element that had seceded, the result of which was that the seceders agreed to take no further steps, but · hold their charter in abeyance till the next regular meeting of the State Alliance. Immediately after the conference, the president and vice-president resigned, and by virtue of my office I called a meeting of the State Alliance to convene in January, 1887, for the purpose of filling the vacancies and taking such other action as the necessities of the order demanded. I immediately wrote to Hon. A. J. Streeter of Illinois, who was then president of the National Farmers' Alliance, and Hon. J. Burrows of Nebraska, who was vice-president of that order, for information in regard to the origin, history, methods, and purposes of the National Alliance; also to Brother J. A. Tetts of Louisiana, who was prominent in the work of the Louisiana Farmers' Union, asking like information in regard to the Union. The Western Rural was at that time published as the official organ of the National Alliance, and its editor, Mr. Milton George, was the national secretary. I received the Western Rural regularly, and preserved the published rulings of the national secretary as to qualifications for membership, and the rules prevailing in the National Alliance governing charters, etc. The Louisiana Union showed by its constitution that it was practically the same organization then existing in Texas as the Farmers' Alliance, and that it differed only in name; and as I had notice that Louisiana would have a called meeting just prior to the called meeting in Texas, I appointed Brother Evan Jones a delegate to visit the Louisiana Union and make overtures in behalf of unity. was well received, and a committee of one from the Union was elected to visit the called meeting of the Texas State Alliance, and empowered to act in behalf of the Union in taking steps for the extension of the work into new fields. All, this may seem like dry detail, but it is necessary in order to properly understand the exact conditions that surrounded and controlled the formation of the National Farmers' Alliance and Co-operative Union of America, when there was already in existence a National Farmers' Alliance in the States farther north. It is unquestionably very necessary to show that the second National Alliance was not instituted in opposition to, or as a rival of, the National Alliance then in existence, if such be the case, and I believe it was.

The called meeting of the State Alliance of Texas, held in the city of Waco, in January, 1887, is a noted landmark in the history of the Alliance. At that meeting provision was made for the organization of

the National Alliance, and after it was organized its constitution was ratified. There were over four hundred delegates assembled at the meeting, and a more discordant and dissatisfied assemblage of equal size probably never convened; and yet, after a four-days session, a more harmonious and completely unified body of equal size was perhaps never seen. In my address at the opening of the meeting, I called attention to the dissensions and dissatisfaction within the order, much of it the result of misunderstanding, and some the result of personal ambition and local prejudices. I took the position that if the order was a good thing, it was our duty to spread the light; that we must be aggressive; that if we considered Texas well enough organized, and concluded to fold our hands and enjoy the expected benefits of the Alliance, we would be doomed to disappointment, because dissensions and contentions would soon prove to be effective causes for disintegration and rupture.

The very existence and perpetuation of the order demanded that it must take an aggressive position in favor of an overshadowing effort for good in behalf of the membership, that would act as a nucleus and rallying cry, and be of so general a character that it would receive the indorsement of the entire membership. Without this the local issues, developed by local conditions and successfully met by the order, would assume undue proportions, and frequently produce confusion by being mistaken for the chief objects of the order. To prevent a great order that is scattered over a large extent of territory, and embraces people whose habits and occupations have developed a great many different local issues, from breaking up into detachments to each combat a local and fleeting issue, thereby placing it at the mercy of a better organized foe that would decoy each detachment into an ambush where it could be destroyed with ease; to prevent such dire but certain consequences there must be a general issue to which each detachment will return after having sallied out to demolish a local issue, and in support of which all are agreed and united into a solid phalanx, thereby being able to meet either the detached or combined forces of the opposition. The general aggressive issue decided upon at the called meeting was "Organization of the Cotton Belt of America," and under the purifying and inspiring effects of that philanthropic object local issues and personal prejudices were crowded to the background, and every man took his place in the ranks of the aggressive, shoulder to shoulder, determined to succeed, and to-day we may note the grand result. Less than three years have elapsed since that day, and yet the entire cotton belt is well organized.

When the question of electing delegates from the Texas State Alliance, to meet with delegates from the Louisiana Union, for the purpose of organizing a national order, was pending, I presented to the body all the information in regard to the National Farmers' Alliance that I had received from the columns of the Western Rural and the correspondence with Presidents Streeter and Burrows; a careful consideration of which showed that there were, at that time, at least three reasons why the Texas State Alliance was not willing to join itself to that order. first was, the National Farmers' Alliance was a non-secret and very loose organization, with neither fees nor dues, and charters seemed to be sent out by the national secretary, Mr. George, to anybody who would request them, on very little evidence as to the qualifications of those applying. Second, the published rulings as to the qualifications of membership made colored persons eligible; and third, the national secretary published a ruling that any person raised on a farm was considered a practical farmer, and was therefore eligible, regardless of his present occupation.

The membership of the Texas State Alliance and the Louisiana Union were at that time unanimously opposed to each of these three methods, and therefore thought it useless to delay organizing a national body that would conform to the genius of the institution they had so grandly commenced to build. They did not propose to enter the territory of the National Farmers' Alliance, nor to oppose it in any way, but they thought it would be presumption, and perhaps a needless waste of time, to lose a year in order to ask the National Farmers' Alliance to modify its methods that they might join it; and therefore they organized their own national in their own territory.

From the date of the organization of the national, the order grew very rapidly, as the reports from the different State organizations at this meeting show. This rapid growth was largely due to the zeal of a membership, united in an effort thoroughly understood and indorsed by all, exerted at a time when the masses were ripe for the movement. The lines of argument that induced people to join the order are important and should be carefully considered, because they indicate in some degree what they expect the order to accomplish in their behalf and by their assistance.

After a very careful survey of the work, I find myself unable to avoid the conclusion that the leading and principal arguments used, and especially those that have been to any extent effective, have all had for their object, either directly or indirectly, conditions that would render farming more profitable from a financial standpoint. The methods

offered for acquiring this desirable state of affairs have been numerous, and often very ingenious, sometimes wild and impracticable. have held that organization would render farming profitable and prosperous by the benefits that would naturally flow from the more intimate social exchange of ideas and courtesies at the meeting, where each could learn the methods pursued in the detail of farm work by all the others, and that the dissemination of such practical data would render all more productive, and that, as a consequence, they would be stepping into the ranks of those who have been eulogized for having been able to make two blades of grass grow where only one grew before. It seems to me that more importance and value have been attached to this sentiment than its merits entitle it to receive. A proof of this is found in the fact that the cereal crops of the United States, in 1867, aggregated about a billion and a quarter bushels, and brought about a billion and a quarter dollars; and from that time the crop increased till, in 1885, it reached the enormous sum of over three billion bushels, and the whole crop sold for less than a billion and a quarter dollars. Others have held that organization could render farming profitable by the introduction of better business methods, in which all would unite and co-operate for the purpose of selling our products higher, and purchasing such commodities as we are compelled to buy, cheaper. Those who have made a special study of this feature of the effort realize that the purely technical effort of improving our methods of farming, by which we may possibly increase the amount of products we make in return for a given amount of labor and expense, although it be praiseworthy, desirable, and worthy of encouragement, is not a force or remedy nearly equal to the emergency, and that the influences that tend to depress agriculture and render the pursuit of that occupation unprofitable, have rapidly gained the ascendency over and neutralized the beneficent effects that should have followed the introduction of wise methods and new and improved machinery in the past, whereby the results of productive effort have been increased most wonderfully. It is deemed unwise to depend entirely on a remedy that has proved ineffectual on every occasion. They contend for something more efficient, by advocating a better system of handling and disposing of what we produce, and a more careful and economical method of purchasing supplies. This they expect to accomplish by securing, as nearly as possible, a direct sale of our products to those who consume them, thereby gaining the commissions now paid to middlemen that do not appear to be necessary, and increasing the price of the produce sold. They will reduce the price of commodities purchased by encouraging cash transactions on a large

scale, thereby eliminating the loss and risk that attend the credit business, and getting the benefit of wholesale prices. The hope of ultimate success from this line of effort depends upon the ability to enhance the price of what we have to sell, and diminish the price of what we have to buy, thereby increasing the gains. The ability to do this, it is usually argued, depends upon the amount of devotion each member will exercise in favor of the object. This line of argument also holds, that if each would be willing to make enough sacrifices of prejudice, and time, and money, they would be certain to succeed. And yet if we admit all that is claimed in this direction, we must still realize that there is a limit to the power that can be enforced by these methods. example, we cannot reduce the price of the commodities we purchase any below what it costs to manufacture them, neither can we raise the price of the produce we have to sell above a certain limit, without a tendency to have the demand supplied from other sources or by substitutes. The probabilities of success, therefore, by the business methods alone, will depend upon the power thus wielded being equal to or greater than the tendency to depression that has proved so powerful in the past.

Still another method of advocating organization as a means of increasing the profits of farming is, that by organization a united effort can be brought to bear upon the authorities that will secure such changes in the regulations that govern the relations between different classes of citizens as are necessary to secure equal rights, equal privileges, and equal chances. Those mentioned, as advocating the second or business line of teaching as the remedy, seem to have drunk a little deeper at the fountain of thought and wisdom than the first class of teachers mentioned; and those of the third class, now under consideration, seem to have pursued the investigation even further than the second class. They recognize the generally known and universally acknowledged maxim of political economists, that a general rise in prices always attends an increase in the volume of the circulating medium of the country, and a general fall in prices always attends a decrease in its volume; and that the regulations governing the relations between the different classes of citizens in this country empower a certain specified class to issue over one-half of the circulating medium, and permit them to withdraw from circulation any or all of such money at their own pleasure, thereby allowing said class to regulate, as they may choose, the volume of circulating medium in the country, subject to a limit of about forty per cent; that is to say, should they choose to retire all their circulation, they would reduce the volume of the circulating medium of the country to forty per cent of its present volume, and as a necessary and unavoidable consequence reduce the price of everything in nearly the same proportion. There is then absolutely no way of avoiding the conclusion that such class possesses the power to produce a general rise or fall of fifty per cent in prices, at pleasure. Those who realize this state of affairs contend that it is a waste of energy for all the farmers in this great land to combine and co-operate to raise the prices of a given product when, if their most sanguine hopes were realized, they would not augment the price over twenty-five per cent, while at the same time representatives of another class of citizens of this country could receive instructions from one office in a single hour which would depress prices fifty per cent. In fact, owing to the inflexible rigidness of such a system, the fluctuation in general prices is very great between the different seasons of the same year, and for the following reasons: Agriculture presents, during the last four months of every year, an actual tangible addition to the wealth of the nation, equal to five times the gross volume of all the money in actual circulation in the country; and all this agricultural product comes on the market to purchase money for the use of the agriculturist. Now it stands to reason that such an increase in the demand for money, when there is no increase in the supply, must augment its price, - which is its purchasing power, - and which means diminished prices for everything else. Now if, in addition to this powerful tendency, a certain class possesses the power to diminish the supply at that season, in the face of the augmented demand, the tendency to a rise in the purchasing power of money becomes certain and irresistible. The experience of every man in the agricultural districts of the West and South has no doubt often shown him a difference of fifty per cent or more in the price of an article during the fall season and the spring. And it is universally known that, in pursuance of the above phenomena, general prices are much lower in the fall than in the spring season. Great respect is due to the teachings of those who contend that the greatest power being exercised to depress agriculture to-day emanates from unjust regulations governing the relations between the different classes of citizens; and if, by a united effort, we can secure the correction of the evils they point out, we will pave a way for the certain triumph of our business efforts, and the enjoyment of more satisfactory and prosperous social relations. It seems to me that there is much good in the teachings of all three of these methods, and that it will be found a duty of this body to encourage the effort to improve in farming from a technical standpoint, as a result of the pleasant social reunions enjoyed in the subordinate

organization. Also, to sustain and assist in every possible manner the efforts made to co-operate for business purposes, by the different county and State organizations, and to provide a plain, simple, and specific demand on the part of the national organization for the proper, just, and equitable regulation of the relations between the different classes of citizens.

These three classes of teachings, and modifications of them, have been the principal inducements offered people as reasons why they should join our ranks; and the fact that they have joined in such vast numbers indicates the necessity for action in the directions pointed out, and is a pledge that they will assist in carrying out such methods. the three different methods, that of relief from the business effort has received the most attention, and been by far the most prominent. This is due, probably, to the fact that the technical and social co-operation seems best adapted to the workings of the subordinate body, while the business efforts have demonstrated the necessity of the wider range of co-operation to be secured in the county and State organizations, and the co-operation necessary to secure the proper adjustment of economic relations seems peculiarly within the province of the national organization, as it is the very foundation upon which the whole class in all the States must depend. The prominence given to the business effort, by the different State organizations, has not been without important results, the full details of which, I suppose, will be reported to you by the different State delegations. They have, in nearly all the States, organized their business with a strong capital stock, ranging from \$50 to \$500,000. Texas has a capital stock of \$500,000, divided into individual shares of five dollars each. Several States have their capital stock divided into shares of \$100 each, and issue them to subordinate bodies only. think this last method has many advantages, and would particularly recommend the plan of the exchange of Georgia as one that seems to me wisely prepared.

In my message to the last regular session of the National Farmers' Alliance and Co-operative Union of America, at Meridian, I pointed out the necessity for great caution in the formation of any national plan of co-operation for business purposes. I now desire to reiterate that caution, and say to those who wish to inaugurate a National Farmers' Exchange, that there is danger of such an enterprise being so placed that it cannot accomplish much, and still, when in existence, the people will expect much of it. There may, perhaps, be some plan formulated by which the different State exchanges can co-operate, but I doubt the wisdom of going any further than that, by organizing a national exchange,

or of incurring much expense on the part of the national for business It seems that the co-operation for business purposes, in order to be effective and reach its highest development, should be more extensive than can be obtained in the subordinate bodies alone, and that it absolutely requires co-operation between the subordinates in the counties, and co-operation between the counties in the State; but beyond the State organization there does not seem to be any prominent and conclusive reason for extending so strong and close an organization, in which it would be necessary to lodge so much power and responsibility. Each State is a complete jurisdiction within itself, and usually has different and distinct conditions, customs, usages, and issues. It always comprises territory and business enough to develop all the branches of business, as manufacturers, jobbers, wholesalers, retailers, brokers, commission men, etc. From all these reasons, I conclude that while cooperation between the different State business efforts will probably be necessary and beneficial, stronger reasons than I have yet been able to discover should exist before a national exchange organization will be able to do much good.

From these considerations, it must now be plain to you that the order has, by means of the consolidation here to be consummated, reached a period of full development that places a responsibility upon it for efficient and aggressive action. The three effective lines of effort above specified, that have induced this vast army of brethren to espouse the cause and place their shoulders to the wheel, have each a proper field in which to operate. The national organization, by securing a better adjustment of the economic policy of the government, will insure that the regulations governing the relations between the different classes of citizens shall be just, fair, and equitable, and thereby lay a foundation on which the States, in their business efforts, will find it possible to reach complete success, but without which they would, as now, be contending with inevitable defeat, and the success of the business effort rendered certain by the exercise of the great powers possessed by the State Alliances, when they can be exercised under the just conditions which it is the province of the national to secure, will augment the social benefits and enjoyments that should result from the subordinate organ-Each has its special field, and the success of the national renders success in the State effort possible, and the success of these two contributes to the true benefits which must finally flow to the subordinate body.

As we have seen, the order has made a most prodigious growth, and its business efforts have reached a high stage of development and useful-

ness. Your attention is now called to the genius of the government of the order. It will be found in the highest sense interesting and peculiar. We have had a written law and an unwritten law. Two sets of laws and systems of government have been in force at one and the same time. Every individual member has sustained a dual relation to the order, and yet all have harmonized perfectly, and there has been no conflict or clash. The written law is comprised of the charter from the United States government; the constitution and legislative enactments of the national order; the charters, constitutions, and legislative enactments of the various State organizations; and the charters, constitutions, and legislative enactments of the various county and subordinate bodies. The form of government under the written law was democratic, the subordinate bodies each being a simple democracy in which the individual is the sovereign, and all members vote on all questions. The State and national bodies were each a confederated form of republican government, and every step from the people, who are the supreme power, lessened the power of the delegated body. The national only had such powers as were expressly delegated to it by the States, and the State only had such powers as were bestowed upon it by delegates from the subordinate bodies. Its form of government, under the written law, was modelled after, and was very similar to, the form of political government under which we live. The unwritten law is the secret work, and, like all other secret orders, it has necessitated and depended upon a form of government closely analogous to a limited monarchy. According to it, all power and authority must emanate from the recognized head, and permeate through the various branches to the individual membership. Under this system of law, this is a supreme body, and under the written law the membership of the subordinate were supreme, because, under the written law the membership could, by the exercise of their constitutional privileges, abolish the national body entirely; and under the unwritten law the national could, by the exercise of its power, abolish a subordinate body by revoking its charter. This system of dual sources of power and forms of government, that originate at opposite extremities of the order, and encompass it as two parallel bands throughout its entire extent, is wonderfully calculated to add to its strength and efficiency, and furnishes a complete safeguard against any weak point in either system, by always having the strength of the other system present and ready to assist and maintain it. The necessity for this full and complete statement of the genius of the government of the order is twofold: First, an imperfect conception of these principles has often been the cause of considerable hesitation and embarrassment on the part of

State presidents, when called upon to rule on questions upon which the constitutional law was not very explicit; and second, delegates to the national frequently seem to think that the only way they have of offering new and necessary regulations to the order is by modifying the constitution or offering a resolution. Now the facts are that resolutions should be offered for nothing but as expressions of sentiment or advisory measures recommended to the order or others; that the constitution should contain nothing but the declaration of purposes of the order, an outline of the different branches of government, an expressed limitation of the powers of each branch and each officer, and such general provisions governing the laws and usages as are of universal application, and will be permanent and require no modification and change. Then, to provide rules for the conduct of the officers, and the carrying out of the provisions of the constitution and render the workings of the order effective and satisfactory, not resolutions, but laws should be passed, the difference being that laws would prescribe certain things while resolutions simply recommend them. Every bill should be refused consideration unless it commence according to an established form, as, "Be it hereby enacted by the Farmers and Laborers' Union of America," etc., and each bill should have a caption and be numbered. If the laws of the legislative body were expressed in this way, they would soon make a valuable code of statutory laws for the order, that would save much of the time now wasted in discussing resolutions that are simply a repetition of what may have been passed many times before, but is not in a shape to be of record. This will also obviate the necessity for making any changes or additions to the national constitution, which is very desirable, as every possible means should be resorted to that will tend to make the national organic law fixed and permanent; let it be too sacred to be modified except in cases of the plainest necessity.

Observation of the workings of the order in the past leads me to make the following suggestions:—

1. There should be an efficient and uniform method of securing reports as to the strength, financial condition, etc., from the entire order. The national secretary cannot now send out a blank asking for information and get a response that is satisfactory from half of the States, because the blanks used by one State secretary are entirely different from those used by another, and consequently the information they have is of a different character. To make statistics of the order valuable they should all be gathered in response to the same questions, and it seems to me that the best way to secure that end would be for this body to provide for a small but competent committee who should

call upon each State secretary to send them a copy of what he finds to be the best blank for subs to report to county organizations, and what for county to report to State organizations upon, and give this committee authority to consider all these forms, adopt the best as the standard for all, and get up the reports to the national, State, and county bodies in a complete system. They can then be printed from plates in large numbers, and thereby reduce the expense.

- 2. Independent of the secretaries' reports, a system of crop reports should be inaugurated, that will be more prompt, accurate, and reliable than the estimates made and published every year by the speculators, who are interested in depressing prices of our produce. This is of the utmost importance; and yet all efforts made up to this time have been signal failures. I would therefore suggest that the national, State, county, and subordinate bodies each elect a crop statistician, to be paid by the body electing him, and who shall be held responsible to make regular reports as required by the officers to whom he is to report, and that the national statistician report monthly to the president of the national body.
- 3. The national committee on secret work should alone be authorized to print the ritual, and all sub and county charters should emanate from the national, and be issued by the various States.
- 4. The regular annual meetings of the State bodies should be timed so as to come in rotation, thereby allowing national officers to visit them.
- 5. All written official documents of the national should bear the impress of the seal, and all printed official documents should have printed on them a fac-simile of the seal.
- 6. The secretary should be required, on the first of every month, to pay the treasurer all the money he has received, and the treasurer prohibited from paying out any money, except on a warrant drawn by the secretary and approved by the president, and the secretary should be prohibited from drawing a warrant on the treasurer, except upon a voucher or account that is audited and approved by such auditing officer as this body may provide.
- 7. There seems at present a necessity for a national lecturer, and as that necessity may only exist for a year or two, it might be provided for temporarily; and if it be, the lecturer should be an efficient officer, with probably a larger salary than any other national officer, and be required to do active work during his term.
- 8. Since education is one of the most potent agents at our command, the national should impress upon the membership the importance of every member reading his State and national organ.
 - 9. The president should be authorized at any time to appoint com-

mittees to confer with any or all other labor organizations, on questions relating to the objects and methods of organized producers, always reserving to this body the right to ratify or reject their action.

With these recommendations as to matters within the order, I will leave that feature of the work and call your attention to the relations of the national order to the government and people of this country at large. Our relations, as an organized force, with the people of the United States and with the government have been wonderfully improved during the last year, by the establishment and publication of your national organ, the National Economist, at the national headquarters. been the means of presenting the true, just, and equitable side of the movement to a class of readers who before never saw anything but misrepresentations of the objects of the order. It has fought for our rights from a high, dignified, and indisputable standpoint of right, and as a result we now see leading papers and periodicals in the large cities publishing articles in the interest of the masses that a few years ago they would not have allowed to come inside their doors. In fact, our national organ has been so conducted that the entire order has shown unmistakable evidences of the fact that they are proud of it, and that it has been a wonderful educator and benefit to the membership. Nevertheless, the national organ will never reach its highest development for good until it goes hand in hand with a good, efficient State organ in every State, and the State organs of the various States will not reach their highest development for good without a harmony of effort and concentration of forces. I therefore submit for your consideration the propriety of authorizing the national and State organs to organize themselves into a newspaper alliance for the purpose of, first, lessening their expenses; second, guaranteeing a uniformity of sentiment, officially indorsed by a national supervising committee; and third, increasing their usefulness and efficiency; and that this body make its president ex officio chairman of a committee of three, who shall pass upon and, if approved, place their stamp upon every article expressing editorial opinion as to doctrine which emanates from a central editorial bureau for publication in the various papers of such newspaper alliance. A thoroughly reliable and uniform expression of sentiment can in this way be secured in all parts of the country at the same time. Our State organs are at present doing a great work, and accomplishing much more for the order than is generally supposed. In nearly every State in which the order has a State organ it will be found, on comparison, to be the best farmers' paper in that State, and members who read their State and national organs are always too well posted to waver in their

allegiance to the order, on account of any of the arguments or false reports of the opposition. With such an alliance as an auxiliary, when the conflict of the national deepens, the full force and influence of twenty or twenty-five of the best papers in the country could be manipulated with great advantage to the true interests of our cause. This will be by far the most potent agent at our command in the impending struggle, since by it we can keep our own ranks thoroughly posted and unified, and at the same time we can meet the opposition at no disadvantage, in an effort to secure the influence of the great class that now stand comparatively neutral, but will sympathize with and assist us when convinced that our objects are right and our methods fair.

In considering our relations to the world at large, I believe it well to call your attention to what, after a long and careful investigation, I believe to be a fact, and that is, that all the evils which afflict agriculture to-day, and especially all which contribute to the present universal depression, arise either directly or indirectly from unjust regulations or privileges enjoyed by other classes under our financial system, or our system of laws in regard to transportation corporations, or our land system. In the consideration of these prime causes of the many abuses that afflict our class we as a national organization of farmers occupy a peculiar but not unsatisfactory position. It has been the custom for changes in any important feature of governmental regulations to be inserted in partisan platforms, and in this way brought before the masses. We compose at least fifty per cent of the strength of each of the political parties. The two oldest political parties have each had their turn at the administration of affairs, and neither has made a single move toward these questions that are now of more importance to our class than all others. Evidently we have been derelict in our duty to ourselves, because we have not made our influence felt in the party to which we belong. We have, from time to time, at our meetings passed resolutions making various and sundry demands of our law-makers, but up to the present time there are little or no visible results. I believe we have scattered too much and tried to cover too much ground, and that we should now concentrate upon the one most essential thing and force it through as an entering wedge to secure our rights. A political party is one thing, and we in our organized capacity are entirely different from it. In fact, we are the exact opposite. Partisanism is the life of party, and the more bitter it can be made, the more solid the party. We, by the dissemination of the true principles of economic government, set free the strongest influence for neutralizing partisanism, because if all thoroughly

understood perfect political economy, and all were honest, all would agree, and therefore there would be no partisanism or party.

We are a complete opposite to a political party. We dissolve prejudices, neutralize partisanism, and appeal to reason and justice for our rights, and are willing to grant to all other classes the same. appeals to prejudice, and depends on partisan hatred for power to perpetuate itself. The strength of a political party is its platform, which, when constructed with the highest modern art, seeks to pander to the prejudices of every section. It must contain a plank for every question that is agitated or discussed, and be expressed in such equivocal terms as to mean one thing to one man and the opposite to another. Now, since we are the very opposite of a political party, and have for our object, not to get control of the chief offices of the government with all their power and responsibility, and do nothing except perpetuate ourselves, but to accomplish some needed reforms in the regulation of the relations between the different classes of citizens, no matter which party furnishes us the servants that may occupy the offices, it must be plain that we would only weaken our cause were we to attempt to construct a platform after the custom of political parties. Our strength lies in an entirely different and opposite direction. We should unite every effort on the accomplishment of the one reform first necessary, and the most important, and rest assured that the accomplishment of that will insure us a development of strength sufficient to then carry other necessary reforms in their turn. With these thoughts as to the policy to pursue, let us carefully consider which is the most urgent, most important and necessary reform to be dignified as the battle-cry of the order temporarily, till accomplished.

THIRD DAY.

Brother Tracy submitted the following: —

Committee appointed to wait upon Hon. Mr. Powderly reported that arrangements had been made to have him address this body at 3.30 P.M., with Messrs. Beaumont and Wright; which, on motion, was adopted.

On motion, the house adjourned to meet at 1.30 P.M.

Convention called to order at 1.30 P.M., President Jones in the chair.

The following resolution was read by Brother Patty of Mississippi:—

Resolved, That the National Farmers and Laborers' Union declare in favor of organic union with the National Farmers' Alliance.

That a committee of five be appointed to meet a like committee on

the part of the National Farmers' Alliance, to prepare a constitution and plan of consolidation for said organizations. Adopted.

The following resolution, relative to taking census, was read and adopted: —

Whereas, Statements are often made and the belief is growing, that we are becoming a nation of landlords and tenants, and that the homes and farms of the country are very largely under mortgage; and

Whereas, Exact knowledge on this subject is of great importance in the study of the social and economic questions of the day; therefore be it resolved by the National Farmers' Alliance and Industrial Union,—

- 1. That Robert P. Porter, superintendent of the eleventh census, be respectfully requested to collect evidence in the next census, what percentage of the people in this country occupy their own homes and farms, and what proportion are tenants; and of those who occupy their own homes and farms, what proportion have their property free from debt; and of the homes and farms which are under mortgage, what percentage of the value is so mortgaged, and also what proportion of such indebtedness is for purchase money.
- 2. That if the present law providing for the census enumeration does not include provisions to take a complete census of farm indebtedness, we request the Congress of the United States to so amend the present law as to provide for the above enumeration, and further that the publication setting forth the above facts shall be the first report given to the public.
- 3. That the secretary forward a copy of the above resolutions to the superintendent of the census and each member of Congress and Senate.

FOURTH DAY.

The report on constitution was read and accepted; after which the following officers were elected for the ensuing year:—

L. L. Polk of North Carolina was elected President; B. H. Clover of Kansas, Vice-President; J. H. Turner of Georgia, Secretary; H. W. Hickman of Missouri, Treasurer; Ben Terrell of Texas, Lecturer.

On motion, a committee from the Northwestern Alliance was received, and considerable time given to a conference with this body.

Brother Polk was asked to take the chair to receive the committee.

Adjourned to meet at 7.30 P.M.

Convention called to order at 7.30 P.M., President L. L. Polk in the chair.

On motion, the body proceeded with the completion of the organiza-

The election of three judges resulted as follows: R. C. Patty of Mississippi, for a term of three years; Isaac McCracken of Arkansas, two years; Evan Jones of Texas, one year.

The Committee on Demands made the following report on confederation with the Knights of Labor. Adopted.

REPORT OF COMMITTEE ON DEMANDS.

St. Louis, Missouri, December 6, 1889.

Agreement made this day by and between the undersigned committee representing the National Farmers' Alliance and Industrial Union on the one part, and the undersigned committee representing the Knights of Labor on the other part, witnesseth: The undersigned committee representing the Knights of Labor, having read the demands of the National Farmers' Alliance and Industrial Union, which are embodied in this agreement, hereby indorse the same on behalf of the Knights of Labor, and for the purpose of giving practical effect to the demands herein set forth, the legislative committees of both organizations will act in concert before Congress for the purpose of securing the enactment of laws in harmony with the demands mutually agreed.

And it is further agreed, in order to carry out these objects, we will support for office only such men as can be depended upon to enact these principles in statute law, uninfluenced by party caucus.

The demands hereinbefore referred to are as follows:—

- r. That we demand the abolition of national banks, and the substitution of legal tender treasury notes in lieu of national bank notes, issued in sufficient volume to do the business of the country on a cash system; regulating the amount needed on a per capita basis, as the business interests of the country expand; and that all money issued by the government shall be legal tender in payment of all debts, both public and private.
- 2. That we demand that Congress shall pass such laws as shall effectually prevent the dealing in futures of all agricultural and mechanical productions; preserving a stringent system of procedure in trials as shall secure the prompt conviction, and imposing such penalties as shall secure the most perfect compliance with the law.
 - 3. That we demand the free and unlimited coinage of silver.
 - 4. That we demand the passage of laws prohibiting the alien owner-

ship of land, and that Congress take early steps to devise some plan to obtain all lands now owned by aliens and foreign syndicates; and that all lands now held by railroad and other corporations, in excess of such as is actually used and needed by them, be reclaimed by the government and held for actual settlers only.

5. Believing in the doctrine of "Equal rights to all and special privileges to none," we demand that taxation, national or State, shall not be used to build up one interest or class at the expense of another.

We believe that the money of the country should be kept as much as possible in the hands of the people, and hence we demand that all revenues, national, State, or county, shall be limited to the necessary expenses of the government, economically and honestly administered.

- 6. That Congress issue a sufficient amount of fractional paper currency to facilitate exchange through the medium of the United States mail.
- 7. We demand that the means of communication and transportation shall be owned by and operated in the interest of the people, as is the United States postal system.

For the better protection of the interests of the two organizations, it is mutually agreed that such seals or emblems as the National Farmers' Alliance and Industrial Union of America may adopt, will be recognized and protected in transit or otherwise by the Knights of Labor, and that all seals and labels of the Knights of Labor will in like manner be recognized by the members of the National Farmers' Alliance and Industrial Union of America.

S. B. ERWIN, Chairman, J. D. HATFIELD, N. S. HALL, Secretary, S. B. ALEXANDER, J. D. Hammonds, D. K. Norris, F. M. Blunt. H. S. P. Ashby, B. H. CLOVER. R. F. Peck. M. PAGE, R. C. Betty, J. R. Miles, W. S. Morgan, W. H. BARTON, J. W. TURNER, N. A. Dunning, A. S. Mann, S. M. Adams,

Committee on Demands of the National Farmers'
Alliance and Industrial Union.

T. V. POWDERLY, RALPH BEAUMONT,

A. W. Wright,

Committee representing the Order of the Knights of Labor.

FIFTH DAY.

St. Louis, Missouri, December 7, 1889.

Committee appointed to wait on the Kansas delegation reported that delegation in waiting to be admitted.

On motion they were admitted at once.

The delegation was escorted to the platform, and reported that they were ready to consolidate.

After much enthusiasm the following resolution was unanimously adopted : —

Resolved, That the National Farmers' Alliance and Industrial Union hereby approve and ratify the consolidation of the Farmers' Alliance and Farmers and Laborers' Union of the State of Kansas. That J. M. Morris, G. Bosher, L. V. Herlosker, Perry Daniels, T. J. McLean, and Henry Shapscott be received and seated as delegates from said State, and that a charter for the Farmers' Alliance and Industrial Union of the State of Kansas be issued to B. H. Clover and S. M. Morris and their associates.

Committee on Constitution reported on the monetary system, which, after an animated discussion, was adopted by a large majority.

We, your committee on the monetary system, beg to submit the following report, and recommend that 50,000 copies of this report, with complete arguments in support of the same, be published and distributed to the members of our order and to the country, under the supervision of the *National Economist*, provided the printing and distribution shall be done at actual cost by said journal, to be paid on the 20th day of November, 1890.

C. W. MACUNE, L. L. POLK, L. F. LIVINGSTON, W. S. MORGAN, H. S. P. ASHBY.

REPORT OF THE COMMITTEE ON THE MONETARY SYSTEM.

The financial policy of the general government seems to-day to be peculiarly adapted to further the interests of the speculating class, at the expense and to the manifest detriment of the productive class; and while there are many forms of relief offered, there has, up to the present time, been no true remedy presented, which has secured a support universal enough to render its adoption probable. Neither of the political parties offers a remedy adequate to our necessities, and the two parties

that have been in power since the war have pursued practically the same financial policy. The situation is this: The most desirable and necessary reform is one that will adjust the financial system of the general government so that its provisions cannot be utilized by a class, which thereby becomes privileged and is in consequence contrary to the genius of our government, and which is to-day the principal cause of the depressed condition of agriculture. Regardless of all this, the political parties utterly ignore these great evils and refuse to remove their cause, and the importunities of the privileged class have no doubt often led the executive and legislative branches of the government to believe that the masses were passive and reconciled to the existence of this system, whereby a privileged class can, by means of the power of money to oppress, exact from labor all that it produces except a bare subsistence. Since, then, it is the most necessary of all reforms, and receives no attention from any of the prominent political parties, it is highly appropriate and important that our efforts be concentrated to secure the needed reform in this direction, provided all can agree upon such measures. Such action will in nowise connect this movement to any partisan effort, as it can be applied to the party to which each member belongs.

In seeking a true and practical remedy for the evils that now flow from the imperfections in our financial system, let us first consider what is the greatest evil, and on what it depends. The greatest evil, the one that outstrips all others so far that it is instantly recognized as the chief, and known with certainty to be more oppressive to the productive interests of the country than any other influence, is that which delegates to a certain class the power to fix the price of all kinds of produce and of all commodities. This power is not delegated directly, but it is delegated indirectly by allowing such class to issue a large per cent of the money used as the circulating medium of the country, and having the balance of such circulating medium, which is issued by the government. a fixed quantity that is not augmented to correspond with the necessities of the times. In consequence of this, the money issued by the privileged class, which they are at liberty to withdraw at pleasure, can be, and is, so manipulated as to control the volume of circulating medium in the country sufficiently to produce fluctuations in general prices at their pleasure. It may be likened unto a simple illustration in philosophy: the inflexible volume of the government issue is the fulcrum; the volume of the bank issue is the lever power; and price is the point at which power is applied, and it is either raised or lowered with great certainty, to correspond with the volume of bank issue. Any mechanic will instantly recognize the fact that the quickest and surest

way of destroying the power of the lever to raise or lower price, is to remove the resistance offered by the fulcrum — the inflexible volume of government issue. The power to regulate the volume of money so as to control price is so manipulated as to develop and apply a potent force, for which we have in the English language no name; but it is the power of money to oppress, and is demonstrated as follows: In the last four months of the year, the agricultural products of the whole year having been harvested, they are placed on the market to buy money. The amount of money necessary to supply this demand is equal to many times the actual amount in circulation. Nevertheless, the class that controls the volume of the circulating medium desires to purchase these agricultural products for speculative purposes; so they reduce the volume of money by hoarding, in the face of the augmented demand. and thereby advance the exchangeable value of the then inadequate volume of money, which is equivalent to reducing the price of the agricultural products. True agriculturists should hold their products and not sell at these ruinously low prices. And no doubt they would if they could; but to prevent that, practically all debts, taxes, and interest are made to mature at that time, and they being forced to have money at a certain season when they have the product of their labor to sell, the power of money to oppress by its scarcity is applied until it makes them turn loose their products so low that their labor expended does not average them fifty cents per day. This illustrates the power of money to oppress; the remedy, as before, lies in removing the power of the fulcrum — the inflexible government issue — and supplying a government issue, the volume of which shall be increased to correspond with the actual addition to the wealth of the nation presented by agriculture at harvest time, and diminished as such agricultural products are consumed. Such a flexibility of volume would guarantee a stability of price, based on cost of production, which would be compelled to reckon the pay for agricultural labor at the same rates as other employment. Such flexibility would rob money of its most potent power - the power to oppress - and place a premium on productive effort. But how may so desirable a result be secured? Let us see. By applying the same principles now in force in the monetary system of the United States, with only slight modification in the detail of their execution. The government and the people of this country realize that the amount of gold and silver, and the certificates based on these metals, do not comprise a volume of money sufficient to supply the wants of the country; and in order to increase the volume, the government allows individuals to associate themselves into a body corporate,

and deposit with the government bonds which represent national indebtedness, which the government holds in trust, and issues to such corporation paper money equal to ninety per cent of the value of the bonds, and charges said corporation interest at the rate of one per cent per annum for the use of said paper money. This allows the issue of paper money to increase the volume of the circulating medium on a perfectly safe basis, because the margin is a guarantee that the banks will redeem the bonds before they mature. But now we find that the circulation secured by this method is still not adequate; or, to take a very conservative position, if we admit that it is adequate on the average, we know that the fact of its being entirely inadequate for half the year makes its inflexibility an engine of oppression, because a season in which it is inadequate must be followed by one of superabundance in order to bring about the average, and such a range in volume means great fluctuations in prices, which cut against the producer, both in buying and selling, because he must sell at a season when produce is low, and buy when commodities are high. This system, now in vogue by the United States government, of supplementing its circulating medium by a safe and redeemable paper money, should be pushed a little further, and conducted in such a manner as to secure a certain augmentation of supply at the season of the year in which the agricultural additions to the wealth of the nation demand money, and a diminution in such supply of money as said agricultural products are consumed. It is not an average adequate amount that is needed, because under it the greatest abuses may prevail; but a certain adequate amount that adjusts itself to the wants of the country at all seasons. For this purpose, let us demand that the United States government modify its present financial system, ---

- 1. So as to allow the free and unlimited coinage of silver, or the issue of silver certificates against an unlimited deposit of bullion.
- 2. That the system of using certain banks as United States depositories be abolished, and in place of said system, establish in every county in each of the States that offers for sale during the one year \$500,000 worth of farm products,—including wheat, corn, oats, barley, rye, rice, tobacco, cotton, wool, and sugar, all together,—a sub-treasury office, which shall have in connection with it such warehouses or elevators as are necessary for carefully storing and preserving such agricultural products as are offered it for storage; and it should be the duty of such sub-treasury department to receive such agricultural products as are offered for storage, and make a careful examination of such products, and class same as to quality, and give a certificate of the deposit show-

ing the amount and quality, and that United States legal tender paper money equal to eighty per cent of the local current value of the products deposited has been advanced on same, on interest at the rate of one per cent per annum, on the condition that the owner, or such other person as he may authorize, will redeem the agricultural product within twelve months from date of the certificate, or the trustee will sell same at public auction to the highest bidder, for the purpose of satisfying the debt. Besides the one per cent interest, the sub-treasurer should be allowed to charge a trifle for handling and storage, and a reasonable amount for insurance, but the premises necessary for conducting this business should be secured by the various counties donating to the general government the land, and the government building the very best modern buildings, fire-proof and substantial. With this method in vogue, the farmer, when his produce was harvested, would place it in storage where it would be perfectly safe, and he would secure four-fifths of its value to supply his pressing necessity for money, at one per cent per annum. He would negotiate and sell his warehouse or elevator certificates whenever the current price suited him, receiving from the person to whom he sold, only the difference between the price agreed upon and the amount already paid by the sub-treasurer. When, however, these storage certificates reached the hand of the miller or factory, or other consumer, he, to get the product, would have to return to the sub-treasurer the sum of money advanced, together with the interest on same and the storage and insurance charges on the product. This is no new or untried scheme; it is safe and conservative; it harmonizes and carries out the system already in vogue on a really safer plan, because the products of the country, that must be consumed every year, are really the very best security in the world, and with more justice to society at large. For a precedent, attention is called to the following: -

In December, 1848, the London *Times* announced the inevitable failure of the French republic and disintegration of French society in the near future; but so wise was the administration of the statesmen of that nation that two months later it was forced to eat its own words—saying in its columns, February 16, 1849:—

"As a mere commercial speculation with the assets which the bank held in hand, it might then have stopped payment and liquidated its affairs with every probability that a very few weeks would enable it to clear off its liabilities. But this idea was not for a moment entertained by M. D'Argout, and he resolved to make every effort to keep alive what may be termed the circulation of the life-blood of the community. The task was overwhelming. Money was to be found to meet not only

the demands on the bank, but the necessities, both public and private, of every rank in society. It was essential to enable the manufacturers to work, lest their workmen, driven to desperation, should fling themselves amongst the most violent enemies of public order. It was essential to provide money for the food of Paris, for the pay of troops, and for the daily support of the industrial establishments of the nation. A failure on any one point would have led to a fresh convulsion, but the panic had been followed by so great a scarcity of the metallic currency, that a few days later, out of a payment of 26,000,000 fallen due, only 47,000 francs could be recorded in silver.

"In this extremity, when the bank alone retained any available sums of money, the government came to the rescue, and on the night of the 15th of March, the notes of the bank were, by a decree, made a legal tender, the issue of these notes being limited in all to 350,000,000, but the amount of the lowest of them reduced for the public convenience to 100 francs. One of the great difficulties mentioned in the report was to print these 100-franc notes fast enough for the public consumption. In ten days the amount issued in this form had reached 80,000,000 francs.

"To enable the manufacturing interests to weather the storm at a moment when all the sales were interrupted, a decree of the National Assembly had directed warehouses to be opened for the reception of all kinds of goods, and provided that the registered invoice of the goods so deposited should be made negotiable by indorsement. The bank of France discounted these receipts. In Havre alone eighteen millions were thus advanced on colonial produce, and in Paris fourteen millions on merchandise; in all, sixty millions were made available for the purposes of trade. Thus, the great institution had placed itself, as it were, in direct contact with every interest of the community, from the minister of the Treasury down to the trader in a distant outport. Like a huge hydraulic machine, it employed its colossal powers to pump a fresh stream into the exhausted arteries of trade to sustain credit, and preserve the circulation from complete collapse." — From the Bank Charter Act, and the Rate of Interest, London, 1873.

This is proof positive, and a clear demonstration, in 1848, what this system could accomplish when a necessity existed for resorting to it. But since that time every conceivable change has tended toward rendering such a system easier managed and more necessary. The various means of rapid transportation, and the facilities for the instantaneous transmission of intelligence, make it no disadvantage for the produce of a country to be stored at home until demanded for consumption, and the great saving that will follow the abolition of local shipments shows

what great economy such a system is. In this day and time, no one will for a moment deny that all the conditions for purchase and sale will attach to the government certificates showing amount, quality, and running charges that attach to the product.

The arguments sustaining this system will present themselves to your minds as you ponder over the subject. The one fact stands out in bold relief, prominent, grand, and worthy the best effort of our hearts and hands, and that is, "This system will emancipate productive labor from the power of money to oppress," with speed and certainty. Could any object be more worthy? Surely not; and none could be devised that would more enlist your sympathies.

Our forefathers fought in the Revolutionary War, making sacrifices that will forever perpetuate their names in history, to emancipate productive labor from the power of a monarch to oppress. Their battle-cry was, "Liberty." Our monarch is a false, unjust, and statutory power given to money, which calls for a conflict on our part to emancipate productive labor from the power of money to oppress. Let the watchword again be, "Liberty!"

Delegation from Farmers' Alliance of the State of Dakota were admitted, and the following communication was received and unanimously adopted:—

St. Louis, Missouri, December 7, 1889.

To the Farmers and Laborers' Union of America:

In pursuance of the joint action of the National Farmers' Alliance and the Farmers and Laborers' Union, providing for an organic union between the two bodies, the conditions being that when the new constitution should be jointly proposed, approved, and ratified by said Farmers and Laborers' Union, and by two-thirds of the State Alliances composing the National Farmers' Alliance, then by proclamation of the presidents of the two bodies the union should be declared completed, we the delegates from the State Alliance of South Dakota, by authority reposed in us, do hereby accept and ratify said constitution, as amended and agreed upon by the National Farmers' Alliance and the Farmers and Laborers' Union, to take effect upon acceptance and ratification of said constitution by two-thirds of the State Alliances composing the National Farmers' Alliance.

Attest:

C. V. GARDNER,
Chairman of Delegation,
A. WARDALL,
Secretary of Delegation.

Resolved, That C. V. Gardner, F. F. B. Coffin, A. N. Van Dorn, E. B. Cummings, Alonzo Wardall, and Mrs. Elizabeth Wardall be received and seated as delegates from South Dakota, and that a charter for the Farmers' Alliance and Industrial Union of South Dakota be issued to said persons and their associates. That Walter Muir be received and seated as a fraternal delegate from the State of North Dakota. Adopted unanimously.

On motion, the city of Jacksonville, Florida, was selected as the place of holding the next regular session.

Committee on Land made the following report, which was adopted:—
Your committee on land submit the following report:—

The total number of farms in the United States is about 5,000,000; 1,280,000 are rented. Since 1880 there has been an increase in farm renting to the extent of twenty-five per cent. It is evident to the most ordinary observer that the farms are passing out of the hands of those who cultivate them. It cannot be urged that this is the result of incompetency or idleness on the part of the tillers of the soil, for statistics show that the wealth of the country has, during the past twenty-five years, increased more than one hundred per cent. No other nation has ever shown such an enormous increase of wealth in the same length of time. All this increase of wealth is the result of the active energies of the producers. It is a peculiar condition, that the producers of all this wealth have gradually grown poorer; but still the cold, hard fact stares them in the face that they are not only not living as well as they should, but their farms are gradually slipping from their grasp.

The natural and inevitable result of this accumulation of wealth into the hands of the capitalists, and at the expense of the producers, is the establishment of a land aristocracy on the one hand, and tenant farmers on the other; such a system as has obtained in many of the European countries.

Your committee have had neither the time nor the facilities to prepare as extensive a report as the importance of the subject demands. From the best and most reliable authority we can obtain, the amount of mortgaged indebtedness resting upon the farms and homes of the people is not less than \$16,000,000,000. The interest on this vast sum, at eight per cent per annum, is \$1,280,000,000. This is the annual tribute which the farmers of this country are paying to Shylocks. The immensity of this vast sum can the more readily be realized when we consider that it exceeds the value of the entire wheat, corn, and cotton crops of the United States for one year. Nor is this all. Other forms

of indebtedness, both public and private, swell the above sum to more than \$30,000,000,000. When we consider the fact that the annual increase of all agricultural interests is less than three per cent, it does not take more than an ordinary observer to realize that it is only a matter of time when the eight per cent annual tribute will absorb all the land in the country, as it has certainly done in other parts of the world. Statistics show that more than 200,000,000 acres of land have been granted to various railroad companies. Foreign syndicates own more than 20,000,000 acres. In addition to this, the comparative statistics show that there is a tendency to increase the number of large farms in the United States, and that the number of small farms is growing less each year.

We recommend to this body that they take immediate action to furnish some relief to the many thousands of farmers whose only hope in being able to lift the mortgages from their homes and farms is through the early action of Congress, to devise some method to protect their interests and give to them the fruits of their labor.

J. F. TILLMAN, Chairman, S. B. ERWIN,

W. H. BARTON,

B. J. KENDRICK.

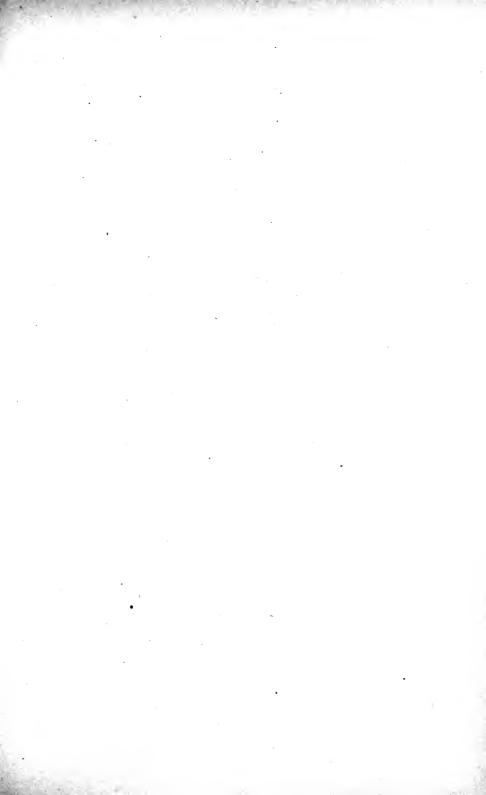
The following resolutions were read and adopted: -

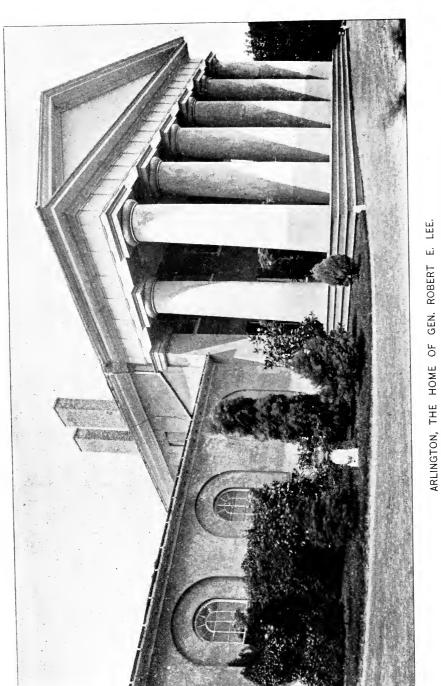
Whereas, The National Economist, our adopted official national organ, has so boldly and fearlessly advocated our cause and defended our principles; therefore be it

Resolved by this national body, That we heartily approve of the course it has pursued, and recommend that every member of the order should subscribe and read the paper, as one of the best means of education in the way of industrial freedom.

The Committee on Secret Work reported and exemplified the secret work.

The meeting adjourned at 6 P.M., to meet the first Tuesday in December, 1890, at Jacksonville, Florida.





CHAPTER VI.

HISTORY OF THE NATIONAL ALLIANCE — concluded.

It was both hoped and expected that the Alliance of the Northwest would consolidate with the National Farmers' Alliance and Industrial Union, as had the Union and Wheel, and form one grand agricultural organization. All efforts in that direction proved futile, through the persistent opposition of a few men who have since been relegated to obscurity. Much disappointment was manifested, and considerable ill-feeling was engendered over the failure of consolidation. A careful analysis of the causes which conspired to bring about this result disclosed the fact that sectionalism, that old enemy of national organized labor, was the controlling factor. The members of the order rapidly sized up the situation, and the matter of consolidation was soon lost sight of in the vigorous effort to push the organization into new territory. The agreement made with the Knights of Labor added much strength to the movement, and gave it a standing among a class of people who had heretofore been inclined to doubt its motives and methods. This compact has stood the assaults of both old political parties, and is the rallying cry of labor in production at the present time.

Immediately after this meeting, President L. L. Polk and Secretary J. H. Turner opened offices in Washington, District of Columbia, the Grand Council having provided for such action. Active, aggressive work was begun at once. Brother C. W. Macune, Chairman of the Executive Board, called the balance of the board, Brothers A. Wardall of South Dakota and J. F. Tillman of Tennessee, to Washington, for consultation. At this meeting the whole situation was thoroughly discussed with President Polk. A plan of campaign was agreed upon, and an agreement made to push the work vigorously. The now famous sub-treasury bill was drawn up and introduced into both houses of Congress, and arrangements were made to send out literature and secure petitions. Brother Macune being at the head of the

Legislative Committee, also did some grand work for the order in that direction. Believing in direct methods, and at the same time being conservative and consistent, his efforts were soon felt in Congress, and the effects were seen throughout the whole country.

President Polk soon had organizers at work in nearly every North and Northwestern State, and the fruits of their labors began to appear. As the result of such efforts, the States of Indiana, Illinois, Michigan, Pennsylvania, Colorado, and California were added to the organization, with other States well under way. The little difficulties in Texas and Missouri were met and overcome by the prompt action of the national officers, and the whole order was put on the high road of prosperity. The vitality of the order was disclosed by the manner in which it withstood the shock of a hotly contested political campaign. In this contest the Alliance was no passive factor. It made. itself both known and felt in many States. Its methods differed somewhat in different sections, but the one idea of a change of conditions obtained all through the contest. In the South, the Alliance directed its efforts to the primaries, while in the North and West it made the fight at the polls. In the South, the new Alliance principle, known as the sub-treasury plan, furnished the basis for nearly all contention. The Alliance stood squarely upon that measure, and made its provisions the gauge of fealty. Congressman after Congressman, who could not stand the test, was deposed, and a tried Alliance man put in his place. West, the St. Louis demands, or compact, were made the basis of operations.

The history of politics furnishes no parallel to the campaign in the West, especially in Kansas and Dakota. Independent candidates were nominated, and a square fight was made between the reform element and the old political parties. As the campaign advanced, the feeling became more bitter and intense. An idea prevailed among the members of the order that a failure would prove the destruction of the Alliance, and result in the complete bankruptcy of nearly all its members. Because of this belief, the struggle became fierce and strong. Past affiliations were forgotten; party ties were broken; and an entirely new political alignment was effected. The two old parties aided

each other where it was possible, and the entire power of partisan machinery was worked to its utmost capacity. Opposition simply provoked increased efforts, and political trickery increased watchfulness, and the effective work of the independents continued amid it all. Education on economic lines had been doing its perfect work, and the people were filled with a desire to obtain further information. As a result of this, these reform meetings were the largest political gatherings ever seen on this continent. When the end came, and the smoke of battle had cleared away, the ground was found thickly strewn with the political corpses of the candidates of both old parties. South, the States of Georgia and North and South Carolina made the best showing; while in the West, Kansas, Nebraska, and the Dakotas led the others. The effect of this political contest will go down to future generations. It marked an epoch in the history of American politics. It was a deserved rebuke to old party methods, and a rugged notice that conditions must be changed. The lessons taught by this campaign will not soon be forgotten; neither will the power and advantage gained by the people soon be relinquished.

During the summer and through the political canvass, vile and vicious attacks were made by the old parties upon the organization as a body, and its national officers in particular, Brothers Polk and Macune coming in for the largest share. Through all this the membership stood firm, with but here and there an exception. Of course the excitement incident to a political campaign retarded, to some extent, the work of organizing; but the seed sown during this time was destined to bring forth a rich harvest of new recruits, which is now being gathered. The success of this campaign increased the interest of the public generally, and the politicians in particular, in the national meeting that was to be held in December of that year. as a whole, the year's work had proven very satisfactory indeed. President Polk had visited nearly every State in person, and had contributed his full share toward the ultimate success attained. The reform press had been strengthened and encouraged, and was doing a truly wonderful work in the line of education.

The wisdom of having the national organ of the order located at Washington was clearly shown by the great benefit derived

by the entire brotherhood from the National Economist. This paper, under the guidance of Brother C. W. Macune, exerted a wide-spread influence for good throughout the entire nation, and demonstrated the fact that reform papers, in order to obtain and retain a standing among intelligent people, must take a dignified, conservative position. Education being the foundation stone of the order, everything possible was done to make progress in that direction. Newspapers, pamphlets, tracts, etc., were sent out in great numbers, and eagerly read by the brethren. The new principle of government loans direct to the people was thoroughly and intelligently discussed. The result has demonstrated the fact that the people, as a rule, are willing to learn the truth, and when once learned, are quite apt to act accordingly. This wave of education on economic questions spread with great rapidity, and its effects have been truly wonderful. The Sub-Alliances, through the discussion of financial and other matters, have brought men and women to public notice who are destined to fill important positions in the future conduct of this nation. The reform press is filled with letters from members of these subordinate Alliances, which are not only sound in principle, but full of good sense and practical ideas. Men and methods are no longer taken for granted, but must first pass through the ordeal of a thorough analysis in the Alliance. By this means, the trickster is discovered, the demagogue exposed, and the scoundrel avoided.

During the entire year, nothing but educational methods were considered. Every point in this regard was strengthened, and all undertakings encouraged. The national officers were continually at work endeavoring to show the people the necessity of understanding their own situation. The result was highly satisfactory to all concerned. The order grew rapidly during the year, in numbers and importance. It became more unified and accustomed to the methods and usages of organization. The necessity for united action became more apparent each day, and a general desire to work harmoniously for the good of all seemed to pervade the entire order. The success at the elections disclosed the power of united action, and gave universal encouragement.

The year began with a large organization, with untried machinery, considerable differences of opinion, and in some cases

a fear of the result. It ended with a much larger membership, with an almost complete system of organization working smoothly, nearly all differences eliminated, and a record of triumphs all along the line. Such was the year 1890. Long will it be remembered by the brotherhood. As the time for the annual meeting approached, President Polk gave up lecturing and speaking, and took a general survey of the situation, preparatory to making his report. He found nothing but success and improvement on every hand. He had the proud satisfaction of giving to the brethren of the national meeting a most satisfactory account of his stewardship. While it had been to him a year of unremitting toil and anxiety, it had been to the order one of prosperity and rapid advancement.

At the St. Louis meeting, Brother Macune brought forward the sub-treasury plan, and the meeting indorsed it by an overwhelming majority. In fact, there were but seven votes against it. This measure, which has been fully explained in another part of this work, soon became the rallying cry of the order. By common consent, it was accepted as the one great principle of the Alliance, and it proved to be the greatest educator yet brought to notice. During the winter of 1890 a bill embodying its principles was introduced into both houses of Congress, and the contest at once began. The old party papers antagonized it, and the politicians went wild with rage over the innovation, as they termed it. Amidst it all, Alliance members and papers continued to argue in its favor; precedents and matters of legislation were gathered from every possible source, until all opposition was confused and confounded. Petitions by the thousands were poured into Congress, as well as letters and resolutions, until both the old parties became thoroughly alarmed at the outlook. Congress continued in session very late, and when the politicians finally reached home, they found the Alliance thoroughly entrenched and working for its principles. sub-treasury plan, and the vivifying effects which followed its investigation, and the senseless ridicule of the opposition, that concentrated the hosts of the Alliance and brought substantial victories in the South; and the same may be said, but in a somewhat less degree, of the Northwest.

As the time for the Ocala meeting approached, the interest

of the politicians became apparent. Every possible effort was made to break down the Alliance, by dividing it upon the subtreasury plan. A few political aspirants were found in the Alliance, ready to serve any power that promised political preferment. The recognized method of such was to oppose the sub-treasury plan. Of course there were a few who honestly considered the sub-treasury plan as wrong in principle, and that it would do harm in practice. Such were the exception, and not the rule. Under these conditions the annual meeting was held.

The annual meeting at St. Louis adjourned to meet at Jacksonville, Florida, but the citizens of that place failed to realize its importance, and neglected to make any provision for the session. Taking advantage of this apathy, the bright little town of Ocala, many miles in the interior, made such flattering propositions that the executive committee changed the place of meeting. As a consequence, the National Council of the National Farmers' Alliance and Industrial Union met at Ocala, December 2, 1890. A synopsis of the proceedings is given below.

FIRST DAY.

Council called to order by the President, L. L. Polk, at 12 M., sharp, and opened in due form.

Prayer by the Chaplain, Rev. Isom P. Langley of Arkansas.

The following officers were appointed by the chair: Isom P. Langley of Arkansas, Chaplain; A. E. Cole of Michigan, Assistant Lecturer; H. M. Gilbert of Indiana, Doorkeeper; T. J. Guice of Louisiana, Assistant Doorkeeper; J. C. A. Hiller of Missouri and W. B. James of Kansas, Sergeants-at-Arms.

Moved by R. F. Rogers of Florida that an invitation be extended to Governor Flemming and other leading citizens of the State, to the meeting this afternoon, which shall be for the public generally. Carried.

On motion of S. B. Erwin of Kentucky, a committee of five was appointed on credentials: W. J. Talbert of South Carolina, Chairman; W. L. Peek of Georgia; M. D. Davie of Kentucky; G. T. Barbee of Virginia; P. B. Maxson of Kansas.

AFTERNOON SESSION.

Convention called to order at two o'clock.

Brother Rogers introduced Francis P. Flemming, governor of Florida, who delivered the address of welcome.

- Mr. J. F. Dunn of Florida was then introduced by Brother Rogers. Mr. Dunn made a telling talk, and gave words of encouragement and cheer to the farmers of America.
- H. L. Loucks of North Dakota responded to the addresses of Governor Flemming and Hon. J. F. Dunn.

The annual message of the President was then read by the President, Hon. L. L. Polk, as follows:—

To the National Farmers' Alliance and Industrial Union:

Congratulating you, and through you the great organization you represent, on the hopeful and encouraging auspices under which you have this day assembled, I beg to submit for your earnest consideration such thoughts and suggestions, affecting the present and future of our great order, as may conduce to the successful prosecution of its noble and patriotic purposes.

Profoundly impressed with the magnitude of this great revolution for reform, involving issues momentous and stupendous in their character, as affecting the present and future welfare of the people; the public mind is naturally directed to this meeting with anxious interest, if not solicitude, and you cannot be unmindful of the importance and responsibility that attach to your action as representatives. Coming, as you do, from States and localities remote from each other, and differing widely from each other in their material and physiological characteristics, and marked by those social and political differences which must necessarily arise under our form of government, it is your gracious privilege, as it shall be your crowning honor, to prove to the world, by your harmonious action and thoroughly fraternal co-operation, that your supreme purpose is to meet the demands of patriotic duty in the spirit of equity and justice.

The great and universal depression under which the agricultural interests of these United States are suffering, is, in view of our surroundings and conditions, an anomaly to the students of industrial progress. No country or people in all history has been so favored and blessed with opportunity and favorable conditions for the successful and profitable prosecution of agricultural industries. With soils, climate, and seasons admirably adapted to the successful growth of all the great staple crops demanded by commerce; with a people justly noted for their industry, frugality, and progressive enterprise, and characterized by an aggressiveness in material development which has no parallel in history; with transportation facilities, inland and upon the seas, equal to the productive power of the country; with a development in railroad and manu-

facturing enterprise, and in the growth of villages, towns, and cities—marvellous in its expansion; with the rapid accumulation of colossal fortunes in the hands of the few; — why, instead of the happy song of peace, contentment, and plenty, which should bless the homes of the farmer and laborer of the country, should we hear the constant and universal wail of "hard times"? To solve this significant and vital question in the light of equity, justice, and truth, is the underlying principle, the holy mission and inspiration, of this, the greatest industrial revolution of the ages.

To restore and maintain that equipoise between the great industrial interests of the country, which is absolutely essential to a healthful progress and to the development of our civilization, is a task which should enlist the minds and energies of all patriotic people — a task as stupendous as its accomplishment shall be grand and glorious.

The pathway of human governments is strewn with mournful wrecks of republics, whose ruin was wrought by and through the subordination and degradation of some one or more of their essential elements of civilization.

It has been truly said that agriculture is the basis of all wealth, and important and indispensable as it is in this relation, yet its higher character and function as the basis of all life, of all progress, and of all higher civilization, can be measured only by human capability and aspiration to reach the highest perfection of society and government. Standing as it does, by far the most important of our great industrial interests, and related as it is, in such important connection, with every individual and every conceivable interest in our country, its prosperity means the betterment of all—its decline means the decline of all.

Retrogression in American agriculture means national decay and utter and inevitable ruin. Powerful and promising as is this young giant republic, yet its power and glory cannot survive the degradation of the American farmer. Never, perhaps, in the history of the world has industrial and economical thought been more intensely engaged than for the past two years, in this country, in the investigation of the causes which have conspired to place agriculture so far in the rear in the race of material progress.

This investigation, earnest, sincere, and searching, has led to the general, if not universal conviction, that it is due in large measure and in most part to partial, discriminating, and grossly unjust national legislation. Were it due to false or imperfect systems of farm economy, we would be graciously allowed and liberally advised to apply the remedy by improved systems of our own devising; but thanks to the founders of

our government for the power and privilege of going beyond the domain of the farm to correct the evils that afflict us.

This great organization, whose jurisdiction now extends to thirty-five States of this Union, and whose membership and co-workers number millions of American freemen — united by a common interest, confronted by common dangers, impelled by a common purpose, devoted to a common country, standing for a common destiny, and guided by the dictates of an exalted patriotism, will, in the exercise of conservative political action, strive to secure "equal rights for all and special privileges to none," and secure indeed a "government of the people, for the people, and by the people."

No patriot can view, but with feelings of gravest apprehension and alarm, the growing tendency, under the fostering care of our politico-economic systems, to the centralization of money power and the upbuilding of monopolies. Centralized capital, allied to irresponsible corporate power, stands to-day as a formidable menace to individual rights and popular government. This power is felt in our halls of legislation, State and national; in our popular conventions, at the ballot box, and in our temples of justice; and it arrogantly lays its unholy hand on that greatest and most powerful lever of modern thought and action, — the press of our country.

Emboldened by the rapid growth of its power, it has levied tribute on the great political parties of the country, which must be paid in servile party subserviency to its greedy demands. High places in politics and in government have been intrusted to its chosen servants and suborned leaders, who scorn the will and the interests of the people; so that reflecting, patriotic men are confronted with the question whether this is really a popular government founded "on the consent of the governed," and whose "powers are vested in and derived from the people," or whether it is a party government, whose powers are vested in and derived from arrogant and unfaithful party leaders.

We are rapidly drifting from the moorings of our fathers, and stand to-day in the crucial era of our free institutions, of our free form of government, and of our Christian civilization. To rescue these inestimable blessings and interests from the impending peril should be the self-imposed duty of all patriots throughout the land.

Since our last annual meeting in the city of St. Louis, the States of Illinois, Indiana, Michigan, North Dakota, California, Colorado, West Virginia, Pennsylvania, and Oklahoma have been added to the roll call of our Supreme Council. Organizers are at work in the States of Washington, Oregon, Ohio, New York, New Jersey, and Arizona. And in

all these States the fields are ripe unto the harvest, but the laborers are few.

I cannot too earnestly urge upon you the importance of devising means and methods for the prompt occupation of these and other States, with competent and active organizers. During the year I have visited officially twenty-four States, and everywhere I found a zealous interest and harmonious spirit among the brotherhood. Indeed, the order was never in finer spirit or more united in purpose than it is to-day.

If asked what is the greatest and most essential need of our order, as contributing most to its ultimate and triumphant success, I should unhesitatingly answer, and in one word — Education; education in the mutual relations and reciprocal duties between each other, as brethren, as neighbors, as members of society; education, in the most responsible duties of citizenship; education, in the science of economical government; education, for higher aspiration, higher thought, and higher manhood among the masses; education, in a broad patriotism, which should bind the great conservative masses of the country in the strongest ties of fraternity and union. Hence I urgently commend to your most favorable consideration the importance of providing at once a plan by which competent lecturers can be actively employed and maintained in the field. Zealous, faithful, and untiring, as has been your national lecturer. Brother Terrell, yet the service rendered by him was not a tithe of what is urgently demanded from all sections of our territory. I commend to your consideration the policy of employing lecturers at fixed salaries, to be paid from the national treasury, or treasuries of the States in which they shall be employed, or from both, jointly, whose entire time shall be devoted to the work, and in sufficient number that the whole field may be canvassed during the year. Selected for their peculiar fitness, and employing their whole time, they would give us a service which, for efficiency, could be secured in no other way. In most of the States comprising this council, the entire service of at least two good lecturers could and should be constantly employed, even should it require the temporary abandonment of local or State enterprises.

Never, perhaps, in the history of this order has there been, or will there be, a period when the demand for this indispensable service will be so great as now; and never can the expenditure of money, if wisely directed, be so effectual and so profitable to our order. In view of its great importance and the urgent demand for it, I trust you will pardon me, if I most earnestly insist that this department of our work shall have your most deliberate and earnest consideration.

By far the most potent and influential power underlying this great revolution of industrial and economic thought has been the reform press. At the earliest moment practicable, the Supreme Council should digest and inaugurate a plan which ultimately will give to every family in our order a thoroughly reliable paper, devoted to the principles of the order. We have a national organ of high order, and several of the States have organs which are doing noble service in the cause; but as an order, we cannot claim to be properly equipped, nor need we hope for zeal, fraternity, and unity, so essential to success, until each State in our jurisdiction shall have at least one paper to represent us, whose dignity, and character, and power shall command the support of our members and the respect of our enemies. Let us place our aims, purposes, and principles at the hearthstones of our laboring millions, and thus arouse to activity the dormant brain power of the masses, that they may grasp the grand possibilities and duties of their existence.

Educate the people in the science of true economical government, and in the great principles of civil and religious freedom, and keep them informed as to the dangers which threaten these inestimable blessings, and we establish a safeguard for the liberties of the people. I respectfully suggest for your consideration the advisability and expediency of placing the ownership of the national organ with the national order, and the ownership of State organs with their State organizations, respectively. This plan would secure harmonious co-operation and a uniform policy through all the leading organs of the order, and would avoid any possible conflict arising from personal interest. Then the will of the order would be the law of the organ and its rule of action.

If the Supreme Council shall inaugurate plans or measures for the dissemination and inculcation of true Alliance principles among the people, its existence and power will be firmly established. Let the people read and hear the truth as we understand it.

Many of the State organizations have adopted business systems which are being operated with varying success. Some of them are eminently satisfactory and have made large savings to the membership. Existing conditions in the different States vary so widely as to preclude the adoption of any uniform system for the transaction of business, but I would respectfully suggest that this department of Alliance work could be materially aided through the investigations of a committee, appointed for the purpose, who shall examine the most successful methods now in operation, and present their conclusions in printed form, outlining their general features for the guidance of new State organizations, and as suggestive of improvements on the systems which have been found less

successful. A matter of such importance to our financial well-being should receive your careful and generous attention.

It is the fixed purpose of this organization to secure, if possible, certain needed legislative reforms. However urgent and emphatic may be our demands, experience teaches us that they are of no avail unless supported and enforced by such practical methods as will convince the law-making power of our determination and ability to prosecute them to a successful issue.

Let this Supreme Council, representing all parts of the country, and that great interest that pays over eighty per cent of all taxes of the country, assert and maintain its dignity and its solemn purpose to protect and advance the interests of its constituency, by declaring their legislative needs, and by showing to the American Congress that when its demands on paper are ignored, it can and will vindicate and maintain its claims at the ballot box. Our recent experience with that body, as well as with the leaders of the two great political parties of the country, should admonish us that the time has arrived when this great organization should take bold and determined action.

To this end, I respectfully recommend that this council authorize the organization of a body to be known as the National Legislative Council of the National Farmers' Alliance and Industrial Union, to whom shall be committed the charge of such legislative reforms as may be indicated by your body. I would respectfully suggest that the Legislative Council be composed of your national president, who shall be ex officio chairman, and the presidents of all States represented in the Supreme Council; and that this body shall hold its annual meeting within sixty days after the adjournment of the Supreme Council, at such time and place as may be indicated by the national president; and that it be empowered and authorized to appoint such legislative committees as in its judgment may be wise; and that it be required to transmit to each of the States, in printed form, through the national secretary, for distribution to the reform press, lecturers, and membership of the order, all measures or bills (together with the arguments in their favor), as they may decide should be enacted into laws. Let it be required, further, that the Legislative Council shall keep a correct record of all its proceedings, which shall be submitted through its chairman to the next annual meeting of the Supreme Council.

This body composed, as it would be, of presumably the best and wisest men of our order, and coming fresh from the people of each State, and being thoroughly conversant with the measures of legislation proposed, and acting in harmonious concert on all questions for the com-

mon good, without regard to sectional or geographical divisions, would wield a moral power which would enforce the respect of any legislative body to whom it would appeal, and enlist the earnest sympathy and co-operation of the great mass of the people whom it would represent. Not only would its service in this direction be potential for good in securing harmony and unity of action among the people, and by crystallizing and concentrating that action upon any desired measure of reform, but the natural and harmonious blending of the moral force of such a body, with the influence of the reform press throughout the States, would establish and solidify a power which could not fail to exercise a most beneficent effect on public-affairs.

We have reached that point in the development of our organization when we must address ourselves to the important and indispensable work of organizing and systematizing these various departments of our effort, to which I have briefly adverted.

Organize your lecture system so that we may have able and competent men constantly employed in advocating our principles and purposes throughout all the States within your jurisdiction; organize and establish a system through which we may reach the people through the columns of an able representative reform press; aid the membership, as far as we may be able, in devising and establishing the best possible system for conducting their business through county and State agencies; and place our demands for legislation, as an organization, in the hands of an able body of men representing each of the States, and no power, nor combination of powers, can prevent or thwart our ultimate and triumphant success.

- 1. I respectfully call your attention to the necessity of a change in Section 2, Article V., of our constitution, defining the relative powers and duties of the judiciary and executive departments, in the matter of official rulings by the president. The requirement that the president shall submit promptly all official rulings to the judicial department for consideration and action, is unnecessary and often impracticable. In cases of importance, the delay thus enforced, especially should the judiciary fail to concur in the ruling of the president, might work great injustice and incalculable damage. I suggest, respectfully, the expediency of so amending the section referred to as to authorize appeals to the judiciary from the rulings of the president—the decisions of the judiciary on such appeals to be the final construction of the law until the next meeting of the Supreme Council.
- 2. Section 2, Article VIII., of the constitution makes it the duty of the Supreme Council to enact a uniform eligibility clause for the various

State constitutions; also to enact laws defining "the eligibility of persons of mixed or unusual occupation or residence, subject to all the limitations of this article." In pursuance of this requirement, Section 20 of the statutory laws enacted at the last session of the Supreme Council, says, "That the question of eligibility be left to each State, subject to the limitations of the constitution." This conflict between the organic and statutory laws has caused confusion and embarrassment throughout the States. I recommend that Section 20 of the statutory laws be repealed, and that the Supreme Council enact a law in conformity to Section 2; Article VIII., of the constitution. I further recommend that the Supreme Council determine and fix definitely the question of the eligibility of mechanics living in cities and incorporated towns. Much confusion and irregularity has grown out of the ambiguity of the law on the eligibility of this particular class of our citizens, and it is important to the good of the order that the matter should be definitely settled.

- 3. Under Sections 17 and 18 of the statutory laws, the office of crop statistician is created and his duties defined. The functions and powers of this officer and his subordinates are so indefinite, and the machinery through which this service is to be performed is so imperfect, that I beg to direct your attention to it. The importance and magnitude of this work, if undertaken at all, require an expenditure of money and labor much beyond the scope contemplated by the law as it now stands. The value of the information sought depends upon its accuracy, and the promptness, often, with which it is disseminated to the membership. To secure this would require the constant service and entire time of the head of the department, and much of the time and service of his subordinates throughout the States. It will be observed that neither the chief officer nor any of his subordinates are required to give any specified time to the work, nor are they allowed any compensation for their services, nor any appropriation to defray expenses of printing, etc. Under existing laws this service must necessarily be voluntary and imperfect, and hence of little value; and I would therefore recommend that means and measures be adopted to render it effective and of practical value to the order, or that it be abolished.
- 4. I recommend, if it be practicable and expedient, that the office and duties of treasurer be transferred and merged into that of the secretary.
- 5. I respectfully suggest to your body the expediency and advisability of requiring any officer of your body who may be nominated or appointed to any civil office, to tender the resignation of his office promptly upon his acceptance of such nomination or appointment.

For a statement of the work and duties performed in the various departments, you are respectfully referred to the reports, respectively, of the officers in charge. And in this connection, I recommend, with the concurrence of all the officers concerned, the appointment of a competent committee, early in your session, who shall, with your national secretary, examine carefully and thoroughly the records of all receipts and disbursements, and report thereon before your adjournment.

It affords me pleasure to testify to the fidelity and efficient labor of all the officers connected with your national office.

An intelligent conception and comprehension of the relations and reciprocal obligations between the citizen and the government is one of the highest attributes of American citizenship; and under our form of government, one of the most important and responsible duties devolving upon the citizen is the attainment of this knowledge. Hence, first and foremost in our "declaration of principles," we announce that we are "to labor for the education of the agricultural classes in the science of economical government, in a strictly non-partisan spirit, and to bring about a more perfect union of said classes."

Were it the design of the framers of our organic law to impress our membership with the responsible and patriotic duty of reaching that exalted standard in citizenship to which all American freemen should aspire, and to assert that our organization was political in the highest sense of that term, they were fortunate in adopting the language used in this declaration. But while our organization is political, it cannot be partisan or sectional in its action. In support of this declaration, we proudly point to our whole past record and to the recent popular election, and particularly to the noble and patriotic bearing of the brotherhood in the States of Kansas and South Carolina.

It is as needless as it would be criminal to attempt to disguise the fact that, as an organization, we have reached a critical period in our existence. Insidious and powerful influences are seeking to divert us from the high purposes and grand objects for which we were organized. Flushed and elated with success, — marvellous in many of its aspects, and the most remarkable in the political history of this country, — let us not impair its prestige and power by indifference or inactivity on the one hand, or by grasping for the impracticable or unattainable on the other.

Strong as we are and strong as we must become, — strong enough, if united, to render our lines impregnable to any open or opposing force, — yet we are not strong enough, nor can we be, to withstand the intrigue and treachery of foes within. Our principles must find their "city of



refuge," and our cause its citadel of safety, in the loyal hearts of a devoted membership.

Let our primary bodies barricade their doors against unworthy and designing men; and if such be found already within the gates, let them at once be furnished a safe and speedy exit to the camp of the enemy. Let these primary bodies — standing as sentinels at the outer gates — be constantly on the alert, and watch with ceaseless vigilance, lest they admit dangerous emissaries from corporations, or political or monopolistic combinations. Let us, as an order, adopt as our rule of action the inflexible test of loyalty to Alliance principles, as the first and most essential prerequisite to membership and to our confidence. Apply this test in the selection of officers, from the steward of a primary body to the president of your national body. Apply this test rigidly to all men who aspire to represent us in any capacity, and especially to those whether of high or low degree --- who are to be intrusted with the duties and powers of legislation. And if, in the faithful and impartial application of this test, any reasonable doubt should arise, do not hesitate to give our cause the full benefit of such doubt. Place no man on guard who is not a loval and faithful friend to our cause. Herein lie our strength and our safety.

Let us stand unitedly and unfinchingly by the great principles enunciated at our St. Louis meeting. In the light of our recent experience, the important work of discussing and elucidating these principles must devolve upon us. In Congress, on the hustings, in conventions, and in the partisan press of the country, there was a significant silence on these principles, except and only in cases where we forced their discussion. All propositions presented by us, looking to financial reform, and notably the measure known as the sub-treasury plan, were ignored by Congress, and even the discussion of this plan was suppressed, notwithstanding the petitions of hundreds of thousands of our members for financial relief in this direction. Neither of the great political parties of the country, nor indeed did the leaders of these parties, indicate a favorable inclination to heed the demands of these millions of oppressed and long-suffering farmers.

A careful review of financial legislation by Congress, for the past quarter of a century, together with the disregard manifested by that body to the just and urgent demands of the people for financial relief, has fixed upon the public mind the alarming apprehension that the seductive hand of monopolistic and corporate power has lifted the American Congress to that dangerous eminence from which they can no longer hear the cry of the people. But the decree has gone forth that this dangerous and

threatening state of things cannot much longer exist. Congress must come nearer to the people, or the people will get nearer to Congress.

Let us not be diverted, through the machinations of political intrigue, from the great and paramount issue now before the American people — financial reform. Let this be the slogan and the rallying cry of the people until relief shall come. We cannot hope for relief if we accept the financial policy adopted and practised for a quarter of a century by the two great political parties of the country.

Never in the political history of the country was there such universal interest among the people, and such urgent demand on the political parties for financial reform, as characterized the recent campaign; and yet the great effort of the leaders of each of these parties and of the partisan press, was to give overshadowing prominence to questions and issues partaking largely of a partisan character to the exclusion of the one great vital, living issue — financial reform. Indeed, the evasion of this great issue has been prominently characteristic of the two great parties for the past twenty-five years.

The great absorbing question, let me repeat, before the American people, is not whether the Democratic or the Republican party, with their evident subserviency to the will of corporate and money power, shall be in the ascendency; but the question is, whether under our republican form of government the citizen or the dollar shall be the sovereign. Thoroughly imbued with the magnitude and importance of this issue, the people who constitute the parties revolted against the designs and dictation of suborned leadership in the recent election.

A system of finance which recognizes and secures to every citizen of this country an equitable, fair, and just right to share its benefits, and which will furnish a volume of circulating medium adequate to the legitimate demands of the country, at a low rate of interest, is the greatest and most urgent need of the times. Let the people here represented continue to reiterate, and with increased emphasis demand:—

- 1. That silver shall be restored to its dignity and place as a money metal, with all the rights of coinage and all the qualities of legal tender which gold possesses.
- 2. That the currency of the country shall be issued direct to the people, at a low rate of interest and without discrimination, and shall be a legal tender for all debts, public and private.
- 3. That taxation shall be more nearly equalized, by requiring that all property shall bear a just proportion of its burdens.
 - 4. That alien ownership of land should be resisted and prohibited,

- 5. That public transportation should be owned and controlled by the government.
- 6. That no class or interest should be taxed to build up any other class or interest.
- 7. That public revenues should be limited to an honestly and economically administered government.

And for the further security of the public welfare, let them demand: -

- 8. A just and equitable system of graduated taxation on incomes.
- 9. The election of United States senators by a direct vote of the people.

These demands are the necessary and legitimate outgrowth of our rapidly advancing civilization, and the highest considerations for the public weal and safety should impel us to earnest and persistent endeavor to engraft them upon our governmental policy.

In all the broad field of our noble endeavor as an order, there is no purpose grander in design, more patriotic in conception, or more beneficent in its possible results, to the whole country and to posterity, than the one in which we declare to the world that henceforth there shall be no sectional lines across Alliance territory. Failing in all else we may undertake as an organization, if we shall accomplish only a restoration of fraternity and unity, and obliterate the unnatural estrangement which has unfortunately so long divided the people of this country, the Alliance will have won for itself immortal glory and honor. In the spirit of a broad and liberal patriotism, it recognizes but one flag and one country. Confronted by a common danger, afflicted with a common evil, impelled by a common hope, the people of Kansas and Virginia, of Pennsylvania and Texas, of Michigan and South Carolina, make common cause in a common interest. It recognizes the important truth, that the evils which oppress the agricultural interests of the country are national in their character, and that they cannot be corrected by sectional effort or sectional remedies. It recognizes the fact that the war ended in 1865; that chattel slavery is gone, and that the prejudices and divisions, born of its existence, should go with it.

Community of interests between the great States of the middle, southern, and western sections, is the mighty natural force which will draw them together in solid array in the impending struggle between the people and plutocratic power.

Causes other than political (potent and effective as the latter have been) have conspired to propagate and perpetuate sectionalism. The rich, powerful, and densely populated East must needs have an outlet for its aggressive enterprise, its rapidly accumulating wealth, and

its growing population. The dense forests and fertile plains of the magnificent and inviting West were transformed into rich and powerful States. Lines of immigration and enterprise, of wealth and of general development, were pushed forward with marvellous rapidity and success to the shores of the Pacific. Along these lines were transplanted from the East the prejudices and animosities engendered for a half-century. The South, traversed by no transcontinental line of communication, sullen and humiliated in her great and crushing losses, and by defeat in war, most naturally nursed the sectional animosities and prejudices of the past. What an inviting condition was thus presented for wicked sectional agitators; and how assiduously they utilized it, let the shameful sectionalism of the past quarter of a century answer. But the people of the awakening South and the people of the great agricultural West, aroused and inspired by a common danger, have locked their hands and shields in a common cause, the cause of a common country.

The lines of sectionalism have been cut in twain. The Alliance has planted its banner, on which is inscribed in characters of golden light, "Equal rights to all and special favors to none," from the State of New York on the east to the golden gates of the Pacific on the west; from the Gulf on the south to the Great Lakes on the north, embracing within its territory the great staple crops of the country, — the centre of population and the centre of political power.

We cannot fail to see the opportunity of the hour; and recognizing that opportunity, we must not forget that it carries with it corresponding responsibilities. The opportunity is for the great conservative, lawabiding, patriotic masses to assert and establish a perpetual union between the people. The sequent obligation is, that these great masses must discourage, discountenance, and discard from their councils the wicked demagogical agitators who for the last twenty-five years have sought to foster discord and dissension that they themselves might thrive. Ordinarily they are the men — North and South — who were "invisible in war, and have become invincible in peace."

Divided, we stand as a Samson shorn of his locks; united, we stand a power that is invincible. Cato fired and thrilled the Roman senate with the fierce cry, "Carthage must be destroyed." Must we, as citizens of this great republic, emulate such a vengeful spirit? Hannibal, while yet a tender youth, was placed by his father on his knees and made to swear eternal vengeance against the Romans. Must we, as Christian parents, entail upon our children the bitter legacy of hate? Hundreds of thousands of noble, aspiring, hopeful, and ardently patriotic young men all over the land are manfully enlisting in the responsible

duties of American citizenship. Born since the war, — thank God!—their infant vision was first greeted by the light of heaven, unobscured by the smoke of battle, and their infant ear first caught the sweet sound of hallowed peace, unmingled with the hoarse thundering of hostile cannon. Shall they be taught to cherish, and foster, and perpetuate that prejudice and animosity, whose fruits are evil, and only evil?

"Let the dead past bury its dead"; and let us, as an organization, with new hope, new aspirations, new zeal, new energy, and new life, turn our faces toward the rising sun of an auspicious and inviting future, and reconsecrate ourselves to the holy purpose of transmitting to our posterity a government "of the people, by the people, and for the people," and which shall be unto all generations the citadel of refuge for civil and religious liberty.

Adjourned until 7.30 P.M.

EVENING SESSION.

Committee on Credentials reported : —

Arkansas Alliance: L. H. Moore, J. E. Bryant.

Arkansas Farmers and Laborers' Union: D. E. Barker, I. P. Langley.

Alabama: H. P. Bone, J. P. R. Beck, B. W. Groce.

Louisiana: J. T. W. Hancock, T. S. Adams, A. D. Lafargue, T. J. Guice. Mississippi: J. H. Beeman, Frank Burkett, W. S. McAllister, A. M. Street.

Indiana: W. W. Prigg, Thomas W. Force. Illinois: M. L. Crum, H. M. Gilbert.

Missouri: J. S. Hall, N. J. Wallard, J. C. A. Hiller, L. Leonard, Ahira Manring, J. W. Gray.

Georgia: L. F. Livingston, W. L. Peek, W. A. Broughton, R. A. Wright, T. B. Trammell, W. S. Copeland, A. Q. Moody.

North Carolina: M. L. Wood, S. B. Alexander, Elias Carr, George Williamson, R. B. Vance, E. A. Moye.

South Carolina: J. W. Stokes, W. J. Talbert, S. C. Latimer, J. E. Jarnigan.

Texas: J. M. Perdue, G. L. Clark, Sam. H. Dickson, S. O. Dawes.

Colorado: W. S. Starr, E. H. Bruton.

Tennessee: J. P. Buchanan, J. H. McDowell, E. B. Wade, W. C. Lightfoot.

Maryland: Hugh Michell, J. W. Kerr.

Kansas: James Blakeley, Frank McGrath, T. B. Maxson, D. H. Walker, Mrs. B. H. Clover, A. Terrell, J. M. Nevelle, W. B. James.

Florida: R. F. Rogers, Thomas Hines, S. S. Harvey.

North Dakota: E. M. Sanford, Walter Muir.

South Dakota: H. L. Loucks, C. L. Hinckley, A. V. Vandorn. Kentucky: S. B. Irwin, M. D. Davie, W. T. Winn, P. H. Haney.

Pennsylvania: A. W. Knepper, H. C. Demming. Michigan: A. E. Cole, A. N. Howe, George Northup.

Indian Territory: J. W. Stewart, R. C. Betty.

Virginia: Mann Page, G. T. Barbee, G. Chrisman, Robert Beverley.

West Virginia: S. A. Houston, T. R. Carskadon.

New York: D. F. Allen. Minnesota: W. E. Fish.

California: J. S. Barbee, D. C. Vestal.

The report was taken up in sections and adopted seriatim.

The report of the Committee on Credentials, where the dues were paid, was adopted as a whole, and said delegates seated.

Joseph S. Barbee of California handed in the application and fee for the charter for California State Alliance.

SECOND DAY.

Resolution by Alonzo Wardall of South Dakota, adopted unanimously:—

Whereas, The National Council of the Colored Farmers' Alliance is now in session in this city; and whereas we are engaged in a common cause, and our interests are mutual: therefore,

Resolved, That a committee of five from this body be appointed to wait upon them with our cordial fraternal greeting, and extend to them our earnest invitation to join us in such action as shall tend to unite our strength in forwarding the cause we love so well.

The committee was appointed as follows: Alonzo Wardall, Chairman; George Chrisman; W. C. Lightfoot.

Resolution by Brother Beverley read and adopted, instructing committee on Constitution to consider the advisability of providing for congressional district Alliances.

AFTERNOON SESSION.

The following resolution was adopted: —

Whereas, The President of the United States, in his annual message to Congress, recommends and urges the immediate passage of a measure known as the Lodge election bill; and whereas, the said bill involves a radical revolution in the elective machinery of this Union, both State and national, and its passage will be fatal to the autonomy of the States and to the cherished liberties of the citizens; and whereas, in the holy war which we have declared against sectionalism, the firesides of the farmers of the North, South, East, and West are the citadels around which the heaviest battles are being fought, and to the end that victory may crown our crusade, let fraternity and unity reign: therefore, be it

Resolved, By the National Farmers' Alliance and Industrial Union, in

national convention assembled, That we most solemnly protest against the passage of the said election bill, and we most earnestly petition our senators in Congress to employ all fair and legal means to defeat this unpatriotic measure, which can result in nothing but evil to our common and beloved country.

The following telegram was received and read, and response authorized:—

"Philadelphia, Pa., Dec. 2. L. L. Polk, President: Our fraternal delegates will convey greeting of the Knights of Labor to your convention on Friday, at any hour you designate.

"T. V. POWDERLY."

Brother Livingston of Georgia arose and spoke to a question of personal privilege. He was followed by C. W. Macune and L. L. Polk, who spoke to the same question. The tenor of their remarks was: That newspapers and persons had circulated reports which reflected on the character and official acts of each. Brother Macune stated that it had been generally reported that charges would be brought against him, and he defied any man to bring any charges or adduce any evidence on which charges could be based. He was not on the defensive, and could not be put on the defensive. All three agreed in demanding a thorough and complete investigation, by a committee composed of one from each State. This was granted, and the following committee of investigation appointed: McDowell of Tennessee, Allen of New York, Demming of Pennsylvania, Mitchell of Maryland, Beverley of Virginia, Vance of North Carolina, Latimer of South Carolina, Wright of Georgia, Hine of Florida, Bone of Alabama, Burkett of Mississippi, Adams of Louisiana, Jones of Texas, Barker of Arkansas, McGrath of Kansas, Hall of Missouri, Winn of Kentucky, Crum of Illinois, Force of Indiana, Howe of Michigan, Houston of West Virginia, Vestal of California, Starr of Colorado, Stewart of Indian Territory, Sanford of North Dakota, Van Doren of South Dakota.

THIRD DAY.

Report of State business agents read and referred to a special committee of five.

Resolution by Sister B. F. Clover of Kansas adopted:

In view of the mountain of mortgage debt heaped upon our people through the unjust financial system enacted during and since our unfortunate civil strife, and the notorious unreliability of the United States census concerning the amount of that indebtedness; be it

Resolved, That this National Council of the Farmers' Alliance and Industrial Union recommend to all County Alliances throughout the Union the appointment of a competent committee to examine the mortgage records of each county, and compile accurate statistics upon this subject, for information of the people.

AFTERNOON SESSION.

Brother Pickler of South Dakota was invited to address the meeting. He said he visited the National Council to ascertain what legislation the farmers would urge in the present and next Congress, and that he was ready to serve them. He stated that the sub-treasury plan was in the hands of the Ways and Means Committee of the House and of the Finance Committee of the Senate, and he believed action would be taken when urged by this body or legislative committee. The subtreasury plan was the best for the distribution of money yet proposed.

Resolution unanimously adopted expressing thanks to Brother Rogers for his untiring energy, zeal, and success in providing for the comfort and happiness of the delegates and visitors. Also, thanks to the city of Ocala for its bounteous hospitality and many courtesies so freely and fully bestowed on this large assembly.

FOURTH DAY.

Report of Committee on Confederation, making the following recommendations, was adopted:—

- 1. A confederation.
- 2. A joint committee on confederation, of five from each organization, which shall represent this confederation.
- 3. Each organization shall be entitled to as many votes as it has members who are legal voters in State or national elections.
 - 4. The St. Louis platform shall be the basis.
- 5. Each shall stand pledged to assist when possible in all local efforts to better the condition of our people.
- 6. Fraternal delegates or correspondence shall never be denied the one by the other, so long as the confederation exists.
- 7. The joint committee on confederation shall have the power, by a majority vote, to admit other organizations with similar objects, upon application.
- 8. When plans are agreed upon by the joint committee on confederation for mutual co-operation, each organization shall be bound to support said plans fully and cheerfully.

- 9. Expenses accruing on account of the joint committee on confederation shall be defrayed by their respective organizations, as they may be incurred by each.
- 10. The joint committee on confederation shall have power to adopt such by-laws for the government of the joint committee as they deem best.
- L. F. Livingston offered a resolution indorsing the St. Louis platform, and said: "I believe the people can stand on this platform forever. This platform is a declaration of our Supreme Council, and our enemies are stumping the States, declaring that it has not the following of the Alliance people, and I desire the platform read and a vote taken by States, so there will be no mistake as to how we stand."

Mr. Stelle, of the Farmers' Mutual Benefit Association, said: "I wish to state that the Farmers' Mutual Benefit Association can stand squarely on the St. Louis platform."

Following are the resolutions: --

r. Resolved, That this National Convention of the Farmers' Alliance and Industrial Union do hereby most earnestly and emphatically indorse the St. Louis platform adopted last December, and with equal sincerity and persistency demand that all subordinate bodies connected with this organization shall not only align themselves therewith, but co-operate with this national organization and sustain the same.

The vote on this was as follows: -

Alabama voted yes; Arkansas Alliance, yes; Arkansas Farmers and Laborers' Union, yes; Colorado, yes; North Carolina, yes; South Carolina, yes; North Dakota, yes; South Dakota, yes; Florida, yes; Georgia, yes; Illinois, yes; Indiana, yes; Kansas, yes; Kentucky, yes; Louisiana, yes; Missouri, yes; Mississippi, yes; Maryland, yes, with privilege of amending if colleague dissents; Michigan, yes; Pennsylvania, yes; Texas, yes; Tennessee, no, because the Committee on Demands are now considering this question; Virginia, yes; West Virginia, yes; California, yes.

- 2. That any national officer, or organ either State or national, that shall not conform fully with the foregoing resolution shall be suspended by the national president; and furthermore, we advise our people not to vote for any candidate for a place in our national Congress who does not pledge himself or themselves to the St. Louis platform.
- 3. That we demand that there shall be a rigid and just national and State governmental control of the means of communication and transportation. And if this does not cure existing abuses, we demand that the government own and control said lines of communication and transportation.

Report of the Executive Committee read by the chairman: -

Brethren: We, your Executive Board, hereby submit our annual report as follows:—

The first duty of your board, after the adjournment of the Supreme Council last year, was to secure bonds from the secretary and treasurer, and to start the officers in the execution of their duties in the city of Washington. The secretary, Brother Turner, made bond in the sum of \$10,000, which was approved as good and deemed sufficient under the rules made by this board; that the secretary should promptly every day deposit all money received in the Second National Bank, in Washington, District of Columbia, which bank received such money under instructions not to pay out any portion of it, except on warrants signed by the secretary, approved by the president, and bearing the imprint of the seal of the order. With this careful method of handling the funds, a bond of \$10,000 was considered amply sufficient for the secretary to give.

The treasurer, Brother Hickman, promptly made a good and sufficient bond, but the sureties having failed to make oath as to their solvency, it was returned to him for correction, and owing to the satisfactory working as to the present system of keeping the funds in bank, this board has not insisted on the bond being made by the treasurer. He was ready to give all the bond required, but the money coming in during the year has not exceeded the amounts necessary to meet the running expenses, and it would have been both troublesome and expensive to pay it into a treasury in Missouri, when it was immediately necessary to pay it out again in Washington. For these reasons the treasurer has not been required to perform the duties of his office, but the Supreme Council, at its last session, voted to that officer a salary of \$500 per year. He has presented no claim for the salary and performed none of the duties. Your board desires instructions as to whether the salary shall be allowed him or not.

The gross amount of salaries voted by the last Supreme Council to the officers of the order, aggregated \$10,500. The expenditure for delegates to the St. Louis meeting has amounted to \$2687.94. The sum of \$1000 was voted to the officers of the previous year, and the president-elect was allowed \$900 for a stenographer and office and travelling expenses. The secretary was allowed office expenses; the lecturer, travelling expenses; the members of the Executive Board, travelling expenses; and the national crop statistician, printing and postage expenses. All these obligations were incurred by the Supreme

Council, and no provision was made for funds with which to discharge them as they became due. In this emergency, the chairman of this Executive Board applied to the president for a ruling as to whether the per capita dues were payable in advance or not. He ruled that they were, but the Judiciary Committee refused to concur in the ruling, and according to the constitution that question has been held in abeyance to be decided at this session of the Supreme Council. The result has been great confusion. Eleven States, namely, Kansas, Virginia, North Carolina, Arkansas Alliance, Mississippi, South Carolina, Georgia, Alabama, Florida, Louisiana, and Maryland, reported their number of active members according to their strength on the first day of October, 1889, and paid on them for the year ending October 1, 1890. These payments were scattered throughout the year, and ten States, namely, Mississippi, Alabama, North Carolina, Kentucky, Tennessee, Missouri, Texas, Arkansas Farmers and Laborers' Union, Colorado, and New Mexico, had not reported and paid in full on the first day of November, as the constitution expressly provides shall be done. Six States, namely, Texas, Tennessee, Kentucky, Missouri, Arkansas Farmers and Laborers' Union, and New Mexico, had not reported or paid anything on the 25th day of November, at which date this board examined the books of the secretary. The gross expense for the year, including every item authorized by the Supreme Council, and all the running and incidental expenses necessary to carry on the work, has been \$19,551.65. The gross receipts from the per capita dues for the year ending October 1, 1890, have been \$11,231.27. The gain upon supplies sold by the national secretary was \$1380.33, and the amount of fees and dues received from unorganized States was \$918.95; making the gross receipts for the year ending October 1, 1890, \$13,530.55, and leaving a deficiency of \$6021.10. This deficiency has been reduced to \$2862.75 by the use of \$3158.35, which has been received on the per capita dues for the year ending October 1, 1891. The net deficiency, therefore, for the year, as shown by the secretary's books on the 25th day of November, was \$2862.75. of these facts, your board respectfully makes the following recommendations: -

- 1. The salaries and expenses should be reduced to the very smallest possible amount on which the business can be conducted, and must be reduced until the expenditures do not exceed the income.
- 2. There exists no necessity for requiring the national president or the chairman of the Executive Board to live at the national head-quarters, because they can attend to the business just as well and live at home, where they will require less salary and incur less expense.

- 3. The salary of the president should be reduced to not over \$1000 per year, and he should not be allowed an assistant, because the business of the office does not require it. The salaries of the chairman and members of the Executive Board and the treasurer should be abolished, and for such time and travel as may be found necessary each should be allowed mileage and per diem.
- 4. The Executive Board should have authority to curtail the expenses authorized by the Supreme Council, whenever the condition of the exchequer makes such curtailment necessary. With such a system of rigid economy inaugurated, the treasury would soon be in possession of funds that would enable effective work in the educational field.
- 5. The system of collecting per capita dues should be improved by having a stated time of year in which all State organizations should collect same. A State with a membership of 40,000, that is increasing at the rate of twenty-five per cent per year, would have \$2000 to pay if it paid in advance; but should it defer the payment to the end of the year, it would have \$2500 to pay on account of the accessions to membership; but on the other hand, if the State be decreasing in membership, it would be cheaper for them to pay at the close of the year. To avoid these fluctuations and establish the fairest and most uniform method, would be for all States to enumerate and pay at the expiration of the first six months of the year. To do this, it would be necessary for the subordinate bodies to report their active membership and pay five cents per capita dues with their April report to the county secretary. The county secretaries would have it all in and make their report and remittance to the State secretary in July, accompanying their regular reports to the State secretary, who would have plenty of time to receive and compile same by the first day of September, at which date the report and remittance from the State secretaries should be due, with the distinct understanding that the first day of November would be the last day of grace, and that all States which violated the constitution by not having made both report and remittance on or before that date, would have no right to demand representation in the Supreme Council.

This board has held three sessions during the year, the first in February, at the beginning of the year, for the purpose of establishing the work, approving bonds, etc. The second was in May, immediately after the expiration of the first half of the year. This meeting was called by the chairman, for the purpose of examining the secretary's books, and to see if the expenses could not be curtailed so as not to exceed the receipts. After a careful examination of the condition

of affairs, in connection with the president, it was decided that this board had no authority to curtail expenses expressly prescribed by the Supreme Council. A short summary of the condition was sent to each State organization then about to convene, showing that there would probably be a deficiency of nearly \$6000, and calling their attention to the constitutional provisions requiring them to report and pay on the first day of November, in order to be entitled to representation. The prediction then made as to a probable deficiency has been verified, but the prompt response of the States has reduced the same very materially, and should the balance of the States pay their indebtedness, all obligations can be discharged, the expenses of this session met, and funds left in the treasury for the expenditures of the coming year on the economical basis herein recommended by this board; but otherwise it will not be sufficient. The third and last session of this board was held on the 25th of November, for the purpose of examining the books and closing up the business of the year.

The secretary has made a very ample and complete report, one that reflects credit upon himself, and will be appreciated by you on account of its simplicity and the readiness with which you can understand it and prove its correctness. A copy of the same is submitted with this report, and your attention is called to the various vouchers for the expense account of the secretary and other officers, by which you will see that economy has been the rule, and that no display or luxury has been indulged; also to the bill of printing, and supplies of books sold by the secretary, which will show the great help the national organ has been, by having facilities which enabled it to do the printing much cheaper than it could be procured elsewhere. Much credit is due your secretary for the efficient manner in which he has discharged his duties, and the economy with which he has conducted the work. During a large part of the time his wife has been compelled to assist him, and they have performed all the work pertaining to the office, with the help of a boy, made necessary by the large amount of packing and shipping of outfits and supplies. The gain arising from the sale of supplies has more than paid all the expenses of the office, except the salary.

> C. W. MACUNE, Chairman, A. WARDALL, J. F. TILLMAN.

The chairman of the Executive Board then, as ex officio chairman of the Legislative Committee, continued his report, saying that the Legislative Committee had, at the beginning of the year, commenced work without

instructions and without a precedent; that they had been cautious and conservative; that the work had required a vast amount of work and expense, all of which had been paid by the chairman from his own salary; and that the growth of sentiment in Congress was the most forcible testimonial of the efficient work of this committee. cautioned the order as to the great responsibility resting upon this body at this time, as to what action it takes in regard to the political situation. The order could never participate in any partisan political effort, and in the South it was opposed to giving its sanction to any independent or third party move on the part of the members, while in the West and Northwest the delegates claim that the order will retrograde if such sanction is not given. In this emergency he thought he had a compromise to offer that would meet the case exactly, and that was for this body to hereby say that it gives its sanction and call for a meeting to be held about February, 1892, to be composed of delegates from all organizations of producers, upon a fair basis of representation, for the purpose of a general and thorough conference upon the demands of each, and to the end that all may agree upon a joint set of demands just prior to the next national campaign, and agree upon the proper methods for enforcing such demands. If the people by delegates coming direct from them agree that a third party move is necessary, it need not be feared; and that the next session of this Supreme Council elect delegates from this order to represent it in said national conference of productive organizations, for political purposes.

Motion of Livingston of Georgia duly seconded and carried, that all of the above report be adopted, except such parts as modify the constitution, and that they be referred to Committee on Constitution.

AFTERNOON SESSION.

On motion, special order was suspended to hear the report from the Investigating Committee, which was made by the chairman, as follows:—

Your committee appointed to investigate the rumors and reports published implicating the character, integrity, and fidelity to duty of the president of this organization, the chairman of the Executive Board, and the president of the Georgia State Alliance, and this at the earnest solicitude of the brethren named, state that they have discharged the duty assigned them to the fullest of their ability, and respectfully report—

1. That they have been unable to ascertain a single fact implicating in any way, shape, or form, the high character and standing and per-

sonal and official reputation of our worthy president, L. L. Polk; but we regret the writing of the Norwood letter.

- 2. That as to Brother Livingston, president of the Georgia State Alliance, we do not find anything derogatory of his personal or official high standing or integrity, but your committee is not quite prepared to indorse the course of Brother Livingston in the Georgia senatorial contest.
- 3. That in the case of Brother Macune nothing has been found, after the most rigid investigation, to lessen our confidence in his personal integrity and loyalty to the order; however, we regret his official connection with the Georgia senatorial contest. Adopted.

ELECTION OF OFFICERS.

L. L. Polk was elected President; B. H. Clover was elected Vice-President; J. H. Turner was elected National Secretary. Moved that the election of Treasurer be deferred until a report from the Committee on Constitution is received. Carried. J. H. Willits of Kansas was elected Lecturer; J. Fount. Tillman was elected to fill vacancy on Executive Board; A. E. Cole of Michigan was elected member of Judiciary Board.

The following were elected to constitute the Committee of Confederation with the Farmers' Mutual Benefit Association, and other organizations: Ben Terrell, L. F. Livingston, R. F. Rogers, H. L. Loucks, W. J. Talbert.

FIFTH DAY.

AFTERNOON SESSION.

Various amendments to the constitution were offered and adopted.

Resolved, That this Supreme Council reindorse the National Economist, and actions of Brother C. W. Macune and his associates in said paper, and will do all we can to urge them onward in the good work of education.

Adopted unanimously, by rising vote.

Report of Committee on Salutation and Fraternal Relations between the National Farmers' Alliance and Industrial Union and Colored Farmers' National Alliance and Co-operative Union:—

Your committee on above beg leave to report that we visited the Colored Farmers' National Alliance and Co-operative Union committee, and were received with the utmost cordiality, and after careful consultation it was mutually and unanimously agreed to unite our orders upon the basis adopted December 5, 1890, a basis between the National

Farmers' Alliance and Industrial Union and the Farmers' Mutual Benefit Association; to adopt the St. Louis platform as a common basis, and pledge our orders to work faithfully and earnestly for the election of legislators, State and national, who will enact the laws to carry out the demands of said platform, and to more effectually carry it into effect, recommend the selection of five men from each national body, two of whom shall be the president and secretary, respectively, who shall, with similar committees from other labor organizations, form a Supreme Executive Board, who shall meet as often as may be deemed necessary, and upon the joint call of a majority of the presidents of the bodies joining the confederation, and when so assembled, after electing a chairman and secretary, shall be-empowered to do such things for the mutual benefit. of the various orders they represent, as shall be deemed expedient; and shall, when officially promulgated to the national officers, be binding upon their bodies until reversed by the action of the national assemblies themselves — political, educational, and commercial; and hereby pledge ourselves to stand faithfully by each other in the great battle for the enfranchisement of labor and the laborers, from the control of corporate and political rings. Each order to bear its own members' expense on ' the Supreme Council, and be entitled to as many votes as they have legal voters in their organization. We recommend and urge that equal facilities, educational, commercial, and political, be demanded for colored and white Alliance men alike, competency considered, and that a free ballot and a fair count will be insisted upon and had for colored and white alike, by every true Alliance man in America. We further recommend that a plan of District Alliances, to conform to District Alliances provided for in this body, be adopted by every order in confederation, with a district lecturer and County Alliances organized in every county possible, and that the lecturers and officers of said district and counties co-operate with each other in conventional, business, educational, commercial, and political matters.

Adopted, with understanding that joint Committee on Confederation should act for this order.

SIXTH DAY.

Report of the Committee on Demands: —

Section 1. We demand the abolition of national banks, and that the government shall establish sub-treasuries, or depositories, in the several States; which sub-treasuries shall loan money to the people on approved security at a low rate of interest, not to exceed two per cent per annum: *Provided*, That real estate and non-perishable farm products shall be

considered approved security; and that the circulating medium be increased to at least \$50 per capita, keeping the volume equal to the demand.

For this the following substitute was adopted, to which Wade of Tennessee had his name withdrawn from this portion of the report:

- 1.a. We demand the abolition of national banks.
- b. We demand that the government shall establish sub-treasuries or depositories in the several States, which shall loan money direct to the people at a low rate of interest, not to exceed two per cent per annum, on non-perishable farm products, and also upon real estate, with proper limitations upon the quantity of land and amount of money.
- c. We demand that the amount of the circulating medium be speedily increased to not less than \$50 per capita.

The vote by States, on the first proposition, was as follows: —

			Y	ES.	No.	Yes. No.
Alabama			•	4		Virginia 4
Arkansas Alliance .				2		West Virginia 2
Arkansas Union				2		New York
Indian Territory				2		Kansas 8
Florida				3		South Carolina 4
North Dakota				2		Texas 4
South Dakota				3		Colorado, not voting.
Kentucky				4		Tennessee
Pennsylvania, not vo	ting					Maryland 2
Michigan				3		California 2
Louisiana						L. L. Polk, President I
Mississippi				2	1	B. H. Clover, Vice-President . I
Indiana				2		J. H. Turner, Secretary I
Illinois					2	C. W. Macune, Chr. Ex I
Missouri				2	4	E. Jones, Judiciary Com Absent.
Georgia				7		A. Wardall
North Carolina		•		4	į	

Tennessee, in voting 1 aye and 3 no, explained that they would have voted 4 aye on the section as it came from the committee before it was amended.

- 2. That we demand that Congress shall pass such laws as will effectually prevent the dealing in futures of all agricultural and mechanical productions; providing a stringent system of procedure in trials that will secure the prompt conviction, and imposing such penalties as shall secure the most perfect compliance with the law. Adopted.
- 3. We condemn the silver bill recently passed by Congress, and demand in lieu thereof the free and unlimited coinage of silver. Adopted.

- 4. We demand the passage of laws prohibiting alien ownership of land, and that Congress take prompt action to devise some plan to obtain all lands now owned by aliens and foreign syndicates; and that all lands now held by railroads and other corporations, in excess of such as is actually used and needed by them, be reclaimed by the government, and held for actual settlers only. Adopted.
- 5. Believing in the doctrine of equal rights to all, and special privileges to none, we demand —
- a. That our national legislation shall be so framed in the future as not to build up one industry at the expense of another.
- b. We further demand a removal of the existing heavy tariff tax from the necessities of life that the poor of our land must have.
- c. We further demand a just and equitable system of graduated tax on incomes.
- d. We believe that the money of the country should be kept as much as possible in the hands of the people, and hence we demand that all national and State revenues shall be limited to the necessary expenses of the government, economically and honestly administered. Adopted.
- 6. We demand the most rigid, honest, and just State and national governmental control and supervision of the means of public communication and transportation; and if this control and supervision does not remove the abuse now existing, we demand the government ownership of such means of communication and transportation. Adopted.
- 7. We demand that the Congress of the United States submit an amendment to the Constitution, providing for the election of United States Senators by direct vote of the people of each State. Adopted.

Moved by Brother Livingston, that the report be adopted as a whole. Carried.

By Brother Davie of Kentucky: --

Whereas, There is now a bill known as the sub-treasury bill in the hands of the Ways and Means Committee of the House of Representatives, which should have been reported and acted upon at the last session, and which if enacted into law would bring the financial relief so much needed by all classes and industries: therefore, be it

Resolved, That this national convention of the Farmers' Alliance and Industrial Union do most respectfully and earnestly ask that said bill be enacted into law as soon as possible, or some other measure that will carry out these principles and meet the necessities of the toiling masses.

Adopted by a rising vote, four votes being cast against it.

EVENING SESSION.

Resolution of Brother Guice; referred to general joint Committee on Confederation:—

Whereas, We have already adopted the report of the chairman of the Executive Board in part; and whereas, said report did recommend that this body authorize a call for a convention of all labor organizations to be held in February, 1892; now, therefore, be it

Resolved, That this body elect a committee composed of one from each State here represented, to be known as the National Executive Committee, for the special purpose of conferring with like committees from other organizations, and deciding questions as to time and place of meeting, basis of representation, and to submit to their respective States the demands of all such other labor organizations as will probably be represented at such labor conference, each member to be ex officio chairman in his State, and to have authority to appoint congressional district chairmen, who in turn shall appoint county chairmen, for the purpose of bringing our demands and those of the other labor organizations squarely before the people during the coming year, and secure an expression from them as to what concessions they will make in order to secure general co-operation, and what methods they will adopt to secure the same.

Resolution of Brother Guice; read and adopted: —

Resolved, That a committee of three be appointed by the chair, whose duty it shall be to report on the practicability of the use of the small bale of cotton over that of the large bale, at the next annual meeting of this body.

Resolution of Brother Demming on summer encampment; read and unanimously adopted:—

That the president be requested to appoint a committee of three, with full power to act, to take into consideration the holding of a grand summer encampment: *Provided*, That in no event shall this organization be liable for any expense connected therewith.

Committee on Summer Encampment appointed as follows: H. C. Demming, Beverly of Virginia, and Mitchell of Maryland.

Moved, by Brother Wardall, that the matter of fire insurance be referred to the Executive Board for the purpose of formulating a mutual and feasible plan of fire insurance, and have it ready for report at the next meeting of the Supreme Council. Adopted.

Report of Committee on Insurance: ---

Your Committee on Insurance report that we have carefully examined

the life plan of the Alliance Aid Association of Huron, South Dakota, and believe it will be a benefit to the order, and recommend its adoption. On fire insurance, we recommend that it be referred to the Executive Committee to prepare a feasible plan for mutual insurance, publish it in our official papers, and present it at our next annual meeting.

Laid on the table.

Resolution by Brother Cole; adopted unanimously: —

That, in connection with the post-office, the government should organize financial exchanges, safe deposits, and facilities for deposit of savings of the people in small sums.

Supreme Council then adjourned.

The following is the amended constitution of the order: -



CONSTITUTION.

DECLARATION OF PURPOSES.

Whereas, The general condition of our country imperatively demands unity of action on the part of the laboring classes, reformation in economy, and the dissemination of principles best calculated to encourage and foster agricultural and mechanical pursuits, encouraging the toiling masses—leading them in the road to prosperity, and providing a just and fair remuneration for labor, a just exchange for our commodities, and the best means of securing to the laboring classes the greatest amount of good; we hold to the principle that all monopolies are dangerous to the best interests of our country, tending to enslave a free people and subvert and finally overthrow the great principles purchased to the fathers of American liberty. We therefore adopt the following as our declaration of principles:—

- 1. To labor for the education of the agricultural classes in the science of economical government, in a strictly non-partisan spirit, and to bring about a more perfect union of said classes.
 - 2. That we demand equal rights to all and special favors to none.
- 3. To indorse the motto, "In things essential, unity; and in all things, charity."
 - 4. To develop a better state mentally, morally, socially, and financially.
- 5. To constantly strive to secure entire harmony and good will to all mankind and brotherly love among ourselves.
- 6. To suppress personal, local, sectional, and national prejudices; all unhealthful rivalry and all selfish ambition.
- 7. The brightest jewels which it garners are the tears of the widows and orphans, and its imperative commands are to visit the homes where lacerated hearts are bleeding; to assuage the sufferings of a brother or sister; bury the dead, care for the widows, and educate the orphans; to exercise charity toward offenders, to construe words and deeds in their most favorable light, granting honesty of purpose and good intentions to others, and to protect the principles of the Farmers' Alliance and Industrial Union until death. Its laws are reason and equity, its cardinal doctrines inspire purity of thought and life, its intention is, "On earth, peace, and good will to man."

ARTICLE I.

NAME AND POWERS.

SECTION 1. This organization shall be known as the National Farmers' Alliance and Industrial Union.

SEC. 2. This organization possesses and shall exercise such powers as are delegated to it by charter from the government of the United States, and such further powers as are herein expressed.

ARTICLE II.

DIVISION OF POWERS.

SECTION 1. The powers of this organization shall be divided into three branches, to wit: A legislative, an executive, and a judicial department.

SEC. 2. The Legislative Department shall be supreme in authority, and its sessions shall be known as the Supreme Council of the order.

SEC. 3. The Executive and Judicial Departments shall be of equal power and authority, and subordinate only to the legislative,

ARTICLE III.

MEETINGS.

The regular annual meetings of the Supreme Council shall be on the third Tuesday in November in each year.

ARTICLE IV.

LEGISLATIVE DEPARTMENT.

- SECTION 1. It shall be the duty of the Supreme Council to make laws, rules, and regulations to govern its meetings and usages.
- SEC. 2. The Supreme Council shall be composed of the officers of the organization and delegates from the various State organizations elected by the States upon such basis of representation as the Supreme Council may prescribe. It shall be the duty of the Supreme Council to adopt rules governing such representation: *Provided*, That the delegates to the Supreme Council shall not be less than twenty-one years of age; and the basis of representation shall not allow more than two delegates from each State and one additional member for each 10,000 active members or majority fraction thereof. Active members under this section are such members only as have paid the regular yearly dues of five cents each.
- SEC. 3. The Supreme Council shall elect at each regular annual session the following officers, who shall hold office until their successors are elected and qualified: A president, a vice-president, and a secretary-treasurer.
- SEC. 4. The president shall be presiding officer of the Supreme Council and the official head of the Executive Department.
- SEC. 5. The Supreme Council shall provide laws and rules prescribing the powers, duties, and methods of the officers, and may limit the term of office, fix salaries, etc.

ARTICLE V.

EXECUTIVE DEPARTMENT.

- Section 1. The president shall be the chief executive officer; he shall have power to direct and instruct all executive officers and all executive work in this department, subject to the laws and regulations made by the Supreme Council.
- SEC. 2. The president shall have authority to interpret and construe the meaning of the laws of the national order by official rulings, and such rulings shall have the force and effect of laws until the next meet-

ing of the Supreme Council: *Provided*, Appeals may be taken from the interpretation and rulings of the president to the Judiciary Department, whose decisions shall be final.

SEC. 3. The president shall be the custodian of the secret work, and shall provide for its exemplification and dissemination. He shall be authorized to issue special dispensations and held responsible for the same, all of which shall be matters of record.

ARTICLE VI.

JUDICIARY.

SECTION 1. The Judiciary Department shall be composed of three judges, one of whom shall after the first year be elected annually by the Supreme Council. Three judges shall be elected the first year, one of whom shall be for a term of one year, one for two, and one for three years.

SEC. 2. The regular term of office for the judges of the Judiciary Department shall be three years.

SEC. 3. No person shall be eligible to office as judge in the Judiciary Department who is under thirty years of age.

SEC. 4. The senior judge shall be called the chairman, and shall be the presiding officer of the court.

SEC. 5. The Judiciary shall have authority to act upon the rulings of the president; to try and decide grievances and appeals affecting the officers or members of the Supreme Council; to try appeals from the State bodies.

SEC. 6. The decisions and findings of the Supreme Judiciary shall be a matter of record, and shall be preserved in the archives of the order, a careful report of which shall be made to the regular annual sessions of the Supreme Council.

SEC. 7. For the purpose of carrying out the above provisions and rendering the workings of the Judiciary Department effective, the Supreme Council shall provide rules and regulations.

ARTICLE VII.

SECTION 1. The Supreme Council shall fix such salaries for officers as may be a fair remuneration for services required, and for such expenditures of the various departments as may be consistent with strict economy.

SEC. 2. A per capita tax of five cents shall be paid for each male member into the national treasury by each State organization, on or before the first day of November of each year.

SEC. 3. The Supreme Council shall at each session fix the mileage and per diem to be paid the actual delegates to the body, subject to a limitation of not over three cents per mile each way by the nearest and most direct travelled route, and not over three dollars per day for such days as are spent in actual attendance at the session.

ARTICLE VIII.

SECTION 1. No person shall be admitted as a member of this order except a white person, over sixteen years of age, who is a believer in the existence of a Supreme Being, and has resided in the State more than six months, and is, either: First, a farmer, or a farm laborer; second, a country mechanic, a country preacher, a country school teacher, or a country doctor; third, an editor of a paper which supports all national demands, and the demands of the State Alliance under whose jurisdiction he may live: *Provided*, That no Sub-Alliance shall initiate an editor until the county president and secretary shall indorse and the State president approve the application. *Provided further*, The State president may suspend any editor from membership for using or permitting his paper to be used against the Alliance until the next meeting of the State Alliance, when said Alliance may reinstate or expel him from the order.

Provided, That each State and Territory shall have the right to prescribe the eligibility of applicants for membership, in reference to color, within the limits of the same. Provided further, That none but white men shall be elected as delegates to the Supreme Council.

SEC. 2. It shall be the duty of the Supreme Council to enact a uniform eligibility clause for the various State constitutions; also, to enact laws defining the eligibility of persons of mixed or unusual occupations or residence, subject to all the limitations of this article.

ARTICLE IX.

STATE BODIES.

Section 1. A State organization may be chartered by the president in any State having as many as seven county organizations, provided that any State containing less than seven counties may be chartered when one-third of its territory is organized.

SEC. 2. It shall be the duty of the president to issue a charter to any State organization qualified under section one of this article, when they shall file evidence that they have, first, adopted a constitution that does not conflict with this constitution; second, that they adopt the secret

work, and acknowledge the supremacy of the National Farmers' Alliance and Industrial Union.

ARTICLE X.

RESERVATION OF POWERS.

SECTION 1. All rights and powers, not herein expressly delegated, are reserved to the State organizations severally.

ARTICLE XI.

AMENDMENTS.

SECTION 1. This constitution cannot be altered or amended, except upon a written resolution clearly setting forth the changes or additions to be made, which must be read in open session on at least two separate days, and adopted by two-thirds majority.

STATUTORY LAWS.

- 1. The basis of representation of the State organizations in the Supreme Council shall be as follows: Two delegates from each State, and one additional delegate for each 20,000 active members, or majority fraction thereof.
- 2. Delegates to the Supreme Council will not be entitled to seats in the body unless settlement of the national per capita dues of five cents for each male member has been made by the State secretary, accompanied by the proper amount of money to the national secretary, and State secretaries shall make such remittance, and report promptly on or before the first day of November.
- 3. The annual election of officers by the Supreme Council shall be by ballot.
- 4. The president shall appoint from the actual delegates to the session of the Supreme Council, a chaplain, assistant lecturer, doorkeeper, assistant doorkeeper, sergeant-at-arms, and such other executive officers as the business of the session may require. The term of office for such officers shall expire at the close of the session; such appointed officers to receive nothing in addition to mileage and per diem as delegates.
- 5. The president shall be the presiding officer of the Supreme Council, and shall conduct the business according to the accepted rules of parliamentary usage and the requirements of the ritual.
- 6. The president shall have authority to call upon any executive officer or committee to make report and showing of the business intrusted to him, at such time as in his judgment it seems best.

- 7. The president may, when notified of any dereliction of duty or violation of the rules of the order, suspend any officer or committee, and summon them to appear before the judiciary committee to make showing to the chairman, either by oral or written evidence, as to their guilt or innocence of the charges.
- 8. The president shall have full authority to enforce order and decorum during the sessions of the Supreme Council.
- 9. The president shall have power to call a meeting of the Supreme Council at such time and place as in his judgment is for the benefit of the order. When petitioned by one-fourth of the State presidents in the jurisdiction of this order, he shall call a meeting of the Supreme Council. He shall state in the call specifically for what purpose the meeting is convened.
- 10. The vice-president's duties shall be to assist the president, and in his absence to perform his duty.
- 11. The order of succession in vacancy shall be president to vice-president, and vice-president to chairman of the Executive Board.
- 12. The secretary-treasurer's duty shall be to keep a record of the proceedings of the Supreme Council, conduct its correspondence, to receive all money of the Farmers' Alliance and Industrial Union, and account for the same, to read all communications, reports, and petitions in open Supreme Council when necessary, to affix the seal of the Farmers' Alliance and Industrial Union to all documents requiring the same, to prepare for publication a copy of the proceedings of each annual or called session immediately after adjournment. He shall have charge of the seal, books, and papers of the Farmers' Alliance and Industrial Union. His books shall at all times be open to the inspection of the president, or any committee appointed by the president to inspect the same, to keep a correct account between each State and the Farmers' Alliance and Industrial Union. He shall furnish the secretaries of each State Farmers' Alliance and Industrial Union with a blank book properly ruled, with suitable column heads for classifying and recording the contents of the reports from the Farmers' Alliance and Industrial Union. Also suitable blanks for making reports to his office and to the chairman of the executive committee. He shall also make a list of all the officers, standing and special committees of the Supreme Council, with name and post-office address, which list shall be a part of the printed proceedings of the Supreme Council.
- 13. It shall be the duty of the lecturer to visit each State in the jurisdiction at least once a year, and to hold himself in readiness at all times to visit such localities and perform such duties as may be designated by the president.

- 14. There shall be elected by the Supreme Council an Executive Board composed of three members, who shall be an advisory board of the president, and shall represent the Supreme Council during recess. The chairman of the Executive Board shall be located at the official headquarters of the order in the city of Washington.
- 15. It shall be the duty of the Executive Board to require and pass upon the bonds of the secretary-treasurer, to audit all bills and accounts, to examine and audit the secretary's books, and in a general way perform detail of executive work.
- 16. The regular term of office for members of the Executive Board shall be three years, but of the board first elected, one shall be for one year, one for two years, and one for three years, and thereafter one shall be elected each year.
- 17. All persons who are ineligible for membership, who make application, should be notified of the facts in the case, and no ballot or action taken. When members of the order engage in an occupation that would have rendered them ineligible before initiation, they shall, upon sufficient evidence, be immediately dismissed by motion of the president in open lodge.
- 18. Each Supreme Council shall, when convened, fix the mileage and per diem of its members, subject to the restrictions of the constitution.
- 19. The salary of the president of this organization shall be \$3000, office and travelling expenses, and \$900 dollars for a clerk, with head-quarters at Washington, District of Columbia.
- 20. The salary of the secretary-treasurer shall be \$2250 and office expenses.
- 21. The salary of the lecturer shall be \$2000 and actual travelling expenses.
- 22. The remuneration of the members of the Executive Board shall be three cents per mile each way for actual necessary travel, and five dollars per day for actual time employed.
- 23. No State organization or members of this order shall under any circumstances be allowed to print or distribute the rituals of the order, except as the Executive Board shall cause them to be, and they shall be distributed as the president may direct.
- 24. All charters for State, county, or subordinate bodies in unorganized States must emanate from and contain the signature of the national president, and those for bodies under State jurisdiction shall be issued by the president and secretary of the State body having jurisdiction over them.
 - 25. It shall be the duty of the Executive Board to secure from each

of the States copies of their forms of reporting from sub, county, and State secretaries, and endeavor to secure a uniform system of quarterly reports throughout the entire order.

- 26. All resolutions that shall be adopted by this National Council shall be laws governing the membership of the order, and shall be codified and added to the existing laws of the order.
- 27. The Executive Board shall require the heads of the various departments to give them an estimate of their expenses for the ensuing year, and shall allow each department such an appropriation as they deem just: *Provided*, That at least one-fourth of the annual revenue shall be appropriated to the lecture department. (The chairman of the Committee on Constitution reports that the committee intended the above clause to be advisory, and not mandatory.)
- 28. The per capita dues shall be five cents, due annually in advance on the first day of November, with the last day of grace February first following.
- 29. It is hereby enacted by the National Supreme Council that, within sixty days of the adjournment of the Supreme Council, a meeting of all presidents of States composing the Supreme Council, together with the national president, who shall be ex officio chairman, and shall be held at such time and place as may be designated by the national president, and the meeting thus constituted shall be known as the National Legislative Council of the National Farmers' Alliance and Industrial Union, and one-fourth of the membership shall constitute a quorum.
- § 2. That it shall be the duty of the said National Legislative Council to formulate measures and devise such necessary methods in conformity with the principles, purposes, and acts of the Supreme Council, as may secure the enactment of such laws as may be indicated by the Supreme Council.
- § 3. It shall be the duty of the president of the National Legislative Council to keep in substantial form a correct record of the proceedings of each legislative council, to be presented to the Supreme Council of the National Farmers' Alliance and Industrial Union at its next meeting.
- § 4. It shall be the duty of the Legislative Council to cause to be printed any measures, bills, resolutions, or petitions which it may decide to present to Congress, and cause the same to be transmitted by the national secretary to all subordinate bodies in each of the States under the jurisdiction of the order, together with such other arguments or other information as in the judgment of the council should be given to the membership.
 - § 5. It may appoint a national legislative committee consisting of not

more than three members, to be chosen from its own body, and require said committee to give such personal service as may in the judgment of the council be necessary to a proper presentation for the measures before Congress. Each member shall receive such compensation as may be provided by his State Alliance out of its treasury. The per diem and mileage of the legislative committee shall be fixed by the National Legislative Council, to be paid out of the national treasury upon the warrant of the national president.

- 30. Delegates from a majority of the States organized shall constitute a quorum of the Supreme Council.
- 31. There shall be a standing committee, consisting of the State business agents from the States composing the National Farmers' Alliance and Industrial Union, provided that each State exchange or State Alliance shall defray the expenses of said agent.
- 32. All measures presented for consideration may be discussed fairly, fully, honestly, and thoroughly, and when the action of a majority has been had, all who participate in the meeting are pledged to support such action. It is the duty of every member where the body has spoken to stand as a unit before the world.
- 33. No officer or member of the Supreme Council shall absent himself from the meetings unless excused by the president, under penalty of the forfeiture of all his mileage and per diem.
- 34. The following rules shall govern the confederation with the Farmers' Mutual Benefit Association, the National Colored Farmers' Alliance and Co-operative Union, and such other organizations as may be admitted to same:—
 - § 1. A confederation.
- § 2. A joint committee on confederation of five from each organization, which shall represent this confederation.
- § 3. Each organization shall be entitled to as many votes as it has members who are legal voters in State or national elections.
 - § 4. The St. Louis platform shall be the basis.
- § 5. Each shall stand pledged to assist when possible in all local efforts to better the condition of our people.
- § 6. Fraternal delegates or correspondence shall never be denied the one by the other so long as the confederation exists.
- § 7. The joint committee on confederation shall have the power by a majority vote to admit other organizations with similar objects, upon application.
- § 8. When plans are agreed upon by the joint committee on confederation for mutual co-operation, each organization shall be bound to support said plans fully and cheerfully.

- § 9. Expenses accruing on account of the joint committee on confederation shall be defrayed by their respective organizations as they may be incurred by each.
- § 10. The joint committee on confederation shall have power to adopt such by-laws for the government of the joint committee as they deem best.
- 35. The indebtedness of the various organizations which consolidated on the first day of October, 1889, to form the National Farmers' Alliance and Industrial Union, shall in no case be a debt of the consolidated order, unless by special act of the Supreme Council.

Order of Business.

- r. Calling the roll.
- 2. Reading the minutes.
- 3. Application for membership.
- 4. Report of investigating committees.
- 5. Balloting.
- 6. Initiations.
- 7. Is there any member sick or in distress?
- 8. Reports of standing committees.
- 9. Report of special committees.
- 10. Unfinished business.
- 11. New members.
- 12. Business with the County Alliance.
- 13. Business with the State Alliance.
- 14. Lecturing.

This was doubtless one of the most important gatherings, in many respects, that was ever held on American soil. Representatives from thirty-one State and Territorial Alliances were present, besides a large number of both friends and enemies of the order. Following, as it did, immediately after the close of a political campaign of remarkable surprises, it was compelled to bear a burden of pressure from both the old parties—one being driven by disaster to the verge of despair, and the other elated by success to the point of dictatorial assumption. The Republican party hoped that the meeting would result in certain indiscretions which would break the power of the Alliance, and permit that party to regain its waning strength. The Democratic party was anxious to have the Alliance recede from its

advanced position on economic questions, in order to make co-operation more probable. Again, there was a strong element from the West demanding independent action, and at the same time showing, as the result of such a movement, the fruits of the last election. This was met by a conservative force largely from the South, but really from nearly all the States represented, which considered it unwise and untimely. The wily politician was there also, and as usual dangerous to all honest purposes; the traitor and breeder of discord was not wanting; and the coward could be occasionally met with. All this tended to distract the brethren and destroy that continuity of action without which the results of the meeting would have been disastrous.

Under such unfavorable circumstances the delegates began their work. For weeks and months certain newspapers and individuals had been poisoning the minds of the brotherhood with slanderous assaults upon certain members of the order, whose downfall would best serve the purposes of the politicians of either party, and prepare the way for the overthrow of the order, if possible. These attacks were so bold and brutal that an investigation was at once demanded by some of the victims. This investigation disclosed the viciousness of the plot and the entire innocence of the accused.

The message of the president was temperate, well considered, and enthusiastically received. It was full of encouragement, and seemed to crystallize the scattered forces and bring the delegates together. The report of the secretary was thorough and complete, and inspired confidence in that officer. report of the lecturer disclosed a year of hard work, and the addition of a large number of States to the order was proof of the efficacy of his labor. The report of the Executive Committee was thoughtful and logical, and contained much that was worthy of consideration. Taken altogether, the national officers made a splendid showing of the year's work, and the brethren were highly pleased. The real labor of the meeting was begun in earnest, and with the determination to do that which was best for the interest of the order, honestly and fearlessly. The old officers were re-elected, with the exception of Brother Willits of Kansas being chosen national lecturer in the place of Brother Terrell, who had held that position for the past four

years, and Brother Cole of Michigan being selected as a member of the Judiciary Committee. The salaries were changed in some particulars, and the membership confined strictly to the country. A Legislative Council was instituted, consisting of the national president and the president of each State Alliance. An understanding was arrived at concerning the duties of Alliance papers in the discussion of Alliance principles, which will no doubt be of great benefit to the order. A platform or declaration of principles was adopted that will stand as the crowning glory of the meeting. It will warm the hearts of all true Alliance members, inspire them with confidence, and nerve them to renewed action. The schemes of the slanderer failed, the plans of the traitors were destroyed, and the plots of the politicians disclosed, and the Alliance came out of the ordeal purified, stronger than ever, more united than ever, and more determined than ever to push on the work so grandly and earnestly begun.

Such, in brief, was the important work of the meeting. To restrict its membership in future to the country was wise, and served to eliminate many annoying conditions, and at the same time made room for other fraternal orders to work without unpleasant complications.

The declaration of demands adopted at the meeting will challenge the admiration of every candid, thinking man throughout the entire nation. Its demands are simple, plain, practical, and entirely within the provisions of the constitution. is nothing revolutionary in their character, and they could be easily and cheaply administered. These demands are limited almost entirely to the three great questions, - land, transportation, and currency. Upon these it speaks with no uncertain sound. No backward step has been taken, but a long stride in advance has been made. The sub-treasury plan has been reaffirmed, with the addition of loans upon real estate. This makes the financial proposition complete, and will tend to greatly strengthen the whole. With loans direct to the people, upon land as the basis for a permanent addition to the circulation, and loans upon products to furnish that flexibility which all just systems of finance should possess, the Alliance can meet any and all objections with the most convincing arguments.

demands in regard to the means of transportation and communication have been strengthened by explicitly stating, in terms not to be misunderstood, the ultimatum. It is a platform upon which every honest man can stand. It is a demand for reforms that all candid men will indorse, and, as a whole, it constitutes a declaration of purposes that will lead the people out of their distress, and in the end bring peace and prosperity.

Here ends the history of the Farmers' Alliance at the present time. Upon this history it must stand or fall. What its future may be, God alone can tell. It was born of necessity, nurtured amid want and distress, and stands to-day as the champion of the down-trodden of earth. It is not properly an organization—it is a growth; and they who would prophesy of its future must first know the wants and woes of the human family. Such a beginning, such years of probation, such opportunities for good, and such triumphs! He who holds the destinies of nations in his keeping, and does all things well, will never suffer to be brought to naught.

The Farmers' Alliance has a mission to fulfil that even those who are its leaders know not of. It has battles to fight, conquests to make, and victories to gain, that will fill the earth. It is the last, grand, peaceable assault by labor in production upon the intrenchments of plutocracy. It is the last appeal for justice, for "equal rights to all, and special privileges to none," that will be made through education and the ballot box. well might we undertake to blot out the stars of heaven as to prevent the final triumph of this great movement. In some manner, and in the immediate future, labor in production is going to be free. The shackles it has worn so long will be stricken off, and the bands that have bound it to the chariot wheels of the oppressors will surely be loosened. The Alliance will yet prove the Moses that will lead the people out of their bondage and up to that condition which a kind Providence has vouchsafed to us all. It is sure to be the strong man who, at the appointed time, will proclaim, in thunder tones, reaching from ocean to ocean: "It is finished. Let the people go free."

The methods of the Alliance are based upon education, and are therefore conservative. They appeal to an intelligent sense of justice, and are therefore all the more potent. Every de-

mand is founded upon the full knowledge of an outraged equity, and every proposition cemented with the logic that comes through practical application. It is the conservative element of society, the long-suffering, slowly aroused portion, that is now in rebellion against the methods of plutocracy. It is a protest against that which is widening the gulf between Dives and Lazarus, which in the end, if not checked, will engulf the liberties of the people. There is nothing sensational or emotional about it. It is a deliberate conclusion, based upon study and reflection. It is not a theory; it is a condition, and one that must be met in the same spirit in which it is presented, or the end of the rule of the majority has been reached.

Let no one be deceived in this matter. Let no one think the Alliance is the creature of a moment. It is here. It has come to stay, until the armies against freedom and humanity are driven without the borders of this fair land. It is the uprising of the hosts of good government. Its purposes are expressed in the words of Lincoln: "That a government of the people, for the people, and by the people, may not perish from off the earth." It makes war on no one; it demands justice and not charity; equal rights instead of special privileges; and stands squarely upon the doctrine of the fatherhood of God and the brotherhood of man. It believes with the poet, who said:—

"See the sole bliss Heaven could on all bestow!
Which who but feels can taste, but thinks can know:
Yet poor with fortune, and with learning blind,
The bad must miss; the good, untaught, will find;
Slave to no sect, who takes no private road,
But looks through nature up to nature's God;
Pursues that chain which links the immense design,
Joins heaven and earth, and mortal and divine;
Sees that no being any bliss can know,
But touches some above, and some below;
Learns from this union of the rising whole,
The first, last purpose of the human soul;
And knows where faith, law, morals, all began,
All end in Love of God and Love of Man."

Founded upon such principles, and grounded in such belief, nothing can prevent the ultimate accomplishment of its pur-

poses. Here are represented four agricultural organizations in one. This fact alone points to it as a factor of destiny. About the same time, in different localities, four organizations were started in farming communities, -the Farmers' Alliance, in Texas; the Farmers' Union, in Louisiana; the Brothers of Freedom, in one part of Arkansas, and the Agricultural Wheel in another. They all began under similar conditions and because of similar reasons, and undertook to accomplish similar objects. The story of their origin and final consolidation reads like a romance. They seem to have been actuated by one motive, continued for one purpose, and held together by one common desire. We see the Brothers of Freedom uniting amicably and peacefully with the Wheel, and thereby increasing the power and efficiency of both. Then the Farmers' Union consolidates with the Alliance, for the mutual benefit of both; and last we find the two great organizations, the Farmers' Alliance and Co-operative Union and the Agricultural Wheel combining into one great body, under one name and one authority. The success of this consolidation effort has been phenomenal. It has astonished the thinking world, and is growing in wonder daily. The cause is easily found: it is an honest effort to accomplish a legitimate purpose through business methods. It is the plain result of intelligent organization, based upon a righteous cause, having as its ultimate result the emancipation from the power of corruption and vicious laws of all those who contribute to the production of the wealth of the nation.

The farmers are the only class who have not availed themselves hitherto of the benefits of organization. There seems to be among them a disposition to keep out of organizations themselves, and find fault with others who join. This comes through a lack of proper education upon that subject. If the farmers of America would organize as intelligently and solidly as the Standard Oil Company has, and then use the power of such organization as unscrupulously, they would in a few years become the dictators of the world. Nothing could withstand their power. Of course the Alliance and other similar organizations are doing a great work in this line of education, but there remains so much yet to be accomplished that the attempt looks almost hopeless, even to many who have long been in the movement. But the absolute necessity for organization among farmers is apparent to all thinking people. In the past many attempts have been made to accomplish needed results, but in the main they have all been preparatory. Stern necessity, the great educator of mankind, reaches the farmer last of all. Besides this, the agricultural portion of all governments are their conservative elements. They dislike innovation, deprecate a change, and cling to old customs and traditions. But when once aroused, when thoroughly convinced that their rights are being invaded, there is no factor of society more determined, less liable to make mistakes, and better acquainted with the source of difficulty and the needed remedy, than the farmer.

Organization, and that alone, will make these conditions possible, and that alone will save the farmer and his vocation from complete destruction. Is it not, therefore, the duty of every farmer to at once become identified with some organization, and make common cause against the oppression under which he is now suffering? Let the farmers of the United States organize, stand together, demand better laws, easier conditions, and more liberty. The power to do these things is with them. Let them do it wisely, but firmly.

In looking back over the history of the order, we note its first rapid growth from August, 1885, to August, 1886, during which time the order in Texas grew from about six hundred Sub-Alliances to about twenty-seven hundred. Perhaps the most potent argument used by the lecturers during that time was that there were too many merchants, and that the farmers could organize and co-operate, and by concentrating their trade on one, where the custom was to have five or six, they would save the expense of supporting so many. During the rapid growth of the order that year, this was the doctrine taught by the lecturers, and at the end of the year it was discarded as a fallacy, and a different policy, that of bulking the crops, advocated for the next year. In spite of this complete change of base, there was no check to the rapid growth of the order; it kept on growing through every change of public sentiment as to its objects, purposes, and methods. Nor is this all. The men who founded it have not remained in the lead during its wonderful growth. Officers have been changed almost every year, and the constitution, the organic law of the order, has been several times completely changed.

What are we forced to conclude from all this? Evidently that the growth of this great order does not depend upon the wisdom and forethought of the men who founded it, or of those who have been put at the head of the column to act as officers; neither does it depend upon the provisions of the declaration of purposes or the constitution; and, as we have seen that a general popular misconception of its purposes, attended with futile and useless action, has in no case retarded its great onward march, we must conclude that it is a higher and a greater power than could possibly emanate from any or all of these sources. The Farmers' Alliance is a God-given institution, that ranks above, and cannot be tied down to, any local or fleeting issue. It is the highest development of material progress, an ever-present and all-powerful influence for good. It is the farmers' sinking fund, or savings bank, on which he may draw for help to meet the evils that surround him now, or may surround him in the future. If it could be tied down or limited to the business effort, or to the political effort, or to any other effort of to-day, it would only last until that effort was gained or lost, for success would be as fatal to it as failure, since failure would discourage and dishearten its followers, and success would obviate the necessity for its existence. It is, however, on too high and too broad a plane for that. It can never be anchored to any special effort; it must ever remain a general and powerful influence for good, calculated to meet every emergency; and, as such, its mission will never be accomplished while evil exists or unjust conditions confront the producers, as such a defeat is local and cannot injure, and a victory only opens the way for other fields to conquer. Under this broad, this grand conception of the mission of our noble order, we realize that it is here to stay, and that its existence is not fleeting, that it is worthy of our very best efforts of hand, head, and heart.

In the light of this conception of our order, let us apply to this all-healing fountain for the crystal drops of ultimate truth and justice, that shall quench the fires of evil and discrimination that surround us to-day. A comparison of the condition



THE NATIONAL ALLIANCE.

of the farmers of America to-day with that twenty to twenty-five years ago, will forcibly illustrate the fact that there is at this time a depressed condition of agriculture. In spite of the fact that it has been an era of great productiveness and prosperity, farmers, on the average, are much poorer now than they were twenty years ago. Improved machinery has added to our power to produce, and the railways have brought the markets of the world to our very doors, and yet we have gone down in the scale of financial prosperity, until it is common to hear men say they would not farm if they could make a living any other way. Think of that! The noblest calling on earth made the least desirable of any! It is time we examined carefully into the causes for this condition, and having found them, stand shoulder to shoulder as a unit in demanding conditions that shall reverse this order of things.

Production, distribution, consumption, and accumulation constitute the four great factors in business. The one governing factor is distribution. Production will take care of itself. It is simply an expression of human nature through a common desire to do something to promote personal gain or pleasure. Natural wants or fancied comforts, together with human frailties, will furnish ample ways and means for consumption. The real danger to be avoided is an excessive accumulation of wealth in the hands of a few people, through an unfair distribution of the products of labor.

"We demand equal rights for all, and special favors to none," says the great agricultural and labor organization of America. Such a demand implies the non-existence of these conditions. Equal rights mean an equal chance in the struggle of life; that no one may be compelled to bear the burden of his neighbor in addition to his own, thereby endangering success and jeopardizing escape from poverty and dependence. President Lincoln said: "I am here to make of myself the best intellectual, moral, and physical being possible. To do it, I am entitled to generous food, generous clothing, and comfortable shelter, and if any person or set of persons lays upon me a burden whereby I am required to use more than reasonable effort to feed, clothe, and shelter myself, the person or set of persons so unreasonably burdening me is an enemy of God, and my murderer."

We may judge both the future and the present by the past. Applying this rule, we at once discover that our rights have not only been invaded, but in many cases absolutely taken from us. We find, on all sides, monsters in the guise of trusts, corporations, and monopolies, that not only despoil us of our rights, but grimly resist all efforts to regain them. The conditions of the present are a protest against the laws of the past, and a future invasion of our rights may be justly charged as a crime of the present. Thomas Paine said, many years ago: "When old men go to the poor-house, and young men to prison, something is wrong with the economic system of the nation." So say I. When one man dies in this country worth one hundred millions of dollars, and his neighbor is buried at public expense, something is wrong with the doctrine of equality before just laws. Nothing but a perversion of our rights could make the vast social differences of the present time. We look about us and find poverty and distress in the midst of plenty; hunger and nakedness amid bursting granaries and crowded ware-The wails of the starving are wafted into the banquet halls of the oppulent. The cry of the unemployed comes up amid the unused opportunities of God's bounty; and want and wretchedness confront us at every turn.

Prior to the war there were but two millionnaires in this country; at the present time 31,100 persons own \$36,250,000,000 of the wealth of the nation. Estimating the national wealth at sixty billions, we find that these 31,100 persons own three-fifths. Think of 31,100 persons in this republic worth more than one million each, on the average! There are 616,000 miles of telegraph lines in this country, and one man controls it all. There are 156,000 miles of railroad, costing nine billions of dollars, yet seven men dictate its profits. We mine 120,000,000 tons of coal, yet five men determine how much we shall pay for it. We produce 6,000,000,000 gallons of coal oil, but one man establishes the price.

The above is but a partial record of the past twenty years. During that time prices have declined $67\frac{3}{4}$ per cent. Debts have increased from less than four billions in 1866 to more than thirty-six billions in 1890. Crime has increased 46 per cent; suicide, 97 per cent; insanity, 145 per cent; and bankruptcies,

from 520 to 12,340. One-half of one per cent of our population own three-fourths of the property of the country, and less than one thousand persons dictate a line of action to more than sixty-three millions. One firm establishes the price for the thousands of millions of pounds of beef and pork produced; and the board of trade gamblers fix the price on our 500,000,000 bushels of wheat, long before it is harvested.

The record is not yet complete. The public domain—the last hope of a free people—is being rapidly taken from us. The railroads have been given over 177,000,000 acres. Private parties and corporations own fully 40,000,000 acres more, and, worst of all, alien syndicates have gained possession of 63,000,000 acres of American soil. This wholesale appropriation of public lands has continued until there are now remaining less than three acres each per capita of population. These are the economic conditions that confront us at the present time. These are the results of a public policy we are asked to indorse, and are expected to perpetuate. In view of the above, is it necessary to ask if equal rights and privileges have been granted alike to all? Our prisons are filled; our almshouses are running over; our streets are swarming with tramps; and three millions of our citizens are unable to obtain work.

Are these the legitimate fruits of over a century of freedom? If they are, the blood of our Revolutionary fathers was shed in vain, the patriotism of 1776 was ill-timed, and the statesmanship which followed a cruel farce. That these conditions are with us, no one will have the temerity to deny. The reasons for their being with us are evidently subjects for discussion. Various theories are advanced by way of explanation; meanwhile the work of depletion goes on. One popular theory is over-production; that our economic laws are too perfect; that, as a nation, we are suffering from a surplus of success, or are the victims of a reckless and persistent industry. If all our people were comfortably fed, housed, and clothed, there would be no over-production. Over-production is that amount of any commodity remaining after every use to which it can be applied has been fully satisfied. A surplus is that which remains unused from any cause whatever. There is no over-production of wheat or meat where people are hungry; or of boots and shoes where they are barefoot; or of clothes where they are ragged. Neither are there too many homes where people are compelled to live in damp cellars or cold attics, or with nothing but the blue dome of heaven for a shelter.

Let us go to the figures and amounts themselves, and ascertain how much this alleged over-production has been. Working from the rule that this surplus is sent abroad, we find that, in 1888, we exported in all, of beef, pork, and dairy products, 1,132,000,000 pounds, 120,000,000 bushels of wheat and flour (reduced to bushels), and that our whole exports amounted to \$683,000,000. Had the 65,000,000 of our people consumed each day that year one ounce of meat more than they did consume, it would have taken 1,470,000,000 pounds, — 338,000,000 pounds more than was exported.

If they had consumed four ounces of flour each day, it would have required 148,280,000 bushels of wheat,—28,280,000 bushels more than was exported. If they had expended three cents each day for products, in excess of what they did expend, they would have bought \$711,750,000,—or nearly \$29,000,000 more than was expended. Does any one doubt that our people could have consumed one ounce of meat or four ounces of flour each day more than they did? Go among the alleys, the by-ways, and almshouses, and be taught better. Could we not have expended three cents each day for the comforts or necessaries of life, more than we did? Stand on the street corner and notice the crowds as they pass by, and receive the answer. Where there is a demand, there is no over-production.

Extravagance and want of thrift are given as another explanation of the difficulty. Need I insult your intelligence by asking if you ever worked harder or practised economy more closely? I venture to say that nine-tenths of the people have labored more hours, and economized closer, this past year than ever before. The environment of labor in production, at the present time, defeats all its aims at financial progress. The fault is not in your labor, your calculations, or your saving. It lies in the system under which your efforts are directed. Labor in gross production was never better repaid, and yet in net results it shows a loss.

In 1867, 65,636,000 acres in cultivation produced 1,329,729,000

bushels of all kinds of grain, which sold for \$1,284,000,000; while in 1887, twenty years subsequently, 141,821,000 acres produced 2,660,457,000 bushels, which sold for only \$1,204,289,000. That is, the products of 1867, from less than one-half as many acres and half the amount, brought the farmer \$79,711,000 more. Can these figures be explained away by want of thrift or extravagance?

Labor, the architect of all wealth and prosperity, is languishing to-day from similar causes. There is no other nation on earth where labor is despoiled as easily as it is in America. other nations it requires a monarchy, a standing army, and the traditions of a brutal past to effect this robbery; but here it is accomplished almost by common consent. All economists unite on the proposition that "labor is the sole creator of wealth." If that be true, what agency steps in between the producer and the wealth he creates? In the answer to this question lies the whole labor problem. In the discussion of this point it is necessary to examine at least two others. What is labor? It is mental or physical exertion. Capital is wealth used in production, and wealth is the crystallized labor of the past. Again, while all capital is wealth, all wealth is not necessarily capital. Wealth not used in production is not capital. There are also two kinds of capital, visible and invisible. The first consists in money, tools, merchandise, etc. The latter lies hidden in the brain and brawn of the individual, and is called labor.

It would seem that these two factors ought to live peaceably together, and many kind-hearted people insist that they do, that their interests are identical. This, however, is not true; their interests are diametrically opposed to each other. Instead of living in peace, they are at war; they have been in the past, and will be in the future, so long as the present system of economics continues. This contest began with the introduction of a medium of exchange, and has continued ever since. In the primitive state of the race, men labored simply for personal or family wants, and there was neither commerce nor exchanges. Each produced what would satisfy, and each enjoyed the full benefits of his labor. A few conditions of barbarism would be appreciated even now. If a man made a coat, it was his; he was not obliged to part with it to pay interest, or hide it from

the tax-gatherer. If he planted a field, he was not compelled to eat the refuse and sell the best to pay rent or to make a payment on the mortgage. If they were without schools, churches, and railroads, it is no less a fact they were wanting in prisons, poor-houses, and tramps.

Soon barter, an exchange of commodities, began to take place between individuals and tribes. The fish of one section were exchanged for the fur of another section. It often became difficult to make these exchanges exactly balance. One class of products would possess more labor value than the other. For example, ten pieces of fur would have more labor value than ten fish, but not enough for eleven. This made the bargain unequal and entailed a loss. After a time they began to use shells and beads to represent this difference in labor value. These shells and beads had no value of themselves, but by common consent represented labor value. By and by some one hoarded up enough of these representatives of value to exchange entire for some of the fish or fur. Then the war between capital and labor began, and has continued until the present time. man with the beads and shells wanted all the fur and fish he could obtain for them, while the hunters and fishermen wanted to give him as little as possible. The self-same struggle is with us to-day. The shells and beads of barbarism are the prototypes of the gold and silver of civilization. The owners of these shells and beads of barbarism are identical with the banker and bond-owner of civilization. The form and material have changed. The conditions and circumstances of exchanges have differed since that time. But the old idea of barbarism, the relationship which these representatives of value bear to each other and to all created wealth, has remained the same. has obeyed all these years the same general laws, and has been guided by the same unvarying rules. The same general laws govern the production and distribution of wealth to-day that did when production and distribution began. With an increase of these representatives of value, products are more justly distributed, labor is paid better, and prosperity makes its appearance. With a decrease, exactly the reverse of this is effected. This has proven true in all ages of the world, and is proving true at the present time.

As long as this tool of exchange remains the *instrument* or *incident*, it is in every sense a blessing; but the moment it becomes the *object* of exchange, then it becomes the oppressor, as it now is. At this point I desire to direct your attention to two propositions: first, the price or commercial value of products is fixed by the amount of circulating medium. More money, higher price, and better times; less money, lower price, and harder times. As proof of this I desire to submit a few statistics.

While every demand made by the Alliance is founded upon ultimate truth, the necessity and correctness of the one asking for an increase of currency among the people can be at once demonstrated to the entire satisfaction of all candid-thinking individuals. The statistics of the past quarter of a century prove the following propositions beyond a question of doubt:—

- I. That the per capita volume of currency has been constantly and materially lessened.
- 2. That bankruptcy and failures have rapidly multiplied in consequence.
- 3. That the national debt, during this period, has increased instead of being diminished.

It now remains for me to substantiate the above statements, which I will undertake to do as briefly and plainly as the facts and space will permit. The question of the amount of currency in circulation is one that necessarily involves a resort to certain estimates, which should be fairly and carefully considered. It has recently, however, become a prime factor in partisan politics and financial duplicity, which subjects it to all the misleading statements and false assumptions that usually accompany a discussion of financial propositions under such conditions. ordinary reader is many times led to mistake high-sounding phrases and uncommon words for good argument, and, as a result, becomes settled in an opinion without being able to give the shadow of an intelligent reason therefor. Another mistake is frequently made in always considering the deductions drawn by government officials from government statistics as absolutely correct, because the exact reverse has been proven in many If the farmer would apply the same kind of logic when considering the volume of currency that he does to his corn-crib or pork-barrel, approximately correct conclusions would

be easily obtained. If it was desirable to know how much had been fed to the stock or consumed by the family, it would be hardly fair to ascertain what remained in the crib or barrel, and assume that the difference had been used by the stock or family, especially when more or less had been loaned or sold to others. Just so with the government; it manufactures under fiat of law certain amounts of money, and when asked to give that portion which is circulating among the people, it subtracts the amount on hand from the quantity manufactured, and declares the difference to be in circulation. The plain fact is either overlooked or ignored, that certain stringent laws are on the statute books, which specifically demand that certain other portions of this currency shall be locked up and held as reserves, and consequently not in any sense in circulation; that other portions have been lost, destroyed, sent out of the country, or used for other purposes. When proper deductions are made to conform to the law, and reasonable allowances given for other factors which conspire to reduce the amount, the following table, with a brief explanation, will be found substantially correct:—

. Circulation Per Capita.

YEAR.	Population.	Circulation.	PER CAPITA.		
1866	35,819,281	\$1,863,409,216	\$52.01		
1867	36,269,502	1,350,949,218	37.51		
1868	37,016,949	794,756,112	21.47		
1869	37,779,800	730,705,638	19.34		
1870	38,558,371	691,028,377	18.70		
1871	39,750,073	670,344,147	16.89		
1872	40,978,607	661,641,363	16.14		
1873	42,245,110	652,896,762	15.45		
1874	43,550,756	632,032,773	14.51		
1875	44,896,705	630,427,609	14.04		
1876	46,284,344	620,316,970	13.40		
1877	47,714,829	586,328,074	12.28		
1878	48,955,306	549,540,087	11.23		
1879	50,155,783	534,424,248	10.65		
1880	51,660,456	528,524,267	10.23		
1881	52,693,665	610,632,433	11.51		
1882	53,747,538	657,404,084	12.23		
1883	54,812,488	648,205,895	11.82		
1884	55,908,737	591,476,978	10.58		
1885	57,016,911	533,405,001	9.35		
1886	58,157,249	470,574,361	8.08		
1887	59,320,393	423,452,221	.7.13		
1888	60,506,800	398,719,212	6.58		
1889	61,717,936	306,999,982	4.97		

The above table is corrected to conform to the population given by the recent census. I carefully prepared and published in my book, "The Philosophy of Price," a table from 1866 to 1885. I also made calculations from 1885 to 1889, based upon the increase of the census of 1880. I overestimated the population, as shown by the late census. This gives a small percentage of increase in the per capita amount over previous tables.

These tables will stand the most searching criticism. As a logical result of such rapid per capita contraction of the circulating medium, the following table of business failures is given. While these figures are appalling, they do not give more than one-half or one-third of the actual number or amount. The real estate mortgage failures, the chattel mortgage failures, and the deed of trust failures, cannot be given with any degree of accuracy, yet they are numbered by tens if not hundreds of thou-Besides these, there are the railroad and corporation receiverships; the vast amount of compromised indebtedness, and other forms of liquidation which are but different terms for business failures. By comparing this table with the one above, it will be seen that the failures have kept pace with the reduction in the volume of currency, excepting the years which followed 1873 and 1878. At this last date, the year which immediately preceded specie resumption, all values were nearly eliminated and left no room for failures for some time.

The failures in the United States from 1865 to 1889 were:-

YEAR.		Number.	LIABILITIES.	YEAR.			Number.	LIABILITIES.
1865		520	\$17,625,000	1879			6,658	\$98,149,053
1866		632	47,333,000	1880			4,735	65,752,000
1867		2,780	96,666,000	1881			5,582	81,155,932
1868		2,608	63,694,000	1882			6,738	102,000,000
1869		2,799	75,054,000	1883			9,184	172,874,172
1870		3,551	88,242,000	1884			10,968	226,343,427
1871		2,915	85,252,000	1885			11,211	267,340,264
1872		4,069	121,036,000	1886			12,292	229,288,238
1873		5,183	228,599,000	1887			12,042	335,121,888
1874		5,830	155,239,000	1888			13,348	247,659,956
1875		7,740	201,000,000	1889			13,277	312,496,742
1876		9,092	191,117,000					
1877		8,872	190,669,000	То	tal		161,332	\$3,919,394,824
1878		10,478	234,483,132					

This table will not agree with Bradstreet's, because a certain per cent is added for failures of a smaller amount than that agency recognizes.

After a careful examination of these tables, the question must naturally present itself to every honest man: Was it necessary for 162,000 business men to pass through the horrors of bankruptcy, and suffer the torture which always waits upon such conditions, or that \$4,000,000,000 of hard-earned property should be unnaturally and wrongfully transferred, because of the power of an inadequate volume of money to oppress? Has the experiment been a success, and is the nation greater or stronger for having passed through this trying ordeal in order to make United States bonds bear a premium of twenty-five per cent? Human nature and honest convictions revolt at the plain facts contained in this statement, and the universal verdict must be that conditions which conspire to bring about such results must be unwise and unjust. While the first table given discloses "the power of money to oppress," the second table furnishes ample proof of its existence.

But there is other and stronger evidence of the destructive forces contained in the first table, that cannot be disproved. It is as plain as the noon-day sun, and is found in the increase of the national debt, notwithstanding the vast sums that have been paid as principal, interest, and premium. A careful and thorough analysis of the following statement and table is requested of the reader:—

The national debt in 1866 amounted to \$2,783,000,000. We have paid on the principal of the public debt \$1,599,665,312; and as interest on same, \$2,540,726,049; and a further sum of \$58,540,000 as premiums on bonds purchased; amounting in all to \$4,198,931,361. Yet we find the debt of the nation has actually increased, if paid in the labor and products of the people, (any person of ordinary intelligence knows it cannot be paid in anything else); that is to say, it will take more labor products to pay what we now owe, at present prices, than it would have taken to pay the entire indebtedness in 1866, at the prices then. As proof of this, the table below is given. In regard to its correctness, reference is called to any authentic price lists of products for the years named.

Increase of the National Debt, if Paid in Farm Products.

Debt in 1866, \$2,783,000,000.

Debt in 1890, \$1,183,334,688.

Products Necessary.	AMOUNT, 1866.	Амоинт, 1890.	ACTUAL INCREASE.				
Beef (barrels)	129,000,000	236,666,937	107,666,937				
Pork (barrels)	87,000,000	147,916,836	60,916,836				
Wheat (bushels)	1,007,000,000	1,972,222,448	965,222,448				
Oats (bushels)	3,262,350,000	5,917,773,340	2,755,423,340				
Corn (bushels)	2,218,000,000	3,944,448,893	1,726,448,893				
Cotton (pounds)	17,092,000,000	13,148,162,755	6,056,162,755				
Wool (pounds)	4,281,538,451	4,733,338,752	551,800,301				

This table clearly shows that, notwithstanding the national debt has been nearly twice paid in principal and interest, the portion which yet remains is larger than the original. This statement will not hold good when mere dollars and cents are considered, but is absolutely true as regards the amount of the products of labor that is necessary to purchase these different sums of money. Thus, had the debt been contracted to be paid in wheat, it would have taken, in 1866, 1,007,000,000 bushels.

										Bushels.
We have paid on the principal										1,786,460,000
As interest										2,823,328,000
As premium on	bo	nds								62,770,000
Total paid										4,652,558,000
We yet owe .										1,958,389,084

Had the debt been contracted to be paid in cotton, it would have taken, in 1867, 7,092,000,000 pounds.

We have paid on the	pri	nci	ipal								Pounds. 16,077,683,000°
As interest											25,407,260,000
As premiums on bond	s	•	•	•	•	•	•	•	•	•	565,000,000
Total paid											42,049,943,000
We yet owe											11,752,316,000

When it is remembered that all private indebtedness has gone through the same process; that a mortgage which was given prior to 1872, and remains half unpaid, is larger and

¹ Prices in 1867.

more burdensome than when first given; that the man who has worked hard and economized closely during all these years to pay one-half or two-thirds of his indebtedness is no better off, and in nearly every case more in debt than when he first began, measured by the remuneration received for his own efforts, — is there any wonder that wide-spread distress and discontent obtain among the wealth-producers of the country?

In order to show that money has become dear and the products of labor cheap during the past twenty-five years, attention is called to the following statement. Two neighbors had each \$1000 in 1866, which they desired to invest in some kind of speculation. The one bought wheat and stored it, while the other locked up his money and let it remain idle. Each allowed his investment to remain until 1890, when the matter would be about as follows:—

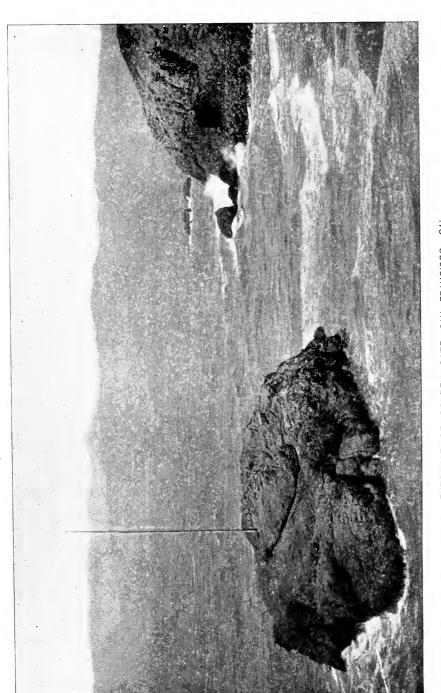
1866.																		
Mr. A, cash																	\$10	00
Mr. B, wheat			•					•			•				bus	shels	5	00
1890.																		-
Mr. A, with h	is \$	10	00,	ca	n b	uy,	at	60	се	nts	pe	r b	usl	ıel,	bus	shels	16	66
Mr. B. with 50	oo l	ous	hel	s o	f w	he	at.	cai	n b	uv	onl	v					\$30	00

These two statements present a subject for consideration well worthy the attention of every American citizen. If idle money can increase so alarmingly in its power over the products of labor, what may not money loaned at ruinous rates of interest bring about? Something must be done to even up the conditions between those who can command the use of money and those who cannot.

This can be done only by unity of action, unity of purposes, and an unselfish desire to promote the general good. To this end, the Alliance is doing its perfect work. The people are thinking, studying, and investigating. This will soon lead to action, and then, the end. The people are saying:—

"Swing outward, oh, gates of the morning!
Swing inward, ye doors of the past.
A giant is rousing from slumber;
The people are waking at last."





ENTRANCE OF GOLDEN GATE, SAN FRANCISCO, CAL.

DIVISION II.

HISTORICAL AND POLITICAL.

CHAPTER I.

KINDRED ORGANIZATIONS.

The Agricultural Wheel. — The origin of the Wheel is a matter of plain record, and has been written many times. It was founded in the distress of the people and made rapid growth, both in numbers and importance, because the farmers believed that its teachings were wise and just. The date of its organization, in 1882, was simultaneous with that of the Brothers of Freedom, with which it consolidated a few years later.

The Wheel was purely an agricultural organization, with definite aims and a proper conception of the rights and privileges of that class of American citizens. On the 15th day of February, 1882, at McBee's School-house, in the town of Des Arc, Prairie County, Arkansas, was held the preliminary meeting that The following persons were present: led to its formation. W. A. Suit, W. T. McBee, J. W. McBee, H. B. Lakey, J. T. Thrasher, J. W. Walls, and W. W. Tedford. These men were all farmers, unused to anything save hard labor; but all united in the belief that their condition might be improved through A determination was soon some sort of concerted action. formed to make an attempt in that direction. A secret organization was decided upon, and a committee was appointed to draft the constitution, by-laws, and secret work. Their report was presented and adopted at the next meeting.

THE ORIGINAL CONSTITUTION.

- 1. This organization shall be known as the Wattensas Farmers' Club.
- 2. Its objects shall be the improvement of its members in the theory

and practice of agriculture, and the dissemination of knowledge relative to rural and farming affairs.

- 3. The members shall consist of such persons as will sign the constitution and by-laws, and who are engaged in farming.
- 4. Its officers shall consist of a President, two Vice-Presidents, Secretary, Chaplain, and Treasurer, who shall jointly constitute the Executive Committee, also the Sentinels, and shall be elected annually.
- 5. Its meetings shall be held on the first and third Saturday nights in each month, at McBee's School-house.

The secret work was adopted in part at this meeting, and perfected soon afterwards. A ritual was soon added, and the usual secret work of such orders, changed or amended as circumstances and experience demanded.

The following preamble to the constitution of the Wheel was adopted by Wheel No. 1, sometime during the spring or summer of 1882:—

Whereas, The general condition of our country imperatively demands unity of action on the part of the laboring classes, reformation in economy, and the dissemination of principles best calculated to encourage and foster agricultural and mechanical pursuits, encouraging the toiling masses, leading them in the road to prosperity, and providing a just and fair remuneration for labor, a just exchange of our commodities, and best mode and means of securing to the laboring classes the greatest amount of good;

We hold to the principle, That all farmers should save their own meat and bread, raise more corn, wheat, oats, and the grasses, and less cotton, so as to increase the demand far beyond the actual supply, securing better prices, and holding the stock of provisions from the greedy paws of merciless speculators.

We hold to the principle, That all monopolies are dangerous to the best interests of our country, tending to enslave a free people, and subvert and finally overthrow the great principles purchased by Washington and his glorious compatriots.

We hold to the principle, That the laboring classes have an inherent right to sell and buy when and wherever their best interests are served, and patronize none who dare, by word or action, oppose a just, fair, and equitable exchange of the products of labor.

We denounce, As unfair and unjust any set of men who sell at large profits, and gain the advantage over the laboring classes, and obtain the

product of their labor at greatly reduced prices, thus forcing patronage and constituting a hateful monopoly, making free and independent men slaves.

OBJECTS OF THE ORDER.

- 1. The objects of this order shall be to unite fraternally all acceptable white males who are engaged in the occupation of farming, also mechanics who are actually engaged in farming.
- 2. To give all possible moral and material aid in its power to its members, by holding instructive lectures, by encouraging each other in business, and by assisting each other in obtaining employment.
- 3. The improvement of its members in the theory and practice of agriculture, and the dissemination of knowledge relative to rural and farming affairs.
 - 4. To ameliorate the condition of farmers in every possible manner.

PREAMBLE AS AMENDED.

We believe, There is a God, the great Creator of all things, and that He created all men free and equal, and endowed them with certain inalienable rights, such as life, liberty, and the pursuit of happiness, and that these rights are a common inheritance, and should be respected by all mankind.

We further believe, That any power or influence that tends to restrict or circumscribe any class of our citizens in the free exercise of these God-given rights and privileges, is detrimental to the best interests of a free people.

While it is an established fact that the laboring classes of mankind are the real producers of wealth, we find that they are gradually becoming oppressed by combination of capital, and the fruits of their toil absorbed by a class who propose, not only to live on the labor of others, but to speedily amass fortunes at their expense.

This constitution and declaration of principles, together with the usual by-laws, constituted the working plan of the initial member of this organization. Little did these men know the solid foundation upon which they built. Little did they realize that their efforts in the line of reform, joined with others, would in so short a space of time bring about the greatest organization in the interest of agricultural freedom that the world has ever seen. It is both just and proper to hand down to posterity their names and deeds, and point to them as worthy efforts for emulation.

There has been considerable speculation as to the real cause for the selection of such a peculiar name for the organization. It is said that several other names were presented, but through some means and for some purpose now unknown, the name "Agricultural Wheel" was selected. It has served its purpose well, and no one who has ever been connected with the order need disown it. The officers of the parent Wheel were: W. W. Tedford, President; J. W. Walls and B. F. Slater, Vice-Presidents; W. C. Hammond, Secretary; W. T. McBee, Treasurer; H. B. Lakey and J. B. Thrasher, Sentinels; N. B. Massey, Chaplain.

Other Wheels were soon formed, and the idea of such organizations found ready converts among the farmers. Articles of incorporation were drawn up and numerously signed, and a charter, or certificate of incorporation, was granted from the State, in August, 1882. In April, 1883, or within about one year from the first meeting, a State organization was formed, with over 500 members. This State Wheel was perfected at the home of W. T. McBee, one of the original founders, with E. R. McPherson, President, and W. C. Hammond, Secretary.

The success of the movement was apparent to all who attended this meeting, and a common desire was manifested to push the work of organization in other parts of the State. This determination was carried out with vigor and success. The State Wheel met semi-annually for a time, or until it became so large that such frequent meetings were considered impracticable. In July, 1883, the State Wheel met at Goff's Cove, with a little over forty sub-organizations. The old officers were re-elected. At this meeting a move was made in the right direction, and the membership taken from the villages and cities, and relegated strictly to the country.

The next meeting was held at Stony Point, January 9, 1834. The order still showed a rapid increase, there being at this meeting representatives from about 114 sub-organizations, with a membership of fully 5000. At this meeting provision was made for the formation of County Wheels, and the meeting of the State Wheel was changed from semi-annual to annual. A National Wheel was also the subject of some discussion.

A resolution was passed, condemning the system of mortgaging stock and growing crops; also petitioning Congress to prohibit, by statute law, the dealing in futures, and demanding that the State Legislature should enact laws, "granting equal rights to all, without burdening any." It was a grand meeting, and showed the power and judgment that might be brought to bear through an organization of farmers.

The next meeting of the State body was held at Sulphur Springs, in July, 1884. Much work of a general character was done at this meeting, including an attempt to formulate some plan to nationalize the movement and extend the organization into other States. The subject of consolidating with the Brothers of Freedom was discussed. John R. Johnson was elected president of the Grand Wheel.

The State Wheel met next at Mount Carmel, in July, 1885. This proved to be a very enthusiastic meeting. Many were there from other States, and a general feeling obtained that great things were in store for the order. J. R. Johnson was re-elected President, and R. H. Morehead, Secretary. A thorough revision of the secret work, constitution, and by-laws was made at this meeting.

A called session of the State Wheel, for the purpose of consolidating with the Brothers of Freedom, was held at Greenbrier, October 15, 1885. After considerable discussion, the two orders combined, with Isaac McCracken, President, and R. H. Morehead, Secretary, the Brothers of Freedom patriotically consenting to drop their name. At that time there were 462 Subordinate Wheels, and about 650 organizations of the Brothers of Freedom, making a joint membership of over 40,000. New constitutions, by-laws, and secret work were adopted; organizations sprang up rapidly throughout the State; and other States, becoming interested, began to call for organizers also.

The organization had now reached the danger line. Education had done and was doing its perfect work. The membership could not refrain from giving expression to their views. And this resulted in the usual abuse and misrepresentation from the partisan press, which had the result of advertising the order, so that it prospered and increased rapidly in numbers, as a consequence. At its next meeting, at Litchfield, in July, 1886,

much work of a solid nature was perfected. Some changes in the constitution were made, one of which, the dropping of the word "white" from the eligibility clause, caused a spirited debate. A committee was appointed to confer with delegates from other States, to take into consideration the formation of a National Wheel. Regularly chosen delegations were present from the States of Tennessee and Kentucky, who, in connection with the delegates from Arkansas, met in convention, drafted a constitution and by-laws for a National Wheel, and elected Isaac McCracken, National President, A. E. Gardner, Secretary-Treasurer, and Isom P. Langley, Lecturer.

The question of eligibility was settled by making provision for separate organizations for the colored members. This action was immediately ratified by the State Wheel of Arkansas, and subsequently by the States of Kentucky and Tennessee. Isaac McCracken was also chosen president of the State, with R. H. Morehead as secretary. The formation of the National Wheel gave renewed impetus to the growth of the order. Soon the States of Missouri, Mississippi, Alabama, Texas, and the Indian Territory were added to the list, while the work had been begun in several others.

The first meeting of the National Wheel was held at McKenzie, Tennessee, on November 8, 1887. It was disclosed at this meeting that the membership numbered fully 500,000, and was increasing with wonderful rapidity. President Isaac McCracken delivered the following address:—

Brother Wheelers of the National Organization, and Visiting Brethren:

This is indeed an occasion of great pleasure to me, to meet with as large and intelligent a body of Wheelers as I see before me, coming as you do from different States, and representing exclusively an agricultural constituency.

I feel and recognize the importance of a gathering together of farmers from the different parts of these United States, with a view to the amelioration of the condition of those following the oldest vocation in the world, and the only one of divine origin. Justly may we feel proud of the rapid strides Wheelerism has made since the formation of this national organization, less than sixteen months ago. We had, at the organization of the National Agricultural Wheel, but three State Wheels.

We now have seven States organized, and a Territorial Wheel; and, as president of the national organization, I have appointed and have deputy organizers in the States of Wisconsin, Virginia, Kansas, and also Idaho Territory.

And I have appointed others as national organizers, upon the recommendation of the presidents of the different State Wheels.

I will now attempt to give you a very brief history of the origin of our organization. The Wheel was organized on the 15th day of February, 1882, in an old log school-house, eight miles southwest of Des Arc, in Prairie County, Arkansas. The causes for organization were monopoly and oppression. At about the same time an organization known as the Brothers of Freedom sprang into existence in the northwest portion of the same State; and in the year 1885 the two organizations were consolidated, retaining the name of the Agricultural Wheel.

Brother W. W. Tedford, one of the charter members of Wheel No. 1, gives the numerical strength of the Agricultural Wheel as follows: On February 7, 1882, there were 7 members; in 1883, 500 members; in 1884, 5000 members; in 1885, 10,000 members; in 1886, 50,000 members; in 1887, 500,000 members.

I will now enumerate some few of the many causes for the formation of the numerous organizations of farmers, since the financial crisis of 1873. One cause is the chartering of so many corporations, which have no souls, and never die, and that have received and are receiving, from both the State and national governments, privileges which individuals do not receive. The Standard Oil Company of the East, and the Cotton Seed Oil Company of the South and West, and other institutions of like nature, are examples.

It has been claimed that competition is the life of trade. Competition is the greatest enemy that the American wage-worker has to contend with; not only competition among themselves, but they have had to compete with foreign labor, the laborers having been landed here by shiploads under contract. And we see the results in some of our large trade-centres, — Chicago, for instance. All honor to those whose influence has put a stop to this pernicious system! It was supposed, in an early day, that competition would regulate the value of transportation; but no sooner is the country spanned by railroads, from the Atlantic to the Pacific, and from the Lakes on the north to the Gulf on the south, than we next behold the vast system, commonly called pooling, by railroad magnates. Competition has ceased to be a factor with the moneyed men of our land; but it still continues in full force with the agriculturists and wage-workers.

In order to make a success of farming, we must necessarily sell more than we buy. The individual, the State, or the nation that buys more than it sells is on the high road to bankruptcy; or, in other words, if the balance of trade is in our favor, there is no danger of failure. But when one class of our citizens, and that class the largest numerically, produce a commodity, and the surplus of that commodity, which regulates the price of the whole amount, is sold in a free-trade country, while the same class of citizens have to buy in a high protectional tariff country, it would seem to me, to say the least, that there is something wrong in our laws. The necessaries of life should be placed on the free list. The value of the cotton alone that was exported in the year 1883, which is the last report I had to refer to, was the sum of \$247,328,721, heading the list of all farm products exported.

The next was bread and breadstuff, \$208,040,850; provisions of other sorts, \$107,388,287; the next is tobacco, which will interest you Kentucky brethren, \$22,095,229. The sum total of all agricultural products was \$619,269,449. The value of all exports, other than products of domestic agriculture, was \$184,954,183, showing that the exports are the products of the farm, to the extent of 77 per cent.

These figures, taken from Report No. 12, of the 48th Congress, show that farm products exceed all other exports by \$434,223,632. Who dare say, in the face of these figures, that we as farmers are not a working people? And as cotton is much the largest of any one farm product exported, and the one the Agricultural Wheelers raise the largest amount of, it would seem to me that there might be some plan devised by our organization, with the assistance and co-operation of other organizations in the South, whereby we might reduce the acreage of cotton, and by so doing receive as much for 4,500,000 bales as we now do for the 6,500,000. Supply and demand in a measure regulate the value of a commodity. We find, by referring to a report of the Commissioners of Agriculture, that wheat declined in price from \$1.05 to 77 cents per bushel, as the acreage increased; and we find that trust companies, which are a corporation of corporations, will allow very valuable plants worth, in some cases, thousands upon thousands of dollars, to remain idle, in order to reduce the output of their product, that the supply should not exceed the demand. We have an illustration of this in the Cotton Seed Oil Trust Company in Arkansas. And instead of increasing the cotton area, as the farmers of the cotton belt did in 1885, about 5 per cent, if they would reduce it about 30 per cent, there would be fewer mortgages given, and it would then be raised as a surplus crop, and we should be independent, as we by right should be.

Brother Wheelers, we are debarred, by our organic law, from taking any steps politically as an organization; and I thank the Giver of all good and perfect gifts that we are, as I firmly believe that, if we were to take any steps as a political organization, our order would soon cease to exist.

But it is a self-evident fact to me that the farmers of this broad land have been and are being unjustly dealt with by the law-makers, both State and national. If it were possible for the farmers to get representation according to their numerical strength, I feel satisfied that there would be but very little class legislation.

With your permission, brethren, I will quote a little from the address of President Macune to the Farmers' Alliance held at Shreveport, Louisiana. He says: "We have the two great principles and conceptions as contended for by John Adams and Thomas Jefferson, as a basis for a division into two great political parties. These should suffice." I would infer that Brother Macune was opposed to a third party movement.

Now, Brother Wheelers, I am not going to advocate the third party movement; neither will I tell you that you can have all your wrongs redressed by remaining in either of the two old parties. No man holding the position that I do at this time, and under our laws, has a right to advise or suggest in his annual message anything pertaining to partisan politics. But as politics is the science of government, and it is necessary that every citizen should be well informed upon the economic questions of the day, in order to vote intelligently, I think it is the duty of this body to elect a committee, to consist of one delegate from each State Wheel, the said committee to be a Committee on Demands; and, if you elect, I would recommend that you make it their duty to formulate and submit to this body, before its adjournment, such changes in the national laws, if any, as they in their wisdom would deem to the interest of the agriculturists and wage-workers. And if two-thirds of this body can agree upon the said demands, I would most earnestly recommend that it be made the duty of the Executive Committee of each State Wheel to submit the same to the candidates for congressional honors in their respective States, whether they be Democrats, Republicans, Union Labor, or Prohibitionists.

I have come to this conclusion, that the time has arrived for the agriculturists to make their demands, and use every honorable effort to have those demands inserted as a plank in all of the national platforms, if possible. A law that will benefit a Republican farmer will not injure his neighbor farmer, though he be a Democrat or a Union Labor man.

And I would most earnestly enjoin upon you the necessity, regardless of what party you may belong to, of sending more farmers to your legislative halls, as their interests are your interests.

In conclusion, I would recommend some changes in our organic law.

Considerable important business was transacted at this meet-The constitution was amended, the Wheel perfected, and the national machinery in a general way prepared for active work. Considerable attention was paid to the question of business agencies, and the whole field of aggressive work and sure defence was carefully and candidly considered. The National Farmers' Alliance and Co-operative Union had held its annual meeting at Shreveport, Louisiana, in October, - just a month previous,—at which meeting delegates from the different State Wheels were present. Consultation among the delegates of the two organizations showed that their aims and purposes were the same, and that their methods were almost identical. The necessity for a union impressed every one, and steps were taken looking toward that end. The Alliance system of co-operative trade was examined and approved, and shortly afterward adopted. The report of these delegates was received by the National Wheel with much favor, and after due consideration and considerable discussion a resolution was passed, calling the next annual meeting at Meridian, Mississippi, for the purpose of meeting with the Farmers' Alliance and Co-operative Union of America, with a view to consolidation. This project was objected to by some, but the great bulk of the members heartily approved of it.

The following demands were adopted by the meeting:-

We, the members of the National Agricultural Wheel, in convention assembled, at McKenzie, Tennessee, November, 1887, do hereby demand of our national government such legislation as shall secure to our people freedom from the shameful abuses that the farmers and mechanics are now suffering at the hands of arrogant capitalists, powerful corporations, and the seemingly insatiable greed of Shylocks. We demand:—

1. That the public land, the heritage of the people, be reserved for actual settlers only,—not another acre to railroads or speculators,—and that all lands now held for speculative purposes shall be taxed at their full value.

- 2. That measures be taken to prevent aliens from acquiring titles to lands in the United States and Territories of America, and to force titles, already acquired by aliens, to be relinquished to the national government by purchase, and retain said domain for the use of actual settlers and citizens of the national States, and that the law be rigidly enforced against all railroad corporations which have not complied with the terms of their contract, by which they have received large grants of land.
- 3. That we demand the rapid payment of the public debt of the United States, by operating the mints of the government to their full capacity in coining gold and silver, and the tendering the same without discrimination to the public creditors of the nation, according to contract, thus saving the interest on the public debt to the industrial masses.
- 4. That we demand the abolition of national banks, the substitution of legal tender treasury notes in lieu of national bank notes, issued in sufficient volume to do the business of the country on a cash system; regulating the amount needed on a per capita basis as the business interests of the country expand, and that all money issued by the government shall be a legal tender in payment of all debts, both public and private.
- 5. That we demand that Congress shall pass such laws as shall effectually prevent the dealing in futures in all agricultural and mechanical productions, preserving a stringent system of procedure in trial that will secure prompt conviction, and imposing such penalties as shall secure the most perfect compliance with the law.
- 6. That we demand a graduated income tax, as we believe it is the most equitable system of taxation, placing the burden of the government on those who can best afford to pay, instead of laying it on the farmers and mechanics, and exempting millionnaires, bondholders, and corporations.
- 7. That we demand the strict enforcement of all laws prohibiting the importation of foreign labor under the contract system, and that all convicts be confined within the prison walls, and that all contract systems be abolished.
- 8. That we demand the election of all officers of the national government by a direct vote of the people, and that all wilful violations of the election laws be declared a felony, and a part of the punishment be the prohibition of the party convicted from voting in all future elections.
- 9. That we demand the repeal of all laws that do not bear equally upon capital and labor, the strict enforcement of all laws, the removal

of all unjust technicalities, delays, and discriminations, in the administration of justice.

- 10. That we demand the tariff laws be so amended as to remove all import duties on articles entering into our manufactures, and that the duties be levied mainly upon articles of luxuries, not above the importing point.
- 11. That we demand that the government shall protect the Chickasaws and Choctaws, and other civilized Indians of the Indian Territory, in all their inalienable rights, and shall prevent railroads and other wealthy syndicates from overriding the law and treaties now in existence for their protection.
- 12. That we are unqualifiedly in favor of the education of the masses by a well regulated system of free schools.
- 13. That we demand that no patents be renewed after the expiration of the time for which they were originally patented.
- 14. Resolved, That this body will not support any man for Congress, of any political party, who will not pledge himself, in writing, to use all his influence for the formation of these demands into laws.

The following preamble and constitution were adopted:—

Whereas, The general condition of our country imperatively demands unity of action on the part of the laboring classes, reformation in economy, and the dissemination of principles best calculated to encourage and foster agricultural and mechanical pursuits, encouraging the toiling masses, leading them in the road to prosperity, and providing a just and fair remuneration for labor, a just exchange of our commodities, and the best mode and means of securing to the laboring classes the greatest amount of good;

We hold to the principle that all monopolies are dangerous to the best interests of our country, tending to enslave a free people and subvert and finally overthrow the great principles purchased by Washington and his glorious compatriots;

We hold to the principle that the laboring classes have an inherent right to buy and sell when and wherever their interests are best served, and patronize none who dare, by word or action, oppose a just, fair, and equitable exchange of the products of our labor;

We denounce as unjust and unfair any set of men who sell at large profits to gain the advantage over the laboring classes, and obtain the product of their labor at greatly reduced prices, thus forcing patronage and constituting a hateful monopoly, making free and independent men slaves; Therefore, we have formed the National Agricultural Wheel of the United States of America for the purpose of organizing and directing the powers of the industrial masses, but not as a political party. In this organization are sentiments and measures for the benefit of the whole people, yet it should be borne in mind, when exercising the right of suffrage, that many of the objects herein set forth can only be obtained through legislation.

ARTICLE I.

NAMES AND POWERS.

SECTION 1. This organization shall be known as the National Agricultural Wheel of the United States of America.

SEC. 2. It shall be the body to which all appeals shall be made, emanating from the State Agricultural Wheels.

ARTICLE II.

OBJECTS OF THE ORDER.

Section 1. The objects of the order shall be to unite fraternally all acceptable citizens, male and female, over the age of eighteen years, who are actually engaged in the occupation of farming; also all mechanics who are engaged in the pursuit of their respective trades; provided that no lawyer, merchant, banker, nor the proprietor of any manufacturing establishment who employs more than three hands, shall be eligible to membership: and provided further, that there shall be separate organizations for white and colored.

SEC. 2. To give all possible moral and material aid in its power to its members, and those depending on its members, by holding instructive lectures, by encouraging each other in business, and by assisting each other to obtain employment.

SEC. 3. The improvement of its members in the theory and practice of agriculture, and the dissemination of knowledge relating to rural and farming affairs.

Sec. 4. To ameliorate the condition of farmers, in every possible manner.

ARTICLE III.

TIME AND PLACE OF MEETING.

SECTION 1. Its meetings shall be held annually, on the second Wednesday of October, and at such place as shall be determined by a majority of all of the representatives present in the National Agricultural Wheel.

ARTICLE IV.

MEMBERSHIP.

SECTION 1. This national Agricultural Wheel shall be composed of the officers of this body and five representatives from each State Agricultural Wheel, and one additional representative for each fifteen thousand members and majority fraction thereof, to be elected or appointed by each State Agricultural Wheel under the jurisdiction of this body, whose term of office shall expire at the close of the term for which they were elected.

ARTICLE V.

OFFICERS.

Section 1. The officers shall be a President, a first Vice-President, a second Vice-President, a Secretary-Treasurer, a Chaplain, one Steward, one Conductor, one Lecturer, one Sentinel; and the President shall appoint three Trustees annually.

ARTICLE VI.

ELECTIONS AND INSTALLATIONS.

SECTION 1. The officers shall be elected and installed at each annual meeting in each year.

SEC. 2. All elections shall be by ballot, where more than one name is put in nomination, and a majority of all votes cast shall elect.

ARTICLE VII.

REVENUE.

SECTION 1. The fee for a State charter shall be \$10.

SEC. 2. A per capita tax of five cents shall be paid into the National Agricultural Wheel treasury, by each State Agricultural Wheel, on or before the first day of each annual meeting, to be paid out by direction of the executive board of this body for actual expenses of the National Agricultural Wheel.

ARTICLE VIII.

OUORUM.

Section 1. Seven representatives shall constitute a quorum.

ARTICLE IX.

VACANCIES.

SECTION 1. All vacancies that may occur by death or otherwise shall be filled by the executive board.

ARTICLE X.

PRINTING.

SECTION 1. The printing of all State charters, rituals, odes, cards, official receipts, funeral rituals, by-laws, and all other printed matter for the National Agricultural Wheel, belongs exclusively to said body, but the constitution of all State, County, and Subordinate Agricultural Wheels, secret work and rituals, shall conform to the constitution and laws of the National Agricultural Wheel.

ARTICLE XI.

AMENDMENTS.

SECTION 1. The National Agricultural Wheel only has power to change or amend its constitution and by-laws.

SEC. 2. This constitution may be amended at any regular meeting of the National Agricultural Wheel by a vote of two-thirds of all the members present, but all amendments must be presented in writing, and signed by three or more members.

ARTICLE XII.

EXECUTIVE BOARD.

Section 1. The President and first and second Vice-Presidents shall constitute the Executive Board of the National Agricultural Wheel.

ARTICLE XIII.

EXPENSES OF OFFICERS AND REPRESENTATIVES.

Section 1. The legally elected officers and representatives to the National Agricultural Wheel shall receive as a compensation for their services all actual necessary travelling expenses, to be paid out of the National Agricultural Wheel Treasury at the close of each session.

Isaac McCracken was re-elected President, and A. E. Gardner Secretary-Treasurer. The meeting adjourned amid good feeling and great enthusiasm.

The National Wheel met the next term at Meridian, Mississippi, December 5, 1888. This meeting was composed of delegates from the States of Arkansas, Missouri, Texas, Tennessee, Mississippi, Alabama, Kentucky, Wisconsin, and the Indian Territory. According to previous arrangements, the National

Farmers' Alliance and Co-operative Union met there at the same time. The order had prospered satisfactorily during the year, and the members everywhere were working earnestly for its further success. President McCracken addressed the meeting as follows:—

Brethren of the National Organization:

Again we have convened for the purpose of devising ways and, if possible, providing means to assist our brother farmers throughout the land. I fully believe that one great step in that direction will have been taken when we shall consolidate the farmers' organizations into one grand body, representing, as it will, millions of toilers. United we will be able to wield an influence, as farmers, never before known in the history of the world. One of the objects of this meeting is to unite in still closer bonds the different national organizations that have the same objects in view, and it will be necessary for all to make some concessions, that the greatest good may be done to the greatest number; and I believe that I voice the sentiments of the Wheel delegates in saying that it will not be our fault if the consolidation is not consummated. A harmonious, organic union of all farmers' organizations is now the watchword, as union and harmony of purpose on all great questions are of vital importance to the agriculturists of the nation.

The moral, industrial, and intellectual education of the farmers will make co-operation a success. There is now a greater necessity for organized effort on the part of the farmers than ever before, as monopoly in all its various forms is arrayed against the producer. And as Uriah A. Stevens so aptly said, nineteen years ago, at the formation of that noble order, the Knights of Labor, "When bad men combine the good must unite, or else they will fall one by one, a pitiful sacrifice, by the wayside."

I will now give you, brethren, a brief statement of my stewardship for the past year: I have issued commissions to nine deputies as national organizers; two in Georgia, one in Virginia, one in Michigan, three in Illinois, and two in Missouri, and have suspended one indefinitely.

My correspondence has more than doubled. I have had applications from several States for organizers to visit and aid in establishing our order among them, and have been unable to comply, for lack of an appropriation for that purpose. But it affords me pleasure to be able to state that the organization is in a growing and healthy condition. We have passed through another political year, a period which I have found

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to be very trying upon labor organizations; and will say that, in compliance with the instructions of the National Agricultural Wheel at its last meeting, I forwarded to Brother CarLee a communication with the National Wheel demands attached thereto (he being then in St. Louis), with the request that he have a sufficient number printed to supply the delegates to both the Democratic and Republican national conventions, the one in St. Louis, and the other at Chicago.

Brothers, I feel the importance of all organized labor making demands upon our law-makers, both State and national. The farmers as a class have neglected this very important matter. We have submitted to us, once in every four years, by the different political parties, their respective platforms; and they contain measures that the formulators of the same promise to have enacted into law. Sometimes they are unable to fulfil their promises, and I think it would be money well spent, on the part of this organization, to have a committee whose business it would be to take up their residence in the city of Washington, and remain there during the session of our National Congress, or as long as the executive board of this body deemed advantageous, the said committee to devote their whole time and energy to the promotion of the interests of the tillers of the soil, and work in conjunction with like committees from other labor organizations, where the same would be to the interest of both parties.

I feel that the farmers are being discriminated against by both our State and national law-makers, and if we don't look well after our own interest you may rest assured others will not do it for us. There will be three great questions discussed by the people during the next four years, land, money, and transportation, and I think that we, as farmers, should give forth no uncertain sound as to our position on these very important subjects. We, as farmers, should oppose any monopoly of the land, and more especially the holding of vast bodies of it, by foreign syndicates, for speculative purposes. I think it is full time that large representative bodies of farmers, such as I see before me, should make an effort to mould public sentiment, because, in a democratic form of government, we can accomplish nothing in the way of a reform movement without public sentiment on our side.

You are all aware of the fact that, though a law be enacted by a State legislature, and signed by the proper officers, if the same be not sustained by the public it becomes a dead letter on our statutes. Hence the necessity for us, as an organization of producers, to agitate such changes as will be of benefit to us. And, in conclusion, I wish to return my sincere thanks to the officers of the National Agricultural Wheel

for the very able manner in which they have assisted me during the past year in the performance of my duties as president.

Below is printed the communication addressed to the different conventions, to which were attached the demands of the McKenzie meeting:—

June 4th, 1888.

To the Chairman, Officers, and Delegates of the National Democratic Convention.

Gentlemen: We respectfully call your attention to the demands made, and resolution adopted by the National Agricultural Wheel, in Convention assembled, delegations being present from the States of Alabama, Arkansas, Mississippi, Missouri, Kentucky, Tennessee, Texas, and Indian Territory, and they recognizing the fact that our interests have been practically ignored in the formation of your party platforms in the past, and also by our representatives in Congress in their law-making capacity, and although as a class we produce over eighty per cent of our exports, yet we are growing poorer yearly, and are plundered by trusts and combinations of capital on every side. We desire a straightout approval of the demands; the ignoring of them will be considered as a rejection.

As an agricultural organization, we are non-partisan in politics, hence we make our demands from a non-partisan standpoint.

Hoping that severally as delegates, and collectively as a convention, you will give our demands your most careful consideration, we are,

Your obedient servants,

ISAAC McCracken, Pres't N. A. W. of America.

R. B. CARLEE,

Sec'y Executive Committee, Ark. S. A. W.

The principal work of this meeting was to formulate, in conjunction with the Alliance, a basis for consolidation. Differences of opinions had to be adjusted, personal pride and ambition had to be satisfied, and many other matters had to be reconciled, in order to bring about the much desired consolidation. After a number of days spent in earnest deliberation, a plan was adopted upon which both organizations agreed to act. This plan and its details have been given in the history of the Alliance, found in another part of this work. After re-electing the same national officers the meeting adjourned.

The result was as had been expected. The consolidation was effected and the name of the National Agricultural Wheel was eliminated. To drop the name was an act of patriotism, and should ever be held as such. It will be remembered by those who were present at its birth or assisted in its development, with loving kindness, and this short history of its rise and progress will no doubt be read with pleasure by its members and friends. It was a grand order, admirably equipped, strong in principles, and effective in its efforts. Hail and farewell to the National Agricultural Wheel!

CHAPTER II.

KINDRED ORGANIZATIONS — continued.

The Brothers of Freedom.—This organization originated in Arkansas in the year 1882, as the joint production of Isaac McCracken and Marion Farris. The name was suggested by an old revolutionary organization, known as the "Sons of Freedom." These two men began the formation of secret organizations among the farmers, for the avowed purpose of enabling them to obtain a just reward for their hard labor, and to incite a proper rivalry among merchants and dealers. The methods adopted were simple and effective. They first organized the farmers into subordinate bodies. These sent representatives to the common council. The common councils in turn sent delegates to the county council, and this county council would make contracts with merchants and dealers, in the benefits of which all members participated. A large reduction in the price of goods and merchandise was usually the result.

The success of the organization was assured from the start, as it promised aid and protection to a class of producers that was wanting in both friends and advisers. A Grand Council was soon formed, with Isaac McCracken, President, and Dr. James Gray, Secretary. This organization continued to increase in numbers and popularity, until October, 1885, when it consolidated with the Agricultural Wheel, another organization having fewer members but working for similar objects. At the time of consolidation, there were 643 subordinate organizations of the Brothers of Freedom that lost their identity and gave up their name in order to secure harmonious co-operation, and thereby push forward more rapidly the great work of reform.

Brother McCracken remained president during the existence of the order. But Brother A. J. Nichols served as secretary after the two years in which Dr. Gray acted in that capacity. In this manner has been lost to sight one of the pioneer efforts in the building up of this grand agricultural reform movement. One of the old members, in writing upon this point, feelingly said: "But they who laid the foundation for these vast agricultural organizations knew at the time that they were unfit to adorn the upper stratum. They knew full well that other and abler men would be found to take up the grand work when they were unable to carry it farther, and guide it to ultimate success; but they also believed that the sturdy workmen who break the soil and lay the foundation stones are just as necessary as those who beautify and adorn the completed structure." It is out of just such pioneer organizations as this that the great Farmers' Alliance of the present has been evolved.

The following is the declaration of principles and constitution of the order, which will be read with interest by all, as being among the first of its kind.

This constitution was framed by a few men before there was any organization of Brothers of Freedom; it was read to each applicant for membership, and he ratified the same upon becoming a member.

Declaration of Principles.

We believe there is a God, the great Creator of all things, and that he created all men free and equal, and endowed them with certain inalienable rights, such as life, liberty, and the pursuit of happiness, and that these rights are a common inheritance and should be respected by all mankind.

We further believe that any power or influence that tends to restrict or circumscribe any class of our citizens in the free exercise of these God-given rights and privileges, is detrimental to the best interests of a free people.

While it is an established fact that the laboring classes of mankind are the real producers of wealth, we find that they are gradually becoming oppressed by combinations of capital, and the fruits of their toil absorbed by a class who propose not only to live on the labors of others, but to speedily amass fortunes at their expense. Therefore, in order to protect ourselves from the oppression of said combinations of capital, and to secure the co-operation of the laboring classes in obtaining a just reward for the fruits of honest labor, we ordain the following constitution, by-laws, and rules of order:—

CONSTITUTION.

ARTICLE I.

SECTION 1. This lodge shall be constituted by at least six members, including a president or vice-president, and shall be known as "The Brothers of Freedom."

SEC. 2. The legislative powers of this society shall be vested in a representative body, styled "The Grand Council of Brothers of Freedom."

SEC. 3. The Grand Council shall be composed of delegates from each County Council, to be elected and qualified as hereinafter provided. When deemed prudent, and for the good of the order, one delegate, or a minority of any committee, may be elected from among the brotherhood.

The articles which follow are in the usual form, and may be omitted here, for the sake of brevity.

The Farmers' Union. — One of the four agricultural organizations that formed what is known as the National Farmers' Alliance and Industrial Union, was the Farmers' Co-operative Union of Louisiana. The history of this union becomes interesting, as showing the condition of the farmers and the methods adopted in their efforts to obtain relief. It also discloses a patriotic willingness to join others in an effort of similar character, even at the sacrifice of relinquishing independent action. It is not only just, but the author considers it a duty, to record for future reference the efforts made by these and other pioneers in the movement for agricultural reform. The time will certainly come when these men will be honored and their labors duly appreciated.

Brother J. A. Tetts of Alexandria, Louisiana, one of the originators of the order, gives the following interesting account of its inception:—

To get an idea of the causes and incidents that brought about the formation of the Farmers' Union, it will be necessary to give a brief sketch of an attempt that was made to form such an organization as early as the year 1880. Some time during the spring of 1880 there was a meeting held at D'Arbonne Church in Lincoln Parish, Louisiana, for

the purpose of cleaning up the graveyard. At this gathering the question of an organization among the farmers was discussed at some length, in a conversational manner, and, as a result, ten or twelve of those present agreed to meet in a short time and form what was to be known as a farmers' club.

It was the intention at first to make it a secret organization, but there were several who had agreed to come in that were members of the Primitive Baptist Church, which did not permit its members to join secret organizations. In view of this, and with a strong desire to retain them as members, the idea of secrecy connected with the organization was given up. The club grew rapidly, until it numbered forty or more members. It met twice each month, and discussed political, social, and agricultural questions. At these meetings the condition of the farmers and the best method of bettering their condition was a topic of frequent That something was wrong, and an immediate and earnest debate. change necessary, all were compelled to admit; but as to the best and surest manner of bringing about these needed reforms, there was, as is usually the case, a diversity of opinion. After a time, a want of interest in the meetings, or personal business, or some other reasons, caused one member after another to drop out, until the club virtually disbanded, after somewhat over a year's existence."

I give [says Brother Tetts] the history of this farmers' club because, from the experience gained during its brief existence, the foundation was laid for the Farmers' Union. Some of the same men who formed this club and remained with it to the end were foremost in the organization of the Farmers' Union. In the fall of 1884 I met Brother Samuel Skinner in the streets of Ruston, Louisiana. He had just sold his short crop of cotton for a short price, and was feeling none the best over the prospect for another year. I had also disposed of my crop, and found that my receipts did not meet my expenses. Brother Skinner and I had, on several occasions before, talked over the situation, the causes and remedies, and our views as a rule coincided. On this occasion, under such circumstances, we talked of the matter more earnestly than ever, and decided to take some steps toward organizing the farmers for mutual protection and assistance.

After further discussion, it was agreed to make an effort to organize in Lincoln Parish. Brother Skinner promised to come to my home on Christmas eve, so we could consider carefully all the details and call a meeting for the first of January. For some reason he failed to keep his engagement, and it was not until March following that we met for that purpose. When he came, I furnished him a copy of the constitution

and by-laws of our old farmers' club, of which I had been secretary. These we changed in some respects to better serve the purpose of the proposed new organization. After further consultation a meeting was called for the 10th of March, 1885, at Antioch Church, Lincoln Parish. At this meeting there were nine who subscribed to the obligation. Later on the secret work was added to the first, which was simply a few signs, with no ritual.

The first organization took in members from a wide territory, and it was not long before we found it necessary to divide up and make our unions more convenient. I rode fifteen miles to attend, until I could work up a favorable sentiment in my own neighborhood, into which I had only lately moved. Our unions began to spring up all over the parish of Lincoln, owing to the enthusiasm of the members and the undoubted necessity for some relief. The first parish mass meeting was held at Vienna in July, and there we organized a central parish organization, with the following officers: J. M. Stallings, President; J. A. Tetts, Secretary; W. J. Spinks, Treasurer; W. J. Smith, Lecturer; Samuel Skinner, Assistant Lecturer; Jesse Gooden, Doorkeeper; J. W. Simonton, Assistant Doorkeeper; Sim Nobles, Sergeant-at-Arms.

At this meeting J. A. Tetts, W. T. Smith, and W. J. Mitchell were appointed to draft a ritual and present it to a meeting to be held again in Vienna, the second week in August, 1885. J. W. Gooden and J. A. Simmons had also been authorized to have a thousand copies of our constitution printed. Up to this time each union that had been formed organized under a constitution written with a pen. There had been a copy of the Alliance constitution sent to our neighborhood by a Texas friend, and we adopted that with but little change, as it provided for some of the *minutiæ* better than the one we had previously been working under. The committee on ritual took the defunct Grange ritual, and so curtailed it as to adapt it to initiation by one degree. This ritual was very impressive, and did much to keep our meetings interesting.

At the meeting in August, for the reason that we wanted to more swiftly extend the organization, we formed the first organization of the State Union by voting the officers of the Parish Union to be the officers of the State Union. This was done with only one exception. J. A. Tetts, who was secretary of his subordinate union and secretary of the parish union, claimed that he had already too much of the honor and too much work, considering that he was a farmer and had a large family to support. He resigned, and asked that O. M. Wright, who was teaching school, be appointed in his place. This was done. At this meeting the offered ritual was accepted and ordered printed. For a system of

organization, every president of a subordinate union was an authorized organizing officer. To faster extend the organization, the office of corresponding secretary was created, with authority to distribute the constitutions as widely as possible, and to correspond with such agricultural papers as would insert his communications. J. A. Tetts was elected to fill this office. No officer was allowed any salary, and only actual expenses incurred were paid. Even the organizing of sub-unions was done free of charge and as a labor of love. This first band of union men worked for their love of humanity and the cause they were in, without pay and cheerfully.

The State Union adjourned to meet again in October, 1885. At this meeting there were four parishes represented. I had made good use of my pen; had written communications to Home and Farm, and hundreds of private letters to parties inquiring about the order. At the October meeting I presented letters from many who had taken an interest in our order, and among others one from Brother Isaac McCracken, President of the Agricultural Wheel. At the close of my report, I was, by resolution, authorized to correspond with other agricultural societies, and try to bring about a consolidation. I had copies of the Alliance constitution of Texas, and on these were printed the names of the officers. I enclosed to Brother Andrew Dunlap a copy of our constitution, and stated the nature of my authority. Some time afterward I received a letter from Brother C. W. Macune, stating that Brother Dunlap and the vice-president of the Alliance of Texas had resigned, and that the correspondence for the president's office had fallen into his hands; that he saw no reason why the two bodies should not unite and form a national, as I had proposed to Brother Dunlap; that he had issued a call for the State Alliance to meet at Waco, on the 17th of January, 1886. I wrote him, asking him to send a delegate to meet with us on (I think) the 6th day of the same month, for the purpose of explaining the nature of the Alliance, and assisting us in arriving at a basis of union. Brother Macune requested Brother Evan Jones to meet us. He did so, and to him I proposed a plan I had previously submitted to our State Union. (Brother Jones did not reach Ruston on the first day of our Brother Jones gave us an idea of the condition of affairs in Texas, and informed us that, as his State Alliance had not met, he was unable to act upon the part of the Texas State Alliance. Brother Jones' visit gave the union great encouragement, and it immediately elected me to go to the Waco meeting, on the 17th of January, and act for our State organization in the formation of a national organization.

At the Waco meeting the State Alliance elected one member from

each congressional district (or perhaps two), to meet with me on the part of Louisiana, and form a constitution to be submitted to that same meeting for ratification. This constitution, in its general principles, was strictly democratic, guarding and protecting the rights of States to control their own affairs. It also embodied a system of organizing, and, when submitted, was unanimously ratified. Just here set in a boom for the Alliance. It was but a short time until the whole South was organized. Brother Macune was chosen president, being put in nomination by myself. His energy and ability pressed the work, with what result you must be familiar.

It will be useless for me to follow the subject further, as it is already history. I will only add that the Farmers' Union dropped its own ritual and secret work and adopted that of the Texas Alliance. The Alliance work became the secret work of the National Farmers' Alliance and Co-operative Order Union. The officers and members of that body honored me with positions of confidence and trust. They elected me first Vice-President at the organization meeting. At the first annual meeting I was placed on the Committee on Secret Work. At the second, when the Farmers and Laborers' Union was formed, I was made chairman of the Committee on Secret Work, and together with the balance of the committee helped form the present secret work of the order.

The complete details of the consolidation of the Union and the Alliance will be found in the history of the Alliance, in another part of this book. In this simple, plain statement of Brother Tetts is found the clearest evidence of devotion to the cause of distressed agriculture, and an earnest desire to promote its interest. This conscientious discharge of duty on the part of the pioneers of this movement is the bulwark of its power, and the unwritten source of its success. The members of this Union have always proved true; ready at any and all times to battle for the right as they saw it. Too much credit cannot be given them for their fidelity to the cause of agriculture. The following is a copy of the declaration of principles and constitution of the State Farmers' Union of Louisiana:—

Constitution and By-Laws of Lincoln Parish Farmers' Club, No. 1, Organized in 1881.

ART. 1. This club shall be constituted of at least ten members, who shall be practical farmers, whose chief interest and dependence for sup-

port is in farming, and shall be called Lincoln Parish Farmers' Club, . No. 1.

ART. 2. This club shall hold regular meetings, at least once a month, and not oftener than once a week. Extra meetings may be called by the president at any time, to attend to important business.

ART. 3. Applications for membership shall be made through a member of this club, who shall personally vouch for the applicant as being a farmer and of good moral character. The application for membership shall be referred to a committee of three members, which shall report at the next regular meeting, unless further time is requested. If the committee report favorably or unfavorably, a ballot shall be taken, which shall be by depositing a slip of paper bearing the word "yes" or bearing the word "no," the former for admitting to membership, the latter for rejecting. If two-thirds of the members shall vote for reception, the applicant shall be declared elected, otherwise rejected. If elected he shall become a member by signing this constitution.

ART. 4. The officers of this club shall be a President, a Vice-President, a Secretary and Treasurer. The officers shall be elected at the first regular meetings in January and July.

ART. 5. At the first regular meeting after election, the president shall appoint the following standing committees, and require them to report whenever their several duties require: First, a finance committee, composed of three members, who shall attend to the financial affairs of the club and devise means for bearing its expenses, their plans to be subject to ratification by the club. Second, a query committee, composed of three members, whose duty it shall be to originate and select questions of interest to be discussed by the club. They shall receive and examine all questions presented for their consideration, and if found worthy, they shall be reported and be subjects for discussion by the club. All temporary committees shall be appointed as needed, and discharged when they have performed their duties.

ART. 6. The objects of this club are: First, to work for the elevation of agriculture to its true position among the industries of our country, by the mental, moral, social, and financial improvement of its members, which can be best effected by frequent meetings and free discussions, cultivating and developing their best talent for business; by experiments, adopting a more rational system of farming, — one guided by the use of more brains, — thereby commanding better returns for the labor expended; to encourage the practice of the cash system in buying and selling; to oppose special and class legislation and rebuke misguided and corrupt legislation; to endeavor to secure the nomination and

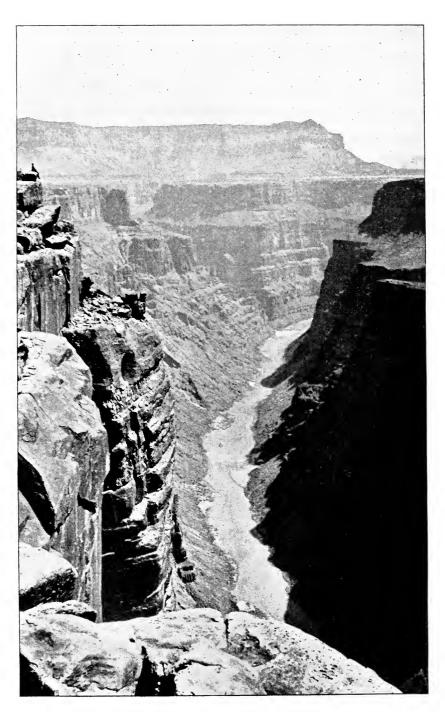
election of good men to office, and spurn, as dangerous to liberty and economy, all professional politicians; to denounce and destroy, wherever possible, all political rings and defeat all machine candidates. In this club the largest liberty shall be allowed for the discussion of all questions, political, financial, and domestic, which can possibly interest the real farmers of our country.

ART. 7. This club shall work for more favorable agricultural legislation, more equitable taxation, equal rights in transportation, lower rates of interest, cheaper administration of the laws, more respect for the true wants of the people, and especially more thorough representation in the halls of legislation.

ART. 8. By-laws not conflicting with this constitution may be made, and any article of this constitution may be amended upon three-fourths of the members voting for the same.

ART. 9. Any club or organization of farmers in our parish or State, having a constitution similar to ours, and enforcing the same restrictions in receiving members, will be fraternally recognized by us, and we request their co-operation in the pursuit of all the objects of our organization, and we offer them ours. We also request them to unite with us and assist us to spread and make permanent this organization throughout our State.





GRAND CAÑON OF COLORADO RIVER, ARIZONA.

CHAPTER III.

KINDRED ORGANIZATIONS — continued.

The Northwestern Alliance. — The Northwestern Alliance, so called to distinguish it from the Alliance which originated in the South, was the result of considerable agitation among the farmers of that section regarding the depressed condition of agriculture. This agitation was forced upon the people by the teachings of the Greenback party, then in its prime, and the hard times which followed specie resumption and the contraction of the currency. This feeling of unrest among the farmers rapidly intensified during the years succeeding 1876, and hastened the formation of the organization which is the subject of this paper. The first Alliance in the West was organized in the office of the Western Rural, Chicago, Illinois, April 15, 1880, and named Cook County Alliance, No. 1, with G. A. Hauf, President; C. E. Tuerk, Vice-President; James W. Wilson, Secretary; and Milton George, Treasurer.

The national meeting at St. Louis in 1882 was not a success, and the one held in Chicago the year following was almost a failure. At this meeting it was determined that the officers elected should hold their positions until their successors were elected, and that the board of officers be empowered to act in the place of the National Alliance, according to its best judgment. In 1884 an attempt was made to hold a national meeting, but it failed. In 1885 no effort was made; but in November, 1886, a meeting was called at Chicago, which was fairly well attended. Hon. A. J. Streeter was elected President; J. J. Burrows, Vice-President; Milton George, Secretary; A. A. Arnold, Treasurer. Minneapolis was selected as the next place of meeting. Strong resolutions were adopted and the meeting adjourned.

The seventh annual meeting convened at Minneapolis, Minnesota, October, 1887. Six States were represented. Although the attendance was small, a feeling obtained that important

questions of public policy, as connected with agriculture, would soon arouse the farmers to greater activity.

Since 1887 the order has grown considerably in certain localities. It is not definitely known just how many members it has. A safe estimate would be from 125,000 to 175,000. At the present time its largest membership is in the States of Iowa, Nebraska, and Minnesota. This order is not necessarily secret, but confines its membership to the agricultural classes.

Declaration of Principles of the Northwestern Farmers' Alliance.

- 1. The free and unlimited coinage of silver.
- 2. The abolition of national banks and the substitution for their notes of legal treasury notes, and the increase of currency to \$50 per capita.
 - 3. Government ownership of all railroads and telegraphs.
- 4. The prohibition of alien ownership of land, and of gambling in stocks, options, and futures.
- 5. The adoption of a constitutional amendment requiring the election of President and Vice-President, and United States Senators, by direct vote of the people.
 - 6. The Australian ballot system.

The Farmers' Mutual Benefit Association. — The order originated, it seems, in this way: In the fall of 1882 or 1883 (some give one date and some the other), five neighboring farmers of Johnson County, Illinois, of more than ordinary determination and independence of character, happened on the same day at their local wheat market, each with a load of wheat. The local buyers refused to take it, claiming that the market was so unsettled they dare not make figures. The farmers believed this was a method agreed upon between the buyers, for the sole purpose of depressing the market and plucking them. After a brief consultation, a committee was quietly sent to the telegraph office, and wired for the city market. answer came, highly satisfactory, showing the market not only firm but actually rising. They then telegraphed to the railroad authorities to know if they could get a car. There happened to be a car already upon the track, which was not just then to be used, as the regular buyers had stopped buying for the time.

This the farmers were kindly given the refusal of. Returning to the buyers, the farmers again offered to sell their wheat at the price that had been paid the day before, and were again refused. They then told the buyers that if they (the buyers) would not take it, the farmers would ship it themselves.

This incident, of course, became the talk of the neighborhood, and set all the farmers to thinking of shipping their own prod-It was at once seen that, in order to do so, co-operation was necessary, as different persons must necessarily ship together. This led to the formation of clubs. Five such clubs were organized during the winter, very much on the style of the ordinary neighborhood debating society. It very soon became apparent that, if they devised any plans for their mutual benefit, secrecy was an absolute necessity, as they found themselves at once surrounded by prying enemies of their plans. A meeting of the five clubs, or lodges, was called at New Burnside, Johnson County, Illinois. At this meeting a constitution and bylaws were adopted, a secret work formulated, the meeting was termed a General Assembly, and the name Farmers' Mutual Benefit Association was chosen for the organization. The five lodges then organized drew lots for the numbers they should bear, from one to five. The General Assembly was to meet every three months, and each lodge was made an organizer to organize other lodges, on petition from a sufficient number to form a new lodge. These new lodges were to be branches of the lodges organizing them, until the General Assembly should meet, when they could send their representatives and be admitted as regular lodges. The branch lodges, however, as soon as organized, could proceed to organize new lodges. other method of organization was provided for.

July 4, 1887, the General Assembly met at Mt. Vernon, Illinois. This may be set down as the turning-point in the success and growth of the organization. A committee was appointed to secure a legal incorporation, to revise the constitution and laws, and otherwise place the order on a firm basis, and give it a legal standing and rights in the courts.

In October, 1887, the General Assembly met at DuQuoin, Illinois. The Committee on Incorporation reported a general charter, granted under the corporation laws of Illinois, with

authority to work and charter subordinate lodges in any State or Territory in the United States. The next meeting of the General Assembly was held at Fairfield, Illinois, in December, 1887.

The next General Assembly was held at Murphysborough in October, 1888. Several important measures were discussed. A Farmers' Mutual Benefit Association Printing Company was formed, and general satisfaction seemed to prevail over what had been done in the past, and what might be done in the future.

The next General Assembly met at Mt. Vernon, Illinois, in November, 1889. Again a rapid and permanent growth was apparent on every side. The order had passed the turning point, and was now on the highway of prosperity.

The last meeting of the General Assembly was held at Springfield, Illinois, November, 1890. This order sent fraternal delegates to the National Farmers' Alliance and Industrial Union at Ocala, in December, 1890.

Such, briefly, are the history, aims, and purposes of an organization that has done, and is doing, good and earnest work in the line of reform.

The Farmers' Political League. - This organization originated among the farmers of Massachusetts, during their contest with the manufacturers of oleomargarine. For a number of years the farmers had petitioned the legislature for a law to prohibit the coloring of oleo like butter, and, as is usual in such cases, these demands were entirely ignored. Early in the fall of 1880 it was suggested that a Farmers' Political League be organized to carry these reforms squarely into politics, and make them the issue in all primaries, caucuses, and conventions, of all parties. The idea met with instant favor. The Farmers' League of Massachusetts was temporarily organized in October, and there not being time enough to perfect permanent organizations in every township, in season for elections, the plan was adopted of circulating a pledge among the voters in agricultural districts, irrespective of party, whereby they bound themselves "to vote only for such candidates for governor and for the state legislature, as shall pledge themselves to work and vote for a bill to prohibit the coloring of oleo like butter." A State League



was formed temporarily in October, and permanently some time later, with the following officers: F. A. Putnam of Dudley, President; G. M. Whitaker of 43 Merchants' Row, Boston, Secretary; J. C. Poor of North Andover, Treasurer.

The League is not a secret organization. It has no ritual, signs, grips, or passwords. It is confined to farmers alone. The method of organization is simple in the extreme.

The membership of the League is confined almost exclusively to the States of Maine, Massachusetts, Connecticut, Pennsylvania, and New York, numbering in all something less than fifty thousand. At present its efforts are directed to the better protection of dairy products against fraudulent imitations. While it may accomplish beneficial results in that line, it is hardly organized with a continuity of purpose, or fixed limits of action, to become either large in numbers or effective in national affairs. However, it is a move in the right direction, and should be encouraged rather than depreciated in its work among the farmers. Any organization that will assist in bringing the farmer to a sense of duty in regard to his own relations to society will do good, no matter in what form it may appear.

CHAPTER IV.

KINDRED ORGANIZATIONS — concluded.

The Alliance in the State of New York.—After much trouble, I have succeeded in obtaining the following statement regarding the origin of the Alliance in New York. It seems rather strange that the name should have been selected by an organization in Texas in 1873, and in New York in 1875, without one knowing of the existence of the other; yet this appears to have been the case. The history of the Alliance of New York is more interesting when it is known to have been the origin of what is now known as the Northwestern National Alliance, and clears up the early history of that organization. The following statement is kindly given me by Mr. F. P. Root of Brockport, New York:—

N. A. Dunning, Esq.

Dear Sir, — Your communication of the 5th inst. came duly to hand. In reply to your inquiries in relation to the early formation of a Farmers' Alliance, I will say: I have not the minutes of the first organization before me, but the proceedings are quite fresh in my memory. You may have noticed an article I communicated to the Albany Cultivator and Country Gentleman on the subject, published a few weeks since, in which the chief points of the early organization were given.

The only published notice I find, is the call for the meeting to organize, which was in February, 1875. In pursuance of that call, the meeting of farmers assembled, and the organization was effected. Since the publication of the article in the *Cultivator* at Albany, I have received a note from Rev. B. T. Roberts of North Chili, this county, saying that he claimed to be the originator of the Alliance; that he circulated the call for the first meeting, and that he framed the constitution and bylaws adopted. He says he presented the call to me, which I signed, but not without some objections, that such an effort might interfere with the Grange work, which I thought was already organizing farmers with much promise of good. Mr. Roberts says he replied that it would not be so, for he only proposed to take up their cause where the Grange left

it; that the Grange forbade all interference in politics, and this should be strictly political work, but not party.

Our meeting organized at the court-house in Rochester, and a committee was appointed to consider and report name, constitution, and by-laws for a farmers' organization. That committee consisted of the following men: Rev. B. T. Roberts, Prof. A. A. Hopkins, F. P. Root, John R. Garretson, and Jesse Deney.

That committee, after considerable discussion, reported the name of Farmers' Alliance, and constitution and by-laws, which were adopted by the meeting. I have not now a copy of the constitution at hand, but know that none but farmers were eligible; but all who were engaged in any branch of husbandry could become members, by the payment of an annual fee. The officers then elected, were: F. P. Root of Brockport, President; Mr. Ely of Rochester, Vice-President; and A. A. Hopkins of Rochester, Secretary and Treasurer.

This organization was in February, or the first of March, 1875. embraced only the county of Monroe, but soon after a call was issued for a State meeting at Rochester, to organize a State Alliance. The call was responded to by representative farmers throughout Western New York, and an organization was effected to be known as the New York Farmers' Alliance. The constitution adopted by the Monroe County Alliance was also adopted by the State Alliance. The objects of this organization, as set forth, were to work out reforms in the State laws affecting the farming interest, and to urge an equal representation from our class in the legislation of the State. The course as most approved, and to which members were pledged, was to attend primary meetings of each political party, to which they were severally connected, and to urge the nomination of such men as were favorable to our interests; and when each party could succeed in their aim, each would vote their own ticket; but if one failed and the other succeeded, all should turn in and elect the candidate who favored us; otherwise, if neither candidate favored our views, an independent candidate should be nominated. The officers elected for the State Alliance were: President, F. P. Root of Brockport; Secretary and Treasurer, Prof. A. Dan of Wyoming County. name of the Vice-President I have lost.

The next annual meeting was appointed at Syracuse, New York, which meeting was well attended, and an address was given by the president, and the objects and reforms most sought for were discussed during two days of the session. An election of officers for the ensuing year resulted as follows: President, Hon. Harris Lewis of Herkimer County; Prof. A. Dan was re-elected Secretary and Treasurer. The next annual meet-

ing was held at Utica, New York. At this meeting a delegation from the Board of Trade and Transportation of New York City was sent, and was accepted in consultation. The officers of the previous year were re-elected. The next annual meeting was held in the city of Rochester, at which Gen. A. Diven of Elmira, Chemung County, was elected President, and W. J. Fowler of Monroe County was elected Secretary and Treasurer.

General Diven was a man of considerable note, being ex-member of Congress, also ex-vice-president of the Erie Railroad, but he could not afford the time necessary to advance the interests of the Farmers' Alliance, though heartily approving its work. He was twice elected President, with W. J. Fowler Secretary and Treasurer, but did not maintain the organization after the expiration of their official terms. I did not attend the last two meetings of the Alliance.

An organization of farmers, under the name of Farmers' League, was soon after effected, which is still in operation. Some time in the winter of 1880, a notice was issued for a meeting at Chicago for the formation of a National Farmers' Alliance. The purpose was carried out, and the Secretary of our Alliance, W. J. Fowler of Monroe County, New York, was elected President. Whether there were organizations under the head of Farmers' Alliance prior to the Chicago meeting, in any of the Western or Southern States, I am not informed; or whether the Alliance was anywhere known prior to our movement at Rochester, I do not know; but the organization was original with us. It was reported that an organization, copied after ours, was inaugurated in Germany, and also in England, previous to the Chicago meeting in 1880; but I have no positive knowledge of the fact.

This organization died almost, if not completely, out in the State, and is just at the present time being revived. It was never a secret organization, and did not reach a very high position either in effectiveness or utility; but it did, without doubt, lead to the formation of other and stronger organizations, and in this manner became the pioneer in the agricultural alliances of the North.

The Grange, or Order of the Patrons of Husbandry.— This order was founded in the city of Washington, District of Columbia, on the 4th day of December, 1867. The circumstances which led to its formation are as follows: In January, 1866, Mr. O. H. Kelley, in the Department of Agriculture, was sent on a mission of some sort through the South, by Mr.

Newton, the then Commissioner of Agriculture. Kelley went as far south as Charleston, South Carolina; thence to Savannah, Mobile, New Orleans, up the Mississippi to Memphis, across the country to Atlanta, and back again to Washington City, by the 21st day of April following.

Impressed with the disorganization of that peculiarly agricultural section, and grieved at the utter demoralization of its people, whom he found to be intelligent and trustworthy, Mr. Kelley conceived the idea that organization was necessary for the resuscitation of the country, and the recuperation of the farmers, whose wealth and resources had been swept away by the cruel hand of war. This, however, was but a transient thought, as applied to the farmers of the South; for a moment's reflection convinced him that there was vital need of organization among the farmers of the entire Union, North as well as South. In his soliloquy he asked himself why farmers should not join in a league peculiar to themselves, to which others should not be admitted. Such a union would be partisan; and, if partisan, it should be secret; and, if secret, it must have a ritual to make it effective and attractive.

This process of reasoning rapidly brought him to a conclusion, and forthwith he undertook to execute the ritualistic framework of such an organization. The task was, however, beyond his capacity, and he soon found himself sounding in deep water. But Kelley was a man not easily baffled; so, with ardor unabated, he resorted to the expedient of advising with counsellors. Mr. J. R. Thompson, an officer in the Treasury Department, and Mr. William M. Ireland, chief clerk in the Finance Division of the Post Office Department, to which bureau Kelley had been transferred in the fall of 1866, were two congenial companions, whose acquaintance he had made after his return from the South.

Mr. William Saunders, superintendent of the garden and grounds of the Department of Agriculture, was invited to join them, which he did. This quartet, unwilling to pass judgment upon the work of their own minds, invited the Rev. John Trimble, then an officer in the Treasury Department, to exercise the privilege of criticising their labors as they progressed. After a season, the Rev. A. B. Grosh, then a clerk in the Agricultural

Department, and Mr. F. M. McDowell, a vineyardist of Wayne, New York, were induced to labor with the five, and these seven constituted the founders of the Order of the Patrons of Husbandry, though several mutual friends, now unknown to the order, were at sundry times consulted. For nearly two years these seven men wrought, until they completed a well-devised scheme of organization, based upon a ritual of four degrees for men, and four for women. Having framed a constitution, adapted to this ritual, to govern them, these men met on the 4th day of December, 1867, in the little brown building now standing embowered in the trees of Four and a Half Street and Missouri Avenue, in the city of Washington, and then and there constituted themselves the National Grange of the Patrons of Husbandry, with Saunders as Master, Thompson as Lecturer, Ireland as Treasurer, and Kelley as Secretary. The remaining offices were left vacant.

The constitution of the order required that every subordinategrange should be composed of at least nine men and four women, and that fifteen such granges might apply for the organization of a State Grange. In accordance with these provisions, a State Grange was organized in Minnesota, on the 23d day of February, 1869, and another in Iowa, on the 12th day of January, 1871. On the 3d day of January, 1872, the National Grange met in its fifth annual session, and, as an accession to its members, hailed with a welcome the presence of Dudley W. Adams, the master of the State Grange of Iowa, and the first member of the order who had ever met with the original seven.

Anterior to the fifth session of the National Grange, there had been organized, in the several States, about two hundred granges, whose charter fees had partially reimbursed the founders for the money advanced in the cause; but annual salaries had been promised to the master, the secretary, and the treasurer, not a dollar of which could now be paid, for there was, as yet, not a surplus penny in the treasury. During the year 1872, new life was infused into the order, and before its close 1074 granges had been organized, scattered over more than half the States of the Union. The founders continued to work most assiduously, and framed a degree peculiarly suited to the State Grange, and another higher one for the National Grange,

and still another for those patrons who had served twelve months or longer in the National Grange. They also appointed deputies to do work in the Grange field.

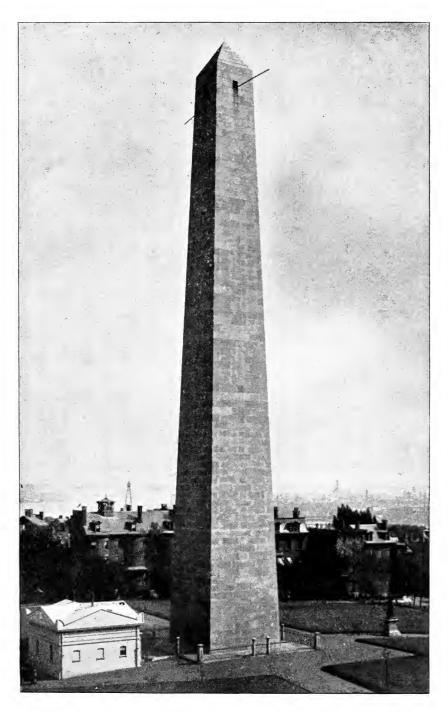
In the fall of 1872 the secretary mailed to all the masters of the State Granges, to the deputies, and to others who had labored for the cause, a letter of invitation to convene in Georgetown, District of Columbia, on the 8th day of January, 1873, in the sixth annual session of the National Grange. Seventeen delegates, in addition to six of the founders of the order (Brother Ireland was absent), representing eleven States, assembled on that day, at the place designated, six of whom were masters of State Granges, and the remainder deputies in the order. In addition to these, four ladies honored the body with their presence; and now, for the first time in its history, the National Grange began to assume the proportions of a national organization.

Thus the foundation was laid for active, energetic, progressive work during the succeeding year. The enthusiasm of the founders was imbibed by every delegate present, and each avowed himself a propagandist on his return home. To date (January 12, 1873), there had been organized nearly fourteen hundred granges, more than one-half of which were in the two States of Iowa and South Carolina. The years 1873 and 1874 were marvellously prosperous years for the Grange. former, 8668 subordinate granges were organized, and in the "Then it was," says a member, "that in our latter, 11,041. strength we exposed our weakness. Our debts had been paid, and our coffers were full. But we had grown suddenly too rich and powerful. We had leaped from poverty into affluence. From a struggling brotherhood of seven we had developed, with magic growth, into a fraternity of over twenty thousand subordinate granges, averaging a membership of forty, all adults, or well-grown male and female youths, and our members were increasing at the rate of thousands a month. But our ranks lacked discipline. Our leaders were afraid of the multitude, and chaos prevailed to a considerable extent throughout the order."

The Grange has been a great educator, and being the pioneer agricultural association, it has been compelled to stand the criti-

cism which always waits upon preparatory efforts. It has had its seasons of great prosperity, and also its full term of adversity, and is again making headway in its endeavors to benefit the farmer. It is increasing in numbers, and promises to take a prominent part in the reforms which await the future.





BUNKER HILL MONUMENT.

CHAPTER V.

HISTORY OF STATE ALLIANCES.

Official Directory of the National Farmers' Alliance and Industrial Union. — President, L. L. Polk, North Carolina; Vice-President, B. H. Clover, Kansas; Secretary-Treasurer, J. H. Turner, Georgia; Lecturer, J. F. Willetts, Kansas. Executive Board: Chairman, C. W. Macune; A. Wardall, J. F. Tillman. Judiciary Department: Chairman, H. C. Demming; Isaac McCracken, A. E. Cole. Committee on Confederation of National Farmers' Alliance and Industrial Union: Chairman, Ben Terrell, 239 North Capitol Street, Washington, District of Columbia; L. F. Livingston of Georgia; B. F. Rogers of Florida; W. J. Talbert of South Carolina; H. L. Loucks of South Dakota.

Alabama. — A. T. Jacobs, a member of the Texas Alliance. organized the first Alliance at Beech Grove, Madison County, in March, 1887. Other Alliances were rapidly formed in Limestone, Jackson, and Marshall counties. A State organization was formed, with W. J. McKelvey, President, and G. W. Jones, Secretary. Regular organizers had been sent into another part of the State by President Macune, and had done effective work. At the second meeting of the State Alliance, in August, 1887, all were united under one State organization, with S. M. Adams, President, and J. W. Brown, Secretary. Delegates to the National Meeting to be held at Shreveport, Louisiana, in October, 1887, were elected and instructed to apply for admission into the national order, which was granted. The union of the Wheel and Alliance was perfected October 15, 1889. The organization in this State is strong, well organized, and increasing in number. It is one of the banner States.

Arkansas. — I. W. Baker, William Davenport, and D. B. Hall were commissioned as national organizers for this State, by President Macune, in the spring of 1887. As the Brothers of Freedom and the Agricultural Wheel originated here, and

both had strong organizations, the Alliance made but slow progress. Several Sub-Alliances were organized, however, during that year. The complications which have followed an effort to consolidate are numerous and difficult to explain. At one time there were three separate organizations, each operating independently. After much trouble and discussion, the different State bodies met at Little Rock, February 12, 1891, and consolidated into one State organization.

California. — In the early part of 1890, Joe S. Barbee was commissioned national organizer for the State of California, and on April 11, 1890, the first Sub-Alliance was organized at Summerland, Santa Barbara County, with sixteen members and the following officers: President, H. L. Williams; Vice-President, Mrs. Agnes S. Williams; Secretary, C. T. Norcross; Treasurer, William Wales; Chaplain, A. C. Doane. The first County Alliance was organized at Santa Barbara, in Santa Barbara County, on May 3, 1890, with President, H. L. Williams, Summerland; Vice-President, S. K. Shilling, Lompoc; Secretary, H. F. Cook, Cathedral Oak; Treasurer, H. A. Nelson, Dos Pueblas; Chaplain, Henry Douglas, Goleta. The State Alliance was formed at San José, November 21, 1890.

Colorado. — The first Alliances were organized in this State in 1888, by R. S. W. Overstreet. On account of the sparsely settled counties, hard times, and land troubles, it was found difficult to push the work. In 1889 the organization took a fresh start. The Northern or Open Alliance had been at work in the State and had secured quite a membership. After carefully considering the matter, the two Alliances met together in joint convention in December, 1889, and perfected a State organization.

The Dakotas. — The Farmers' Alliance was introduced into the Territory of Dakota in the fall of 1884. A number of farmers met at Huron, now in South Dakota, on December 19, 1884, and after adopting a series of resolutions adjourned until the 4th of February succeeding. Several Sub-Alliances had been organized prior to this meeting, under a charter from the Northern or Open Alliance. At the meeting in February, a Territorial organization was perfected, and the following officers selected: President, J. L. Carlisle; Vice-President, A. R. Mon-

tague; Secretary, W. F. T. Bushnell; and Treasurer, A. D. Chase. The last meeting of the Territorial organization was held at Aberdeen, South Dakota, November 28, 1889. About nine hundred Sub-Alliances were represented. The Territory having been divided into two States, the Alliance of South Dakota was organized, with H. L. Loucks, of Clear Lake, President; First Vice-President, C. V. Gardner, Postville; Second Vice-President, C. A. Soderberg, Hartford; Secretary-Treasurer, Mrs. Sophia M. Harden, Woonsocket. North Dakota elected President, Walter Muir, Hunter; First Vice-President, Andrew Slotten, Wahpeton; Second Vice-President, James Dobie, Tyner; Treasurer, S. W. Unkenholz, Mandan; Lecturer, Ira S. Lampman, Valley City; Secretary, M. D. Williams, Jamestown. At the national meeting, at St. Louis, in 1889, both of these States joined the National Farmers' Alliance and Industrial Union. Since that time they have increased in numbers rapidly. The same officers have been retained.

Delaware. — The Alliance was introduced into this State in the summer of 1889, by Rev. H. G. Cowan. Considerable time was spent in making a start. The first Sub-Alliance was organized in Kent County, in August, 1889, with President, William Johnson, and Secretary, J. W. Mix. Kent was the first county organized, by J. P. Kelley, January 29, 1891, with the following officers: President, J. M. Eisinburg; Vice-President, Alexander Simpson; Secretary, F. J. Prettyman; Treasurer, Robert Raughley; Chaplain, I. W. Poole. A State organization will be formed during the summer of 1891, as the order is spreading rapidly.

Florida. — The State Alliance of Florida was organized in August, 1887. Oswald Wilson was sent there by President C. W. Macune, as national organizer, and did his work so thoroughly that the State was organized at a rapid rate. The first officers were: President, Oswald Wilson; Vice-President, William Gomne; Secretary, Thomas A. Hall; Treasurer, I. W. Pooser; Chaplain, W. A. Bryan; Lecturer, I. B. Young; Assistant-Lecturer, W. B. Shephard; Doorkeeper, W. G. Coxwell. The order has prospered since its organization, and is doing well at this time.

Georgia. — In the spring of 1887, three national organizers

were commissioned by the National Farmers' Alliance and Co-operative Union of America, and sent to this State. J. B. Wilkes commenced the work of organization in the Fourth Congressional District in March; and about the same time Brother Bairfield, in the Second Congressional District, and Brother Turner in the Third, began the work. All three of these organizers were from the State of Texas. In March, 1887, Farmers' Alliance No. I was organized by J. B. Wilkes, at Antioch, Troup County, with W. B. Whately, President, and Dr. W. G. Floyd, Secretary. The first County Alliance was organized at Franklin, in Heard County, August 6, 1887, with T. M. Awbrey, President, and J. H. Turner, Secretary.

About the first of October, the national President, C. W. Macune, issued his proclamation calling a meeting of delegates of all the organized counties in the State, to convene in the city of Fort Valley, December 20, to organize a State Alliance. Fourteen counties were represented, and the following officers were elected: President, R. H. Jackson, Heard County; Vice-President, W. C. Glenn, Schley County; Secretary, R. L. Burks, Harris County; Treasurer, W. B. Daniel, Sumter County; Lecturer, J. T. Green, Carroll County; and State Organizer, J. H. Turner, Troup County. The order in the State has prospered wonderfully, and is to-day among the first.

Idaho. — The Alliance came to this State in the latter part of 1890. The first Sub-Alliance was organized at Silver Creek, Logan County, February 7, 1891, by B. T. Templeton. The following officers were elected: President, L. E. Gannett; Vice-President, John L. Freeman; Secretary, B. T. Templeton; Treasurer, C. W. Catte; Chaplain, W. H. Loving.

There is no County Alliance as yet, but a number of organizers have just been started. They report good prospects for future work.

Illinois. — The first Sub-Alliance was organized at Noble, Richland County, December 27, 1889; F. G. Blood, organizer. The first County Alliance was organized at Clayton, Adams County, April 5, 1890. The State Alliance was organized at Morrison, Whiteside County, July 15, 1890, with a membership of about 3000; President, M. L. Crum; Vice-President, M. H. Gilbert; Secretary, F. G. Blood; Treasurer, Geo. H. Lee;

Lecturer, C. W. Stevenson. The same officers are serving now. The Alliance in this State is growing rapidly, and promises to be one of the best in the Union.

Indiana. — W. W. Wilson began the work of organization in this State in May, 1889. The order of the Farmers' Mutual Benefit Association had been quite extensively organized in the State previous to this time. The Open Alliance also claimed a considerable membership. The work progressed slowly, and it was not until April, 1890, that a State Alliance was perfected, at the city of Indianapolis. Seven County and about one hundred and twenty Sub-Alliances were represented. T. W. Force was elected President, and W. W. Prigg, Secretary. The order is now rapidly increasing in numbers, and the prospects are good for a splendid organization.

Indian Territory. — The Alliance was introduced into this Territory in 1886. The organizer went from Texas, but I have been unable to obtain his name. The Alliances formed were chartered under the jurisdiction of Texas. Representatives of the various Alliances met at Brickhouse, in Tishomingo, April 12, 1887, and organized a Territorial Alliance, selecting Z. Gardner, President, and M. E. Gough, Secretary. The membership increased rapidly during the succeeding year. At the next meeting of the Territorial Alliance, at Armstrong Academy, in August, 1888, W. Hatchkins was chosen President, and M. E. Gough was again chosen Secretary. At the next meeting of the Territorial body, at Stonewall, in August, 1889, H. C. Randolph was selected as President, and Lyman Friend, Secretary.

Iowa. — On the 26th day of July, 1890, George B. Lang organized South Fork Farmers' Alliance No. 1, in Wayne County, Iowa, with seven members, and officers as follows: President, J. A. Duer; Vice-President, Warren Easley; Secretary, D. D. Southard; Treasurer, C. H. Lord; Chaplain, John Lord.

The first County Alliance was organized by Geo. B. Lang, in Wayne County, December 13, 1890, with the following officers: President, Charles Heckthorn; Vice-President, Theodore Wade; Secretary, Robert E. Gwinn; Treasurer, Ellis Shriver; Chaplain, C. N. Haworth

The State Alliance of Iowa was organized at Creston, March 20, 1891.

Kansas. — Some time during the year 1887, a number of Sub-Alliances were formed in Cowley County, through the efforts of a visiting friend from Texas, who was stopping with a farmer in that county. It is from this beginning that the Alliance in Kansas took its start. Later, W. Shires, a regular organizer, came into the State, and started a few more Sub-Alliances. About this time Brother W. P. Brush went to Cowley County, and succeeded in organizing the first County Alliance. Authority was given Brother Brush to organize the State. A meeting was called for that purpose in December, 1888, and an organization was perfected by electing B. H. Clover of Cambridge, President, and J. B. French, Hutchinson, Secretary.

The growth of the Alliance in this State has been phenomenal. **Kentucky.**—The first Farmers' Alliance was organized in Trigg County, by F. T. Rogers, in December, 1886. At first the work progressed very slowly, and was abandoned by some of the first who made the attempt. In February, 1888, Brother B. F. Davis was commissioned for the work, and began in earnest the difficult task. He succeeded so well that a State organization was completed at Ezel, Morgan County, June 7, 1888, J. E. Quicksall was chosen President; J. M. Raney, Vice-President; B. F. Davis, Secretary; Charles Pack, Treasurer; and Sherman Pack, Lecturer. August 29, 1889, the Alliance and Wheel consolidated, with S. B. Irwin, President; J. E. Quicksall, Vice-President; B. F. Davis, Secretary; Charles Pack, Treasurer; and J. F. Gale, Lecturer. The order has grown rapidly since that date.

Louisiana. — The Farmers' Union of this State had been quite extensively organized before the Alliance was introduced. The first Alliance was organized by J. W. DeSpain and J. Groves, in one of the parishes west of Red River. The second Alliance was organized in De Soto Parish, October 8, 1886. After this it spread rapidly throughout this portion of the State. In May, 1887, the Union and the Alliance united, forming the State Union, the Alliances surrendering their charters and taking out others from the Union. From this time on the order has grown rapidly. The first officers of the Consolidated Union were: President, J. M. Stallings, Venice; Secretary, O. W. Wright, Munnville; Treasurer, W. J. Spinks; Lecturer, W. J. Smith;

Assistant Lecturer, Samuel Skinner; Corresponding Secretary, J. A. Tetts.

Maryland. — The Alliance was introduced into this State in 1889, by Dr. Joseph A. Mudd.

The first Alliance was organized at Piscataway, Prince George's County, February 26, 1889, with the following officers: President, Dr. A. L. Middleton; Vice-President, Dr. J. H. Blanford; Secretary, James P. Elder.

The first County Alliance was organized by Dr. Joseph A. Mudd, at Upper Marlboro, Prince George's County, August 28, 1889, with the following officers: President, Dr. W. W. Waring; Vice-President, Dr. J. B. Langford; Secretary, A. T. Brooke; Treasurer, Geo. W. Brooke; Lecturer, W. B. Claggett; Chaplain, J. B. Perrie.

The State was organized September 25, 1889, by Dr. Joseph A. Mudd of Washington, State Organizer, at Upper Marlboro.

Michigan. — The Alliance was introduced into this State under peculiar circumstances. The Alliance Sentinel was started at least three months before there was a member of an Alliance in the State. Even the editor, Brother J. M. Potter, was not a member of the order. Brother N. A. Dunning of Washington, District of Columbia, came to the State for the purpose of introducing the order. The very first night — February 19, 1890—he organized an Alliance at Pine Lake, Ingham County, with the following officers: President, George Northrop; Vice-President, Hiram W. Baker; Secretary, Daniel B. Potter; Treasurer, Joseph I. Burtraw; Chaplain, William R. Norton.

Every person attending the meeting joined the Alliance, and all expressed entire satisfaction in regard to the aims, objects, and methods of the order as explained.

The State was organized at Lansing, September 17, 1890. The following officers were chosen: President, A. E. Cole, of Fowlerville; Vice-President, T. C. Anthony of Marengo; Treasurer, John D. Carlton of Dimondale; State Lecturer, Luther Ripley of Port Hope; Chaplain, Mrs. Emma Moore of Delta; Steward, H. W. Cobb of Perry; Doorkeeper, A. McKelvey of Delta; Executive Committee: Chairman, George S. Wilson of Horton; Thomas Nichols of Sanilac; Martin Smith of Okemos; B. F. McKellim of Bad Axe; J. W. Ewing of Grand Lodge.

Minnesota. — The Alliance first appeared in this State in the summer of 1890. The first Sub-Alliance was organized about July 1, 1890, by A. D. Ferres, at Pipe Stone, Pipe Stone County, with the following officers: President, H. D. Sanford; Vice-President, John Clark; Secretary, J. A. Bigelow; Treasurer, C. C. Goodnow; Chaplain, W. C. Barber.

Pipe Stone County Alliance was organized in January, 1891. Names of officers are not at hand. The order will be pushed during the summer of 1891.

Mississippi. — In February, 1887, President C. W. Macune commissioned S. O. Daws and W. F. Price to begin the work of organizing the State of Mississippi. The first Alliance was organized March 3, 1887, at Oak Hall, Carroll County. Others followed rapidly. The State Alliance was organized August 24, 1887. R. T. Love was chosen President, and C. T. Smithson, Secretary. Since that time the order has grown steadily, and is now among the best.

Missouri. — The Alliance appeared in this State in the spring of 1887. President Macune sent a number of organizers into the State, at the urgent request of many of its people. In May following the first Sub-Alliance was organized in Butler County. The order spread with great rapidity that summer, so that a State Alliance was perfected October 4, 1887, at Poplar Bluff, with the following officers: President, A. B. Johnson, Ritchey, Newton County; Vice-President, W. B. Anthony; Secretary, Frank Farrell, Mill Spring; Treasurer, J. N. Tatem; Chaplain, J. A. Gross; Lecturer, M. V. B. Page. Since that time the order has grown rapidly.

Montana. — The Alliance made its appearance in this State in the latter part of 1890. The first Sub-Alliance was organized at Augusta, Lewis and Clarke County, January 10, 1891. The officers chosen were: President, D. J. Hogan; Vice-President, J. K. Smith; Secretary, T. G. Woods; Treasurer, W. H. Warden; Chaplain, R. Anchard. Organized by T. G. Wood, temporarily, and granted a dispensation until a regular organizer could be obtained.

New Jersey. — The first Alliance was organized in this State September 23, 1889, at Centreton, Salem County, with the following officers: President, W. W. Gilder; Vice-President,

Samuel Golder; Secretary, Jarvis Pedrick; Treasurer, John B. Cooper; Lecturer, C. P. Atkinson.

The first County Alliance was organized March 13, 1890, at Cohansey, Salem County, by Dr. C. P. Atkinson, with the following officers: President, J. M. Hitchman; Vice-President, E. F. Cook; Secretary, A. R. Thaup; Treasurer, L. M. Garram. The prospects are good for an increase of membership.

New Mexico. — The first Alliance in this Territory was organized in Lincoln County, in April, 1887, by A. D. Wallace. A few months after, this county was organized, being the first county organization in the Territory. For various reasons the work dragged. One great obstacle was the scattered situation of the settlements, and the difficulty of getting the farmers together. After a hard struggle, a Territorial Alliance was perfected, at Santa Fé, in July, 1889. J. N. Coe was chosen President, and W. L. Bruce, Secretary. The order is doing fairly well.

New York. — Early in 1890 D. F. Allen, a farmer from near Allentown, Allegany County, came to Washington City, and was initiated into the Farmers' Alliance. He was at once given a national organizer's commission for New York. April 3, he organized Wirt Farmers' Alliance, No. 1, in Allegany County, with sixteen members and the following officers: President, DeWitt Willis; Vice-President, Marion Keller; Secretary, Rufus Harwood; Treasurer, William Saunders; Chaplain, Chauncy Griffin. The first County Alliance was organized in Allegany County, June 3, 1890, with the following officers: President, M. Spencer; Vice-President, J. D. Rogers; Secretary, George A. Scott; Treasurer, D. C. Willis; Chaplain, N. R. Miller. The State Alliance was organized at Hornellsville, April 22.

North Carolina. — The Alliance in this State has had a wonderful growth. Having had a paper, The Progressive Farmer, advocating a doctrine similar to that taught by the Alliance, it was easy to organize the State. Colonel L. L. Polk, editor of The Progressive Farmer, entered into the work with earnestness and energy. The first Alliance was organized by M. T. Seely, April 20, 1887. In May J. B. Barry of Texas joined in the work. A State Alliance was formed October 4, 1887, at Rockingham, Richmond County, consisting of eight counties and one

hundred and thirty-two Sub-Alliances. S. B. Alexander was elected President, and L. L. Polk, Secretary.

Ohio. — The first Alliance was organized in Gallia County, June 5, 1890, by J. T. Jones, with eleven members and the following officers: President, S. H. Shaffer; Vice-President, M. B. Mala; Secretary, James R. Vires; Treasurer, William H. Vanden; Chaplain, John Leonard.

The first County Alliance was organized in Franklin County, near Columbus, October 4, 1890, by J. M. Richardson, with the following officers: President, H. S. Harris; Vice-President, W. R. Parsons; Secretary, H. M. Evans; Treasurer, Thomas Carpenter; Chaplain, Fred L. Johnson. The State Alliance was organized at Columbus, April 16, 1891.

Oklahoma. — January 10, 1800, the first Alliance was organized in this Territory, by George W. Gardenhire, at Stillwater, with eighteen members, and officers as follows: President, G. W. Puckett; Secretary, Irvin Whittaker.

The first County Alliance was organized by W. H. Barton, in Payne County, on the 20th day of March, 1890, with the following officers: President, D. Skinner; Vice-President, W. H. Hayden; Secretary, M. A. Hickcox; Treasurer, L. Gilges; Chaplain, M. B. Andrews. The Territorial Alliance was organized July 8, 1890, at Guthrie.

Oregon. — The Alliance was introduced into this State during the winter of 1890. There was no organizer, and a meeting was held at Independence, Polk County. A temporary organization was effected, and a dispensation was granted to them until they could obtain the secret work from the regular source. The following were the officers: President, Abram Nelson; Vice-President, J. Dorusife; Secretary, George Roges; Treasurer, J. W. Haley; Chaplain, J. Craven. Organized by Thomas C. Wilkin. There is no County Alliance at present.

Pennsylvania. — The Alliance was introduced into this State in the spring of 1890, by H. C. Demming, who came to Washington, took the secret work, and organized the first Alliance in his own county of Dauphin. In April following, after meeting with many obstacles, Brother Demming succeeded in organizing a State Alliance at Harrisburg, November 26, 1890. The officers elected were: President, Henry C. Snavely, Lebanon;

Vice-President, Curtis S. Clark, Crawford; Lecturer, J. S. Potts, Indiana County; Secretary, Henry C. Demming, Dauphin County; Treasurer, Valentine Hay, Somerset County.

South Carolina. —The first Sub-Alliance in this State was organized by M. T. Seely, an organizer from Texas, in October, 1887. The order grew rapidly, so that, in July, 1888, a State Alliance was perfected, with over one hundred and fifty Sub-Alliances and a membership exceeding three thousand. E. T. Stackhouse was elected President, and J. W. Reid, Secretary. The order has had a substantial and steady increase up to the present time, and its success is assured.

Tennessee. — J. T. Alsup, a national organizer of the Farmers' Alliance, began work in this State in the winter of 1887. The first Sub-Alliance was organized in Wilson County, in March following. At that time the Agricultural Wheel was also seeking to establish itself in the State; but by hard work and perseverance, a State Alliance was organized in March, 1888, with I. P. Buchanan, President. Both orders continued to grow, and at a joint meeting at Nashville, in July, 1889, the two organizations consolidated under the name of National Farmers and Laborers' Union, with I. P. Buchanan, President, and E. B. Wade, Secretary. Since then the order has grown rapidly, and is now reckoned among the best.

Texas.—The history of this State will be found in the general history of the Alliance. The first Alliance having been formed in Texas, a detailed statement of the organization must contain a full history of the Alliance in the State.

Utah and Arizona. — Organizers have been sent into these Territories during the present month (March, 1891), who report that success is absolutely certain; that the people are ready for organization, and eager to join the Alliance movement.

Vermont. — One organizer has been sent to this State, who reports the farmers anxious to organize for common defence. Applications have been received for organizers in the States of Maine, Massachusetts, and New Hampshire, which will doubtless be met during the present year (1891). The growth of the order has been, and doubtless will be, slow in the New England States. Yet the spirit of agricultural unrest is felt there, as in other parts of the country, and the time is "close at hand when every

State and Territory of the nation" will become members of this great agricultural organization.

Virginia. — The first Sub-Alliance was organized at Ottobine, Rockingham County, in September, 1887, by J. S. Barbee. The following officers were elected: President, L. T. Beall; Vice-President, William Ervine; Secretary, St. Andrew Myers; Treasurer, Mrs. N. E. Ervine; Chaplain, G. W. Skelton; Lecturer, Dr. J. P. Coyner. The first County Alliance was organized November 26, 1887, with the following officers: President, Thomas Bradley; Vice-President, Isaiah Printz; Secretary, William M. Rosser; Treasurer, Warfield Yates; Lecturer, H. A. W. Holmes.

Washington. — Early in 1891 Brother Ahiva Mannering went from the State of Missouri to Washington as a national organizer. The first Sub-Alliance was organized at Garfield, Whitman County, February 14, 1891, with the following officers: President, A. J. Irwin; Vice-President, Alvin Manning; Secretary, L. C. Love; Treasurer, William Lemon; Chaplain, E. F. Mason. The work is being pushed with vigor, and is increasing rapidly.

West Virginia. — The Alliance was introduced into this State in the summer of 1887, by Joe S. Barbee. The first Sub-Alliance was organized by him at Franklin, Pendleton County, October 29, 1887, with the following officers: President, S. P. Priest; Vice-President, John A. Marshall; Secretary, J. H. Daugherty; Treasurer, J. T. Harold. The first County Alliance was organized at Franklin, Pendleton County, July 18, 1889, by G. T. Barber. The following officers were chosen: President, Jacob Henkle; Vice-President, W. C. Miller; Secretary, J. H. Daugherty; Treasurer, Solomon Cunningham; Chaplain, W. C. Keyser. The State Alliance was organized at Charleston, West Virginia, August 17, 1890.

Wisconsin. — The Alliance appeared in this State during the fall of 1890. The first Sub-Alliance was organized under dispensation, December 29, 1890, by Haybert Holmes, at River Side, Shawano County, with the following officers: President, Israel L. Pues; Vice-President, Joseph H. Hillister; Secretary, Lewis Peterson; Treasurer, John Westgord. There is no County Alliance as yet.





COLONEL L. L. POLK,
Pres. N. F. A. and I. U.

CHAPTER VI.

SECTIONALISM AND THE ALLIANCE.

By Colonel L. L. Polk, President National Farmers' Alliance and Industrial Union, and Editor *Progressive Farmer*, Raleigh, North Carolina.

The year 1865 witnessed the culmination of the mightiest contest of modern times. The brave and heroic men of the two armies, worn and wearied with war, returned to their homes, and beating "their spears into pruning-hooks, and their swords into ploughshares," addressed themselves, with a faith and a devotion that were sublime, to the solution of problems which would have appalled the hearts of any but those who had been educated in the terrible ordeal through which they had passed. The happy greetings of welcome of the loved ones at the threshold were more thrilling and inspiriting than were the wild shouts of triumph in victorious battle.

As a rule, the soldiers of the North and the South were willing and anxious to accept and abide by the result, in good faith. They knew they had fought like men, and they were willing to accept the result like men. Slavery was gone, and all true patriots fondly hoped that the prejudices, animosities, and divisions which were born of its existence would go with it.

But the selfish, sectional agitator again appeared upon the scene, and, with unholy purpose, spared not even the sacred dust of the heroic dead that he might inflame and keep alive the bitter recollections and animosities of the past. Social and financial chaos was abroad in the land, and he gloated in the opportunity thus afforded to prosecute his wicked designs. Ordinarily he was the man, North and South, who had failed to see, in four years of war, any opportunity to prove his devotion to his section. Ordinarily he was the man, North and South, who was "invisible in war, and had become invincible in peace."

The liberation and enfranchisement of four millions of human beings, the confusion incident to a long-protracted and terrible struggle, presented conditions peculiarly favorable to the propagation and perpetuation of sectionalism. Even our industrial development and expansion evolved conditions which were made to contribute to this unnatural and unfortunate estrangement between the sections. The rich, powerful,

and densely populated East must needs have an outlet for its aggressive enterprise, its rapidly accumulating wealth, and its growing population. The dense forests and fertile plains of the magnificent and inviting West were transformed into rich and powerful States. Lines of immigration and enterprise, of wealth and of general development, were pushed forward with marvellous rapidity and success to the shores of the Pacific. Along these lines were transplanted from the East the prejudices and animosities engendered for a half-century. The South, — traversed by no transcontinental line of communication, — sullen and humiliated in her great and crushing losses, and by defeat in war, most naturally nursed the sectional animosities and prejudices of the past.

Their fields were devastated, their homes desolate, their household goods destroyed; without money, without food, without implements with which to work; their credit gone, their labor utterly destroyed, their industrial systems wiped out, the accumulated wealth of generations swept away as by a breath; in the shadow of drear desolation and the blackened ruins of once happy homes, they were left friendless and unaided, to depend on those qualities of true manhood which are always evolved by terrible emergencies. Theirs was the noble and heroic task to remove the ghastly wreck which marked the feast of wargods, who had revelled in their high carnival of blood, of carnage, and of death.

What an inviting condition was thus presented for wicked sectional agitators, and how assiduously they utilized it, let the shameful sectionalism of the past quarter of a century, with its baneful fruits, tell. Whatever may be said of chattel slavery, with all its acknowledged evils, history nowhere records that it ever made a millionnaire. Whatever may have been its effect upon our society and civilization, it produced no tramps. But we have developed another system of slavery, - the slavery of honest labor, - a slavery of sweat, and brawn, and brain, - a slavery more terrible and degrading in its effects than the African ever knew, and the legitimate outgrowth of which has cursed our country with an army of three millions of tramps, and has placed the greater part of the wealth of this great nation in the hands of one two-thousandth part of its population. It has made the eight millions of American farmers - once the proud possessors of the most princely heritage that God ever gave to man - virtually a nation of tenants, whose every possession, and whose every day of toil and labor, is forced to pay tribute to exacting, domineering, legalized monopoly. all the discriminating partisan legislation which has disgraced the annals of the nation for the last quarter of a century, and in all the machinations

and intrigues which have conspired to destroy that essential equipoise between the great industries of the country, and which has robbed the many to enrich the few, and thus placed our republic and its institutions in imminent peril, no factor has been more potential than the wicked spirit of sectionalism.

We have thus been brought to confront forces, social, industrial, moral, and political, which are dangerous alike to the liberty of the citizen and to the life of the republic; and we stand to-day in the crucial era of our free institutions, of our republican form of government, and of our Christian civilization. Mighty problems confront us, and they must be met in a spirit of fairness, of manliness, of justice, and of equity.

The evils under which the great laboring millions of America are suffering are national in their character, and can never be corrected by sectional effort or sectional remedies. In all the broad field of our noble endeavor as an order, there is no purpose grander in its design, more patriotic in its conception, or more beneficent in its possible results, to the whole country and to posterity, than the one in which we declare to the world that henceforth there shall be no sectional lines across Alliance territory. Failing in all else we may undertake as an organization, if we shall accomplish only a restoration of fraternity and unity, and obliterate the unnatural estrangement which has unfortunately so long divided the people of this country, the Alliance will have won for itself immortal glory and honor. In the spirit of a broad and liberal patriotism, it recognizes but one flag and one country. Confronted by a common danger, afflicted with a common evil, impelled by a common hope, the people of Kansas and Virginia, of Pennsylvania and Texas, of Michigan and South Carolina, make common cause in a common interest. The order recognizes the fact that the war ended in 1865, that chattel slavery is gone, and that the prejudices and divisions, born of its existence, should go with it.

Happily for the country and posterity, the great mass of the people have become aroused to this truth, and they have severed sectional lines in twain. The ex-slave holder of the South, who believed that he held the slaves not only by constitutional but by divine right, and who bravely imperilled his life to defend the institution, to-day stands hand-in-hand with him who was born and reared an abolitionist, and who regarded slavery as an unmitigated evil and curse; and disregarding sectional folly and madness, they have solemnly pledged their alliance in a common cause — the cause of a common country.

We cannot fail-to see the opportunity of the hour; and, recognizing

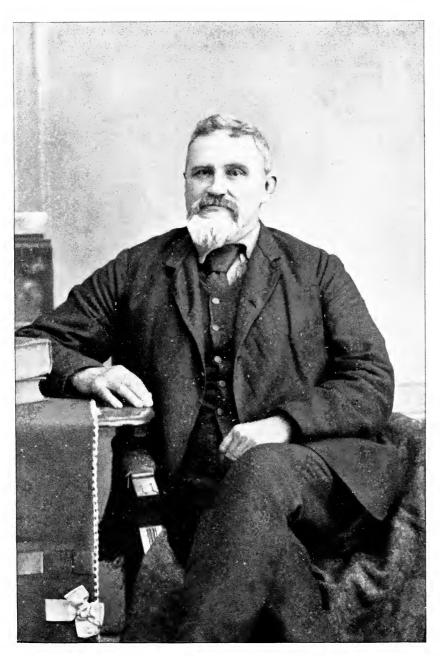
that opportunity, we must not forget that it carries with it corresponding responsibilities. The opportunity is for the great, conservative, law-abiding, patriotic masses to assert and establish a perpetual union between the people. The sequent obligation is, that these great masses must discourage, discountenance, and discard from their councils the wicked, demagogical agitators, who for the last twenty-five years have sought to foster discord and dissension, that they themselves might thrive.

We are told in sacred history, that, in the olden time, one Jeroboam was crowned a king in Israel. He conceived the absurd idea that to strengthen his people he should divide them; that to fraternize them he should destroy their unity; and he forbade and abolished their annual national meeting at the city of Jerusalem. He erected a golden calf at a place in the north, and one at a place in the south, and directed that the people of the two sections should hold their annual meetings at these places, respectively. We are told that even in that remote age Jeroboam adopted some of the methods of modern politics, in that "he made high priests of the lowest people." The avenging hand of outraged justice was laid upon him. Does history repeat itself? Sectionalism, for purposes of greed and gain, decreed that the people of these United States should be divided; and to perpetuate that division it directed that idols should be erected for the people of the North, and for the people of the South. And has it not "made high priests of the lowest people"? And shall it not be rebuked and destroyed?

Divided, we stand as a Samson shorn of his locks; united, we stand a power that is invincible. Cato fired and thrilled the Roman Senate with the fierce cry, "Carthage must be destroyed." Must we, as citizens of this great republic, emulate such a vengeful spirit? Hannibal, while yet a tender youth, was placed by his father on his knees, and made to swear eternal vengeance against the Romans. Must we, as Christian parents, entail upon our children the bitter legacy of hate? Hundreds of thousands of noble, aspiring, and patriotic young men, all over the land, are manfully undertaking the responsible duties of American citizenship. Born since the war—thank God!—their infant vision was first greeted by the light of heaven, unobscured by the smoke of battle, and their infant ear first caught the sweet sound of hallowed peace, unmingled with the hoarse thundering of hostile cannon. Shall they be taught to cherish, foster, and perpetuate that prejudice and animosity, whose fruits are evil, and only evil?

"Let the dead past bury its dead," and let us, with new hope, new aspirations, new zeal, new energy, and new life, turn our faces toward





HONORABLE B. H. CLOVER,
M. C., Third District, Kansas.

the rising sun of an auspicious and inviting future, and reconsecrate ourselves to the holy purpose of transmitting to our posterity a government "of the people, by the people, and for the people," and which shall be unto all generations the citadel of refuge for civil and religious liberty.

SECTIONALISM.

By Hon. B. H. Clover, Vice-President National Farmers' Alliance and Industrial Union, and Member of Congress from the Third District of Kansas.

"In peace there is nothing so much becomes a man as modest stillness and humility."

— RIENZI,

Following the thought of the famous Roman orator, I would fain maintain a "modest stillness"; but I see in our country a condition that never could have existed but for the false and pernicious teachings of those who stir up strife and keep alive the fires of sectional hate.

Do you ask for what purpose is this ceaseless arraignment of the North against the South, and the South against the North, kept up? One who has been chief in the strife, and loudest in his demands for "a solid North against a solid South," says that they have been "alienated by those who sought to prey upon them."

This is surely a frank admission. He further says that "invidious discriminations have robbed them of their substance, and unjust tariffs have repressed their industries." The objects of sectional agitators can not be more fully and tersely stated. Some of them, possibly by reason of their ignorance, were honest in their belief; but with the great majority self-aggrandizement, and the service of an oppressive and unscrupulous combination of public robbers, was the sole end in view.

So successful have been their efforts that the money power of the world has laid tribute upon honest industry, and the laborer, once king, finds himself a pauper, a wanderer, a homeless, nameless stranger in the land of his fathers. Samson, while listening to the siren song of the party Delilah, was shorn of his locks, of his strength, of his manhood, and virtually of his freedom. But some may say, Has sectionalism done all this? Gentle reader, let me ask, Could any other thing have kept the people so blinded to their interest, that, having the ballot in their hands, they would have allowed the soul-and-body-destroying, monopolistic influences to wrap their slimy folds around each and every industry, and send the honest toiler shivering to a hovel, and elegant idleness to a palace?

Sectional hate and its other self, party prejudice, have been the means by which monopoly has been enabled to bind the people; and a blind subserviency to party and designing party leaders has been the means by which it has accomplished what in other countries it obtained by violence, bloodshed, conquest, and other forms of oppression.

The favorite method of those who "toil not neither do they spin," is to array those whom they wish to rob against each other. This once accomplished, the rest is easy. Nor is the robbery of industry and a virtual enslavement of the laboring people all the harm that has come from this the most blighting curse that ever came upon the people of free America. It has arrayed brother against brother, and made enemies of those who, by every tie that binds men's hearts together, should have been friends.

Neither time nor space will allow a detail of methods resorted to by those who "alienate the people only to prey upon them." It is through false politics, and politicians more false and designing, that they seek to accomplish their ends, and they have so far succeeded. All have heard the cry of the campaign howler. I shall not attempt to describe him. He is the bane of civilization, the enemy of liberty and humanity. His mission is to stir up old animosities, engender new strifes, fight over dead issues, and write platforms to be read before election and disregarded and forgotten afterwards. He is an "oily" fellow. been selected for his fitness for the work he is to perform. With him "it is lawful to deceive, to hire Hessians, to purchase mercenaries, to kill, to mutilate, to destroy," - anything for success. It makes him exceedingly "weary" should any one suggest that the politics of our country be placed upon a higher plane. He worships no god but his own ambition, and that ambition is to be the "cutest" trickster and slyest deceiver of his party; for well he knows that those who prey upon the people and wealth producers will see his "transcendent ability" and pay well for his treason to the interests he is supposed to represent, and heap "honors" upon him.

There is no sympathy in his heart for the miseries of the millions who, by reason of his infamous schemes, are robbed of home, happiness, and all hope of the future. There is no tear in his eye as the hapless family—the heartbroken father, the sad-faced and weeping mother, and the sorrowing children—find themselves driven from their home to become helpless wanderers up and down the earth. He has never heard the sigh come up from the bosom of his wife as she listens to the reading of the foreclosure summons. Little cares he though tears may fall like rain, though hearts may break, though hope may go out forever from

the hearts and homes of his victims. In his mad rush for office and spoils he has forgotten that there is a just God, who has said: "Vengeance is mine, I will repay."

It is indeed a gloomy picture that the past thirty years present, in this so-called free land of America. Designing demagogues, sustained by the money and monopolistic power of the world, have so far succeeded in deceiving the people, and arraying them against one another, and despoiling them of their homes, the fruits of their labor, and their hope of the future. Liberty, with the great mass, has become an empty farce, and American independence an "iridescent dream."

This for the past; but what of the future? The early fathers told us that "eternal vigilance is the price of liberty." Have we been vigilant? Do not political sins bring political death, as surely as moral sins bring moral death, or a violation of the laws of health brings on physical disease and death? The fathers taught us that in unity is strength. Have we as a people obeyed their injunction? Sectionalism, with its agitators, has stood guard over the bursting vaults of the public plunderer, and if any one raised his voice in protest against the infamous robbery, the "bloody shirt" was brought out on one side, and the "Yankee hireling" howlers split the air on the other; and the robbery of the people went on.

But I wanted to take a peep into the future; I wanted to write of the time when sectionalism shall be buried deep. Its grave is being dug now. The "great common people" of the South and of the North are realizing their condition and its cause, and they are meeting together, becoming acquainted, and wondering why they ever should have been enemies.

The stock in trade of the sectional agitator is going below par. He will soon be a thing of the past. He is now in his dying throes, and while some of them are bowing to the inevitable, others are nerving themselves for a last supreme effort. But their time has come. The people are awaking from their lethargy, and they find themselves made beggars while they slept. They are fast learning the truth. The "alienator" is out of a job. The "white rose of peace" is being planted over the grave of sectionalism. It is being watered by the repentant tears of the victims of this hideous monster—sectional strife.

The old leaders, who have been responsible for the sectional hate of the past, are being sent into retirement. New blood and new ideas are coming. The people are looking to the future instead of brooding over the past. They know that they have been robbed by infamous legislation, and that righteous legislation will give them back their homes and happiness again. They are refusing to be mere hewers of wood and

drawers of water for a favored class of money-changers. When the happy time comes that sectionalism is dead and buried out of sight, and is remembered only as a hideous nightmare; when the toiling masses of both North and South shall join hands and remember only that they are brothers, children of a common father, citizens of a common country, with one flag, one destiny, and that they are "Americans all"; and when patriots and not partisans shall rule in legislation, then shall the brotherhood of man be acknowledged, and fraternity, peace, and good-will will come among the people.

When I think of the past, and contemplate the present, and anticipate what may be in store for the common people in the future, if they will be friends and act wisely and contend for, instead of against, each other, I am constrained to quote again from the grand Roman, who, when he found his beloved country ruined and desolate, and his fellow-citizens ground down by the heel of oppression, cried out: "Rouse ye, Romans! rouse ye, slaves! our country yet remains."

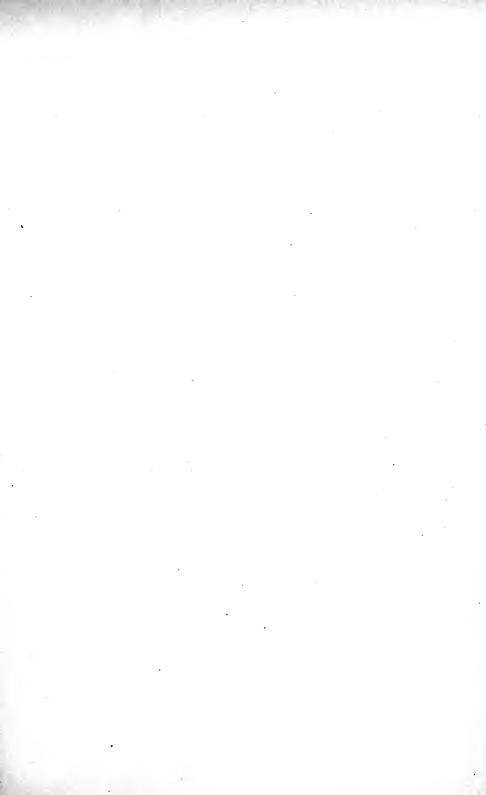
Then he told them of that "elder day," when to be a "Roman was greater than to be a king." Shall not we look back with a patriotic longing to that elder day, when to be an American was greater than to be a king?

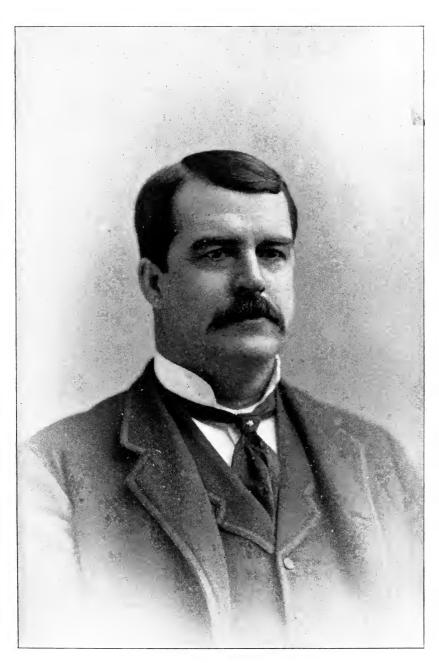
Though poor, though crouching at the feet of as arrogant and unscrupulous oppressors as ever robbed a widow or starved an orphan, let us remember that *our* country yet remains.

Brothers of the sunny South, after thirty years, is it not time that the past should be buried? Grant is dead. Lee is no more. Stonewall Jackson and William McPherson gave up their lives on the field of battle, and fill soldiers' graves. Almost the last one of the great commanders, and a majority of their followers, have gone where war is not known; and why should not we, in our memories, let them lie side by side, and over their graves clasp hands and say to each of them,—

"Soldier rest, thy warfare's o'er; Sleep the sleep that knows not breaking; Dream of battle-fields no more: Days of danger, nights of waking"?

Will not the proudest monument we can build to their memory be a just and righteous government, that will protect the weak, do justice to all, and be of, for, and by the people? Shall we not build a temple of liberty wherein the poorest and humblest shall have a seat, as well as the rich and arrogant, and where he can feel that he is heir to all the glories which the wisdom of the fathers and the unselfish patriotism of our country can give us? "Let us have peace."





DR. C. W. MACUNE.

CHAPTER VII.

THE PURPOSES OF THE FARMERS' ALLIANCE.

By Dr. C. W. Macune, Ex-President National Farmers' Alliance and Cooperative Union, and Editor of the National Economist.

This is a very broad subject, and deep as broad. A superficial observer may state, in a very few words, his conception of the objects and purposes of the Farmers' Alliance, but all such statements will be found very unsatisfactory and imperfect; in fact, the most elaborate essay from the most logical mind will not be perfect, because it is impossible for human mind to conceive in detail the objective development of a great moral and ethical force, evolved and perpetuated by conditions that will exist in the future. No man, therefore, can give a perfect definition of the purposes of the Farmers' Alliance; and he who attempts a definition simply gives his own personal conception of the subject, which may be more or less valuable, according as his field of observation and his accuracy of judgment are good or otherwise.

In a broad sense, the purposes of the Farmers' Alliance are — written or expressed and implied — present and future; they cover to-day a remedy for every evil known to exist and afflict farmers and other producers, and in the future should cover every contingency that may arise, presenting evil to be combatted by means of organization; they are accumulative and ever changing, as the enemy assumes a new guise.

They are written or expressed in the organic and statutory laws of the order, as they have from time to time been enacted and published, and briefly summarized in the declarations of purposes.

They are to be implied from the various positions the order has taken on the issues that it has from time to time met, both local and general, and from the position it may be fairly assumed it will take upon new issues as they may arise in the development of the commercial and educational growth of the country.

To attempt to describe in detail the objects and purposes of the Farmers' Alliance, as shown by the written or expressed laws of the order, and affecting the past and present issues presented, is peculiarly the work of the historian. The object of the present paper must necessarily be confined to such deductions as may be fairly drawn from the history made, and to point out, in a general way, the principles that must under-

lie its action if it shall perpetuate itself as a permanent factor in the development of this great nation. An examination of the past purposes of the order will show that the earliest record we have of a fixed purpose, was that of banding men together to resist the encroachments of land thieves. This seems to have been, at that time, the sole purpose of the order, and was united in with all the vigor possible by the entire In a very short time the whole object seems to have changed, and all the energy of the order was directed towards co-operation to secure lower prices in the purchase of commodities from merchants, and to this end all the lecturers were teaching the policy of concentrating their trade into channels, which by increasing the amount of trade given to special firms or individuals would decrease the profits, and thereby save money for themselves as purchasers. It should be noticed that, accompanying this change of purpose, there was no diminution in the growth or strength of the order. In another year, the object seems to have undergone almost as great a change, for that system of contracts with merchants was entirely discarded, and the whole energy of the order was directed towards establishing a strong business head, conducting its buying and selling, not for profit, but as an auxiliary to the farming effort. Orators, lecturers, and writers were all advocating this with as much zeal as the former object, and the people with one accord were co-operating to secure a new end. And even this change. as shown by the history of the time, was attended with a greater growth than in any preceding period; a growth at that time without a parallel, and an enthusiasm that was all the most ardent advocates could desire.

The history progresses, and in a year or two more this, the most important object, seems in turn to have been set aside, and public attention seems to have crystallized upon the belief that the greatest benefits of the order can only be secured by co-operating to secure the enactment of laws that will stop discrimination against agriculturists as a class. This new departure in the objects of the order, as it is sometimes called, but really this higher development of our conception of the objects of the order, was also attended with the most remarkable growth, far excelling any growth of a like period prior to that time. The conclusion to be drawn from this change in the public conception of the purposes of the order, without any abatement in the growth and development of the movement, must inevitably be, that the growth of the order does not depend upon the conception of those who are filling the offices and acting as leaders in the effort. It does not depend upon the wisdom of any man or set of men; it does not depend, in turn, on the constitution; the peculiar provisions of the organic or statutory laws.

This is evidenced by the fact that the organic law has from time to time been changed, and very materially changed. The statutory law has, at every meeting, been more or less modified and changed to meet new conditions as they arose. There is no way to avoid the conclusion that this great, movement does not depend upon the wisdom of those who started it, upon the peculiar features of the organic or statutory law first enacted, or since modified and changed; neither does it depend in any great degree upon the intelligence, energy, wisdom, foresight, or capacity of its officers. The greatest mistakes have failed to retard its growth or development. The most serious misconception of its objects and purposes, by those acting in the most responsible positions, has in like manner failed to interfere with its grand onward march. The fact must therefore be recognized, that it is the highest evolution of modern development; that it is one of a series of steps in the evolution of material progress, in which the power, force, and benign influences of organization shall reach their height. This must evidently be true, because this organization contemplates securing the co-operation of far the most numerous and most conservative and most intelligent class in the universe.

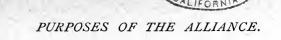
This view of the genesis of the Farmers' Alliance is also calculated to give a correct and acceptable conception of what may be expected of the movement as it reaches higher stages of development. If this is a correct conception of what the Farmers' Alliance is, then it follows of necessity that it will, as time progresses, be recognized by the farmers of this country as a great reserve force for good, a sinking fund of power, a savings bank of force and energy, a great, a powerful, and yet an invisible and ever-present something to which they can apply for power to overcome unjust conditions that may arise at every emergency. The co-operation of the conservative, the good, the honest, and the determined, must mean, when properly carried out, the enforcement of justice, equity, and equality.

This conception of the purposes of the order places it above any local or fleeting issue that may be presented, no matter how fierce the conflict may become. It is a co-operation by agriculturists for good and right, for equality and justice. Business contests or political fights may be incidental to these great ends, but they can never supplant them as the objects of the order; and herein lies the certainty of perpetuity, since good and right, equality and justice, are everlasting principles, and present a perpetual issue with error, vice, oppression, and discrimination. It is the old issue in which the Divine Master gave up his life as an example of the devotion due to principle, and on this issue the Alliance

can certainly be made by the farmers of America the great reserve force of the future, which shall, by wise and conservative methods, meet error and injustice in every shape and form. As such, the order is worthy the most sincere devotion and vigorous support of every member. It is a cause upon which every true philanthropist, as well as every member of the order, should ask the blessing of the Divine Ruler of the universe. It is a living, active, practical, and present embodiment of the cause of Jesus Christ. Every man should work for the cause. No man has yet taken the field and worked actively for the Farmers' Alliance who has not himself grown spiritually and morally. It improves every man to work for the right.

This view of the purposes of the Farmers' Alliance shows it worthy the best effort of head, heart, and hand, of every member, and enables us to comprehend the expression often made, that "it is a great educational movement," because it must depend upon education. and revolution are both calculated to defeat its development, as both must be entirely devoted to a temporary, a local, or a fleeting object that can be obtained, — it would be impossible to agitate or fight for an object that could not be obtained; — but we educate to contend for universal right and justice, which can never be obtained, and still the most good can be secured by striving for it. Hence, methods that contain the elements of agitation or revolution are not in accord with true Alliance methods. This shows that defeat in any direction will only tend to strengthen and stimulate the Alliance to greater efforts, and success will not intoxicate to indiscretion. If it depended upon agitation, defeat would discourage, and success would destroy it, because it would obviate the necessity for its existence.

No business effort could possibly be attended with emoluments enough to compensate for the time and energy employed in this great movement. The temporary agitation, therefore, of any business method as an *object* of the order, while it may for a time be very popular, must be followed by a reaction, because when it fails to satisfy it will discourage. The business effort is a *method*, and not an *object*. The lesson to be taught is, to battle for truth for truth's sake, and then the failure or success of methods will not interfere with the grand onward march of the order. The same may be said of the political efforts of the order; they cannot be its *object*, but they may be *methods*. This distinction should be carefully considered and thoroughly understood by every member, in order that each may be able to meet and combat the sophistry of the opposition that is always predicting the speedy dissolution of the order, when it incidentally takes a hand in politics, as it is



often found necessary to do. All such action is incidental to the great and grand objects of the order.

In conclusion, the above taken together gives a fair idea of my conception of the objects and purposes of the Farmers' Alliance; and it is one in which there is great satisfaction and consolation. It will justify the greatest sacrifices for the good of the order, whether they are appreciated at the time or not. It will stimulate to renewed exertion in the face of defeat, and it will insure caution and conservatism when flushed with success. It bids us use business, politics, or any other laudable and effective agency necessary to secure the triumph of right and justice, and it heeds not the silly cries that prejudice may bring from the teachings of the doctrine of sectional hatred. Ponder it well, and let us remember that the last sentence in the declaration of purposes is a reiteration of the song of the heavenly hosts that praised God in the presence of the shepherds for the birth of Jesus Christ, saying, "On earth peace, good-will toward men."

CHAPTER VIII.

GOVERNMENT CONTROL OF MONEY.

By Judge W. A. Peffer, United States Senator, and Editor of the Kansas Farmer, Topeka, Kansas.

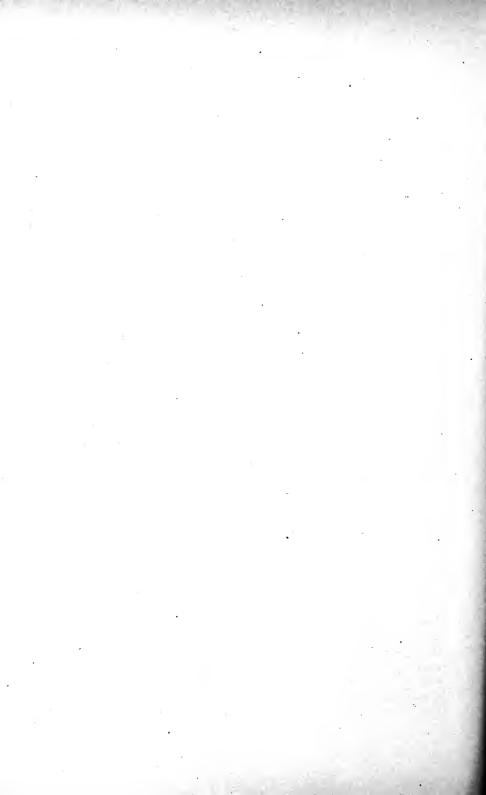
A CAREFUL consideration of the working people, farmers, and all others whose livelihood depends upon their labor, has satisfied the writer that this general prostration of trade is the fruit of our financial legislation; that the laws are based on a system wholly wrong and dreadfully vicious; and that the only wise, safe, and permanent remedy lies in the people taking charge of the finances of the country, making their own money in their own way, and issuing it through agencies established by the general government.

Is there anything unreasonable or dangerous in the request that money be issued by the government directly to the people? be remembered that the money of every nation is issued by the governing power. In this country Congress is authorized to "coin money and regulate the value thereof," and no other body is so empowered. Every American coin, every piece of money, whether of metal or of paper, which has been given to the people as money, was made and issued to them by authority and direction of Congress. Four hundred million dollars in treasury notes were so made and issued in 1862, and the national banking law was enacted one year later for the express purpose of giving more money to the people. At one time the aggregate amount of treasury notes (greenbacks) and national bank notes in use as money, was more than \$700,000,000 dollars. Besides these, some of the bonds were used as money. The government issuing money to the people is not a new or untried proceeding. But what the farmers object to is, that the government unnecessarily uses a very costly channel through which to effect the distribution, and the people are charged with the expense; that is to say, the money is passed to the people through banks, and they - the banks - charge anywhere from ten per cent to twenty-four per cent per annum for making the transfer; whereas, if it were issued to the people directly, without the intervention of the banks or any other private agency demanding profit on the work, the expense would not exceed one to three per cent. If the money is intended for the people (and it is), why not give it to them at once



HONORABLE W. A. PEFFER,

Senator from Kansas.



through government hands, as postage stamps, for example, are given? In the first place, money belongs to the people; the people's general agent, the government, makes the money, every dollar of it, by authority of the people and for them; why, then, should banks or any trafficking agency be permitted to trade in it before it reaches the people to whom it belongs, and for whose use it is intended? That practice is not adopted with respect to anything else which the government does for the people. Whatever else it delivers to them passes through government hands only. What reason can be assigned for delivering treasury notes to the people through banks, that would not apply with equal force to the issuing and delivering to them of patents to public lands, or postage stamps? The object in making and issuing money is, that the people shall have it to use in their business affairs. It would reach them quite as easily and early if sent out through direct channels from the treasury as it does by passing through banks, and it would not cost the people more than from one-tenth to one-eighth as much as the banks and loan agencies compel them to pay. It is believed that this exorbitant charge for the use of money, more than any other one thing, is responsible for the general depression of agriculture.

A change must come. It is inevitable. Farmers cannot pay the principal of their indebtedness if present rates of interest are continued. To pay interest and taxes absorbs all their profits and more. The interest on the indebtedness secured by farm mortgages in ten of the Northwestern States, - Ohio, Indiana, Michigan, Wisconsin, Minnesota, Illinois, Iowa, Missouri, Kansas, and Nebraska, - it is estimated, is equal to a tax of three per cent on the assessed valuation of all the farms in those States. The estimate is based upon the assumption that one-fourth of the farms are mortgaged for one-third of their value. A large proportion of the farms are not mortgaged, and that makes it harder on the owners of the farms which are mortgaged. The average rate on loans in these States is eight per cent. The owner of the money loaned does not receive more than six to seven per cent perhaps, but the borrower pays at least eight; the difference goes to the loan agents. The average rate of taxation for all purposes is three per cent. To this add the interest tax, and it is plainly impossible for a two per cent business to pay out. The average net profit in western and southern agriculture, the last six years, has not exceeded two per cent. Some remedy is absolutely necessary, and one proposition is to reduce the interest rates to what farmers can afford to pay.

But there is a deeper foundation for the doctrine than this, a broader view of the subject, and there is a good affirmative reason for the de-

mand. The making and issuing of money is the exercise of a sovereign power, in the common interest of the people. All money so made and issued is intended for the use of the people of the particular country, and not for the use of the people of other countries. The first moneychangers supplied coins of different tribes or nations to persons who needed them, charging for the service, and from that came banks, used as channels through which money was sent to the people, retaining part of it as compensation. The proper function of money is to serve a public use. The principle involved in its issuance operates in the opening and maintaining of common highways, the erecting of public buildings, establishing water-works, ferries, mills, and schools. All these things are for the use of the people in common, and on equal terms. A postage stamp or a money order is issued through government agents to the people at cost, and without discrimination. People use the highway freely, but may not obstruct it or monopolize its use. And its use is given to them at cost. So it is in every matter which the government manages for the people, except only in the matter of money. It appropriates land of citizens for public use, and permits corporations to build and operate railroads on it for the public convenience, permitting them to charge a reasonable compensation, serving all alike and charging all alike. The object of the Interstate Commerce Law is to prevent discriminations, and give service to the people as nearly as practicable at cost.

Money is in no proper sense a commodity. It is a device which the people have made for their own convenience in trade. A merchant doing a cash business uses money just as he uses the street or the railroad, and he ought to be subjected to no more anxiety about a panic in the money market than he is about the closing of the highway. But it is claimed that banks are necessary for this very purpose of getting money to the people. Then the present banking system is a stupendous failure; for, while the number of banks is increasing yearly, which shows that more money is needed, the circulation of bank notes is constantly and steadily diminishing. The average annual increase in the number of banks during eleven years ending with 1890, is 159, and the bank circulation was decreased \$225,000,000 between 1882 and 1890. The number of national banks in existence October 31, 1889, was 3319, the greatest number since the inauguration of the system, the Secretary of the Treasury said. The amount of national bank notes out on the 30th day of June, 1882, was \$358,742,034, and the amount in circulation September 30, 1889, was \$131,383,334. This was the amount secured by bonds. There were \$72,279,398 in process of retirement, "represented by deposit of lawful money in the treasury," so that

this amount was actually retired permanently. The amount reported as in circulation was \$203,662,732, but the \$72,279,398 represented in the treasury, by "lawful money," must be deducted, leaving \$131,383,334. This is conclusive evidence that the banks are consulting their own interests, not those of the government or the people, in the work they do. A retirement of \$225,000,000 in seven years is not a satisfactory way of getting money to the people. These banks not only charge high rates of compensation for transferring money from the government to the people, but as soon as bonds became more valuable than their own notes, they called in the notes and took up the bonds.

It is conceded by all that some change must be made. The Treasurer of the United States, the Secretary of the Treasury, and the President, all call attention to this subject as one of very great importance, and more than twenty bills relating to the same matter have been introduced in the present Congress. The Treasurer, in his report for 1880. says: "In becoming practically the sole issuer of currency, the government has assumed the duty of supplying the needs of the public for a circulating medium." Precisely. That is what the farmers say — that the government has assumed the duty of supplying the needs of the public, not the banks, for a circulating medium. It is the public, and not the banks, that need a circulating medium, and the reason of it is, that the use of money is a public necessity. The proper use of money is not to be dealt in as an article of merchandise, like wheat, or coffee, or cloth, but to supply a public need. Then let banks be relieved from the duty of transferring money to the public, unless they are willing to do the work as government agents, and for actual cost. Let them be shorn of their power to expand or contract the "circulating medium" at pleasure, and let their operations be confined to the legitimate functions of banking under rules prescribed by Congress, so that charges shall not only be reasonable, but equal for similar service. Let them deliver government money to the people at cost, or let some other agency be established. And money, being prepared for a public use, ought to be free from taxation, just as a public road is.

The objection which is urged against the banks is not that they are banks, but that they are unnecessarily put between the government and the people at an enormous expense, which the people are compelled to bear. Let the banks become government agents, that part of their business being directed from one bureau at Washington instead of by a corps of expensive officers at every bank. If that be done, there need be no further objection. The people will then receive money at cost, and that is what they ask for. The way to ascertain when and where

the people need money, and how much of it they need, is to let them tell it themselves to persons who are authorized to furnish the money. When postage stamps or money orders are needed, the post-office, not a bank or a loan agency, is sought. The post-office is established expressly to do that class of business, and all persons fare exactly alike. There is no discrimination in the post-office, and there is no change when the "money market" is agitated. There are no "Black Fridays" in the postal business. The amount of money needed is not regulated by rates of interest, but the amount asked for or actually used depends largely upon what it costs. If it commands six to ten per cent in the market, much less will be used than if the rate were two per cent or one per cent, though the amount needed is the same. This rule is well understood, and as applied here it answers a question which is often asked: "How shall we get government money into circulation?" The way is easy, the method simple. Establish agencies to supply the people with money, leaving them to say how much they need, just as they do now; but let money go out at cost; then a great deal more of it will be used, and its effect will soon be seen in better prices and greater thrift among producers.

There are two classes of people needing money on loans, - those who want the use of it a long time, and those who want it but a short time. This distinction renders necessary two different classes of agencies for . distribution, - one for short-time loans on personal security, the other for long-time loans on real estate securities. For the former purpose national banks, under proper regulation, will do as well as any other agency which could be devised, and probably better than any one of some which may be suggested. But for the latter something altogether different must be provided. For long-time loans let a loan bureau be established in the Treasury Department (under direction of the comptroller of the currency, who now has supervision of the banks), consisting of three commissioners, and agencies in the several States and Territories, with such clerical assistance as may be needed, the commissioners to apportion the work and superintend its execution. A central agency, located at the capital of a State, might be made the distributing point for that State; operating, through local agencies, at such convenient places as would best accommodate the people, not exceeding say five or seven in a State like Kansas, and twice as many in Texas, five in Pennsylvania, three in Massachusetts, and so on, extent of territory as well as population being considered in the apportionment. The persons in charge of these agencies would enter into bonds, as postmasters and other financial officers do. Long and abundant

experience proves that government money is perfectly secured by bonds which citizens can give. The mode of operation might be about the same as that now in practice by the most reliable and successful real estate and loan agencies, except, chiefly, that charges to the borrower shall not exceed what it actually costs to perform the work, — which is about one per cent per annum on the amount borrowed. perience of the best loan companies shows that when considerable amounts are handled, one per cent is ample to pay all expenses. example may be cited: A well-organized, well-managed Western loan agency has been doing an average business of \$2,000,000 annually for some years, with an average force of twenty persons, whose salaries do not exceed \$1,000 a year. This is equal to one per cent on the amount of business transacted. A considerable part of the work done by a private company would not be required in a government agency. No outside agents, except examiners, would be required; and if one examiner were kept in every county, to be transported from place to place by applicants for loans, the expense of that department might be materially lessened. One per cent will pay all expenses of the proposed plan as an entirety. The persons in charge of the agency should be strictly business men, - not politicians, - and appointed on recommendation of business men. The superintendent of the central agency might be appointed by the President, and he (the superintendent) should appoint all the local officers, who in turn would employ such assistants as might be needed, subject to approval of the general superintendent.

This scheme has all been thought out in detail, but there is not room here to give more than a general outline of it. It is altogether practical, simply applying existing methods in an improved plan. Even in the matter of foreclosing a mortgage, the government would be doing no more than it has done a thousand times in the same courts which would have jurisdiction in cases arising under the proposed plan, the difference being only that in one case the parties were both citizens; in the other, one of them would be the government. Land sold in favor of the government would become government land subject to public sale to the highest bidder.

For loans on personal security and for short time, this plan may be adopted: amend the national banking law so that lawful money, instead of bonds, may be deposited as security for circulation; let banks with small capital be established in small places, say as low as \$15,000 to \$20,000, limiting loans to small amounts. No loan shall be made for more than ninety days, charges not to exceed what would be equal to

one-fourth of one per cent for thirty days; five-twelfths of one per cent for sixty days; and one-half of one per cent for ninety days. Permit increase of circulation according to public needs. The withdrawal of bank notes from circulation would not affect the volume of currency, because the notes are secured by lawful money, on deposit, and as fast as notes are retired, an equal amount of lawful money is put out in their place; for this reason no restriction as to retirement of bank notes need be placed upon the banks.

From and after the inauguration of the proposed system, all moneys shall be non-taxable. If bonds are not taxed, - and they ought not to be, — then the money of the people ought not to be taxed in anybody's hands, except it be in cases where it is hoarded in large amounts, and thus kept out of circulation. Lands used for a public highway are not taxed, though lands adjoining are. Money used by the people in the transaction of their ordinary business, in facilitating exchanges of the value of commodities, ought not to be taxed, and the use of money as a commodity ought to be prohibited. No man has any more moral right to monopolize the use of money than he has to exact tribute from persons who travel on the highway, and the legal right ought to be taken away. Money is not to be used for purposes of private speculation, because it is made for the common use of the people as they need it. It is not proposed to keep money on tap for persons to draw at will, as they would draw water from a public fountain; but for those only who are willing to pay the cost of delivery, as is done in obtaining the service of a railway or ferry company. The fare must be paid, or the service will not be rendered. So in this case, money will not be delivered to persons who are not willing to pay the cost of handling it and secure the return of an equivalent at the time agreed upon. It is proposed only to issue money directly to the people as they need it, and as nearly as practicable at cost, on condition that they pay the expense and return a sum equal to that received. The only change from present methods in this respect consists in the lower rate of charges, and in the money being non-taxable. Working people will earn money just as they do now; but this scheme, if put in operation, will force money into productive industry instead of into mortgages, as now, thus creating new and permanent demand for labor; it will increase the value of products of labor, and that will be good cause for demanding advance in wages. Nothing is proposed which is not now being done in all parts of the country. The changes would be only two: (1) the government would take charge of the work, and (2) the people would get the use of their money at rates which they can afford to pay. It would not require a

force of more than about three or four thousand persons to operate all the agencies required in the whole country, and they would do as much work as is now done by nearly a hundred times that number, all living off of commissions which borrowers must pay. Three hundred agencies, with an average force of ten persons each, would be enough for some years to come, and one per cent would pay all the expenses of the loan bureau.

Money put out on short time and on personal security requires more time and closer attention, with some personal risk to the agent; the expense is necessarily greater, and for that reason the charges are higher. The banks would go right along as they are now doing, with the changes before suggested. If it be objected that there are too many details for the government to look after, compare it with the Post-Office Department, which consists of a central establishment at Washington, with 59,000 branches in different parts of the country, in charge of 150,000 persons, all looking after details, and doing a business amounting to more than \$1,000,000,000,000 annually.

Where will the money come from to start this scheme? As before stated, the national banks have withdrawn from circulation, since 1882, \$225,000,000 of their notes. The steady increase in the number of banks (average 159 yearly the last eleven years, as before shown) is evidence conclusive that, judged from the banks' own standpoint, the business of the country is increasing, needing additional banking facilities, and it would seem reasonable that a larger circulation would be needed as much as more banks. But the circulation was contracted by the banks to the amount stated, and this contraction covers precisely the same period in which farming has become discouragingly unprofitable. With the retirement of national bank circulation, prices of wheat, corn, cattle, cotton, and other farm products, and manufactured articles, except sugar, fell about thirty per cent. Let us restore that circulation, and add to it as much as would have been a reasonable expansion, — say \$8,500,-000 annually, — and issue treasury notes for the whole amount, —\$300,-000,000. On the first day of March, 1878, the national bank circulation was \$313,888,740; and on the first day of October, 1882, it was \$356,-060,348, showing an average annual increase of \$8,434,321 during the period of five years. A like increase during the next seven years, to 1889, would have increased the volume of currency \$59,040,247. To this add the \$100,000,000 held as reserve for the redemption of treasury notes, and the cash balance, whatever it be, — say \$50,000,000, — and we have about \$450,000,000 available money to begin with. Repeal the resumption law so far as it requires the holding of a redemption fund; establish

free and unlimited coinage or use of silver, at present weight and fineness, using the coin or bullion as basis for the circulation of paper certificates. This fresh money could be used for the immediate relief of persons whose homes are mortgaged - to secure debts which are due. They would pay their debts, and the money would at once begin to circulate where it is most needed, - among the toilers. Instead of being used for speculation, it would be used in building, in manufacturing, in mining, in transportation, in making homes, in erecting permanent improvements, and in every legitimate way, where poor as well as rich would receive equal benefit from its use. Being worth less as a commodity to traffic in, because production and traffic yield a profit greater than one per cent per annum, there will be no temptation to deal exclusively in money. And the banks will receive as much profit on the same amount of business as they do now, because relieved from all taxation on their notes and other moneys, and without risk of loss from "corners" and "runs"—the work of gamblers. Money not being taxable, the banks would enjoy an advantage from that source equal to an average of about three per cent per annum - in the new States a little more, in the old ones a little less.

This particular scheme is not presented as that of the farmers or of any association. It is an individual contribution to the discussion of the question, — how to get money from the government directly to the people, and at cost. As before intimated, the details have all been thought out, but it is not possible to give more than a skeleton of the plan in this place.

It may be objected that a sudden reduction of interest would be equivalent to the confiscation of a large amount of property now invested in money. That, too, has been considered. Did those who thus object estimate in advance the effect of contracting the currency to resume specie payments, increasing the value of money and reducing the value of everything else? Did they think about how much farmers would lose by the operation of that dreadful process? And if they did think of it, did they care? When they now look out over the four and a half million farms of the country, and see that everything there is depressed by reason of low prices, and when they learn that this condition has been present some half-dozen years, are their hearts troubled, and do they feel that the debtor has been wronged and that they are responsible? Millions of dollars have been sunk by this heartless forcing down of prices, adding to the gains of the already rich. The government is not under obligations to furnish investments for its citizens, but it is bound to supply them with money. The poor have lost enough. Let them have some benefit now from the just protection of the government.

What are the special advantages of the proposed plan?

First, It would dethrone the money power and make panics impossible.

Second, It would add twenty-five per cent to the value of all commodities in general use, — farm products and manufactured goods more particularly.

Third, It would save to their owners the homes of a million families within ten years.

Fourth, It would afford a good investment for persons of small means. Fifth, It would force money into circulation and keep it there.

Sixth, It would aid poor people to obtain homes on the public lands. Seventh, It would encourage the organization of building associations, securing homes for mechanics and other persons of limited means in cities.

Eighth, It would bring banking privileges close to the people.

Ninth, It would afford a ready means of relief to farmers who wish to hold their crops a few months; elevator and warehouse receipts would secure money at low rates on short time.

Tenth, A complete record of private mortgages would be kept.

Eleventh, It would establish a monetary system that with little change, and that to simplify it and lessen the cost, would be permanently satisfactory to the people.

CHAPTER IX.

THE RACE PROBLEM.

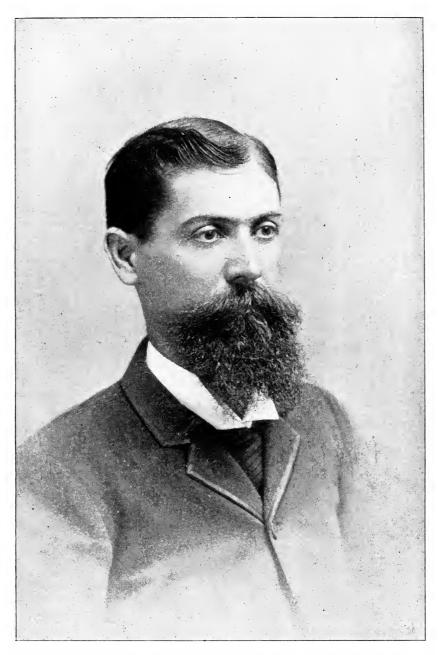
By J. H. Turner, National Secretary-Treasurer of the National Farmers'
Alliance and Industrial Union.

Since President Lincoln issued his emancipation proclamation, January 1, 1863, no question has provoked more discussion and serious consideration than this one, and after twenty-eight years of discussion and legislation, until recently the question seemed no nearer solution than it did when the famous proclamation was issued. Writers of every character, both white and black, have taken a turn at its discussion, and have widely differed as to the means to be employed in its solution.

In writing this short article, I fully realize the gravity of the subject I have in hand, and will therefore remain near the shore. It is not my purpose to solve this question, but simply to give my experience with the negro in the South, coupled with such facts and suggestions as will enable those who know but very little of the real conditions that exist in the South, to form correct ideas in regard to the true conditions that exist between the great masses of the white and colored people of the South. I shall be perfectly satisfied with my effort, if I am able to elicit one thought, word, or deed that will help to bring about a better understanding all over this country, that will bring peace and prosperity to the great common people, both white and black.

I hope the reader will pardon me for alluding to myself in this connection just enough to state that I was born on a farm in middle Georgia. At the time I was born my father was a slave-owner. I have been intimately associated with the negro on the farm, all my life, and know something of the relation of the two races from actual experience. What I have to say on this subject shall be entirely free from all party spirit, and solely in the interest of truth.

After the war, when the negro found himself a citizen of the United States, he was besieged by a class of pretended friends (I allude to the carpet-baggers from the North) who have proven to be his worst enemies. To control them politically, these same carpet-baggers promised each head of a family forty acres of land and a mule, if he would vote right; that is, for the carpet-baggers. The poor negro was not only promised this, but social equality with the whites, and a great many other things



J. H. TURNER, Secty.-Treas. N. F. A. and I. U



which, since he has found out better, he neither needs nor wants. The negro at that time followed willingly the lead of these fellows, because he had no one else to follow, politically. The white people of the South ignored him politically, and hated him, because he followed those whom they knew to be enemies of good government. Under such circumstances, the negro was easily led to believe that his old master was his worst enemy, and would again enslave him if he could, though when he would get into trouble or business complications of any kind, the first man to whom he would apply for advice and counsel would be his old master, who would almost invariably give him the best advice, and very often protect and defend him in his business affairs.

Thus the two races lived for several years after the war. As years passed on, the negro found that the promises of the politician were made only to be broken. When this dawned upon him, he at once began to rely upon himself, and from that day he began to make progress. He realized the fact that, if he was ever independent and happy, he would have to educate himself and acquire property.

All the Southern States have public school systems. The whites and blacks are required to attend separate schools, though the black child receives the same amount of public school fund that the white child does. In my own State — Georgia — the colored children receive more money, in the way of public school funds, than the whole colored population in that State pays taxes of every kind; therefore they do not contribute anything toward supporting the State government. This statement will doubtless appear strange to those who are unacquainted with the facts, and have only heard the demagogue's side of the question. However, an honest investigation among the white and colored farmers (and they constitute a large majority of the population) will reveal many such facts.

The negroes are making a heroic effort to educate the rising generation, and will send their children to school, when the public schools are opened, whether they have anything to eat and wear or not. They will make any kind of sacrifice to send their children to school.

A great mistake has been made, and doubtless thousands of honest people have formed erroneous opinions in regard to the relations of the great masses of the two races in the South, basing their opinions upon the reports of riots and other disturbances in the towns and cities, in which, nine times out of ten, no one took any part except a few worthless negroes, who generally work by the day at some public work, and a few drunken white men, who lounge around the saloons and street corners, and whittle goods boxes. I have never heard of a race riot or

disturbance of any kind in the rural districts of the South, except two or three instances that occurred soon after the war, in what is called the Black Belt of South Carolina, Mississippi, and Louisiana.

For partisan political purposes, these riots among the worthless whites and blacks about the towns have been paraded in the partisan press of the country for the purpose of keeping the old fire of sectional hate fanned into a flame. Such things have been used in the North by the politician, in the press and on the stump, to continue a solid Republican North, pretendedly that the Southern brigadier might be kept under; while the same class of politicians in the South has used the same thing to keep a solid Democratic South, pretendedly that negro supremacy might be kept down. The people of the North and South have listened to these politicians, while plutocracy has done its perfect work in robbing both.

The politician in the South has seemingly been in mortal fear of the negro in politics, all the while, but has so managed as to keep the negro in a solid political phalanx. If the negro was such a menace to good government, and the inferior race mentally, morally, socially, and naturally, why have such tactics always been used as would keep them in one solid political party?

The true answer to this question will perhaps shed more light upon this subject than a great many are willing to admit is true. It is admitting a thing that the evidence will not sustain, if we should claim that a superior race, that has enjoyed the blessings of civilization, education, and culture for ages, is unable to persuade an inferior race; and if persuasion were not the thing to use, there were various other expedients to which easy access could have been had, to divide their vote so that negro supremacy would have forever been out of the question.

To convince the reader that the negro vote could have been divided long ago, and will be divided in the near future, I will make a short quotation from a newspaper article, written last February, by Rev. J. L. Moore, a colored Methodist minister of Crescent City, Florida, who was a delegate to the meeting of the Colored National Farmers' Alliance and Co-operative Union, which met at Ocala, Florida, at the same time the National Farmers' Alliance and Industrial Union met there. The article quoted from was written in reply to an editorial that appeared in one of the partisan newspapers of Jacksonville, Florida, on the race question. It is as follows:—

[&]quot;According to our privileges, I think we have helped the white men all they could expect under our condition; and we are not clamoring for social relations with the whites either. We do not want to eat at their tables, sleep in their beds,

neither ride in the cars with them; but we do want as good fare as the whites receive for the same consideration. As to the Alliance, in the language of Hon. R. M. Hawley of Missouri, we believe this to be its mission:—

"'No protection to party favorites; no force bills to keep up party and sectional prejudices; no secret caucuses by members of Congress or members of the legislatures, to consider matters of legislation. Let these be abolished by law. Also abolish all party primary elections and party conventions for nominating candidates. and provide for a people's primary election, where every voter can write on his ticket the name of any person he prefers for any office, from President down to constable. Let the proper county, State, and national officers, who shall be designated by law, receive the returns, count up and authorize the result, which shall be that the candidate receiving the highest number of votes, and the one receiving the next highest number for each office shall be declared the contending candidates for final election. This would empty politics of party strife and all its concomitant evils, and lead to the representation of the leading industry of each district in Congress, and county in the State legislatures. Party blindness would be removed, and let in the clear light of the science of economical government. I believe that non-partisanism will not reach its full and natural results till these things are accomplished; and this I believe to be the mission of the Alliance.'

"But, Mr. Editor, can we do anything while the present parties have control of the ballot-box, and we (the Alliance) have no protection? The greatest mistake, I see, the farmers are now making, is this: The wily politicians see and know that they have to do something, therefore they are slipping into the Alliance, and the farmers, in many instances, are accepting them as leaders; and if we are to have the same leaders, we need not expect anything else but the same results. The action of the Alliance in this reminds me of the man who first put his hand in the lion's mouth, and the lion finally bit it off; and then he changed, to make the matter better, and put his head in the lion's mouth, and therefore lost his head. Now, the farmers and laboring men know in what manner they were standing before they organized; they lost their hands, so to speak; now, organized in one body or head, if they give themselves over to the same power that took their hand, it will likewise take their head.

"Now, Mr. Editor, I wish to say, if the laboring men of the United States will lay down party issues and combine to enact laws for the benefit of the laboring man, I, as County Superintendent of Putman County Colored Farmers' Alliance, and member of the National Colored Farmers, know that I voice the sentiment of that body, representing, as we did, 750,000 votes, when I say we are willing and ready to lay down the past, take hold with them irrespective of party, race, or creed, until the cry shall be heard from the Heights of Abraham of the North to the Everglades of Florida, and from the rock-bound coast of the East to the golden Eldorado of the West, that we can heartily indorse the motto, 'Equal rights to all, and special privileges to none.'"

It is a pretty general custom with the Democratic party in the South, that when the county executive committee meets to arrange for and call a primary election, to nominate candidates for any office, it passes a resolution setting forth that no one except white Democrats will be allowed to vote in that election. This county executive committee is generally made up of the political bosses of the county,—the ones who are looking forward to the loaves and fishes. Why not let colored Dem-

ocrats vote in a primary election? The politician says to himself: "That would never do; for then we would soon have the negro vote divided, and the bugaboo of negro supremacy would vanish like the mist before the sunshine, and my occupation, like Othello's, would be forever gone."

Judging from the signs of the times, the professional partisan politicians, both South and North, have had their day, and honest, good men will soon rise up and administer the affairs of this nation in the interest of right and justice. Henry W. Grady uttered the true sentiments of the great mass of the Southern people, especially the farmers, when, in his speech before the New England Society of New York, he gave utterance to the following eloquent extract taken from that speech:—

"But what of the negro? Have we solved the problem he presents, or progressed in honor and equity toward solution? Let the record speak to the point. No section shows a more prosperous laboring population than the negroes of the South; none in fuller sympathy with the employing and landowning class. He shares our school fund, has the fullest protection of our laws and the friendship of our people. Self-interest, as well as honor, demands that he should have this. Our future, our very existence, depends upon our working out this problem in full and exact justice. We understand that, when Lincoln signed the emancipation proclamation, your victory was assured, for he then committed you to the cause of human liberty, against which the arms of man cannot prevail [applause] — while those of our statesmen who trusted to make slavery the corner-stone of the Confederacy doomed us to defeat as far as they could, committing us to a cause that reason could not defend or the sword maintain in the sight of advancing civilization. [Renewed applause.]

"Had Mr. Toombs said, which he did not say, 'that he would call the roll of his slaves at the foot of Bunker Hill,' he would have been foolish, for he might have known that whenever slavery became entangled in war it must perish, and that the chattel in human flesh ended forever in New England when your fathers - not to be blamed for parting with what didn't pay - sold their slaves to our fathers - not to be praised for knowing a paying thing when they saw it. [Laughter.] The relations of the Southern people with the negro are close and cordial. We remember with what fidelity for four years he guarded our defenceless women and children, whose husbands and fathers were fighting against his freedom. To his eternal credit be it said that, whenever he struck a blow for his own liberty he fought in open battle, and when at last he raised his black and humble hands that the shackles might be struck off, those hands were innocent of wrong against his helpless charges, and worthy to be taken in loving grasp by every man who honors loyalty and devotion. [Applause.] Ruffians have maltreated him, rascals have misled him, philanthropists established a bank for him, but the South, with the North, protests against injustice to this simple and sincere people. To liberty and enfranchisement is as far as law can carry the negro. The rest must be left to conscience and common sense. It must be left to those among whom his lot is cast, with whom he is indissolubly connected, and whose prosperity depends upon their possessing his intelligent sympathy and confidence. Faith has been kept with him in spite of calumnious assertions to

the contrary, by those who assume to speak for us, or by frank opponents. Faith will be kept with him in the future, if the South holds her reason and integrity. [Applause.]"

The above was delivered before a Northern audience; and to show that Mr. Grady was perfectly sincere in every word he said on this subject, I will now give an extract from a speech delivered by him at the Augusta, Georgia, Exposition, in 1889, which is as follows:—

"As for the negro, let us impress upon him what he already knows, that his best friends are the people among whom he lives, whose interests are one with his, and whose prosperity depends on his perfect contentment. Let us give him his uttermost rights, and measure out justice to him in that fulness the strong should always give to the weak. Let us educate him that he may be a better, a broader, and more enlightened man. Let us lead him in steadfast ways of citizenship, that he may not longer be the sport of the thoughtless, and the prey of the unscrupulous. Let us inspire him to follow the example of the worthy and upright of his race, who may be found in every community, and who increase steadily in numbers and influence. Let us strike hands with him as friends - and as in slavery we led him to heights which his race in Africa had never reached, so in freedom let us lead him to a prosperity of which his friends in the North have not dreamed. Let us make him know that he, depending more than any other on the protection and bounty of government, shall find in alliance with the best elements of the whites, the pledge of safe and impartial administration. And let us remember this - that whatever wrong we put on him shall return to punish us. Whatever we take from him in violence, that is unworthy and shall not endure. What we steal from him in fraud, that is worse. But what we win from him in sympathy and affection, what we gain in his confiding alliance, and confirm in his awakening judgment, that is precious and shall endure and out of it shall come healing and peace. [Applause.]"

Every time the partisan politician speaks on this subject he purposely complicates and makes it worse; but thanks to an all-wise Providence for the power that now rests in the hands of the Farmers' Alliance, which has taken up this great question where the noble Grady laid it down. Until the advent of the Farmers' Alliance and Industrial Union and the Colored Farmers, the negroes, as a class, have taken but very little interest in politics for several years. They lost their former faith in politics and politicians, which was very natural to one acquainted with the fact that they had always been loyal partisans, and for their devotion and zeal they had been paid off with a few appointments as postmasters in, most generally, third or fourth-class post-offices.

Since the negroes have been organized into the Farmers' Alliance, they have made considerable progress in the study of economic questions, and, judging from the utterances of their leaders, they are willing and anxious to sever all past party affiliations, and join hands with the white farmers of the South and West in any movement looking to a

betterment of their condition. The white farmers of the South, while they are more reluctant to cut loose from party, are perfectly willing and ready to take the negro by the hand and say to him: We are citizens of the same great country; we have the same foes to face, the same ills to bear; therefore our interests as agriculturists are one, and we will co-operate with you, and defend and protect you in all your rights.

In proof of the above, I will simply submit the agreement entered into by the National Farmers' Alliance and Industrial Union and the Colored National Farmers' Alliance and Co-operative Union, at their meetings in the city of Ocala, Florida, on the second day of December, 1890, which is as follows:—

"Your committee on above beg leave to report that we visited the Colored Farmers' National Alliance and Co-operative Union Committee, and were received with the utmost cordiality, and after careful consultation it was mutually and unanimously agreed to unite our orders upon the basis adopted December 5, 1890, a basis between the National Farmers' Alliance and Industrial Union and the Farmers' Mutual Benefit Association; to adopt the St. Louis platform as a common basis, and pledge our orders to work faithfully and earnestly for the election of legislators, State and national, who will enact the laws to carry out the demands of said platform; and to more effectually carry it into effect recommend the selection of five men from each national body, two of whom shall be the president and secretary, respectively, who shall, with similar committees from other labor organizations, form a Supremé Executive Board, who shall meet as often as may be deemed necessary, and upon the joint call of a majority of the presidents of the bodies joining the confederation; and when so assembled, after electing a chairman and secretary, shall be empowered to do such things for the mutual benefit of the various orders they represent as shall be deemed expedient; and shall, when officially promulgated to the national officers, be binding upon their bodies until reversed by the action of the national assemblies themselves - political, educational, and commercial; and hereby pledge ourselves to stand faithfully by each other in the great battle for the enfranchisement of labor and the laborers from the control of corporate and political rings; each order to bear its own members' expense on the Supreme Council, and be entitled to as many votes as they have legal voters in their organization. We recommend and urge that equal facilities, educational, commercial, and political, be demanded for colored and white Alliance men alike, competency considered, and that a free ballot and a fair count will be insisted upon and had, for colored and white alike, by every true Alliance man in America. We further recommend that a plan of district Alliances, to conform to district Alliances provided for in this body, be adopted by every order in confederation, with a district lecturer, and county Alliances organized in every county possible, and that the lecturers and officers of said district and counties co-operate with each other in conventional, business, educational, commercial, and political matters."

After the above agreement was entered into, the following communication was received from the Colored National Farmers' Alliance and Co-operative Union:—





"To the National Farmers' Alliance and Industrial Union, convened at Ocala December 3, 1890: Alliance and Co-operative Union recognizes your fraternal greeting; gladly do we accept your right hand, and pledge ourselves to the fullest co-operation and confederation in all essential things."

To one who feels a deep interest in this matter, this looks more like a step in the direction of settling this question in the South than anything that has ever been done since the question existed.

"God moves in a mysterious way, his wonders to perform," and who knows but that he has raised up a Moses, in the person of these farmers' organizations, to lead us out of these our troubles? So mote it be.

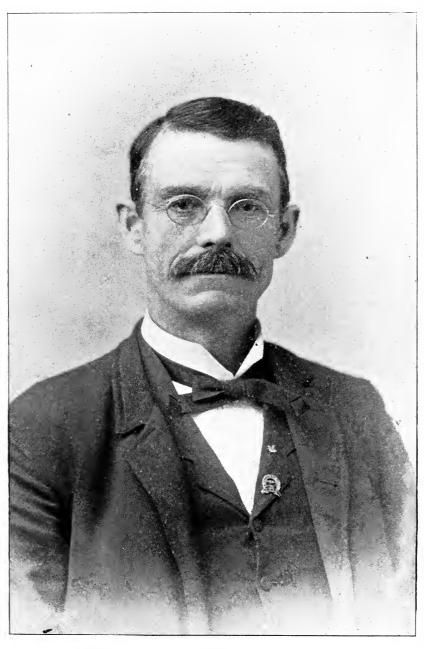
CHAPTER X.

THE POLITICAL REBELLION IN KANSAS.

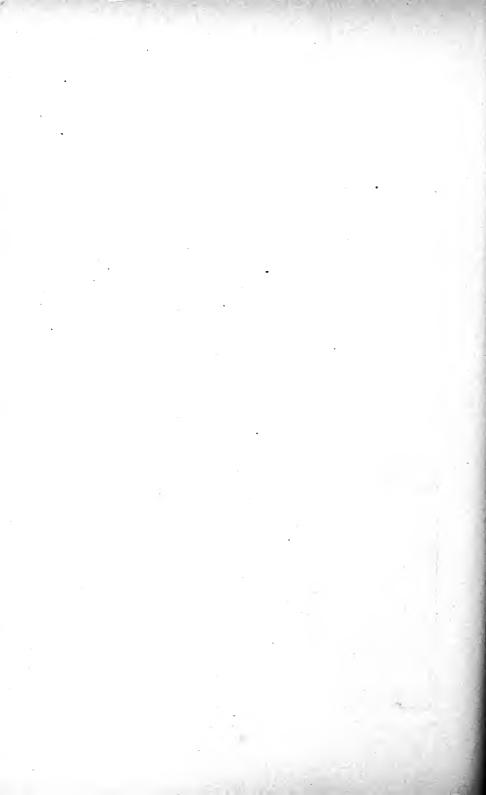
By Hon. Jerry Simpson, Member of Congress from the Seventh District of Kansas.

In the campaign of the fall of 1890, in Kansas, a new party sprang into power, which gained strength with a rapidity never before equalled. What was the cause that produced this sudden rebellion against the Republican party? What was the cause of the uprising of the farmers, and what is the remedy for the evils of which they complain? All these are questions pressing for answers; in fact, they must be answered correctly, and the remedy be applied, if this government is to continue to be a free government by the people. It is not always safe, perhaps, to trust a sick man to diagnose his own case; neither can you trust to quacks who profess to cure all ills to which flesh is heir with one quack remedy.

We seem to have once again entered one of those periods in which nations have been confronted with these same questions: like the riddle of the Sphynx, not to answer was to be destroyed. Never before in the history of the world were there such momentous questions; never before in the history of the world was the welfare of the human race so bound up in the solving of these problems. We must now and here settle whether or not we are capable of self government. We must grapple with, and master, this monster which has eaten up the substance of the producers of wealth in every land. The voters of Kansas are the best representatives of the agricultural class of a half-dozen of the best agricultural States in the Union; they have come West to better their condition; they are a part of that great throng which is always pressing ahead into new countries, trying to escape the oppression of the men who live off their labor; but they find that in Kansas, as in other States, it is impossible to get from under the load which is continually being shifted upon their shoulders, and which grows heavier from year to year. They have found that, in the last twenty-five years, the country, under the control of the great Republican party, has passed into the hands of the money power, the capitalists of the country, who have doubled the oppression of the agricultural classes. Having cried in vain for relief through the Republican and Democratic parties, they are at last driven



HONORABLE JERRY SIMPSON,
M. C., Seventh District of Kansas.



to desperation, and have resolved to take the political management of the State into their own hands. Out of the necessity to adjust these questions grew up the Alliance movement in Kansas.

They began to inquire how it is that in this new State, with its boundless resources, improved machinery, skilled labor, and its improved means of transportation, the farmers are getting deeper in debt each year; that this new State, that twenty-five years ago was without debt, is now so hopelessly encumbered that it would not sell for enough to pay its debts. This certainly is not caused by the failure of crops, for the crop of Kansas will average with that of any other State in the Union; and Kansas has each year a surplus of wheat, corn, hogs, and cattle.

Some of our public men have said that it was over-production, that we have been raising too much wheat, corn, hogs, and cattle for the world's use. Others have said that it is because the farmers are too extravagant. Others that they are idle and spend their time in talking politics. Others that the farmers do not employ the best methods of farming, and do not understand how to make the soil produce the most with the smallest amount of land and labor. All of which is contradictory and unsatisfactory, and we must look further for the true cause. They made the discovery after they had lighted the lights in schoolhouses and began to study and discuss these economic questions. They learned that what a farmer wants when he raises a crop of corn and wheat and other products of the farm, is to trade his surplus of such products for the things which he needs; that he must produce on his farm what he must exchange for the products of the manufacturer, and turn them into money value, which represents the value of all articles. He found that, under the present system of trade, he was prevented from making this exchange with the men who would give him the best bargain; that he would be fined, in fact, from forty-seven to fifty-two per cent for his trade, and compelled to trade in the market where there is no competition, where competition has been destroyed by laws passed in the interest of the manufacturer; and through these laws he is forced to bargain with the men who will give him the least of the things he wants for the greatest amount of the things which he does not want. and so he grows poorer and poorer from year to year and consumes less. As this goes on, the manufacturer making the articles the farmer should consume soon learns that his custom is falling off, and that he must reduce the number of his employees and the wages of those retained. The laborers thus thrown out of employment must also reduce their expenses, and are forced to use less of the products of the farm and factory. In this way is brought about what the political wiseacres call an over-production, which is in fact under-consumption. There is an over-production of too many farmers, laborers, manufacturers, professional men, merchants, railroads; in fact, too many of everybody. There are particularly too many fools who vote to keep up such a system of government, which obstructs trade and progress, and brings poverty and distress upon the whole land.

Then, again, when the farmer sends his surplus to market the rail-roads lie in wait for him. In effecting his exchange he must use this great public highway, and he finds that what should be a public blessing is turned into an engine of oppression, and that all the benefits growing out of this great invention are given to the large corporations, which are enabled to rob the people through special privileges granted by laws passed by a Congress whose election has been secured by the free use of money wrung from the people by the charge upon watered stock.

Another cause of poverty among the farmers is our system of indirect taxation. Under this system a man is taxed on what he spends, and as the average income of the Western farmer is not more than \$500 per annum, he spends at least \$350 of this to support his family. of this is taken from him by indirect taxation, or in bounties to capitalists or rich corporations. The balance of his income is used up in paying State and municipal taxes. To cover this loss that falls upon him from year to year, he is forced to take out a mortgage on his farm. Then it is that he falls a prey to the grandest robber of them all, the loan agent or shark, who demands upon a mortgage of \$500, in some instances, as high as twenty per cent for securing the loan, and from ten to fifteen per cent for insuring the small buildings on the farm, and then raises doubts about the claimant's right to prove up on it at the land-office, and extracts ten or fifteen per cent for securing the poor settler's title to the land upon which he has lived and worked hard for over five years, in accordance with the homestead law.

The farmer, of course, demurs at this exaction; but the time has come when he must buy improved machinery, and pay debts previously contracted, and the government fees at the land-office before he can prove up. He and his wife, fearing that they must give up the fruits of their labor and struggles to build up a new home, sign the papers, and, after the Shylock's exactions, receive from two to three hundred dollars out of the \$500 twelve per cent mortgage, and divide the balance of the swag between the loan agent and the banker, who sells the mortgage, knowing how it has been obtained, to his neighbors, friends, or kinsmen in the East, for the full face of the mortgage, and swaggers around town

as a great financier. The mortgage usually contains the provisions that the buildings shall be kept insured, and the taxes paid on the farm, or foreclosure and eviction can be summarily enforced on the settler, leaving him and his family, with his homestead rights to take up public land gone, in a strange land without home or friends.

How could it be possible under such a system that the rich should fail to grow richer and the men of moderate means should rapidly fall into the ranks of the extremely poor? Then is it any wonder that the men who followed "old John Brown" into Kansas, on the principle that it was wrong to rob the black man of the fruits of his toil, should rebel when their own welfare is at stake? It can easily be seen that, after waiting year after year for the Republican party to come to their relief, and each succeeding year seeing relief further off, and that the State had fallen into the hands of the worst political crew that ever cursed any country, under the domineering rule of this arrogant party, controlled by this aristocratic ring of political office-seekers, who cared only for their own advancement, forbearance ceased to be a virtue, and the farmers were wise in resolving to take charge of things themselves. They made the discovery that for long years they had been blinded to their own interests by designing politicians, who kept alive the old war issues and prejudices. They resolved to cast aside the chief apostle of this doctrine of hate, John J. Ingalls, and thereby set an example to the rest of the country, particularly to the South. They saw that new issues would be brought to the front that were pressing for adjustment; therefore it was time to bury the old ones. With this new declaration of independence, called the "St. Louis Demands," they commenced a political revolution that bids fair to sweep from one end of the country to the other, and drive from place and power the men who fattened upon the labor of the people. That this will be no easy task all history will testify; for the oppressor never lets go without a struggle, whether he wields his power through military force, the Church, by controlling money, trade, commerce, transportation, through cunningly devised schemes of legislation, or by holding men in chattel slavery. All history proves that this is the selfish, brutal part of the human race, which knows no law but force.

Now this rebellion in Kansas is against this principle. The people have been driven to it by oppression from the moneyed class of this country. They have served notice upon the politicians of the country that, from this time on, the farmers of this country are going to take a hand in its politics.

CHAPTER XI.

THE NEEDS OF THE SOUTH.

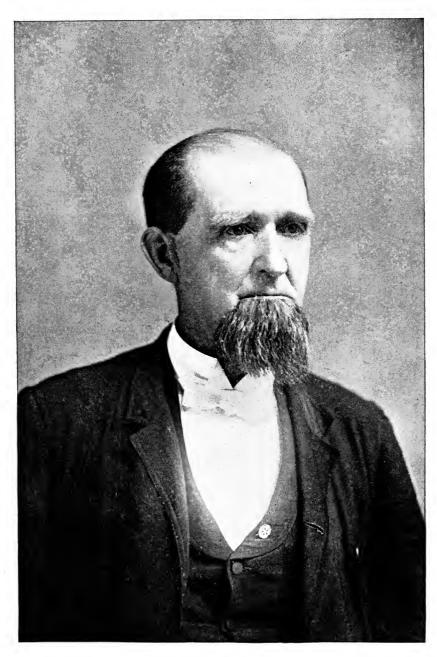
By Hon. L. F. Livingston, Member of Congress from Georgia, and President of the Georgia State Alliance.

The needs of the South are peculiar, rendered so by a combination of circumstances that the outside world is slow to understand. No other civilized and Christianized people have been so misunderstood and misjudged. Since the war between the States, the magazine correspondents, newspaper scribblers, and politicians, combined with those who knew the former power and greatness of the South socially, politically, and financially, and actuated purely by prejudice and jealousy, were determined that her reconstruction should never lead to her former prestige. These have all placed the South and her environments before an inquiring world in a false light. Nothing has been given so freely, "without money and without price," to the struggling South as advice. This, as usual, comes from people either ignorant of our needs or wilfully opposed to the betterment of our condition, and has proven as worthless as gratuitous.

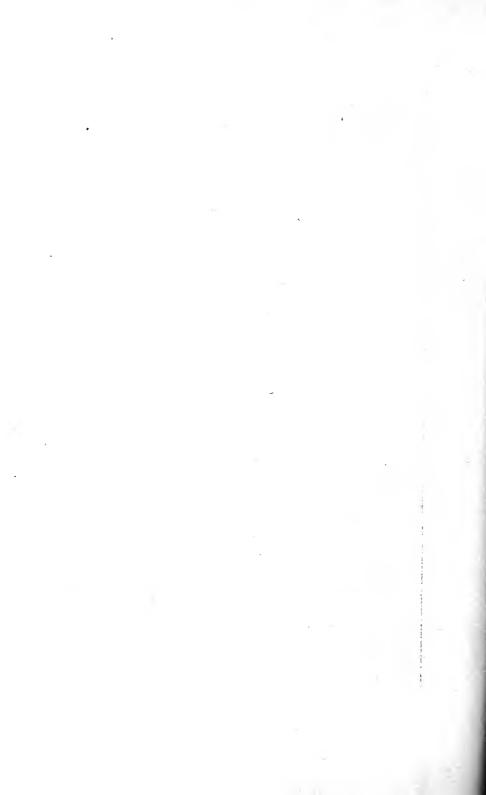
It would prove an interesting chapter in the history of the South if this intermeddling in detail, and the real condition of the people, could be spread out before the civilized world. To do so in this article would neither be appropriate nor consistent with the object for which it is written.

We often come to correct conclusions more readily by looking at the negative side of a proposition. There are many things the South does not and never will need, and there are other things that she may, in her future development, require that are inopportune now. There are two great questions that effect her interest: What are her present and possible needs? and how are they to be obtained? To present this more clearly, we reassert, first, the things she does not need should be shown.

The South does not need a moneyless immigration. This has been a wild and visionary demand, both from home and abroad. The day may come when such immigration would be profitable. At this time it is a struggle on our part to decently support and educate the present population. Immigration, to be profitable to a country or section, must find an open road to labor, and cheap and ready means of supplying their



HONORABLE L. F. LIVINGSTON,
M. C., Fifth District, Georgia.



present necessities. To be contented and useful, their social and political surroundings must be to some extent similar to those formerly enjoyed. To be prosperous, they must find reasonable compensation from the output of their labor. None of these circumstances would meet the moneyless immigrant in the South.

It has been said of some of the populous European countries, that their greatest need was "more room and fresh air." This cannot be said of the South. We have millions of acres of fertile lands lying waste, and our climate is all that could be desired. Proper cultivation of the soil produces the varied cereals and fruits necessary to existence, health, and comfort of the human family. Peculiar to this South-land we have the cotton crop, upon which the world depends largely for cheap and durable fabrics. Nor do we need brains. The history of this country clearly demonstrates that, from colonial days to the present time, Southern men and Southern women have stood in the foremost rank, whether in the councils of the nation, in the pulpit, on the battle-field, telling the secrets of science, or tilling the soil. Our men have proven themselves equal to every emergency, and our women have been the admiration of the world for their hospitality, modesty, and intelligence.

With very few exceptions, she does not need additional transportation. Our whole country is checkered with railroad lines. We are surrounded, on the east and south, by the Atlantic and Gulf coasts, our great rivers penetrating the same, their navigable currents spreading themselves out over our vast territory.

To arrange and display the needs of the South in their order as to importance, we believe that the Alliance has well stated them: First, we need education. I use this word in its true and broad sense. Our people, since the war closed, have had but little opportunity, and less financial ability, for thought and study than any people in modern history. Outside of our cities and towns, our system of popular education has been largely a farce. This has depopulated the rural districts to a large extent, and crowded the thoroughfares of our cities, where a better system usually obtains. Of all the burdens a people can bear, in the way of taxes, ignorance far surpasses all others. We need, therefore, in the South a thorough, practical, and economical system of commonschool education.

The development of the South means a development of the rural sections. To do this there must be an inducement held out to those who are domiciled outside of the cities and towns. By nature we are shut up largely to the pursuit of agriculture, and no greater mistake can be

made with our people than to conclude that the manufactories of the world or this country can or should be transferred to this locality. God never intended that one simple section of this world should ever be independent of other sections. We are tied together thus by nature, and the largest amount of happiness and prosperity depends upon the freedom and interchange of ideas and products; and when friendship reigns supreme between the States in this Union, then will this interchange of ideas become universal and profitable; and when absolute control by the government of the transportation of this country can be had, then an interchange of products, with the greatest possible profit to the producer, with no gambling or speculative prices to the consumer, will demonstrate that the products of the one section so peculiarly adapted thereto can be exchanged with other sections at a profit. These conditions, therefore, are necessary to the development of the agricultural South. We need a diversified agriculture to that extent, at least, that will cover the absolute necessities of life. This is rendered vital on account of the fact that transportation and gambling in prices - setting one side the question of supply and demand - are in the hands of those whose motto seems to be to enrich themselves at the sacrifice of the people. No country in the world will admit of greater diversity as to the necessities of life, and to this extent no people are wise and provident who discard the fact.

We need, in the South, justice and impartiality at the hands of our national government. Being purely an agricultural section, the burdens of taxation have largely fallen on our people. Indeed, the discrimination in favor of manufacturers, shipping, fisheries, internal transportation, capitalists, gamblers, and speculators, has been wicked and unlimited. This the South demands should stop; and with the help of the people from other agricultural sections of this Union we are determined it shall stop.

We need, in the South, a monetary system, established by the government, that will promote and protect the industries of the South; (in this we have a common lot with all industries in this great country;) a financial system not dependent upon that of European countries, a system not intended primarily to facilitate and build up capitalists from abroad, but a currency distinctly constituted, first for the benefit of American citizens and American enterprises; a flexible currency, owned and controlled by the government, not to be expanded or contracted by capitalists; a currency sufficient in volume to meet the demands of every citizen of the country, at all seasons of the year; a currency to be regulated in amount only by the demands of the people; a currency so cheap as

to force capitalists, and those who have the largest share of it, to embark in useful enterprises; a currency that is calculated to expand and foster the industries of the country instead of promoting isolated and sectional enterprises; a currency from which the government can derive sufficient revenue to enable them to abolish every vestige of taxation from the necessities and comforts of life; a currency that will not interfere with commercial transactions in this country.

We need, in the South, perfect friendship, political and financial, with every other section in this Union. This is indispensable. No nation can long prosper with bickerings and strife within. But while legislation and administration of law in favor of one section as against another, or in favor of one class as against another, continues, peace will never wreath her chain around this land of ours. "Let us have peace."

CHAPTER XII.

HISTORY OF THE COLORED FARMERS' NATIONAL ALLIANCE AND CO-OPERATIVE UNION.

By General R. M. Humphrey, Superintendent of the Colored Farmers' National Alliance and Co-operative Union.

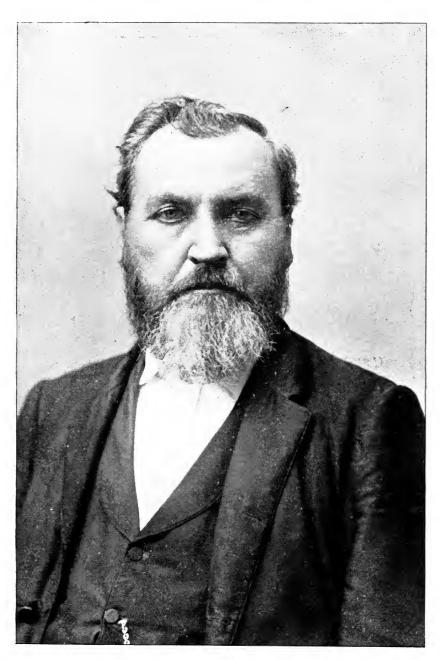
The Colored Farmers' Alliance had its origin in Texas. The first subordinate Colored Alliance was organized in Houston County, in that State, on the eleventh day of December, 1886. Immediately following this, a number of others were organized in Houston and adjoining counties. The necessity for general organization soon became apparent. Accordingly these several Alliances chose delegates to a central convention, which assembled in the Good Hope Baptist Church, at Weldon, on the twenty-ninth day of the same month. After some discussion and earnest prayer, it was unanimously agreed that union and organization had become necessary to the earthly salvation of the colored race,

The convention then proceeded to adopt the following declaration of principles:—

"I. To create a body corporate and politic, to be known as 'The Alliance of Colored Farmers of Texas.'

"2. The objects of this corporation shall be: (a) To promote agriculture and horticulture; (b) To educate the agricultural classes in the science of economic government, in a strictly non-partisan spirit, and to bring about a more perfect union of said classes; (c) To develop a better state mentally, morally, socially, and financially; (d) To create a better understanding for sustaining our civil officers in maintaining law and order; (e) To constantly strive to secure entire harmony and good will to all mankind, and brotherly love among ourselves; (f) To suppress personal, local, sectional, and national prejudices, and all unhealthful rivalry and selfish ambition; (g) To aid its members to become more skilful and efficient workers, promote their general intelligence, elevate their character, protect their individual rights; the raising of funds for the benefit of sick or disabled members, or their distressed families; the forming a closer union among all colored people who may be eligible to membership in this association."

This declaration was promptly signed by the following colored men, being all the delegates present: H. J. Spencer, William Armistead, R. M. Saddler, Anthony Turner, T. Jones, N. C. Crawley, J. W. Peters, Israel McGilbra, G. W. Coffey, Green Lee, J. J. Shuffer, Willis Nichols, Jacob Fairfax, Abe Fisher, S. M. Montgomery, John Marshall.



GENERAL R. M. HUMPHREY.



J. J. Shuffer was elected President, and H. J. Spencer, Secretary. Suitable committees were appointed to draft a constitution and by-laws, a ritual, and a form of charter. After receiving the reports of these committees, it was agreed that the Colored Farmers' Alliance should be a secret association.

R. M. Humphrey of Lovelady was elected General Superintendent, and to him was committed the work of organization. The new order had no money, no credit, few friends, and was expected to reform and regenerate a race which, from long endurance of oppression and chattel slavery, had become exceedingly besotted and ignorant.

On the 28th of February, 1887, a charter was obtained under the laws of Texas, and the organization assumed definite shape as The Alliance of Colored Farmers. The work now spread with great rapidity over the State of Texas, and was soon introduced into several of the neighboring States. The colored people everywhere welcomed the organizers with great delight, and received the Alliance as a sort of second emancipation.

On the 14th of March, 1888, a meeting of the States convened at Lovelady, Texas, and after some discussion, agreed to charter as a trades-union, in accordance with the laws of the United States. The new association adopted the Texas State work, with only such changes as were necessary to give it national character. The new charter was duly filed in the office of the Recorder of Deeds for the District of Columbia, in compliance with the laws of Congress, and will be found recorded in Book IV., at page 354, Acts of Incorporation, United States of America. Under this new arrangement, the Alliance continued to thrive.

About this time, leading minds among the colored people in the South began to realize the importance of a better system of co-operation. They were desirous, too, of utilizing and, as far as possible, extending the benefits of their organization. The national trustees addressed the following communication to the general superintendent:—

"LOVELADY, TEXAS, July 20, 1888.

[&]quot;To the General Superintendent of the Colored Farmers' National Alliance.

[&]quot;SIR: Upon receipt of this order you will at your earliest convenience proceed to establish such trading post, or posts, or exchanges, for the use and benefit of our order in the several States, as in your judgment will be most conducive to the interests of the people. We leave you to adopt such plans as in your opinion will be most effective.

[&]quot;With much respect yours,

[&]quot;J. J. SHUFFER, President.

[&]quot;H. J. SPENCER,

[&]quot;Secretary Colored Farmers', National Alliance and Co-operative Union."

In compliance with this order, exchanges were established in Houston, Texas; New Orleans, Louisiana; Mobile, Alabama; Charleston, South Carolina; and Norfolk, Virginia. These institutions, with varying success, are still in existence, and have accomplished great things for the elevation of the colored race. Occupying as these posts do, the great centres of the country's commerce, we are not without hope that they will be, in the future as in the past, well supported by the people. Our method in their establishment is this: An assessment of \$2.00 is levied upon each male member of the order, within prescribed boundaries, for the benefit of the exchange within his territory. These small amounts paid by each member become a cash capital for the basis of our business operations. The money may be used to buy a stock of bacon, or to pay off a mortgage, and being at once replaced, is ready the next week for some similar investment. Being thus often turned over, it will, in a year, save many times its value as against the speculator, who always reckons the term of a credit at twelve months, and the rate of interest at fifty to one hundred per cent, though the actual time of such credit may be only from August till September.

Again, this kind of cash basis is not exhausted nor exhaustible; fifty or a hundred years hence it may be still present to do the same work it is now doing; or should the Colored Alliance cease or become extinct, the funds on hand might be turned to the endowment of schools or colleges for colored youths, and so render a perpetual service during all time.

With the beginning of 1889 the Alliance established a weekly newspaper, called *The National Alliance*. They designed it for the practical education of their members. It has been reasonably well supported, and is still published weekly, at Houston, Texas, each of its editions reaching many thousand colored families.

At this writing, Texas, Louisiana, Mississippi, Alabama, Florida, Georgia, South Carolina, North Carolina, Virginia, and Tennessee have State Colored Alliances, working under State charters. Several other States expect to be chartered at an early day, while organizations of greater or less extent exist in more than twenty States. The total membership is nearly 1,200,000, of whom 300,000 are females, and 150,000 males under twenty-one years of age, leaving 750,000 adult males.

It is freely admitted by all that the colored people have made great strides forward in intelligence, morals, and financial standing during these years of organization. Thousands of their public free schools have been wonderfully improved in character of teaching, and the duration of their sessions much extended by the combining of the people, and the payment by each member of the Alliance of a small sum in the form of tuition. Very many Alliance academies and high schools have been opened in various sections of the country. In not a few communities the people, impelled by the higher cultivation of their social instincts, have built new places of worship, while the intellectual and moral grade of their pastors and teachers has been immeasurably advanced.

The relation of the colored people in the South to their white neighbors had been long a question of the last importance to both races. There were not wanting those who believed in race conflict, race war, and even race extermination. These beliefs and opinions were shared by some of the best people on both sides, as, perhaps, painfully inevitable results which must follow from existing conditions; but there were others who were in apparent haste to put their views into practical operation, and who, if judged by their own testimony, were ready to baptize their prejudices in the blood of their fellow-beings, and dishonor themselves by the destruction of their country. The Alliances, both colored and white, were organized from the first largely with a view to the suppression of all prejudices, whether national, local, sectional, or race, and to create conditions of peace and good will among all the inhabitants of our great nation. On this account the "race question" was from the beginning a matter of profoundest interest to the order. At the first practicable moment steps were taken looking to the peaceful solution of that much-vexed and intricate problem.

December 3, 1889, the representatives of the Colored Farmers' National Alliance convened in the city of St. Louis. During this session they were visited by committees of fraternal regard from the Farmers and Laborers' Union, the Farmers' Mutual Benefit Association, and the National Farmers' Alliance. These visits were acknowledged with the utmost good will, so that the messengers from the several brotherhoods were looked upon rather as ministers of light and salvation. Like committees were appointed from our body to visit and bear our good will and fraternal greetings to these several organizations.

Again, in Ocala, Florida, at which place their National Council was held in December, 1890, they were visited by committees from the Farmers and Laborers' Union, and by officers of the Knights of Labor, and by members of other labor associations. They appointed committees to each of these bodies, as bearers of their good will and fraternal regard. They further proposed the holding of a joint meeting by these committees to form an association or confederation of the several orders represented, for purposes of mutual protection, co-opera-

tion, and assistance. The committees, in their joint session, found themselves able to agree, and the matter of their agreement being reported back to their several orders, was heartily indorsed by all concerned. It recognizes common citizenship, assures commercial equality and legal justice, and pledges each of the several organizations for the common protection of all. This agreement will be known in future ages as the burial of race conflict, and finally of race prejudice. Its announcement has fired many hearts with renewed hope, has given a new impetus to progress among the people, and will exert tremendous influences in the healing of sectional and national misconceptions and prejudices throughout the entire country.

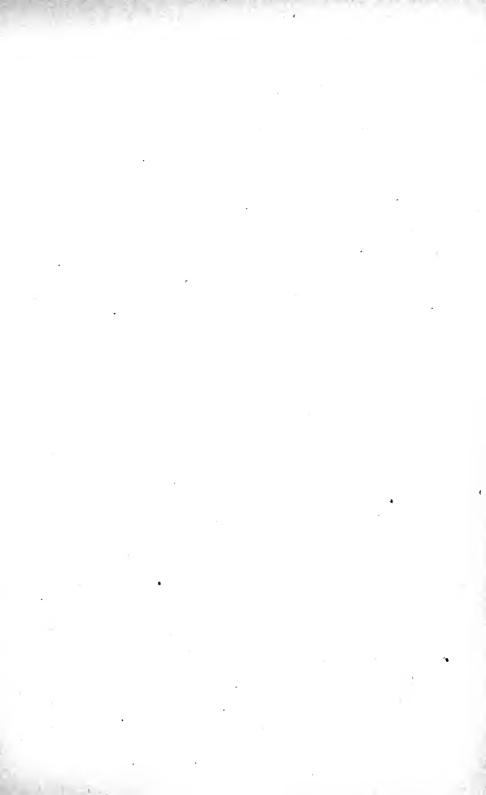
"Declaration of Purposes of the Colored Farmers' National Alliance and Co-operative Union of the United States.

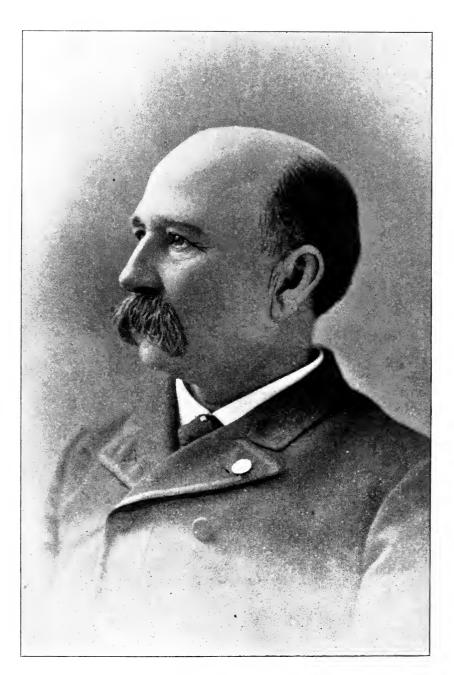
"The seventh section of the charter declares the object of this corporation shall be to elevate the colored people of the United States, by teaching them to love their country and their homes; to care more for their helpless and sick and destitute; to labor more earnestly for the education of themselves and their children, especially in agricultural pursuits.

"To become better farmers and laborers, and less wasteful in their methods of living.

"To be more obedient to the civil law, and withdraw their attention from political partisanship.

"To become better citizens, and truer husbands and wives."





COLONEL BEN TERRELL.

CHAPTER XIII.

THE GROWTH OF THE ALLIANCE.

By Ben Terrell, Past National Lecturer, National Farmers' Alliance and Industrial Union.

The Farmers' Alliance originated in the Lampasas County, Texas, in 1875, but died out in a few years. In 1879 W. T. Baggett, a member of the old Alliance, organized in Poolville, Parker County, July 29, the first Sub-Alliance of the great organization that now embraces thirty-one States and Territories, and whose influence is now being felt throughout the nation. Great as this growth in numbers has been, in its business efforts, in the education of its members in their duties as citizens, in rekindling the fires of patriotism, in its general ability to accomplish results, the growth has been even greater. All of this has not been accomplished without determined and intelligent effort on the part of those composing the rank and file of the order, and to the earnest, intelligent, and faithful workers in the Sub-Alliances.

From the organization of the first Sub-Alliance, July 29, 1879, the growth was slow, not so much from the opposition it encountered from moneyed and partisan interests — for it was too weak to provoke their opposition; but the failure of the Grange and the general apathy of the people were the enemies which in its infancy the Alliance was compelled to meet. In the latter part of 1879 there were only twelve Sub-Alliances in the State.

When it is considered that it required five years to arouse sufficient interest in the order to obtain a State charter and devise plans to extend it throughout the State, and that in all this time so little had been accomplished, we may well be amazed at the persistent determination of those hardy frontiersmen, the pioneers of the Alliance in Texas. Knowing that something was wrong, that labor was being discriminated against, that the doctrine of equal rights to all had become a mere theory, and not a condition in government, they worked on doggedly, determined to restore conditions that obtained in the days of the fathers of the nation.

That political reform, even in those early days, was the grand central idea of the Alliance movement, is made more than manifest by their declaration of purposes. From August, 1884, there commenced a

marvellous growth of the order, and at the next meeting, in August, 1885, there were 550 Sub-Alliances in good working order. The greatest growth of the order in Texas was from August, 1885, to August, 1886. During that year 2200 Sub-Alliances were added, making the number of subs in the State 2750.

At Cleburne, August, 1886, the celebrated Cleburne Demands were promulgated, and the declaration of purposes made what they are to-day; and from that time on the Alliance has been compelled to meet the opposition of the party politicians, and those who were interested in the continuation of class laws.

This rapid increase in number continued, and at the called meeting at Waco in January, 1887, there were between three and four thousand Sub-Alliances in Texas. Up to this time the order had not extended beyond the State; but the time had now come when, by joining with the Farmers' Union of Louisiana, the National Farmers' Alliance and Co-operative Union was formed.

During the year 1889 the Wheel and Alliance were consolidated, and the order was known as the Farmers and Laborers' Union. Delegates were elected to meet on the third day of December, 1889, at St. Louis. From December 3, 1889, to December 3, 1890, the growth has been without a parallel in the history of the world. At the Ocala, Florida, meeting, December 2, the following States and Territories were represented: Arkansas, Alabama, Louisiana, Mississippi, Indiana, Illinois, Missouri, Georgia, North Carolina, South Carolina, Texas, Colorado, Tennessee, Maryland, Kansas, Florida, North Dakota, South Dakota, Kentucky, Pennsylvania, Michigan, Indian Territory, Virginia, West Virginia, New York, California, with the order started in ten other States. The membership was, at that time, over 2,000,000.

In reviewing the progress of the order, these truths are plainly taught: First, there must be a necessity; second, the objects of the order must be just, and in the interest of those sought to be organized; and third, those placed in control must be patriots, working for the good of the whole, and not personal aggrandizement. These three conditions have so far been met by the Alliance. To-day, in looking over the entire order, I can see no sign of disintegration. It is, as a whole, stronger than ever before; and as long as the necessity continues, and its purity of purpose is maintained, the Alliance will continue to grow in numbers and power.

Let us notice the progress of the Alliance in the accomplishment of its purpose, as at first declared, — to labor for the education of the agricultural classes in a strictly non-partisan spirit.

When the Alliance made its entrance upon the world's stage of action, it found the farmers, as a mass, absolutely devoid of interest in, or knowledge of, government. They had tacitly given over to the politician the entire control of economic matters, and, as a rule, voted as partisans, without regard to, or consideration of, the consequences. Prejudice ruled their councils instead of reason, and the Alliance found them fighting one another over imagined differences that had no real existence. It would be hard to conceive of a condition seemingly more hopeless; but at the Cleburne meeting it was determined by the Alliance—as farmers, without regard to party—to make known its wishes in regard to the policy of government, and to that end the celebrated Cleburne Demands were made and published to the world.¹

Demands 1, 2, 3, 7, 8, 13, upon which the State could legislate, have been complied with, and 9, so far as to greatly improve the condition from what it was when the demand was made. Demand 15 was not pressed by the State Alliance, they, after investigation, concluding that it would not be practicable. Demand 14, on the general government, has been complied with in name, but did not yield the results demanded and expected of it; and so it is continued, and finds expression in the present demand in regard to railroads, promulgated at Ocala, Florida, on December 2, 1890. Demands 10 and 11 form the basis of the present demand as to finance. Demand 4 is still continued, and finds expression in the demand opposing the alien and corporate ownership of land. Demand 5, to prevent dealing in futures, is still urged. Demand 6, by the action of Congress, has become the law.

Thus it will be seen that all the demands made upon the State have been, in whole or in part, complied with. Of those made upon the general government, numbers 6 and 12 have been acted upon favorably, and we now have the Secretary of Agriculture a Cabinet officer, and all lands reclaimed by the government held for actual settlers.

When these demands were made in Texas, the Alliance was at once bitterly assailed by the partisan press, as a dark-lantern, secret, political order, dangerous alike to the liberties of the people and the best interests of the country. Every effort was made to cause dissension in the ranks, but the great mass of the Alliance stood firmly by its demands.

As in Texas, so in every State it has had the same conditions to meet. If the State was or had been Republican, then it was a Democratic trick, and the same torrent of abuse was heaped upon it by the Republican papers; if Democratic, it was abused by that party.

In looking back over the past four and a half years, since that ever-to-



be-remembered sixth day of August, 1886; taking into consideration the fact that the Alliance has had no money and, until latterly, no papers to champion its course; no trained speakers, no light of experience by which to guide its course; relying wholly upon the honor, integrity, and patriotism of the people; is it not strange that, opposed as it has been by the combined influence of money, - represented by the national banking system and railroad corporations, land monopolies, and other privileged interests, which it has boldly attacked and defied, — the press, with all of its power, party prejudices; with all of this opposition, I repeat, is it not strange that it even existed? It is more wonderful still that it has attained to the great success which it now enjoys. History cannot show a parallel. In the next Congress there will be forty representatives, and four, if not five, senators who come pledged to its national demands. It has, through education, - by discussion in its Sub-Alliances upon economic questions, - made its power felt throughout the entire country. It is gaining in numbers, intelligence, and influence, with a rapidity almost incredible. It now has hundreds of newspapers defending its demands. It has developed from its own rank journalists of the highest order, and thinkers second to none. public speakers are now legion, and among them are some of the most eloquent and logical of the day. Could any people make more progress than the farmers have made through the Alliance in the last four years? In that time the Alliance has raised the farmer from a class absolutely without influence in the government, to one with more power to mould its policy than any one other in the land.

The order is now confederating with other labor organizations, having like objects, adopting demands upon which all can agree, remembering, "in things essential unity, in all things charity"; its influence is being widened, its power extended, and its effectiveness increased day by day. God grant that its progress may continue, and its efforts to educate in the science of economic government be so successful that all class laws may be wiped from the statute books, and equal and exact justice be maintained for all alike, from the highest to the lowest of our citizens. If wisdom guide, and patriotism lead, in the future as in the past, the Alliance, by its education of the masses, will have created a public opinion that cannot be resisted.

The second declared purpose is to obtain equal rights to all, and especial privileges to none. When the Alliance effects this purpose, then all will have been accomplished that is possible or desired through political action; and that this grand consummation is much nearer than when the Alliance was organized in 1879, I believe no one will attempt to deny.

Another purpose of the order is to strive to destroy prejudice, local, national, and sectional. In the effort to accomplish this, the progress of the order has been greater than the most sanguine could have hoped. By their reading, thinking, and discussing, they have found the true source of trouble; and, as the light of information breaks through the dark cloud of ignorance, the prejudices are disappearing. It is not only these prejudices between industrial classes that have been given their death wound by the Alliance, but party prejudices have, in a great measure, been destroyed. Against this the Alliance has done battle from the very first, and great has been its victory. Its triumph is almost completed. Sectionalism is dead. With it there is no longer North, South, East, or West. . We are one people, with one flag and one country. The famous chasm has been filled up; the scar is hidden by the beautiful white roses of peace and good will. For this all lovers of the country must say, "God bless the Alliance!" If it had done nothing more, and should die now, it would be enough to make one proud to have been a soldier in its ranks.

The progress of the order in its fight against prejudices of all kinds will never cease until the shattered forces of that arch-demon are driven from our beautiful and beloved country. Long may its pure white banner of peace and good will wave over the land of Washington, Jefferson, and Lincoln, and may it continue to be the champion of equal rights to all, and especial privileges to none!

CHAPTER XIV.

THE FARMERS' CONGRESS.

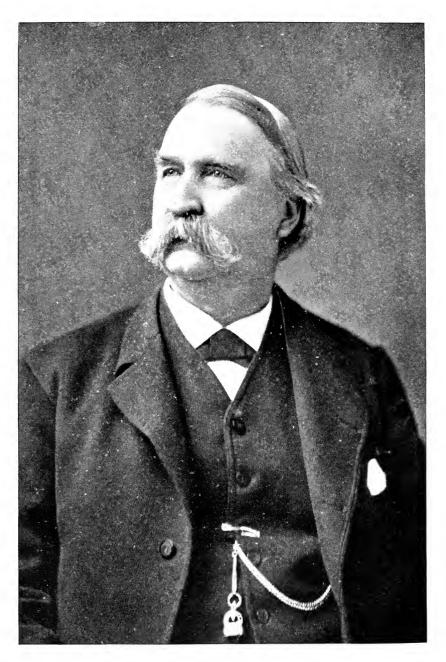
By Colonel Robert Beverley, The Plains, Virginia.

This organization was the first serious effort to organize the farmers of the United States for the purpose of influencing national legislation. All efforts, heretofore, had been confined to State organizations. It was organized in 1875, at Atlanta, Georgia, with General W. H. Jackson of Tennessee, President. It made but little progress from that time until 1879. At this meeting C. J. Hudson of Mississippi was chosen President, and I was selected as Vice-President. Louisville, Kentucky, was chosen as the place of next meeting. At this meeting, Mr. Hudson being in poor health, I was elected President. Fully realizing the languishing condition of agriculture, I immediately issued the following address:—

" To the Farmers of the United States:

"At the recent meeting of the National Agricultural Congress at Louisville, Kentucky, honored by election to the presidency of that body, the duty devolves upon me of issuing this brief address explanatory of the aims and purposes of the organization, this earnest appeal to every farmer in the Union to extend to us his active and cordial sympathy and co-operation. Everything which can affect the dignity or prosperity of agriculture is a subject of national importance, and is entitled to the respectful attention of the government of the nation, so often vauntingly declared to be 'the government of the people, by the people, and for the people'; yet the fact is utterly and scornfully ignored that the tillers of the soil are a clear majority of all the people.

"The ultimate aim and purpose of the National Agricultural Congress is twofold; viz.: First, to arouse agriculturists themselves to a realization of this great fact; and, secondly, to enforce a recognition of it upon the representatives of the people who have been delegated to administer the State and national governments. It is a fact which admits of no dispute, that no prominent and influential statesman in any department of the national government either possesses, or apparently desires to possess, even a superficial knowledge of agriculture in any of its aspects, relations, or interests. This great business, by which a majority of all the people live, and through which all have their bread, is practically unrepresented in any department of the people's government. In the executive branch they have a commissioner who ranks only with the clerks of other departments; in the Senate they have one, and in the House of Representatives twenty-seven members in a body of more than three hundred. When we propose to remedy this improper, unreasonable, and unjust state of



COLONEL ROBERT BEVERLEY.



affairs, we are scornfully told 'the word "agriculture" is not in the Constitution of the United States.' We might retort: Neither is the word 'lawyer.' We might very properly reply: If, then, the word 'agriculture' is not in the Constitution of the government of the people, of whom we are a majority, then we mean to put it there. If as a class we possess no rights, as a majority, nevertheless, we possess all rights and all power under the Constitution and the government as they stand.

"In order that agriculture may be placed upon an equitable footing in the executive branch of the government, it is believed, and we should demand, that it should be represented in the Cabinet by a minister of equal influence, honor, and dignity with any and all other constitutional advisers of the President, to the end that its true relations to taxation, to commerce, to finance, and all other great industries, may be effectively studied and understood, and presented and defended with proper dignity in the councils of the nation. That such is now the case, it is but idle to pretend. Farmers of America, we put it to you that it is your bounden duty to yourselves and to your posterity to use the power which belongs to you to enforce this just recognition of your dignity and your rights! If the word 'agriculture' is not in the Constitution, you have always found, you will ever find, when voters are wanted, it is in every politician's mouth. We make no war upon any profession, calling, or pursuit; we know full well that the prosperity of each is the prosperity of all in any wellordered community; we simply ask of our representatives a reasonable and proper recognition of our rights; and this, let us cause them to understand, is what we are resolved to have. We are fifty-seven per cent of the population of the United States; we need such organization as shall awaken us to a comprehension of the habitual subordination of our interests to those of every other class, producing and non-producing. Such organization and such intelligent comprehension of our situation as will secure a proper representation for us in the executive and legislative branches of the governments, national and State, under which we live, is one of the prime objects of our organization. It is only by and through effective organization in every county in every State that we can hope to act intelligently together to obtain practical recognition of our political powers and our political rights. Let your present representatives be made to know that some of the most extensive and important interests of agriculture are to-day seriously imperilled by their failure or refusal to provide remedies adequate to the danger; that you look to them and expect of them to provide proper and sufficient appropriations of the public funds to protect the great animal industries of the country from perpetual menace and imminent danger by contagious disease, constitutional qualms to the contrary notwithstanding. Let them know, also, that the agriculture of the country expects and requires at their hands that the benefits of the Signal Service be extended to the farming operations of the country, as well as to navigation, commerce, and other pursuits, and that whatever organization is required, and whatever funds are necessary for such a purpose, ought to be provided without further delay, so that information of approaching storms, cold waves, and inclemencies of the weather, threatening and causing destruction to agricultural products, may be timely sent to every community which railroads or telegraph lines reach, or to which warning signals can be conveyed by any means known to science. As one result already matured of the beneficent wisdom of the immortal Maury, the approach of destructive storms may now be foretold two days or more in advance; surely agriculture, which bears the greatest burden of taxation, is entitled to the vast measures of protection which would accrue to her imperilled products from the general diffusion of such timely information, and thereby save to

our interest and to the nation thousands of millions of dollars. If the machinery and funds necessary for the collection and distribution of such incalculably valuable forewarnings are lacking, it will be a shame to our representatives if, with an overflowing national treasury and a sufficient corps of trained scientists lacking employment at their disposal, the machinery and funds are not forthwith provided; and, as agriculturists, we demand it.

"We repeat it, that we entertain no purpose to assume an attitude of hostility to any of the great interests of the country; least of all do we entertain any purpose of assailing any actual vested right legitimately belonging to any of the great transportation companies; but we are deeply sensible of the vital importance to all agricultural interests of cheap, steady, and safe transportation of their products to the great markets of the world. In furtherance of this great national desideratum, we shall favor at all times any State and national policy which shall foster the creation and improvement of such great commercial highways as, for example, the Mississippi River and the ship canals across the Delaware and Florida peninsulas. Such, we feel, would be a better direction to give to the surplus of swollen revenues, thus employing some of our surplus and idle labor, than the anticipation of the demands of the public creditor by this generation.

"Space does not permit me to enter into elaborate details; but why should we not demand and receive appropriations from the national treasury for the protection of our imperilled interests, aggregating hundreds, yea, thousands of millions, of taxable values? Does the Constitution stand in the way? Do we not know that peaceful machinery is provided whereby we who are a majority of all the people of all the States may alter or even abolish that instrument, and that our right to do so is 'inalienable, indefeasible, and indisputable'? Look at the shoal of proposed amendments to the Constitution of your country thrust with unseemly haste upon the national legislature the very first day of the current session, proposed amendments which can in no case take higher rank than mere political and partisan schemes, and say that we must sit down powerless to protect our rights!

"In furtherance of purposes such as I have feebly and imperfectly set forth; in furtherance of every purpose which has for its object the advancement of the great calling we pursue, the National Agricultural Congress was itself called into existence. In furtherance of these great purposes and aims, we earnestly and respectfully invoke the action, co-operation, and cordial sympathy of every farmer of every section of this vast country—the home and the domain of the foremost, the mightiest, and most progressive nation on earth."

The next meeting was held at Nashville, and certain rules were adopted governing representation. At this meeting seventeen States were represented. The next meeting was held at New Orleans, with nineteen States represented. Resolutions calling upon Congress to grant radical reforms were passed, and a general determination prevailed to work for their adoption. The next meeting was held in Washington, District of Columbia, January, 1887, which made an impression upon Congress, then in session. The next meeting was held in Chicago, after which I retired, and Colonel Kolb of *Alabama was chosen president. It is believed that this Congress was the forerunner of the Alliance, and prepared the way

for the grand work it is now doing. Since the only literature relating to this Congress now remaining consists of a few addresses made by me, while its president, I trust the reader will pardon my reference to them. As they show the trend of thought at that time, I will call attention to a few extracts:—

At the Nashville meeting, in 1884: -

"I congratulate you upon the increased interest, everywhere manifested by intelligent agriculturists, in the general policy of our State and national governments, in its broad relations to their own great calling."

"When we say that we mean to be heard with respect and attention by our own representatives, who hold their seats by our suffrage, let it be plainly understood we mean what we say."

"If it be made necessary, our candidates will be found opposing those of both parties, and of all parties opposed to our vital interests; for we mean to have our rights under our own government."

"We meditate no war on any of the great industries of the people; neither upon manufacturers, nor mining, nor transportation, nor commerce, nor any pursuit or business by which honest people earn bread. God forbid! When the farmer meets the mechanic, let him take him by the hand and hail him as a brother; shoulder to shoulder let them take their stand against unequal and unjust taxation in every form; against monopoly, the common oppressor of all."

"Whatever hurtfully touches any of the great employments of the great armies of bread-winners of the land injures and hinders each and all."

"The proposition was urged upon Congress by the chairman of your committee, viz.: 'to create a Department of Agriculture.' This proposition was received with contempt and sneers. We will not bow down nor worship whatever political fetich they may choose to set up for us. We who are a clear majority of the voters of the Union choose to decide for ourselves whether we will have a Department of Agriculture. It is for our representatives to obey the command of their constituents, and not to set up their judgment contrary to the instructions of the people."

"Farmers and mechanics, laborers and producers of every class, brothers in a common cause, let us stand as one man to oppose corruption and monopoly and oppression, in whatsoever form they come, by whatsoever name they may be called, whatsoever disguise they may assume. Organize! I beg you, organize! Without organization you cannot cope with the trained legions of monopoly. Organize! organize! or they will tread you in the dust beneath their feet!"

Again, in 1885: -

"We have not claimed to have grievances, but rights. There are legislative measures and administrative reforms, essential not only to the best interests of our calling, but to the well being of the nation. A majority of the people must carry them against rings and monopolies, corrupt and shameless, and their astute attorneys, who, in cahoot with political 'bosses,' have so long misgoverned this country."

At a called meeting of the Congress in Washington, in 1887: -

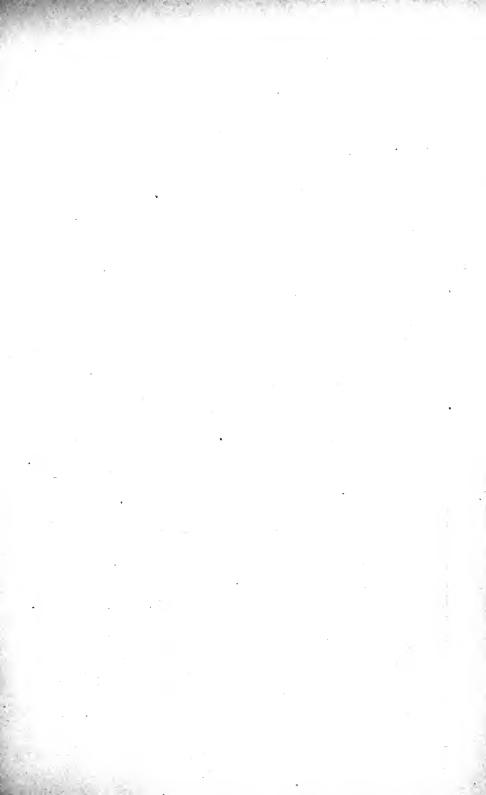
"In our representative capacity we have no cause to be afraid or ashamed to put forth our opinions, wishes, and demands, touching matters which concern the great interests and economics of agriculture, State, interstate, national, and international. It is for that very purpose we are here assembled."

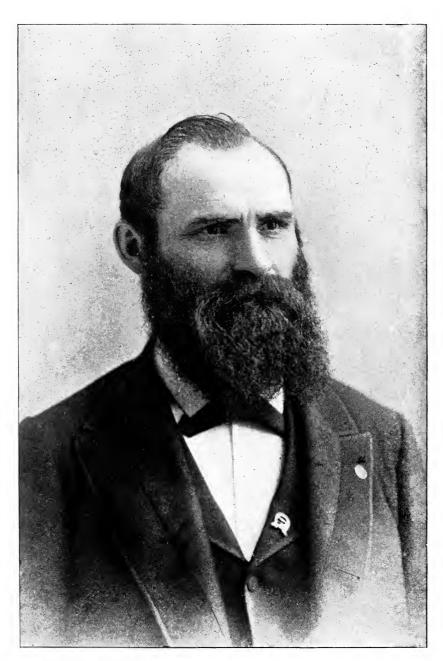
"Our interests require, we demand, an equitable readjustment of the whole system of taxation, federal, State, local; distributing its burdens equally among producers, distributors, consumers. No legitimate business can prosper until war taxation is reduced to a peace basis, without galling and grinding discriminations for the rich and against the poor; nor as long as we gather in the treasury an annual surplus of more than one hundred millions over and above every reasonable or honest public necessity."

Undoubtedly the most important meeting of the Farmers' Congress was the one held in New Orleans, at the time of the great exposition there. At that meeting were present and participating, delegates from nearly every State and Territory. Among them was scarcely a name not known throughout the country as a leading agriculturist. That this meeting exercised an important influence upon the rise and progress of the National Farmers' Alliance, it is impossible not to perceive.

Those who would discern the true intent and meaning of secret developments in industrial organization, those who would understand aright the significance of the demands now urged by these organizations, must not overlook the character and the significance of the work done by the Farmers' National Congress.

Among the accomplished results which must be credited to the efforts of the Congress are the enlargement of the scope and increase of the dignity and influence of the Department of Agriculture, and the final transfer of the Signal Service, or more properly the Weather Bureau, to that department, with the assurance of further increased precision, usefulness, and importance of the service. That the Interstate Commerce law was also the legitimate outcome of the agitation of the question set on foot by the Congress, seems to be true. But the great work on the Congress was its unconscious work in preparing the way for the Alliance. It was as a prime factor in the earlier evolution of industrial organizations that the Congress is important and interesting to the intelligent student of contemporaneous events. When the final outcome and the entire results are before the world, those who may be then living will be aware that human freedom was at this time rapidly unfolding one stage of its progress along the path of its divinely conducted evolution, — a path tending to that "one far-off divine event, to which the whole creation moves,"





ALONZO WARDALL.

CHAPTER XV.

THE SITUATION IN THE NORTHWEST.

By Alonzo Wardall, Member of the National Executive Committee.

This article will deal more particularly with the situation in the States of Iowa, Minnesota, North and South Dakota, as the writer has been intimately and personally connected with those States for the past forty years; although the conditions that obtain there are very similar to what we find in Kansas and Nebraska, each of those States being engaged principally in agriculture, and with comparatively little manufactures. True, Minnesota has vast lumber interests, and mining for coal and the precious metals is being carried on to some extent in the other States; yet they are and must, in the nature of things, ever remain great storehouses for the food products of the world, and I shall confine myself to a view of the situation as related to agriculture and agriculturists.

The four States named are among the largest, most fertile, and most favorably situated in the Union, comprising some 290,000 square miles of the choicest farming land in the world, nearly every acre of which will produce abundant crops without the use of artificial fertilizers; favorably located, with healthful climate, a desirable class of citizens, and unequalled railroad and water transportation facilities. In area, they constitute one-ninth of the United States, exclusive of the Territories, and they raise over one-fifth the breadstuffs and one-eighth the meats produced, not to mention their contributions of butter, cheese, poultry, eggs, flax, and a multitude of other things that go to supply the necessities and comforts of life, which mount up collectively to a vast aggregate. And yet these States are in their infancy as regards material development; great tracts of fertile soil are as yet unvexed by the plow; millions of acres of choice wheat, corn, and grazing land are still unimproved.

Of Iowa's 36,000,000 acres, but 27,000,000 are in cultivation. Minnesota has but 16,000,000 acres reclaimed of her 53,500,000; of North Dakota's 47,500,000 but 3,000,000 are utilized; and South Dakota's 49,000,000 remain as nature left them, save a paltry 4,000,000, — hardly a scar on her broad bosom.

Let me recapitulate: Fertile soil, salubrious climate, convenient to the great markets of the world, abundant transportation facilities, an industrious, frugal, and temperate class of citizens, continuous good crops with local exceptions. Should we not be prosperous and contented?

What are the facts? With an area capable of supporting comfortably 12,000,000 people, we have less than one-third that number, with the rural districts at a standstill or actually decreasing in population, farm values steadily decreasing, while farm and chattel mortgages are as steadily increasing. Census Superintendent Porter gives the land mortgage figures for Iowa at \$199,000,000; \$2,000,000 per county for land mortgages alone. A farmer's debts are by no means measured by the mortgage on his farm; on the contrary, his chattel and unsecured liabilities often exceed the real estate indebtedness. Minnesota and the Dakotas are in a worse condition than Iowa; and when to the totals of her land and personal debts are added the township, municipal, school, corporate, and State obligations, an aggregate is reached almost incomprehensible in magnitude, and appalling to contemplate, especially when an attempt is made to figure how the debt, principal and interest, is to be paid. Labor Commissioner Sovereign of Iowa has collected reliable information as to cost of production in Iowa, and profits thereon. Selecting twelve representative farmers in each of one hundred counties, and sending them a series of questions, including cost per acre of raising crops, price of products realized, profit or loss, rates of interest prevailing, etc., the almost unanimous report was that for the last six or seven years farming had been carried on in that favored State at an actual loss. Conservative judges estimate the total indebtedness, personal, corporate, municipal, and State, at \$2,000,000,000 for the four States, bearing from six to twelve per cent interest, much of it even higher than that, and very little lower: seven per cent would be an average, making an annual interest tax of \$140,000,000.

A system that brings about, or even renders possible, a debt of one billion in 1880, to increase to two billion in 1890, will permit it to swell to three or four billion in 1900, and so on, continually increasing, until our beautiful inheritance, of which we are so proud, will pass from us forever. As a result, the people are organizing as never before, and demanding an about-face in governmental policy, retrenchment in expenses, decrease of official salaries, more honesty in administration, the resumption of such national and State functions as have been improperly delegated to corporations and individuals, such as the control of finance and commerce, and the assumption of such additional functions as may be essential to the successful consummation of the

pledges guaranteed in the Constitution of the United States, where it reserves the right to do any and all things essential to the general welfare of the people. Usurious rates of interest are demanded for the use of money, ten per cent on personal security and eight to ten per cent on real estate being the prevailing rate in Iowa and Minnesota, and twelve per cent on personal and ten per cent on real estate in the Dakotas, with bonus and usury often amounting to twenty or thirty per cent, and thousands of cases could be given where it even exceeded the latter ruinous figure. I refer now to country loans; somewhat lower rates may be obtained in cities. Chattel mortgages on short time, and at high rates of interest and large bonus, with exorbitant attorney fees, in many instances actually exceeding the face of the notes, are placed on everything the farmer owns or expects to own, teams, machinery, stock, furniture, crops for the current year, and for three, four, or five years in advance: these short loans are renewed at compound interest from two to six times a year; each renewal the poor debtor pays what he can, adds new bonuses, compounds interest, pays for making out and filing the mortgage.

The failure of crops must not be charged with this condition of affairs; for while there have been partial or local failures some years, the aggregate crops have steadily increased in quantity and decreased in value for the past twenty-five years. Multitudes of banks, loan agents, and money sharks have sprung into existence, swarming in every city and village, and fattening off the dire necessities of the people. Where one bank could easily transact all the legitimate business for a village or county, seven or eight are located, supplemented by double that number of loan agents, and all of them seemingly prosperous. I have before me a newspaper published in a small county in South Dakota, with fortyeight notices of foreclosure of real estate mortgages in it, covering over half the paper, and in which the attorney fees and publication fees exceed the face of the original mortgages by over fifty per cent; and while that is an extreme case, it is an indication of the relentless methods pursued. There are hundreds of cases where, in the course of five or six years, the poor debtor has paid more than the amount of the original loan in interest and usury, and found himself with a larger debt on his hands at the end than when he started.

Another serious bar to our prosperity has been excessive and discriminating freight rates upon our railroads. With the two great rivers of the continent and the Great Lakes upon our borders, it would seem that competition would regulate that. But the facts are that, despite the Interstate Commerce law and our numerous lines of supposed-to-be-

competing railroads, it costs as much or more to draw our produce the few miles necessary to reach our general markets, - viz.: Minneapolis, Duluth, Chicago, or St. Louis, - as it does to carry it thence a thousand miles by rail through to New York, or even clear through to Liverpool; which practically amounts to the prohibition of shipments of heavy and bulky articles when the price is low; often potatoes, hay, corn, oats, wood, brick, coal, cost much more for freight than the producers originally received for them. Thousands of people burn hay, and other hundreds of thousands burn much less fuel, and consume less of the necessaries of life, on account of the additional cost resulting from excessive freight charges. A coal-mine owner in Pennsylvania told the writer recently that he would be glad to put coal on the car at 75 cents per ton, and yet we, a thousand miles away, are compelled to pay \$8 to \$8.50 per ton for that same coal, or do without. Coal in Iowa, 300 miles from Huron, South Dakota, costs \$1.40 per ton on board car. Delivered at Huron, \$5, — 1½ cents per ton per mile freight. Sworn statements by railroad managers before Congressional committees put actual cost of railroad freight transportation at two mills per ton per mile, which would reduce the freight to 60 cents per ton, and cost of coal to \$2 per ton at Huron. Cheap bread and meat can never become a reality to the people so long as transportation companies have it in their power to "tax the traffic all it can bear."

Again, for long years the elevator companies were in combination with the railroad officials, being really a wheel within a wheel, officers and stockholders in the one occupying a similar position in the other, and by means of discrimination in rates and favoritism in securing cars, practically monopolized the shipping interest and controlled the prices.

North Dakota elects commissioners, but they haven't been in office long enough to accomplish much good, and are handicapped by an ineffective law, which the railroads take good care shall not be materially tampered with.

In Dakota the poor man who cannot afford to buy a two-thousand-mile ticket pays four cents a mile passenger fare, while the rich man rides at two cents, and the politicians, judges, and office-holders go free. The people are tired of all this, and in casting about for relief, realize that it must come through Congress, in the way of a greater volume of currency, divorced from the control of national banks or any individual or corporation, and in the ownership and control of our lines of transportation by the government, and run in the interest of the people at cost, the same as our postal system. But when we go to Congress with our petitions and demands, we are coolly informed that farmers do not

understand finance, and that money and transportation must be left in the hands of their friends; *i.e.* the bankers and railroad kings.

Between 5000 and 6000 Alliances, Knights of Labor, and Labor Unions have been organized during the past few years in the four States mentioned, and every one is a living and vigorous protest against the existing order of things; and if the politicians were not blind they would see the storm brewing, and trim their sails accordingly. But none are so blind as those that will not see, and nothing but a political cyclone will open their eyes. The people have about despaired of securing relief from either of the old parties, being satisfied that they are hopelessly and helplessly under the domination of Wall Street and the great corporations, and are moving strongly for the organization of a people's party; and if they do, it is a safe prediction that they will sweep the Northwest with an overwhelming plurality.

In South Dakota the majority of the county officers, two-fifths of the legislature, and a United States senator were elected last year on an independent ticket.

Minnesota polled 58,000 independent votes, electing legislators enough, headed by the president of the State Alliance, Hon. Ignatius Donnelly, to control largely the legislature, and elected one congressman by a large majority. North Dakota, while not electing her men, largely controlled the nominations of the other parties, resulting in the election of an Alliance congressman and a friendly senator.

In Iowa there was no general independent ticket put in the field, although a number of candidates were nominated and made a strong run, defeating the majority of the Republican congressmen in that old stronghold of Republicanism. But they are awake now, and will be heard from in 1892; and if the "situation in the Northwest" is not changed, politically at least, at that time, it will not be the fault of the State mentioned.

CHAPTER XVI.

THE INFLUENCE OF WOMEN IN THE ALLIANCE.

By Mrs. Bettie Gay, Columbus, Texas.

In the past, woman has been secondary as a factor in society. She has been placed in this position because the people have been educated to believe that she is mentally inferior to the sterner sex. Only of late has the discussion of her social and political rights been brought prominently before the country. The male portion of our population, through a false gallantry, have assumed that they are the protectors of the "weaker sex": women have been led to believe that they had no political or social rights to be respected, and a very large majority of them have bowed in quiet submission.

History proves that the more crude and savage society is, the lower women are placed in the social scale. The men of savage races compel their women to do all the work; in fact, to be their slaves. When this social question is investigated from a scientific standpoint, the wonder is that man has ever been able to emerge from his original condition, while the situation of the mothers of the race has been such as to naturally impede intellectual progress. Only the plain manifestation of the laws of nature and the human mind has enabled man to raise himself above the crude forms of barbarism, and establish what is now termed civilized society.

Education concerning the effects of social conditions is demonstrating that most of the moral evils which afflict society are produced by the unnatural conditions which are imposed upon women. Nature has endowed her with brains; why should she not think? If she thinks, why not allow her to act? If she is allowed to act, what privilege should men enjoy of which she should be deprived? These are pertinent questions which society should begin to consider.

Go into the rural districts, and look at the position occupied by the wives and daughters of the farmers. They have, until of late, occupied a social position which tended only to discourage intellectual effort. In most of the churches women have been allowed no voice; and the very moment some brainy woman in a community would rise above her surroundings and take an interest in public questions, the men, as well as the women, would begin to discourage her efforts. She would



MRS. BETTIE GAY.



be told by her father, brother, or husband, that such questions are not the concern of women. But the Alliance has come to redeem woman from her enslaved condition, and place her in her proper sphere. She is admitted into the organization as the equal of her brother, and the ostracism which has impeded her intellectual progress in the past is not met with, and men have begun to recognize the fact that, when the women are educated, the battle for human rights will have been fought and won.

Her position in the Alliance is the same as it is in the family,—the companion and helpmeet of man. In it she is given the opportunity to develop her faculties. She is made to feel that she is the equal of man, and that she can make herself useful in every department of human affairs; that her mission in the world is more than merely to be called wife or mother (both of which are honorable), but her work is one of sympathy and affection, and her help is as much needed in the great work of reform.

Only in late years have women been considered a necessary factor in reform movements. This has been brought about by advanced thinkers. who have studied sociology and the science of intellectual and moral development. Society seems never to have thought of the fact that there is no progress without opportunity, and that depriving women of their social and political rights has taken from them the inducement to become educated upon great questions. The Alliance contemplates the opening of every avenue of intelligence, which will induce women to become educated, and capable of taking care of themselves in the struggle for existence, and the establishment of a social system which will guarantee to every human being the results of his labor. The condition of the wives and daughters of the farmers is but little better than that of the women who work in factories. In probably a majority of instances, in the South and Southwest, the women assist in cultivating and gathering the crops. Such a condition of industrial serfdom the Alliance, with other reform organizations, expects to overthrow.

In the effort for reform, none can be more interested than women, as they are the chief sufferers whenever poverty or misfortune overtakes the family. They are the ones to look after the welfare of the children, of the family. They, more readily than the fathers, see what is necessary to make the family happy and comfortable. But, having been educated to believe that bad conditions are caused by Divine Providence, or are the result of mismanagement, many of them have borne the social evils in silence, and trusted for happiness after they shall have crossed "the silent river."

Through the educational influence of the Alliance, the prejudice against woman's progress is being removed, and within the last five years much has been accomplished in that direction. Women are now recognized as a prominent factor in all social and political movements. In the meetings of the Alliance she comes in contact with educated reformers, whose sympathies she always has. Her presence has a tendency to control the strong tempers of many of the members, and places a premium upon politeness and gentility. She goads the stupid and ignorant to a study of the principles of reform, and adds an element to the organization, without which it would be a failure. Being placed upon an equality with men, and her usefulness being recognized by the organization in all of its work, she is proud of her womanhood, and is better prepared to face the stern realities of life. She is better prepared to raise and educate her offspring, by teaching the responsibility of citizenship and their duty to society.

The meetings give recreation to the mind, and the physical being is for a time relieved from incessant toil. The entire being is invigorated, and the mind is prepared for the reception of such truths as fit her to be companion, mother, and citizen. As stated above, woman has not been considered a factor in great movements, until of late years, but she comes prominently to the front in the Alliance, and demands that she be allowed to render service in the great battle for human rights, better conditions, happier homes, and a higher civilization generally. In fact, she has come to the conclusion that she has some grievances for which remedies should be found, and that she owes it as a duty to herself and society to help work out the social and political salvation of the people.

I believe that there are remedies for most of the evils which afflict society; that poverty and want are the chief causes of crime; and the reason why so many people are found occupying unnatural conditions, is because of the violation of the principles of justice and right, by the government allowing the few to monopolize the land, money, and transportation, which deprives a large portion of the people of their natural right to apply their labor to the gifts of nature. Under such conditions, the people become dependent, hopeless slaves, — a condition which drives the last spark of manhood and womanhood from their bosoms, — and they become outcasts and criminals, and fill our jails and penitentiaries and other places of shame.

It is the duty of the Alliance to consider these questions, and none others are so much interested in the regeneration of society as women. When the battles of life are to be fought, she is always a valiant soldier, and many of them bear upon their faces the scars of the battle with

poverty and want. The faces and forms of many of the farmers' wives bear marks of premature age. Their sensibilities are deadened with the cares and toils of life. They have enjoyed but few of the benefits of modern civilization, and but few of the luxuries of life which they have helped to create. They have plodded along, while conscienceless greed has fattened upon their labor, and deprived them of the conditions which are necessary to make them happy and good, — their lives a blessing, their homes a heaven.

But this is a new era in human progress, when woman demands an equal opportunity in every department of life. She is no longer to be considered a tool, a mere plaything, but a human being, with a soul to save and a body to protect. Her mind must be cultivated, that she may be made more useful in the reform movement and the development of the race. It is an acknowledged principle in science that cultivated and intelligent mothers produce brainy children, and the only means by which the minds of the human race can be developed is to strengthen, by cultivation, the intellectual capacities of the mothers, by which means a mentally great race may be produced. When I look into the hard and stolid faces of many of the mothers of the present, and know that they have been deprived of the opportunities which would have improved them, I am not surprised that we are surrounded by people who are the advocates of a system but little better than cannibalism.

Through a system of education, in the Alliance and kindred organizations, we are slowly but surely eradicating the false doctrines of the Dark Ages, and the traditions of the pagans, handed down to us through false teaching. To remove these evils is the grandest work of the age, and the woman who holds herself aloof from reform organizations, either through false pride or a lack of moral courage, is an object of pity, and falls far short of the duty she owes to herself, society, and posterity.

If I understand the object of the Alliance, it is organized not only to better the financial condition of the people, but to elevate them socially, and in every other way, and make them happier and better, and to make this world a fit habitation for man, by giving to the people equal opportunities. Every woman who has at heart the welfare of the race should attach herself to some reform organization, and lend her help toward the removal of the causes which have filled the world with crime and sorrow, and made outcasts of so many of her sex. It is a work in which all may engage, with the assurance that they are entering upon a labor of love, in the interest of the downtrodden and disinherited; a work by which all mankind will be blessed, and which will bless those who are to come after for all time.

The education of the masses is the hope of the world, and a healthy public sentiment must be created in the interest of labor. Poverty must be abolished, and the natural rights of the people must be respected. It is unnecessary for me to pay any tribute to, or heap any abuse upon, woman. She is precisely what her opportunities have made her, whether she is found in a palace or a hovel. She is flesh and blood, and whatever virtues or vices she may possess, can only be attributed to environment and opportunity.

What we need, above all things else, is a better womanhood,—a womanhood with the courage of conviction, armed with intelligence and the greatest virtues of her sex, acknowledging no master and accepting no compromise. When her enemies shall have laid down their arms, and her proper position in society is recognized, she will be prepared to take upon herself the responsibilities of life, and civilization will be advanced to that point where intellect instead of brute force will rule the world. When this work is accomplished, avarice, greed, and passion will cease to control the minds of the people, and we can proclaim, "Peace on earth, good will toward men."

CHAPTER XVII.

RELIGION IN THE ALLIANCE.

By Rev. Isom P. Langley, Ex-Lecturer of the Agricultural Wheel.

What influence will the National Farmers' Alliance and Industrial Union have upon the religious institutions of our country? is becoming a question of about as much magnitude to the leaders of religious thought as the question of its political action is to the two great parties. The farmers are thinking and acting more independently than ever before. For some time the political and religious ties of the people have been growing less binding, and men and women have become more exacting as to the conduct of the leaders in both Church and State.

Politics being the science of government, we have the right to know the reasons for the conduct of our public servants. Science is what we know, and not what we may suppose. Supposition is the mother of all our mistakes. Knowing the principles upon which our government is founded, we have the right to call in question the authority of any one who may attempt to change the basis upon which our fathers established our institutions. Our government is intended to be a government of the people, by the people, and for the people; and the people should be consulted on all questions involving their rights to life and property, it being the object of all just governments to secure the greatest good to the greatest number.

To secure these ends, the National Farmers' Alliance and Industrial Union has been putting forth all its energy in educating the wealth-producers of the country in the science of economical government. The prediction has been made that this grand order would go to pieces and fail to accomplish any good; yet it continues to grow, and its principles, as they are better understood by the masses, become more popular.

The religious sentiments contained in the basic principles of the Alliance are giving it its wonderful power with the people. True religion, not sectarianism, is its crowning glory. This organization makes war upon vicious principles, and not upon men, and it will not permit any man or set of men to get in its way. Good government for the

people is its object. To form and perpetuate a good system of government, the people must be just and good.

This brings us to the question: What is religion? The true meaning of religion is, a high sense of moral obligation, and a spirit of reverence or worship toward God, with the desire that all mankind may be happy in this life, as well as in the life to come. No one can truly honor God, who does not desire the happiness of all. God, our common Father, makes no distinction between his children. Why, then, should human governments make such shameful distinctions among men? Christ fed the hungry thousands, that he might more deeply impress upon the minds of those who gathered to hear him, his great doctrine: "Whatsoever ye would that men should do unto you, do ye even so unto them." Any one may know whether he is a Christian by this great rule. Whenever any individual reaches the point where he is willing for others to do to him as he does to others, he can be sure that he has passed from death unto life. One of the main reasons why we have so many empty seats in our churches is the abundance of empty stomachs and unclad limbs. How to reach the people is the question that is being discussed by our ministry all over our country. There is only one solution. See to it that the people who produce the wealth of the nation get a fair share of the profits of their labor. You cannot reach a man's higher sentiments as long as he has an empty stomach, or is in need of decent clothing. Let our pastors and priests study the physical needs of their people more, and give them less theology, if they desire to Christianize the world. Religion is a principle that grows in a man. It remains with him seven days in the week. The true Christian is just as good on Monday as he is on Sunday.

Theologians boast of the Christian government of the United States; but where is the spirit of Christ in our national and State governments? Is that government Christian which creates millionnaires and palaces on the one hand, and paupers and miserable homes on the other? Is that government Christian which licenses the liquor traffic? *It is the duty of all governments to eradicate the evils of extreme poverty and vice, restrain the strong and vicious, and strengthen the weak and helpless. What are we doing, as a nation, on the line of equal rights for all, and special privileges for none? Name a government that permits the masses to be robbed more systematically than ours does.

Among the reasons we have given, in the past, for the superiority of our form of government, none had more weight with the public than the claim that here the few could not prey upon the many; yet, for the last twenty-five years, no people on earth have been more successfully

deprived of their honest earnings than the citizens of the United States. Competition is no longer the life of trade. It has grown into a system of combinations and trusts. Shylock rules the commercial world. The worst feature of the whole matter is, that the names of these modern pirates often can be found upon the records of some religious organization, and they are known as liberal contributors to our benevolent and religious institutions.

There was a time when you might make the masses believe that it was a part of the divine plan that some should be very rich and many very poor; but you cannot deceive all the people any longer on that line.

The members of our labor organizations know that it is God's plan that men and women who are able to work must live by their industry, and they are not the poor that "we have with us always," who are spoken of by Christ. He meant that those who were disabled so as to be unable to work should be cared for by alms or charity, and not those who were able to work.

The old rule was that those who could work and would not, should not be allowed to eat. But this ancient rule has been changed, and they who do the least now, get the most. Organized labor proposes to correct these abuses. The revellings of these modern Belshazzars and their thousand lords have been heard, and the expense thereof has been borne too long for the good of the whole. "Weighed and found wanting," is the writing on the wall; and the hand which writes is the hand of the Alliance, and the sentence is against our political and religious leaders. Let the religious organizations of this country practise what they preach before they dare to throw a stone at organized labor. Let all men who claim to be Christians vote as Christ would have them vote, and see how soon all wrongs would be corrected.

Labor is the creator of all wealth. What can capital do without labor? What was this country before the hand of labor seized hold of it? The Grand Master Workman of the universe has arranged matters as well as they could be, so far as natural advantages are concerned. Our country is a world within itself. Everything needful for man's happiness, in this life, is or can be produced within the limits of our country. But what was this country before the "keel of discovery" touched its shores? With all its natural beauty, it was a waste, howling wilderness, inhabited by wild men, ferocious beasts, and venomous reptiles. What power wrought these mighty changes? Instead of the lonely wigwam of the aborigines, we have innumerable beautiful cottage homes, inhabited by millions of farmers and mechanics, the bone and sinew of the grandest government, ancient or modern. Instead of the mud village of some

war chief, we have magnificent cities and towns, scattered all over this vast territory, the centres of commerce, wealth, and refinement. Instead of the lonely pathway of the untutored savages, we have the highway of quick transportation, with its tracks of steel. Instead of the frail canoe of the red man, we have great floating palaces propelled by steam, links in our system of commerce and travel. Instead of the few small patches of half-cultivated maize of the poor Indian, we have thousands of well-tilled farms, the products of which are anxiously sought for the world over. Instead of a few crude shops where the red men manufactured their bows and arrows, we hear the hum of thousands of spindles, the ring of thousands of anvils, and the whir of a million saws.

The contrast is indeed great. What brought about this mighty revolution? Labor, directed by the spirit of right, has banished the war songs of the savage, and on thousands of hills has erected altars where millions of voices can be heard singing, "Praise God from whom all blessings flow." It has erected school-houses all over the land, where the humblest child may obtain a liberal education free. It has demonstrated the fact that the best form of government is where the majority rules, and the rights of the minority are respected. Without labor the iron horse would stand still on the track; the hum of every mill would be hushed; the plow on every farm would stand idle; our churches and school-houses would be closed; and all our boasted glory as a nation would fade away like the flowers before the rays of the scorching midsummer sun. The time has come for the religious world to put itself in line with the great principles of humanity, advocated by organized labor. If the Christian ministers of the United States had the moral courage to preach the religion of Jesus Christ instead of yielding to the influence of Mammon-worshippers, our political organizations would not dare to neglect the demands of the people. If all men who claim to be members of religious institutions would vote as their respective articles of faith indicate, the wrongs of which organized labor complains would be righted at once.

While the very spirit of true religion is found in all Alliance meetings, yet no sectarianism is manifested, or political preferment known. Its motto is, "In things essential, unity; in all things, charity." The question of "Solid North," or "Solid South," is never heard in any well-regulated lodge or local union. The one great question is: How can we better the condition of those who earn their bread by the sweat of their faces? "An injury to one farmer, or laborer of any trade, is the concern of all farmers, laborers, or mechanics," say our labor advocates. It is a true statement; for if a system will take something for nothing

from one toiler, it will reach them all, sooner or later, unless the system is corrected. The industrial reform does not contemplate the destruction of the rights of any one, but it seeks to deprive a few individuals of the special privilege of robbing the many.

What a shame it is that the churches of the country do not lead in these great reforms. But it is now as it has been in all ages, — reform does not begin in churches or parties. It originates in the mind of some one who will not be fettered by the dogmas of ecclesiastical organizations, and who is brave enough to bear the stripes of the old party lash. The leaders of our present reforms are men and women who would not submit to the dictations of either sectarianism or partisanism. They love humanity better than they love sect or party. It is the spirit of Christ that is arousing the people.

No organization, religious or political, need be alarmed at the action of a body which is constantly striving to secure entire harmony and good will to all mankind, and brotherly love among its own members, laboring to suppress personal, local, sectional, and national prejudices, and all selfish ambition among its members and the people. The Alliance stands by the doctrine of the fatherhood of God and the brotherhood of man. It is ready to co-operate with all institutions that have for their object the betterment of humanity.

CHAPTER XVIII.

THE LABOR MOVEMENT.

By RALPH BEAUMONT, LECTURER KNIGHTS OF LABOR, AND EDITOR National Citizens' Alliance.

The labor movement is not by any means a new movement. It is as old as history itself. Osborne Ward, the translator of the Labor Bureau at Washington, in his book entitled "The Ancient Lowly," traces it back to the days of Abraham; and James Bronterre O'Brien, in his work entitled "Human Slavery: the Way it Came into the World and the Way that it Should be Made to go Out," traces it back to the days of the patriarchs.

It is not my intention to refer to any of the many phases of the movement that may have taken place in those ancient times, but simply to make a brief record of its different phenomena, as I have observed them for the past twenty odd years in this country. The labor organizations that existed in this country prior to the war of the Rebellion were mostly of a local nature. This country, prior to that time, was what might be termed an agricultural country, and that, too, different from any other country on the face of the globe. In nine out of ten cases, the farm laborer was the owner of his own farm, and, in many instances in New England, they divided their labors between the farm, mill, or workshop, and, as a result, were independent of their employers. Besides that, the manufacturing establishments were of a small character, as far as capital was concerned.

But with the war came the demands for increased productions on the part of manufacturing establishments, which resulted in the concentration of capital into large bodies. It is but a little over forty years ago when the New England cotton or woollen mill was the property of one or more individuals; from that it became the property of two or more; and from that to the corporation, consisting of several individuals, clothed by law with special powers. And from the corporation owning one or more mills, it became the corporation owning several mills, until to-day, in one city in New England — Fall River — may be found twenty-five or more mills, employing anywhere from three hundred to fifteen hundred operatives in each separate establishment, representing a combined capital of more than \$30,000,000. The whole

business is concentrated into what is termed a Board of Trade, composed of one representative of each mill or corporation represented in the combination. And this again is concentrated down to an Executive Committee of five persons. And this combination of capital is of such a character that the little bobbin boy that pieces behind the mules cannot ask for a five-cent raise in wages, without causing a throb to go through the whole \$30,000,000 of capital. And the same concentration of capital has been going on in all other manufacturing industries, as well as the cotton and woollen.

At the time these industries were in their infancy, the employees were all either American or skilled English. The farmers' daughters, after they had finished their education in the common school or village academy, would come into the town or village, and work in these manufacturing establishments. Dickens, in one of his works describing one of his visits to the United States, says that he found a well-edited magazine published in Lowell, Massachusetts, and the articles were written by the operatives in the mills of that city. This was as early as 1840.

The moment a person becomes educated, that moment he demands a higher standard of civilization. That was the case with these New England mill operatives. They wanted magazines, daily papers, fine surroundings, shorter hours of labor, more leisure to devote to pleasure and study, better and more comfortable homes. The moment this was asked for, capital, which, under our present competitive system, treats labor as a commodity, and our civilization according to the doctrine of the survival of the fittest, rebelled against it, and said that the business would not warrant it; that fourteen hours was little enough for workmen to toil; and when this labor began to rebel by organization and combination, they began to place their boycott upon it.

There had been a race of people living in Ireland for over four hundred years, in a sort of semi-slavery bordering upon starvation. In 1848 this island was visited with a famine, and emigration began to set in towards the United States. The moment that these people set foot upon our shores, the capitalists looked upon them as their prey. They said, "There is a workman that does not need fine things. He has never had them, and he has no taste for them. Look at that frieze coat that he wears. He has worn that for ten years, and he will be content to wear it for ten years more." Then they offered this man twenty-five per cent less than the educated American was getting; but it was twenty-five per cent more than the Irishman had been receiving, and so was a step upwards for him. In the course of time the Irishman had children that grew up under our civilization; they were educated

in our common schools, and it created a demand on their part for better surroundings; and when they began to demand the wages that would secure them, these same capitalists refused on the same plea as before, that the business did not warrant the advance. Then the employing class made another flank movement, and went over to Canada and imported the Canadian Frenchman, who could neither read, speak, nor write the English language, and who, from his habits of living, was contented to eat lard instead of butter on his bread, and put him to work in the place of the Irishman and his children. It has now reached the point when these Frenchmen have raised a generation of children, who, after having been brought up in our civilization and educated in our common schools, are demanding at the hands of these capitalists those improved methods of living that are the product of our civilization. The capitalists are now substituting Italians and Hungarians for them. It would seem that system and business methods demand that there should be a class of workmen who are of a lower order of intelligence.

This system of substituting the ignorant workman in the place of the intelligent one has taught the intelligent ones that it is necessary for them to combine together to resist this process of despoliation. Because of this conviction, labor organizations sprang into existence.

There have existed in this country, since the close of the war, two different schools of labor reformers. One school was in favor of reform by political methods. The other was composed of those who were in favor of gaining the reform upon the line of what is termed the wage question. They accepted the capitalistic idea of economics, which was in substance that labor was a commodity, and that the law of supply and demand regulated the matter of wages. The political school insisted that, under an industrial republic like ours, it was more a question of legislation, and that by special enactments some were getting more of the products of human effort than they were entitled to. Those who adhered to the capitalistic idea proceeded to organize upon what is termed the "trades-union" principle, and to fight the battle upon that line, and there are a goodly number that adhere to that method to-day, Among the trades that first assumed a national character during the war were: "The Iron Moulders' International Union," of which William H. Sylvis of Philadelphia was the president; "The International Cigarmakers' Union," of which John J. Junio of Syracuse, New York, was the president; "The Machinists and Blacksmiths' International Union," of which John Fearinbach of Ohio was the president; "The International Typographical Union," of which John Farqhuar was president. Farqhuar in after years represented the city of Buffalo in Congress, and

in the fifty-first Congress was the chairman of the Committee on Merchant Marine and Fisheries. There were other trades that were organized, but few of them attained any prominence of a national character.

In 1866 Newell Daniels of Milwaukee and a half-dozen other shoemakers founded what was known as the "Knights of St. Crispin." This organization accepted the capitalistic idea that wages were governed by the law of supply and demand, and they set about to regulate and curtail the supply. Upon joining the order, every member was pledged not to teach any new help. This had the desired effect. In the short period of two years the wages in the shoe trade went up twenty per cent, and all of the boys and apprentices disappeared in three or four years. The manufacturers were compelled to scour the country towns for men who had learned the trade, as none others were any use to them, as the men refused to teach or show them. Help was advertised for abroad, and it seemed that every German that came over to this country at that time was born with some shoemaker's tool in his mouth, for every one of them that the manufacturers hired was a shoemaker in the old country, and that made him eligible to join the organization and receive instructions from the craft. This was necessary, as every one of them had to practically learn his trade over again, as the method of working was so different. And in many instances it took longer to instruct him than it would have taken to instruct a young man brought up here in this country. But under the rules of the society the young man was debarred by the pledge of the organization, while, if the German had learned his trade in the old country, it did not prevent a member from teaching him over again. But when the panic of 1873 came, it broke the power of this organization to curtail help. There were so many thrown out of employment that the workmen had to compete with one another for work, and the organization went to the wall.

In 1865 there was a conference of some of the advanced thinkers in the labor movement, at Louisville, Kentucky. Captain Richard F. Trevellick, then president of the "Shipcarpenters and Calkers' International Union," was one of the leading spirits. This conference was the first step that was taken by the wage workers in this country, for advancing the work of labor reform in a manner different from that which had been practised by the Trades-Unionists. These men saw what the Trades-Unionists did not see; viz.: That the capitalists were using Congress and the different State legislatures to strengthen them in their fight against the laboring people; that they were obtaining special privileges, in the form of special laws, which gave them power to obtain more of the products of the joint labor of capital and labor than

they otherwise could do. These men, few as they were in number, set out to form an organization that would counteract the work of the capitalistic class in that line. They noticed that special privileges had been obtained by these capitalists to issue money, which enabled them to control its volume; that, while it was a good thing to have labor rely upon the natural law of supply and demand, in their opinion it was bad for money to do the same thing. Besides that, these men saw that the capitalistic class were also using the government law-makers to obtain large blocks of land that, in the near future, would be very valuable, on account of the increase in population in the country.

The preliminary steps taken at Louisville resulted in the calling of a convention in the city of Baltimore, in 1866. Among some of the men who were at that convention were Captain Richard F. Trevellick of Michigan; Thomas A. Armstrong of Pennsylvania, the founder of the Labor Tribune, of Pittsburgh, Pennsylvania; A. C. Cameron, who at that time edited the Workman's Advocate, of Chicago, then about the only distinct labor paper in the country; John Oberly, who afterwards became Indian Commissioner and Civil Service Commissioner under President Cleveland. This convention appointed a committee to draw up a platform of principles, and then adjourned. But before it adjourned, it adopted the name of "The National Labor Union," and prepared to form subordinate unions throughout the country. The committee appointed to draw up the platform consisted of A. C. Cameron, Chairman, Thomas A. Armstrong, and several others. This committee met at Ionia, Michigan, on December 18, 1886, drew up a platform, and published it to the world. It may be said that the beginning of labor taking a hand in politics in the United States dates from the publishing of that platform.

The next time that the National Labor Union met was at Chicago, in 1867, at which meeting William H. Sylvis, of the Iron Moulders' Union, was elected president of the body. The next meeting was at New York, in 1868. The publishing of this platform to the world caused others besides workingmen to interest themselves in its proceedings. Among those who came asking admission to the New York meeting were General A. M. West, who at that time was President of the Ohio and Mississippi Railroad; Britton A. Hill of St. Louis, one of the ablest legal minds of that city at that time; and General Samuel F. Cary, who afterwards represented the city of Cincinnati in Congress.

There were local tickets nominated upon this platform, in several different sections of the country, during the next four years. In Massachusetts there were several members elected to the legislature in both

branches, and as a result of this new factor in politics, came the first labor bureau ever established in this country (the Massachusetts bureau). In 1870 there was a State ticket run on this platform in New York. James S. Graham of Rochester was the nominee for governor, and Conrad S. Kuhn of New York City, who was at that time the vice-president of the "International Cigarmakers' Union," was the nominee for lieutenant governor. Alexander Troup, who at the present writing is editor of the New Haven Daily Union, was very prominent in this movement.

In 1872 the officials of the National Labor Union called a national convention at the city of Indianapolis, for the purpose of placing in nomination candidates for President and Vice-President. At this Convention Judge David Davis of Illinois was nominated for President, and Senator Booth of California, for Vice-President. Both of these gentlemen declined, and the Executive Committee did not see fit to place any new men in nomination. Judge Davis was afterwards elected to the United States Senate, over John A. Logan, by some workingmen who held the balance of power in the Illinois legislature. In 1876 the National Committee, elected at Indianapolis in 1872, called another convention at the same city, and placed in nomination for President, Peter Cooper, the New York philanthropist, and Samuel F. Carey of Ohio, as Vice-President, and something like 81,000 votes were cast for this ticket. This party was termed the Greenback party. The following is the platform as adopted at that convention:—

"The Independent party is called into existence by the necessities of the people, whose industries are prostrated, whose labor is deprived of its just reward by a ruinous policy which the Republican and Democratic parties refuse to change; and in view of the failure of these parties to furnish relief to the depressed industries of the country, thereby disappointing the just hopes and expectations of the suffering people, we declare our principles, and invite all patriotic men to join our ranks in this movement for financial reform and industrial emancipation.

"First. We demand the immediate and unconditional repeal of the Specie Résumption Act of January 14, 1875, and the rescue of our industries from ruin and disaster resulting from its enforcement; and we call upon all patriotic men to organize in every congressional district of the country, with a view of electing representatives to Congress who will carry out the wishes of the people in this regard, and stop the present suicidal and destructive policy of contraction.

"Second. We believe that a United States note, issued by the government, and convertible, on demand, into United States obligations, bearing a rate of interest not exceeding one cent a day on each one hundred dollars, and exchangeable for United States notes at par, will afford the best circulating medium ever devised. Such United States notes should be full legal tenders for all purposes, except for the payment of such obligations as are, by existing contracts, especially made payable in coin; and we hold that it is the duty of the government to provide such a circulating

medium, and insist, in the language of Thomas Jefferson, that 'bank paper must be suppressed and the circulation restored to the nation, to whom it belongs.'

"Third. It is the paramount duty of the government, in all its legislation, to keep in view the full development of all legitimate business, agricultural, mining,

manufacturing, and commercial.

"Fourth. We most earnestly protest against any further issue of gold bonds for sale in foreign markets, by which we would be made, for a long period, 'hewers of wood and drawers of water' to foreigners, especially as the American people would gladly and promptly take at par all bonds the government may need to sell, provided that they are made payable at the option of the holder, and bearing interest at three and sixty-five per cent per annum, or even a lower rate.

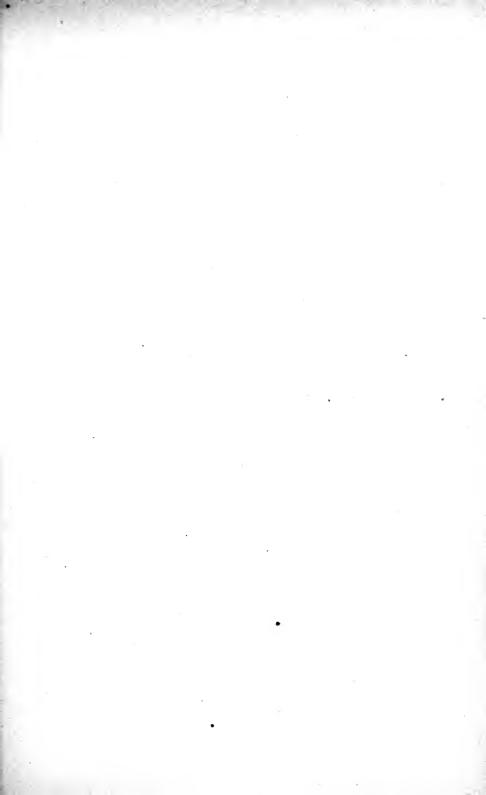
"Fifth. We further protest against the sale of government bonds for the purpose of purchasing silver to be used as a substitute for our more convenient and less fluctuating fractional currency, which, although well calculated to enrich owners of silver mines, yet in operation it will still further oppress, in taxation, an already overburdened people."

In 1877 there was another movement that took root here in the United States. It was termed the "Socialistic Labor Party." It went further than any other labor movement that had ever come to the front in this country. It aimed to do away with competitions as means of advancing civilization. It believes that the next step in evolution is in the line of paternalism. The first national convention that was ever held in this country was in Pittsburgh, in 1877. One of the leading spirits of that body was Albert R. Parsons, who suffered death for his opinions upon this question. A great many persons have been led to believe that Parsons was of a bloodthirsty disposition, while the contrary was the case. He was of the kindest of dispositions, but he had studied the present unjust system until he had become a fanatic against it; and whenever he read of an injustice under it, he could not resist the temptation to condemn it in the most severe terms. This party has constantly placed tickets in the field at local and State elections. They have been the strongest in Chicago and New York. John Swinton of New York is one of the strongest advocates of this idea in the country, and at one time was their candidate for mayor of the city. They are gradually increasing from year to year. During the last campaign their candidate for governor, in the State of New York, reached nearly 14,000 votes. Osborne Ward, the translator of the Labor Bureau at Washington, in 1877 was the lecturer for that party, and travelled over the country in their interests, and, the same as all other labor agitators in the early days, received his pains for his services.

In 1877 there also came into prominence the organization known as the "Knights of Labor," with a platform similar in purport to the one adopted at Indianapolis. The members of this organization, as a general rule, supported the candidates of the Greenback party at election times in 1877, and in the congressional elections of 1878 this party polled over 850,000 votes for congressional candidates, and succeeded in electing thirteen independent men to Congress. The result of this force in Congress compelled the government to reverse its financial policy, which had been to retire the legal tender money and put out bonds in its place. The government had also, in 1873, demonetized silver, and at this session of Congress, through this independent force, it was compelled to remonetize it. This same party held its next convention in 1880, and placed in nomination for President, General James B. Weaver of Iowa, who had been the Independent leader in Congress during two years, and B. J. Chambers of Texas for Vice-President, and that ticket received nearly 400,000 votes.

The Knights of Labor started out on different lines from the tradesunion. They endeavored to be an educational organization, and for the space of twelve years accomplished more in that line than any other body of workingmen that had existed before that. But their work in this line was hampered by the fact that a large per cent of its members were of the wage working classes, and, as a result, the organization drifted, in the latter years, back towards the trades-union spirit. could not carry both ideas and continue in operation. Those who maintained the trades-union sentiment could not see the value of spending money in education on the line of political action, which would manifest itself in the construction of the planks in the platform; while, on the other hand, those who believed in education along political lines could not see the benefit to be gained by contributing their money to make the fight in the line of strikes. The organization became weakened by this struggle between conflicting ideas. In 1884 the Independent party held a convention in Chicago, and placed in nomination for President, Benjamin F. Butler of Massachusetts, and General A. M. West, who was at the New York convention of the National Union, as Vice-President. In 1888 this party changed its name to the Union Labor party, and placed in nomination for President, A. J. Streeter, president of the Farmers' Alliance, and Cunningham of Arkansas, as Vice-President. Every one of these presidential nominations was the outcome of the conference held at Louisville in 1865, and the main points of that platform, — land, transportation, and finance, — have never been deviated from from that day to the present, and the same principles are to-day embodied in the platform adopted by the Farmers' Alliance and Industrial Union and the Knights of Labor, at their joint conference at St. Louis in December, 1889. It was on this platform that the great political upheaval in Kansas, Nebraska, Minnesota, and Dakota was produced, in the political campaign of the summer and fall of 1890, which resulted in the election of some fifteen independent members to the fifty-second Congress—a result which has profoundly astonished the leaders of the two old political parties. It has so revolutionized public thought that, at the time of the penning of this article, there is no living person who can prognosticate the political complexion of the coming presidential campaign of 1892.

These ideas have gained such a hold upon public opinion, that they bid fair to cause a complete change in our form of government, as far as its industrial conditions are concerned, during the next quarter of a century. It looks as though, before that period was passed, the government would assume control and ownership of all means of transportation in the form of railroads; that the government would adopt a system of issuing money to the people without the aid of banking institutions, and that a larger volume per capita would be in circulation than ever before in the history of any government in the world; that the local governments of cities and towns would assume control and complete ownership of all street railroads, gas and water works. In fact, it bids fair to be a radical revolution in the industrial affairs of government. It looks as though the days of individualism and corporations were doomed, and that the next step in the line of human advancement would be the adoption of the socialistic state of society.





COLONEL R. J. SLEDGE.

CHAPTER XIX.

DUTY OF THE MEMBERSHIP.

BY COLONEL R. J. SLEDGE, KYLE, TEXAS.

THERE is always a duty which follows every responsibility of life. This proposition will hold good no matter what station the individual may occupy, be he rich or poor, learned or unlearned, saint or sinner. That duties and responsibilities go hand in hand through all human efforts, and stand side by side in all human achievements, must be accepted as a cardinal truth. This duty may relate to the individual, or extend to those either near or far. It is always present, and, when properly understood, a faithful and unerring guide. Under ordinary conditions a majority of the race will perform a duty when made plainly known. The difficulties which prevent the performance of duty are usually want of information, or mercenary and selfish motives. The individual in his individual capacity can many times reconcile his conscience to certain actions when he has proven recreant to his duty as an individual; but the difficulties of such a settlement increase when this neglect affects the conditions or rights of others. When a person, by his or her own volition, joins with others to promote the advancement of any cause, or for the attainment of any purpose, this sense of duty should become more enlarged because the responsibilities have become greater.

In all organizations there should be definite objects to labor for. This should be followed by a unity of action on the part of every member. The Scripture says that "a house divided against itself cannot stand"; neither can an organization with divided efforts continue to grow and prosper. The duties involved in membership include a desire to advance the best interests of the organization; and this is only possible where a full understanding, backed up by mutual responsibilities, exists. It is true, however, that the degree of responsibility differs with almost every individual, but it is none the less a mutual undertaking. In the Alliance the duty of each member is, or should be, distinctly understood. The motto of the order, "Equal rights to all, and special privileges to none," furnishes a safe monitor for all who may wish an object lesson in that line. It conveys the idea of equality, that condition which is only obtained through brotherly love and fraternal solicitude.

A certain writer has defined a condition of perfect equality to be "where each produces according to his means, and consumes according to his wants." The Alliance goes farther, and seeks better results. It aims, as the ultimate fulfilment of duty, to have each member educated up to one common plane, as nearly as natural or acquired abilities will permit. It assumes that the whole human family can be made better. While admitting that some can make more rapid advancement than others, it holds to the belief that all can be improved. The common "fatherhood of God and the brotherhood of man" would be the ultimate end of true Alliance doctrine. The duties of membership demand that the strong should help the weak; the educated, the uneducated; and the joyful, the sorrowing. Aid and fraternal assistance should include the financial as well as the moral and educational. A general desire to bring about peace, plenty, and prosperity to every member should actuate the whole. Herein lies the full duty of membership, and is indispensable to either success or progress.

In the Alliance all meet upon certain levels, and each is possessed of certain rights and privileges. These should be sacredly preserved, and fully recognized by every member. Those who through ignorance do not understand the full import of these conditions should be taught them at once, and not be deprived of their benefits. Duty makes every member his "brother's keeper," and formulates a condition of fraternal dependence that cannot be neglected or ignored. In all matters pertaining to moral, material, or intellectual growth, each member should be governed by one purpose and guided by one impulse. Nothing should interfere with continuity of action, in this respect, on the part of every member of the Alliance. They should stand together as a unit, defending each other, and protecting the general welfare of the order. Nothing should be taken for granted, or believed to be true concerning a member, unless clearly and distinctly proven; and even then charity, "the greatest of them all," should be permitted to dictate the terms of judgment.

The motives of the organization may not be understood, and, as a consequence, they are liable to be impugned. Because of this, members become alarmed, and the cowards retreat. Not so with those who understand their duty. They seek to make plain their objects, and try to instruct the public in the principles of the order. To do this requires courage; but this courage is nearly always found in conjunction with a proper sense of duty, and in all cases makes the weak strong, and the triumph of truth complete. The Alliance furnishes a fertile field for those who desire to benefit their neighbors and friends. The oppor-

tunities for doing good are never wanting, and all such efforts usually result satisfactorily; the farmers being, as a rule, an appreciative class, who hardly ever fail to profit by example or advice.

When difficulties are increasing, and the weight of oppression grows heavier, or the storm cloud of opposition becomes more threatening, the duties which are demanded of the membership become more burdensome and more exacting. At the present time the Alliance is on the up grade. It has required courage as well as fidelity to convictions to place it where it now is. More and greater efforts, stronger and more devoted friends, wiser counsels, and more willing sacrifices must be made in the near future, to preserve the trophies which the Alliance has already won. Nothing but an abiding faith in the ultimate triumph of truth, and a fearless, conscientious discharge of every duty, will secure to future membership the privileges and prospects of the present.

The Alliance is now in excellent condition and splendidly equipped for aggressive work. Its methods are nearly, if not quite, perfected. Its declaration of principles is clearly defined, its membership is fully alive to the necessities of the times, and the country at large acknowledges the justness of its cause. The one factor absolutely necessary to complete success is a perfect performance of duty among the members. A strict adherence to duty will rid the Alliance of all factional strife, and eliminate the demagogue, the traitor, and the coward. It will add courage, strength, and power to the undertaking, and give dignity, wisdom, and standing to the order. It will cement the organization into one solid phalanx, whose ranks cannot be broken by envy, slander, or internal dissensions. It is not the assaults of the open enemy that now threaten the perpetuity of the order; it is the insidious attacks of an unseen and secret foe, - one who works through stealth, whose weapons are promises which satisfy the greed or ambition of the members; one who can stir up strife in the order, and then add fuel to the fire already lighted. These are the dreaded enemies of the order, and can only be defeated in their nefarious scheming by a rigid performance of duty. When one member can depend upon other members to fulfil their duties at all times, fealty to the order becomes absolute, and a determination to do right becomes unswerving. The Alliance is rapidly teaching its membership their duties and obligations to the order, and it is a pleasure to know that these lessons are bringing forth the rich, ripe fruit of obedience. Nothing indicates the power and ultimate triumph of the principles of the Alliance more forcibly than the manner in which the membership are standing by their duties. If this condition can be perpetuated, future generations will

have cause to rejoice. Whether it will continue or not, depends entirely upon the proper application of the sense of duty which obtains among the membership.

The Alliance movement, during its brief existence, has done-more to educate the great mass of people in the principles of government than all the schools and colleges have in the past century. The people are, through the methods made use of by the Alliance, learning the rights and duties of citizenship with a rapidity and clearness truly alarming to the chronic politician. The Alliance has taught the wealthproducers of the North and South that their interests are identical; that it is their duty to eliminate all sectional feeling, and work together for the common good. It has done more. It has taught them to look upon all attempts to array one portion against another, or revive old animosities, as a cruel wrong, and intended to serve political purposes. They are learning to class the average politician as an enemy to labor in production, and in the near future will put this knowledge to a practical The fact is being made apparent that all labor, whether it be found amid the snow and ice of the North, the rough and rugged portions of the West, or the more mild and balmy sections of the South, must stand together for mutual protection. The Alliance is the initial movement which, if continued, will bring about a unification of sentiment based upon questions of national importance, that will benefit labor, wipe out all sectionalism, and prove a lasting blessing to the whole people.

The objects taught in the Alliance tend to make the membership better and stronger men and women, and fit them more properly for the duties and responsibilities they may be called to bear. In this lies the secret power of the Alliance, and with its increase come more certain prospects of future achievements. No matter what differences may at first appear in the Alliance, in regard to education, morals, social relations, or matters financial or material, a proper sense of duty, wisely and justly applied, will in time produce one united, self-respecting, selfreliant, and earnest organization of well-meaning, duty-loving members. As I have said before, the duties and responsibilities of membership are found together; they are almost inseparable, and demand not only watchful attention, but a strict adherence. No man or woman can long neglect either and maintain their position in ordinary society, much less as members of an organization. It therefore is incumbent upon every one, who has his own or others' welfare at stake, to see to it that every obligation is carefully discharged, and every duty fully performed.





JOHN M. POTTER.

CHAPTER XX.

THE DUTY OF A REFORMER.

By John M. Potter, Secretary Michigan State Alliance, and Editor of the Alliance Sentinel, Lansing, Michigan.

A REFORMER has stood in all ages past, and will doubtless stand in all time to come, among his fellows misjudged and misunderstood. His motives will be impugned, his sincerity questioned, and his efforts unappreciated. He is one "who treads on the thorns and thistles of earth, while walking amid the stars."

The qualifications of a reformer are numerous and exacting, and without them success is impossible. Honesty, patience, and courage are the three most essential. Add to these a continuity of action, a full understanding of the proposed reform, and a willingness to labor without even a prospect of reward, and the necessary requirements of a genuine reformer are partially enumerated. The incessant, persistent exercise of those qualities constitutes, in part, the duty of a reformer. He who undertakes a reform must fight existing power, old conditions and practices, and the almost universal dread of innovations. The settled policies of years are to be changed; the prejudices of long standing are to be overcome; and last, but by far the most difficult, education must do its perfect work.

To be a reformer is to be a hero, perhaps a martyr, but seldom a beneficiary. It is only after the ground has been prepared, the seed sown, and the plant cultivated, that the harvest can be gathered. It is just so with a reform. The people must be prepared through want and distress; the cause must be discovered and pointed out; the remedy must be clearly shown; and a concert of action toward the demand for its application must be aroused; and after all this has been brought about, some eleventh-hour convert usually steps in and receives the reward. But the true reformer is satisfied to perform his duty if only rewarded by the consciousness of having discharged it honestly and well. His efforts are all directed toward the accomplishment of his purpose, without even a care as to what will become of him in the grand results attending success.

The history of reforms during the past demonstrates the fact that none were failures in the end. In the fulness of time, the seeds sown

brought a harvest, of which the world eagerly partook. Men have died believing that their efforts at reform were futile, to whose memory a grateful people have erected monuments many years afterward.

It may be true that

"The seed ye sow another reaps, The wealth ye find another keeps";

but it neither hinders the true reformer in the discharge of his duties, nor causes a single pang of regret in his reflections. It is not necessary to mention any particular reforms in order to designate certain lines of duty. Nearly all reforms originate under similar conditions, and are carried forward by the same forces. The battle may be bloodless, it may even be without confusion or tumult, and yet it may result in the weal or woe of the people of the entire world. Death and destruction to the people wait upon other methods than war.

Carlyle says: -

"It is not to die, or even to die of hunger, that makes a man wretched; many men have died; all men must die. But it is to live miserable, we know not why; to work, save, and yet gain nothing; to be heart-worn, weary, yet isolated, unrelated, girt in with a cold universal Laissez-faire."

John Stuart Mill says: —

"If the bulk of the human race is always to remain as at present, slaves to toil in which they have no interest, and therefore feel no interest, drudging from early morning till late at night for the bare necessaries, and with all the intellectual and moral deficiencies which that implies—without resources either in mind or feeling; untaught, for they cannot be better taught than fed; selfish, for their thoughts are all required for themselves; without interest or sentiments as citizens and members of society, and with a sense of injustice rankling in their minds equally for what they have not and what others have,—I know not what there is which should make a person of any capacity of reason concern himself about the destinies of the human race."

What a fearful picture, and yet how true!

"The iron law of wages," says Ricardo, "is the natural price of labor which is necessary to enable the laborers, one with another, to subsist and to perpetuate their race without increase or decrease."

"Labor," says Karl Marx, "is bought at its exchange value, and sold at its use value. Exchange value is the least amount that will permit the laborer and his family to live, while the use value is all the employer can squeeze out of it."

"You believe, perhaps, fellow laborers and citizens," said Lassalle, "that you are human beings, that you are men. Speaking from the standpoint of political economy, you make a terrible mistake. You are nothing but a commodity, a high price for which increases your numbers, just the same as a high price for stockings increases

the number of stockings, if there are not enough of them—and you are swept away. Your number is diminished by smaller wages, by what Malthus calls the preventive and positive checks to population; just as if you were vermin, against which society wages war."

Conditions, and not theories, bring about the necessity of reforms, and it is necessity, not theory, that brings out the reformer. His duty begins where equal rights are ignored, and never ends until justice and equity are obtained.

Emerson says: -

"What is a man born for, but to be a reformer, a re-maker of what man has made, a renouncer of lies, a restorer of truth and good, imitating that great Nature which embosoms us all, and which sleeps no moment on an old past, but every hour repairs herself, yielding us every morning a new day, and with every pulsation a new life? The power, which is at once spring and regulator in all efforts of reform, is the conviction that there is an infinite worthiness in man which will appear at the call of worth, and that all reforms are the removing of some impediment. The Americans have no faith; they rely on the power of a dollar; they are deaf to sentiment; they think you may talk the north wind down as easily as to raise society. And no class is more faithless than the scholars or intellectual men. Now, if I talk with a sincere wise man, and my friend with a poet, with a conscientious youth, who is still under the dominion of his own wild thoughts, and not yet harnessed in the team of society to drag with us all in the ruts of custom, I see at once how paltry is all this generation of unbelievers, and what a house of cards their institutions are; and I see what one brave man, what one great thought executed, might effect. But the reformer not only beholds his heaven to be possible, but already to begin to exist; not by the men or materials the statesman uses, but by men transfigured and raised above themselves by the power of principles. To principles something else is possible, that transcends all the power of expedients."

The estimate put upon a reformer, in the true sense of the word, by Mr. Emerson, was in reality a tribute to all the virtues. How true this is! When the generations that come after look back upon the efforts of reform, the dark shades with which it was enveloped are turned into brighter beams, and the methods then considered doubtful become the maxims of future conduct. True reforms, true beneficence, and better conditions for the human race, are bound together in indissoluble bonds of union. Where one is found, all may be seen; and where either is wanting, neither need be expected.

The Alliance is the one grand reform of the nineteenth century. Its objects are to enlighten, elevate, and make better. It is founded upon the principle of equal and exact justice to all. It demands reform in the conditions which obtain among those who labor in production, especially the farmers. Being the most conservative element of society,

they are the most confiding and the slowest to act. They are more suspicious of the acts of others than jealous of their own rights, and are quite apt to impugn the motives of any one who seeks to bring about any innovations upon existing customs and usages. Reform in this direction can only follow education, and that is only brought about by patient efforts. While they may be slow to act, it is also true that their efforts are earnest and vigorous when once put in motion. It would be a blessing to the race if reformers were unnecessary; but the wish is useless, since, notwithstanding all the appeals that have been made in ages past, for God and humanity, the tide of oppression seems to be augmenting as time rolls on, and the wails of the poor, needy, and distressed are unnoticed, even in a land consecrated to liberty.

It is here that the herculean task of the reformer presents itself. It is here that he must choose between ease, comfort, and possible riches, and a life of self-sacrifice, deprivation, and possible want. It is here that he must choose between the soul and the body, between the man and the animal. If a reformer, he chooses the right and despises the wrong. Observation has already taught him that great reforms are of slow growth, and that all forms of selfishness must be buried in the great work in which he is engaged. The idea of reward, except in the great world to come, must not possess him. We would cheerfully grant to him the consoling thought that a life devoted to some good work is advancing heavenward.

The reformer must live in the future, and consider present discomforts as the credit marks for coming appreciation. Emerson further says:—

"He who would help himself and others should not be a subject of irregular and interrupted impulses of virtue; but a continent, persisting, immovable person, — such as we have seen a few scattered up and down in time for the blessing of the world, — men who have in the gravity of their nature a quality which answers to the fly-wheel in a mill, which distributes the motion equally over all the wheels, and hinders it from falling unequally and suddenly in destructive shocks. It is better that joy should be spread over all the day in the form of strength, than that it should be concentrated into ecstasies, full of danger and followed by reactions. There is a sublime prudence, which is the very highest that we know of man, which, believing in a vast future, sure of more to come than is yet seen, postpones always the present hour to the whole life; postpones talent to genius, and special results to character. A purer fame, a greater power, rewards the sacrifice."

Another point usually lost sight of is that all reformers begin at the bottom. It is the substratum of what is called society that furnishes the material out of which both reforms and reformers are usually produced. It is among the discontented, the distressed, and those who are not satisfied with their environment, that all reforms begin. Those who

are satisfied with their conditions are not, as a rule, satisfied to divide with others, or consent without a protest to a change. Hence the reformer, in the discharge of his duty, runs counter to the interests of the rich, powerful, and educated. Reforms that are founded in philanthropy are quite certain to end in failure, while those based upon principle are always in the end triumphant. To meet with average courage all these obstacles; to fight manfully all opposition; to bear insult, suffer wrong, and bear reproach,—these constitute the plain duties of every true reformer.

CHAPTER XXI.

THE SUB-TREASURY PLAN.

By Hon. Harry Tracy, Lecturer National Farmers' Alliance and Industrial Union, Editor Southern Mercury, Dallas, Texas.

Before beginning a discussion of this plan I will give the original bill in full, as it deserves to be handed down to history.

H. R. 7162 is the official designation of the bill introduced by Hon. John A. Pickler of South Dakota, embodying the demand of the Farmers' Alliance and Industrial Union, which was referred to the Committee on Ways and Means. Its title is, "A bill to establish a system of sub-treasuries, and for other purposes," the full text of the bill being as follows:—

"SECTION I. Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That there may be established in each of the counties of each of the States of this United States, a branch of the Treasury Department of the United States, to be known and designated as a subtreasury, as hereinafter provided, when one hundred or more citizens of any county in any State shall petition the Secretary of the Treasury requesting the location of a sub-treasury in such county, and shall,

"I. Present written evidence duly authenticated by oath or affirmation of county clerk and sheriff, showing that the average gross amount per annum of cotton, wheat, oats, corn, and tobacco produced and sold in that county for the last preceding two years, exceeds the sum of \$500,000, at current prices in said county at that time, and,

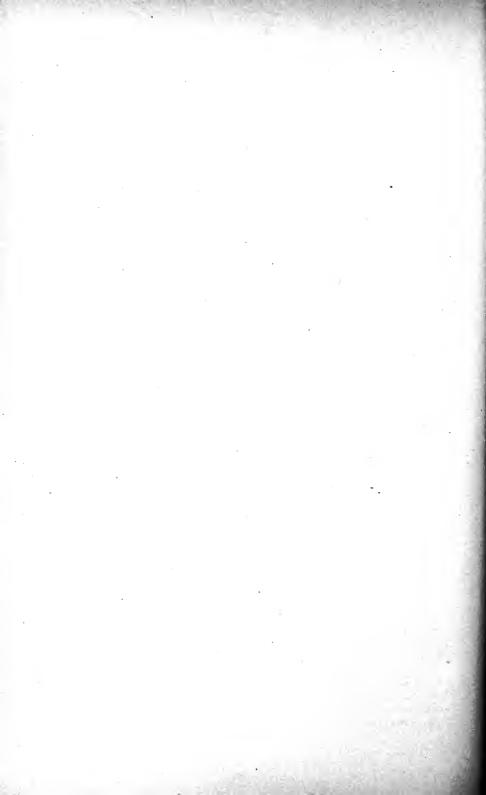
"2. Present a good and sufficient bond for title to a suitable and adequate amount of land to be donated to the government of the United States for the location of the sub-treasury buildings, and,

"3. A certificate of election showing that the site for the location of such subtreasury has been chosen by a popular vote of the citizens of that county, and also naming the manager of the sub-treasury elected at said election for the purpose of taking charge of said sub-treasury, under such regulations as may be prescribed. It shall, in that case, be the duty of the Secretary of the Treasury to proceed without delay to establish a sub-treasury department in such county as hereinafter provided.

"Sec. 2. That any owner of cotton, wheat, corn, oats, or tobacco may deposit the same in the sub-treasury nearest the point of its production, and receive therefor treasury notes, hereinafter provided for, equal at the date of deposit to eighty per centum of the net value of such products at the market price, said price to be determined by the Secretary of the Treasury, under rules and regulations prescribed, based upon the price current in the leading cotton, tobacco, or grain markets of the United States; but no deposit consisting in whole or in part of cotton, tobacco, or grain imported into this country shall be received under the provisions of this act.



COLONEL HARRY TRACY.



"Sec. 3. That the Secretary of the Treasury shall cause to be prepared treasury notes, in such amounts as may be required for the purpose of the above section, and in such form and denominations as he may prescribe, provided that no note shall be of a denomination of less than \$1, or more than \$1000.

"SEC. 4. That the treasury notes issued under this act shall be receivable for customs, and shall be a full legal tender for all debts, both public and private, and such notes when held by any national banking association shall be counted as part of its lawful reserve.

"Sec. 5. It shall be the duty of the manager of a sub-treasury when cotton, grain, or tobacco is received by him on deposit, as above provided, to give a warehouse receipt, showing the amount and grade or quality of such cotton, tobacco, or grain, and its value at date of deposit; the amount of treasury notes the sub-treasury has advanced on the product; that the interest on the money so advanced is at the rate of one per centum per annum; expressly stating the amount of insurance, weighing, classing, warehousing, and other charges that will run against such deposit of cotton, grain, or tobacco. All such warehouse receipts shall be negotiable by indorsement.

"Sec. 6. That the cotton, grain, or tobacco deposited in the sub-treasury under the provisions of this act may be redeemed by the holder of the warehouse receipt herein provided for, either at the sub-treasury in which the product is deposited, or at any other sub-treasury, by the surrender of such warehouse receipt and the payment in lawful money of the United States of the same amount originally advanced by the sub-treasury against the product, and such further amount as may be necessary to discharge all interest that may have accrued against the advance of money made on the deposit of produce, and all insurance, warehouse, and other charges that attach to the product for warehousing and handling. All lawful money received at the sub-treasury as a return of the actual amount of money advanced by the government against farm products as above specified shall be returned, with a full report of the transaction, to the Secretary of the Treasury, who shall make record of the transaction and cancel and destroy the money so returned. A sub-treasury that receives a warehouse receipt as above provided, together with the return of the proper amount of lawful money and all charges as herein provided, when the product for which it is given is stored in some other sub-treasury, shall give an order on such other sub-treasury for the delivery of the cotton, grain, or tobacco, as the case may be, and the Secretary of the Treasury shall provide for the adjustment between subtreasuries of all charges.

"SEC. 7. The Secretary of the Treasury shall prescribe such rules and regulations as are necessary for governing the details of the management of the sub-treasuries, fixing the salary, bond, and responsibility of each of the managers of sub-treasuries (provided that the salary of any manager of a sub-treasury shall not exceed the sum of \$1500 per annum), holding the managers of sub-treasuries personally responsible on their bonds for weights and classifications of all produce, providing for the rejection of unmerchantable grades of cotton, grain, or tobacco, or for such as may be in bad condition; and shall provide rules for the sale at public auction of all cotton, corn, oats, wheat, or tobacco that has been placed on deposit for a longer period than twelve months, after due notice published. The proceeds of the sale of such product shall be applied, first, to the reimbursement to the sub-treasury of the amount originally advanced, together with all charges; and, second, the balance shall be held on deposit for the benefit of the holder of the warehouse receipt, who shall

be entitled to receive the same on the surrender of his warehouse receipt. The Secretary of the Treasury shall also provide rules for the duplication of any papers, in case of loss or destruction.

"Sec. 8. It shall be the duty of the Secretary of the Treasury, when Section 1 of this act shall have been complied with, to cause to be erected, according to the laws and customs governing the construction of government buildings, a suitable subtreasury building, with such warehouse or elevator facilities as the character and amount of the products of that section may indicate as necessary. Such buildings shall be supplied with all modern conveniences for handling and safely storing and preserving the products likely to be deposited.

"Sec. 9. That any gain arising from the charges for insurance, weighing, storing, classing, holding, shipping, interest, or other charges, after paying all expenses of conducting the sub-treasury, shall be accounted for and paid into the Treasury of the United States.

"SEC. 10. The term of office of a manager of a sub-treasury shall be two years, and the regular election to fill such office shall be at the same time as the election for members of the House of Representatives of the Congress of the United States. In case of a vacancy in the office of manager of the sub-treasury, by death, resignation, or otherwise, the Secretary of the Treasury shall have power to appoint a manager for the unexpired term.

"SEC. II. The sum of fifty millions of dollars, or so much thereof as may be found necessary to carry out the provisions of this act, is hereby appropriated out of any moneys in the Treasury not otherwise appropriated, for that purpose.

"SEC. 12. That so much of any or all other acts as are in conflict with the provisions of this act are hereby repealed."

Amid the great confusion of thought as to the real object and effect of this important and much-abused plan, an article, be it ever so elaborate, could not be expected to sustain, by argument, all the propositions of the measure. If, in this communication, a forcible, clear, and conclusive presentation can be made of (1) the necessity for the resort to such legislation at this time, (2) the true methods of the proposed subtreasury system and their relation to agriculture and other lines of business, and (3) a conservative view of the inevitable effect of the introduction of this method to meet the necessity of the period, much will have been accomplished.

The necessity for something of this kind depends upon, and has been developed by, the onward march of material progress. The introduction of steam and electricity, the effectiveness given to effort, under the modern commercial methods, as the combined result of the introduction of improved machinery, and a more perfect application of the economic doctrine of the division of labor, with many other forces developed by discovery, research, and education, have in the last fifty years produced great changes in almost every line of effort. These changes have probably affected the methods of agriculture and the

conditions that surround it, about as much as they have other lines of business, on the average. It is important to note that, for the last twenty-five years, agriculture has, as compared with the other two great branches of production, - manufacture and commerce, - been rapidly becoming depressed and unprofitable. Political economists have long recognized the fact that a country could not reach a high degree of prosperity if it depended alone upon either one of the three great divisions of productive effort, - agriculture, commerce, or manufacture, - and that it requires a wise development of all these branches to produce the highest degree of prosperity in each. It must, then, be a source of concern to all, that agriculture is depressed. That the depressed condition of agriculture has been developed and intensified during the last twenty-five years, a period of material progress without a parallel in the world's history, the development of which should have produced a prosperous condition of agriculture, and through it reacted favorably upon commerce and manufacture, is indicative of a very potent cause, and one worthy the most careful analysis.

In a practical examination of this subject it must be remembered that it is a condition to be met, and not a theory; that things must be viewed as they are, and not as they should be. For this purpose, take two of the leading products of agriculture, wheat and cotton, and trace the changes made in regard to them, during that period. Twenty-five years ago wheat was raised by farmers throughout the North generally, as one of their leading money crops. It was cut by reapers and bound by hand. The farmer had his granary on his farm, in which he stored it until ready to sell. It was threshed by itinerant horse-power threshers, that found steady work throughout fall, winter, and spring. Local mills, thickly scattered over the country, ground the flour for local consumption, and the balance was sold when the price suited the farmer. The farmers of the West then hauled their wheat to market, a distance of from ten to a hundred miles. All this guaranteed a moderately even sale of wheat by the farmer, from August until the next June or July, and it was very common for a farmer to have his wheat on hand for more than a year.

Note the difference now. The development of railway systems has brought the great West so close to market that wheat can no longer be profitably grown in the East, and the local mills have long since been abandoned to the rats, or devoted to other purposes; while in the West, the great wheat-growing district, the wheat is cut and bound by machinery, and eagerly lapped into the iron jaws of immense steam threshers everywhere present. There is no delay, and from the very thresher the

grain goes in hot haste into the elevator upon the railway, always close at hand, and the moment it strikes the elevator, it is, by means of the telegraph, on the markets of the world. Huge milling centres supply the country with flour, and the farmer himself generally sells his wheat and buys his flour. The season in which the farmer realizes from his productive effort, instead of ranging from ten to twelve months, is now shortened to a period that does not, in its utmost limit, exceed three months.

Twenty-five years ago cotton was housed in cabins, built in the fields for that purpose, and slowly ginned out by horse-gins, and marketed throughout the year. Now, it is picked and put into wagons that take it to the large steam merchant gin, to be found in every neighborhood, and, as a rule, it may, by wire, be offered for sale in New York, Boston, or Liverpool, before night, on the very day it is picked. The season for marketing the cotton by the farmer has shortened as much as, or more than, that of marketing the wheat. These changes are brought about by the modern improvements that have substituted the railway train for the ox-cart, and the telegraph for the courier that carried intelligence.

Nothing is more certain than that these changes make some other changes necessary, the most important of which is the substitution of a modern for an ox-cart system of finance, to correspond to these new conditions. Under the old system, the demand for money to handle the products of the country being nearly the same throughout the different seasons of the year, the marketing of the products of agriculture produced no great effect upon the money market; but under modern conditions it produces a most powerful effect, which may be demonstrated as follows: The volume of money in circulation in the United States at this time, is variously estimated at from six to fourteen hundred millions; say one billion dollars, and represent that sum by the figure 2. The gross output of all manufacturing of all kinds is about five billion dollars. Now suppose that all the manufactured commodities change ownership between the manufacturer and the consumer three times; then the demand throughout the year, for the use of money on account of manufactured commodities, would equal four times that amount, or twenty billion dollars. Represent that sum by the number 40, and the relation of the volume of money to the demand for its use would be as 2 is to 40, and would only require that every dollar in circulation should be used twenty times in each year, to satisfy this demand. This relation is practically uniform throughout the year.

The gross value of agricultural products is about seven and one half billions of dollars. In order to be very conservative, suppose that one-

third of this product is used by agriculture for consumption and seed, and that two-thirds, or two and one-half billion dollars' worth, of agricultural products is marketed during the last three months of the year, and that they only change ownership three times. The demand thus created would be for the use of twenty billions of dollars, which, upon the above basis, should be represented by the figure 40, and which, added to the regular demand 40, makes the demand during that time 80. If the volume remains the same throughout the year, it is fair to say that, for nine months in the year, the relation of volume to demand is as 2 to 40, and during the other three months it is as 2 to 80. Of course this is the widest range in the relation of the volume, and it could not, in practice, be confined to any such lines. It must come and go gradually, but the actual relative volume must be and is reduced, during the short term for handling the crops, to one-half of its average during a part, at least, of the balance of the year. This may be denied, on the ground that a violent contraction of the volume of money to one-half of its normal relative volume would depress prices in nearly the same propor-That is true; but there are reasons why it does not have effect to the full extent. First, the contraction produces an acceleration in the speed with which the money circulates. Second, the inadequacy of the volume, with the downward tendency in the prices of products, awakens the spirit of speculation, which floats a substitute in the shape of credit paper, which circulates as money. If the total amount of credit paper issued and circulated for the purpose of handling the crop during the short season will aggregate \$250,000,000, as usually estimated, then on the above basis, ½ should be added to the ratio of volume, making it $2\frac{1}{2}$ during the short season, and making the ratio of volume to demand throughout the year as follows: -

Long season, volume 2, demand 40. Crop season, volume $2\frac{1}{2}$, demand 80.

This shows that the actual deficiency or contraction of the volume during the short season equals five-eighths of the volume during the long term, or 62.5 per cent. Third, there is an actual decline in prices, equal to 40 per cent, during the short season, thus proving the demonstration to be correct.

In support of this statement as to the fluctuation in price every year, the reader is referred to Spofford's American Almanac, where figures are given showing the fluctuations in price of many commodities for the last sixty-two years. During the war the fluctuations were very great; the fairest and best period, therefore, to consider is since the war. The

average annual fluctuations in price of the five products affected by the sub-treasury system for twenty years, from 1868 to 1887, was 41 per cent. That is to say, these products have fluctuated 20.5 per cent above, and 20.5 per cent below, the mean price, on the average, every year for twenty years. This practically means that if the farmer received 79.5 cents for a product during the three months in which he was compelled to sell, the mean price he might have realized, could he have waited a short time, was 100, and the price the consumer would have paid him still later was 120.5. These are not changes of price due to locality or service of any kind whatever, but due principally to the reduction of general prices that must follow the violent contraction of the relative volume of money,—a condition that is unavoidably the result of a fixed and inflexible volume meeting a great and suddenly augmented demand.

The conclusion from all this is very plain and forcible. The farmer makes his investment, in his productive effort, principally during the time between April and August, when the largest amount of the circulating medium and all the credit papers has been released from the products of agriculture, because the surplus has been exported or consumed, and consequently, the demand having diminished, the volume of money is relatively larger, and prices are higher. He realizes from his investment, during the season in which prices are depressed on account of the excessive demand for money meeting an inflexible supply. The result is, and has been for twenty years, that he sells at a time when prices are 40 per cent lower than they were when he bought. business on earth could survive such an unfair discrimination, and the farmers could not, but for the fact that nearly 40 per cent of the value. of their products must have been labor, not capital investment; and as 40 per cent exceeds the labor investment, it shows the inroad made upon their capital by these losses, which are largely represented, at this time, by mortgage indebtedness.

This is an actual, tangible discrimination against agriculture, of 40 per cent annually. It does not inure to commerce or manufacture, as both these great interests are very materially injured by it. No class is benefited except the exporter; but it is, or should be, the concern of all, because it is sapping the foundation of this government and, by the legal sanction of absolute wrong, producing a contempt for law and government favorable to the growth of sentiments of anarchy and socialism that threaten the stability of modern civilization. Every useful and productive interest in this country should be deeply interested in securing a flexibility for the volume of money that will be a guarantee against this

violent contraction. This regular and unavoidable contraction is the true cause for the depressed condition of agriculture.

The methods of the proposed sub-treasury system are such as will exactly meet this condition, and thereby benefit all classes of society. It is the settled and just policy of this government to forbid any issue of money except by the government itself. The government, therefore, either coins or prints all the legal-tender money. There are at present only two ways for the government to get it into circulation; one is to sell it, and the other is to lend it to the national banks and let them lend it to the people. As a modification of this, persons having a commodity called silver bullion are now authorized to deposit it in government warehouses, and the government lends them money on it. Now, if the sub-treasury system will enlarge one of these channels for the distribution of money, and provide for an emergency issue that will increase the volume, so as to keep pace with the suddenly augmented demand, created by dumping the year's product of agriculture upon the market, without increasing the relative volume of money above what is the normal mean average, and provide, also, that such emergency volume shall be of such a character that it will always pass current, on a par value with gold coin, then the sub-treasury plan must be admitted to be a conservative and efficient remedy for the financial question; otherwise it is not. To this severe test the advocates of the measure are ready and willing to yield. Surely an intelligent public will embrace so liberal a proposition.

The sub-treasury system is an enlargement of the present national banking law, the only modifications being that the loan of the bills by the government is not restricted to certain corporations, but is extended to all people who have the required collateral to deposit; and that the collateral so deposited, instead of being restricted to government bonds, a simple evidence of debt, is extended to a few leading products of agriculture that form the basis of the export trade of this country, notably wheat and cotton, the most potential forms of value to man, because the entire product is every year demanded by him for consumption, and therefore it is positive evidence of wealth. Surely nothing can suffer from such a conservative extension of the national banking system. The warehousing is not essential; it makes no difference whether the government or the people own the warehouses, or whether private warehouses are used under suitable guarantees; the object is to base this emergency issue on those products which make such a sudden and augmented demand; because by so doing the violent contractions of the present system will be avoided. The best money now put in

circulation, so far as the wants of the people are concerned, is the pension money, because it goes into active circulation. Who will-deny that the money issued by the Secretary of the Treasury to relieve the September squeeze would have prevented the December flurry if it had been issued direct to people who needed it and would have used it, instead of being issued, as it was, in thousand-dollar gold certificates that never changed hands afterwards?

Money put out under the proposed system could never augment the consumer's price, because it could never abnormally augment the relative volume. Take, for instance, any agreed ratio between demand and volume of money, independent of agriculture, and then dump the products of agriculture to create a greatly augmented demand; issue money to the full amount of one-third of the product of agriculture, which is more than those affected by the sub-treasury plan represent, and there will still be a deficiency in the ratio of the volume that must be supplied by its accelerated speed of circulation; therefore the highest prices, or those which now obtain with the consumer, would not be increased, but the tendency would be to bring the lowest prices, or those now realized by the producer, up to the mean price towards which the consumer's price must also tend.

This government now maintains about \$346,000,000 of treasury notes, that circulate on a parity with gold, that are based on nothing but the government credit. Several members of Congress have recommended that the amount of such notes be increased. This may be done and the amount doubled, or very materially increased, without depreciating such notes from the gold standard; but all must admit that there is a limit, to go beyond which would depreciate such notes, and that such limit is constantly changed by circumstances, such as war, famine, and others. It is hereby claimed that the amount of treasury notes that would circulate, when based on wheat and cotton, would be self-limited to an amount that would always be on a parity with gold, and that none of the disturbing influences which affect government credit would have any tendency to depreciate such notes from the gold standard. In considering this proposition it must be remembered that the farmer is not compelled to deposit his wheat and cotton; it is entirely optional with him. It is a generally recognized fact that the price of these products is regulated by the export market. The price of the portion exported regulates and fixes the price of the gross product, including all that is consumed in this country. foreign markets to which these products are exported, and from which quotations are received that regulate domestic prices, are using the single gold standard of money; therefore the prices of the products so estimated would be gold prices, and whenever the increase in the volume of domestic currency augmented the general prices of commodities to an exact equality with such gold quotations for these products, the equilibrium of price would be established, and no more would be deposited by the farmers, because any further additions to the volume of the circulating medium would increase local prices in local currency, so that it would pay better to sell than to deposit, and the products would come out of the warehouses, and the money go into them, and consequently out of circulation, thus automatically tending to establish and maintain the equilibrium of stable prices. Absolutely no emergency could possibly arise that would depress such money below å parity with gold.

But, in this connection, there is a still more important consideration. If it be true that, of such products as are leading commodities of export, the domestic price is regulated by the export market, then this subtreasury plan must be hailed as the discovery of a great economic truth. Thomas Jefferson and Alexander Hamilton must long since have grown restless in their graves at such economics and statesmanship as permit this country to suffer from the evils of having the leading products priced abroad, without claiming, at the same time, the natural benefit that should flow from that condition. The price of these products being fixed by the export price, it depends of course upon the supply of gold and the demand for its use in such foreign countries; therefore the fluctuations here do not correspond with the general level of local prices expressed in local money, and the producer and consumer are alike at the mercy of the speculator.

Nothing is plainer than the following: If domestic price is governed by foreign quotations, then effective measures should be inaugurated for preserving the same ratio between the supply and demand for money that prevails in the foreign markets. This is effectually done by utilizing the domestic product, which is priced abroad, as a basis for a domestic issue of currency. This system says, practically: "We have been hampered by having domestic prices of these products based on foreign gold, and we now propose to utilize foreign gold as a circulating medium in this country, for the purpose of handling these products which it prices." Now, certificates are issued against gold and silver bullion deposited in the government warehouses, while under the proposed system certificates would be issued against gold coin in circulation abroad but represented by wheat and cotton deposited in the government warehouses here. This must fully demonstrate the wisdom and conservatism of the system.

The effect of the introduction of this system, as has been foreshadowed above, is very different from what is generally supposed by those who have read only newspaper criticisms. There is no direct benefit to the farmer, only as it removes discriminations against him; no direct benefit to him in the warehousing feature. The present law is not considered to be made in the interest of the owner of silver or gold bullion or whiskey, on account of the fact that the government warehouses hold those products: and so it is with the sub-treasury; the benefit does not flow from the warehousing, but from the fact that money is put in circulation when it is needed to keep prices from falling. The result will be a powerful tendency towards stability of price. There will be no discrimination for or against any class, but an equal benefit to all. There are absolutely no favors extended to the farmer, but he is given a chance to help himself simply by having the present discriminations against him removed.

Of course there are many objections raised against the bill. Nearly all relate to its details. Upon the question of its constitutionality, I will quote from an article by N. A. Dunning, in the *National Economist*, which places that point beyond further controversy. He says:—

"The favorite objection to the sub-treasury bill is its unconstitutionality, yet no one has ventured an argument upon that line. In view of the fact that this bill has been so widely discussed, more so perhaps than any other matter of legislation during the past twenty years, it is somewhat strange that the proof of its being unconstitutional has not advanced beyond mere assertions. So far all objections have been confined to the details of the plan, while its principles have been entirely ignored. The main points in the bill involve the right of the government—

- "I. To purchase land.
- "2. To build warehouses.
- "3. To appoint agents.
- "4. To receive deposits.
- "5. To loan money.

"Upon the constitutionality of these propositions the sub-treasury bill must stand or fall. It has been said before, and it is well to repeat, that the most ardent supporter of this measure desires to have all its provisions strictly within the limits of the Constitution. The right of government to purchase land, build warehouses, appoint agents, and receive deposits of grain, merchandise, and the precious metals, is so clearly and fully set forth in the system governing the execution of the internal revenue laws, the customs laws, or those of the Treasury Department as to need no repetition at this time. No functions of government are more clearly defined or practically applied than are these, as shown by the following incident. Learning that the basement of the post-office at Kansas City, Missouri, was being used as a warehouse for whiskey, a communication was sent to the Commissioner of Internal Revenue, which elicited the following response, dated July 12, 1890, from Assistant Secretary of the Treasury George S. Batcheller:—

"'I have to acknowledge the receipt, by reference, of your letter of the 10th instant, addressed to the honorable Commissioner of Internal Revenue, and in reply to the inquiry therein contained relative to the authority under which the basement under the United States custom-house and post-office building at Kansas City, Missouri, is used for warehouse purposes, particularly for the storage of whiskey, I have to refer you to act of Congress approved April 29, 1878, chapter 67, page 39, volume 20, U. S. Statutes at Large, and to section 2962, Revised Statutes.'

"The act of Congress referred to provided for the purchase of suitable grounds on which to erect a building to be used as a post-office, custom-house, bonded warehouse, and office of internal revenue collector. Section 2962 of the Revised Statutes is as follows:—

""Any merchandise subject to duty, except perishable articles, also gunpowder and other explosive substances, except firecrackers, which shall have been duly entered and bonded for warehousing, in conformity with existing laws, may be deposited, at the option of the owner, importer, consignee, or agent, at his expense and risk, in any public warehouse owned or loaned by the United States, or in the private warehouse of the importer, the same being used exclusively for the storage of warehoused merchandise of his own importation or to his consignment, or in a private warehouse used by the owner, occupant, or lessee, as a general warehouse for the storage of warehoused merchandise; such place of storage to be designated on the warehouse entry at the time of entering such merchandise at the custom-house.'

"The above citations constitute the authority by which the government at this present time purchases lands, builds warehouses, and receives deposits for storage. The appointment of agents to perform these duties is a necessary sequence.

"In view of these facts, if the bill is unconstitutional, it is because of that provision which requires the government to loan money. If, therefore, it can be shown that the government has loaned money, and that the Supreme Court has decided it proper and legal, further objections to the bill must be confined to its details.

"The act of February 16, 1876, placed in the hands of the Centennial Finance Committee \$1,500,000 of government funds, to be used in completing the arrangements for the Centennial Exposition. This money was to be returned to the government out of certain moneys, after the close of the exposition. A bond in the sum of \$500,000 was exacted for the performance of the provisions of the act. When the time for payment came, this committee refused to liquidate the debt to the government, setting up a different construction of the act. A suit was commenced, and finally taken to the Supreme Court, where it was argued at length, Chief Justice Waite giving the opinion of the court (U. S. Reports, S. C. 94, Otto IV., page 500), which is given in part:—

"'The act of 1876 requires the payment of the United States before a distribution of profits to stockholders. Not a word is said about restoring capital; in fact, there is no mention of capital at all. The act of 1872 is not repealed. On the contrary, it is left in full force in every particular, save that the liability incurred to the United States is made payable after those contemplated by the act of 1872 are satisfied in full. In this the United States made a concession to creditors, but not to the stockholders. Neither was anything taken from the stockholders; they retain all the rights which the act of 1872 gave them. If there had been no appropriation by Congress, the corporation would have been driven to the necessity of raising the required means by borrowing or a further sale of stock. If by borrowing, the debt so created would have to be paid with the others, before there could be any dividend

to stockholders. If by sale of stock, the new stockholders would come in pro rata with the old, upon the final division of assets.

"'Congress might have advanced the money by loan, as well as upon the conditions it did impose. It might also have subscribed to the stock. If a loan had been made, and there had been no waiver of the legal rights of the government as a creditor, this debt would have preference over all others in the order of payment. If stock had been taken, the government would have participated in the final distribution like any other stockholder. It seemed best, however, not to adopt either of those plans, and another was devised, by which creditors were given preference, and the United States remitted for their indemnity to the fund which might remain after all the debts were paid. To this the corporation assented, and the stockholders cannot now complain. Creditors were protected, and the stockholders not injured. . . . The decree of the Circuit Court must be reversed, and the case remanded, with instructions to enter a decree directing the payment of the sum of \$1,500,000 into the treasury of the United States, by the commercial board of finance, before any division of the remaining assets of that corporation is made among the stockholders.'

"In 1884 an act was passed loaning \$1,000,000 to the Cotton Exposition, to be held at New Orleans. This bill was fully and exhaustively debated, and finally passed by a vote of 132 to 87. The caption of the bill was:—

"'An act to make a loan to aid in the celebration of the World's Industrial and Cotton Exposition.

· "'SECTION I. That the sum of \$1,000,000 be, and the same is hereby, appropriated out of any money in the public treasury not otherwise appropriated, as a loan to the World's Industrial and Cotton Centennial Exposition, to be used and employed by the board of management thereof, to augment and enhance the success of the World's Industrial and Cotton Centennial Exposition, in such manner as said board of management may determine.'

"In the course of this debate the matter was at all times treated as a loan, and in nearly every instance spoken of as such. In a question to Hon. W. D. Kelley, of Pennsylvania, Mr. Bland said:—

"'I will ask the gentleman whether the provision is in the same language as the appropriation in the case of Philadelphia? In that instance the money was only recovered by the government upon suit in the Supreme Court. In other words, the city of Philadelphia refused to pay the money back to the government, and suit was instituted for it. And I remember that the gentleman from Pennsylvania argued on this floor that the Springer amendment did not reserve repayment of the money.

"'Mr. Kelley. An amicable action was entered to determine whether it was a loan or a gift.

"" MR. BLAND. The gentleman claimed that it was a gift.

"'MR. Kelley. The gentleman from Illinois [Mr. Springer] appeared before the court to argue that it was a loan. It was so decided, and the money was paid immediately.'

"Mr. Cannon, of Illinois, said: -

"'The committee, desiring to guard the interests of the government, and to prevent the recurrence of the condition of affairs that happened at Philadelphia, namely, the squandering of great amounts in expensive buildings, to guard against the expenditure, say, of four or five million dollars, provides in this bill that no more than the one million which we loan, and the amount which has been subscribed and might be donated, should go into the buildings; and then the bill further provides to secure

that no more than that amount should be expended, and that the whole assets of this corporation, after the current expenses from day to day are paid, shall be held sacred to pay this \$1,000,000 to the government; provides for a bond, which is conditioned as the act states, and the setting apart of the surplus after the payment of current expenses, to indemnify the government.

"'MR. KELLEY. An exhibition such as is proposed to be held at New Orleans, at which shall assemble the world in its best mechanical and commercial power, and in which convocation the American people shall be the active and predominant element, will pay the American people at a minimum estimate \$100 for every dollar that may be lost, even if the government shall never receive back one dollar it may loan it.

"'MR. HENDERSON of Iowa. Iowa is knocking at the door of Congress to-day, and I am but voicing her feeling when I ask that the government shall loan from its vast surplus in the treasury enough to put this great exhibition grandly, solidly, and successfully upon its feet. [Applause.]

"'MR. SUMNER of California. As I am clear in my opinion that this is a constitutional proposition, I do not hesitate, but cheerfully and eagerly improve this two-minute opportunity to commend the bill.

"'MR. LANE. I do this for this reason: I recognized the propriety of the loan to the Centennial Exhibition; it was the centennial year, and was designed as a celebration of our one hundredth national anniversary. This, however, is not for that purpose.

"'MR. CANNON. I was a member of Congress when the act passed authorizing a loan by the United States to the Centennial Exposition at Philadelphia.

"'MR. HORR. When the loan, as I understand it, was made to the Centennial Exposition at Philadelphia, it was for a million and a half of dollars, I believe; is that correct?

"'MR. BLANCHARD. That was the amount.

"'Mr. Horr. Then we required a bond of only \$500,000. Now, the bond is fixed here at \$300,000 for a loan of \$1,000,000, which, I take it, is about equivalent to what we did in the other case; and that bond is not to secure the repayment of the million of dollars, but, as the bill itself will show, is for the purpose of securing the honest and efficient action of the people in charge of it, and a careful expenditure of the funds intrusted to them; and it is fully as large as the bonds which are usually required under our form of government, for any such purpose.

"'MR. McCord. I favor this bill, and I am not deterred from supporting it by the constitutional question. It seems to me that gentlemen who question the power of Congress to legislate in this way could easily satisfy themselves by finding warrants in two or three of the granted powers delegated to Congress. The one which provides for the general welfare certainly has been constructed broadly enough to cover this.

"'MR. BRECKENRIDGE. Mr. Chairman, in regard to the proposition now before the Committee of the Whole, it simply involves the requirement of security for the repayment to the government of this loan of \$1,000,000, and the question of constitutional power in the premises. The amendment proposed is a hard exaction; it is an unprecedented exaction. This appropriation is not only justified by precedent, but it is also, in my opinion, clearly within the purview of the Constitution and the province of the Congress. That clause about which some gentlemen here stickle so much gives Congress power to raise revenue, and what does it say you may do with that revenue? It says you may pay the public debt, and you may provide for the general welfare by appropriations of that revenue.

"'Mr. BAYNE. There is but one clause in the Constitution which authorizes the Congress of the United States to expend this million of dollars or to loan it. The clause which authorizes Congress to levy taxes to provide for the common defence and general welfare is the source from which Congress must derive its authority to loan this money or expend it.

"'MR. Money. A new set of circumstances has now arisen, and if it seems proper to this House that the government should support this great enterprise by a

loan to it of \$1,000,000, I cannot see any valid objection to it.

"'MR. WOLFORD. I believe it is perfectly constitutional, and I base that belief upon the power given by the Constitution of the United States to Congress to provide for the general welfare of the United States. I agree with Judge Story that that is a distinct power, and I believe that under that grant of power the Congress of the United States has authority to pass any law that will do good, that will bless the people, that will make them happy.'

"Discussing this proposition, Mr. Oates is on record as saying: -

"'This is not an appropriation proper; it is a loan. While it is an appropriation in form, it is nevertheless a loan upon security for return. . . . This, mark you, is not an appropriation outside of the Constitution. It is a loan. It is competent for the government to make a deposit, and it does it with bankers all over the country, wherever it thinks proper. That money is to be returned, and if this money is returned, what harm will be done? If it is outside of the power of Congress to do this, then the action of Congress would be hampered in providing sufficient legislation.'

"When the vote was taken upon the bill, it was passed by 132 to 87. The year were as follows: Adams, G. E., Atkinson, Anderson, Barksdale, Bayne, Belford, Belmont, Bennett, Bisbee, Blanchard, Boutelle, Breckenridge, Bremer, F. B., Brown, W. W., Buchanan, Cadwell, Campbell, I. M., Cannon, Clements, Collins, Crisp, Culberson, W. W., Cullen, Cutcheon, Davidson, Davis, G. R., Davis, R. Y., Dibble, Dibrell, Dorsheimer, Dunham, Dunn, Elliott, Ellis, Evins, I. H., Findlay, Follett, Forney, Funston, Garrison, George, Gibson, Glascock, Graves, Green, Hammond, Hanback, Hancock, Hardeman, Harmer, Hart, Hatch, H. H., Hemphill, Henderson, T. I., Henley, Herbert, Hewett, G. W., Hitt, Hopkins, Horr, Houk, Houseman, Howey, Hunt, Jeffords, Jones, B. W., Jones, I. H., Jones, J. T., Jordan, Kasson, Keifer, King, Lewis, Lore, McCord, McCormick, Money, Morrill, Morrison, Murphy, Neece, Nelson, Nicholls, Oates, O'Hara, O'Neill, Charles, O'Neill, J. J., Payson, Peelle, S. J., Perkins, Peters, Petibone, Phelps, Price, Pryor, Pusey, Randall, Rankin, Ranney, Reed, Reese, Rice, Rogers, J. H., Rogers, W. F., Rowell, Ryan, Shelley, Singleton, Skinner, T. G., Smalls, Spooner, Steele, Stevens, Stewart, Charles, Stone, Sumner, C. A., Throckmorton, Tilman, Tully, Van Eaton, Wakefield, Ward, Wellborn, White, Milo, Whiting, Williams, Willis, Wilson, James, Wilson, W. L., Wilford, Woodward, Young.

"After passing the House, the bill went to the Senate. It was referred to the Committee on Appropriations, and upon its recommendation was passed, with a few amendments and but little debate. The concensus of opinion in the Senate was so unanimous in favor of the bill that a yea and nay vote was not taken. The Senators spoke of it as a loan.

"Senator Plumb considered it a loan, and in his remarks said: -

"'There are chances, and, I think, a majority of chances, that the government will be repaid the money.

"'SENATOR MAXEY. When we made an appropriation in the nature of a loan to the Centennial Exposition, in 1876, we gave a million and a half dollars, and there was no objection to that.

"'SENATOR GARLAND. The bill has undergone the scrutiny of the entire Committee on Appropriations, and long and tedious investigation, and the Senator from Missouri [Mr. Cockrell], who is acute and alert as to these matters, has given it his careful attention, and he reports that it is perfect in this respect. The United States is in no danger in reference to getting back this million of dollars.

"'SENATOR MAXEY. I suggested to the Senator from Kansas [Mr. Plumb], when he was on the floor, that we had loaned to the Centennial Exposition a million and a half dollars.

"'SENATOR FRYE. I would be for it, if I knew the Exposition would not pay a dollar back.

"'SENATOR MILLER. I would rather vote for the bill as it stands, loaning a million dollars, than to vote \$500,000 as a gift.

"'SENATOR ALLISON. We have restricted, so far as it is possible to restrict, the expenditures preparatory to this exposition, to the subscriptions, and to the amount of this loan.

"'SENATOR ALLISON. I move to amend the title so as to make it read, "A bill to make a loan in aid of the celebration of the World's Industrial and Cotton Exposition."

"The opponents of the sub-treasury plan have assumed that it was visionary, impracticable, and unconstitutional. The friends of the measure have endeavored to show the reverse as being true. That it was well considered before given to the public is no longer denied. That it is practical, or with some modifications as to detail can be made practical, is being discussed in a manner that leaves no room for doubt upon that point. As to its being strictly within the limits of constitutional law, the amount and character of the evidence given in this article upon that portion of the question must be considered by all fair-minded persons as absolutely conclusive.

"What more can the friends of this measure do to obtain the assistance of those senators and representatives who prefer, and no doubt feel an interest in, their farmer constituents? The last valid objection is now removed, and nothing but details remain. It is earnestly hoped and expected that all captious objections will now cease, and an honest effort be made to give the measure a fair trial."

In conclusion, let us consider the cost of the experiment.

The grain crop of the United States, for the year 1889, amounted to 2,660,457,000 bushels. At least two-thirds of it will be retained at home for consumption. This will leave 886,819,000 bushels that will be stored during the year.

These crops mature at different dates of the year, and the demand for their consumption is evident. It is, therefore, safe to say that not more than one-third of the whole amount will be in the elevators at any one time. This will amount to not quite 300,000,000 bushels. It is a well-known fact that those elevators will not cost exceeding fifteen cents per bushel. This amounts to \$45,000,000. To be liberal, we will say

that it will be necessary to erect 1000 warehouses, each costing \$30,000. This will necessitate an additional expenditure of \$30,000,000; that is to say, it will require to carry this plan into full and perfect operation all over the country, \$75,000,000—not twice as much as the deferred payments on whiskey. The question naturally comes in just here: Will this expenditure in any manner impoverish the treasury of the United States? By referring to the last monthly statement of the Treasurer of the United States, it will be seen that there is now, and has been since 1875, locked up in that treasury \$100,000,000 in gold, and that it has been, and is still being, held for the purpose of redeeming outstanding United States legal tender notes. This money could be used for this purpose, as there is no law which placed it there. The benefits of this measure would be many. Among them might be mentioned the following:—

It will place about \$550,000,000 in circulation and in the hands of the people, at an annual cost of \$5,500,000. To get this amount of currency into circulation under present laws, the following would be necessary: A national debt of \$610,000,000, upon which to base the issue of national bank currency, the interest upon which at four and one-half per cent amounts to \$27,450,000. This would take the money from the national Treasury, and put it into the vaults of the banks. To get this money from the banks will cost the people at least \$55,000,000 more. The two together make \$82,450,000. By deducting amount of interest necessary under our system, we find the farmers will save \$76,950,000 annually. Besides, under our system, the rate of fire insurance can and will be reduced at least one-half the present rate. This will add at least \$20,000,000 to the savings. The economy in handling that will necessarily follow the carrying out of this plan cannot add less than \$20,000,000 more.

Again, under the working of this plan the grain-raisers will save, at the very lowest estimate, ten cents per bushel on every bushel stored. This will add another saving of \$88,681,900, and not raise the prices that producers now pay for it; but, on the contrary, the price will be rather reduced. The cotton-raisers will save, by this system, at least one-half cent on each pound of lint cotton. This will add \$17,347,000 to the savings, and not raise the price to the manufacturer one cent on fifty bales. The savings on tobacco, sugar, rice, and wool cannot be less than \$8,000,000. All these savings together amount to the enormous sum of \$220,978,900 to the farmers annually. Thus we see that, by investing \$75,000,000 in erecting buildings that will last fifty years or more, we will be enabled to save annually, in the hands of the producer, \$220,978,800 that now goes into the pockets of usurers and speculators.

The carrying out of this demand will confer as many and as rich benefits to every one engaged in any legitimate calling as it does to the farmers. All who are well posted know that more merchants have been ruined by speculating in produce than by anything else. The mercantile business in the agricultural towns has drifted into this unnatural and ruinous attitude by the credit system, this system becoming an imperative necessity by reason of the contraction of the currency. Our system relieves the merchant of this, his worst enemy, by saving \$220,978,900 to his customers annually, which would soon enable them to pay cash.

The manufacturers under the present system are forced to enter the market and purchase within three months sufficient material to run their machinery the entire year, to prevent speculators from cornering the supply. To be able to purchase such large supplies at one time, they are compelled to apply for loans, mortgage their property, pay exorbitant interest, which must be added to the manufactured article. This must, of course, augment the price, which in turn forces under-consumption, which in the end can only enrich the usurer and involve producer, manufacturer, and consumer in one common ruin.

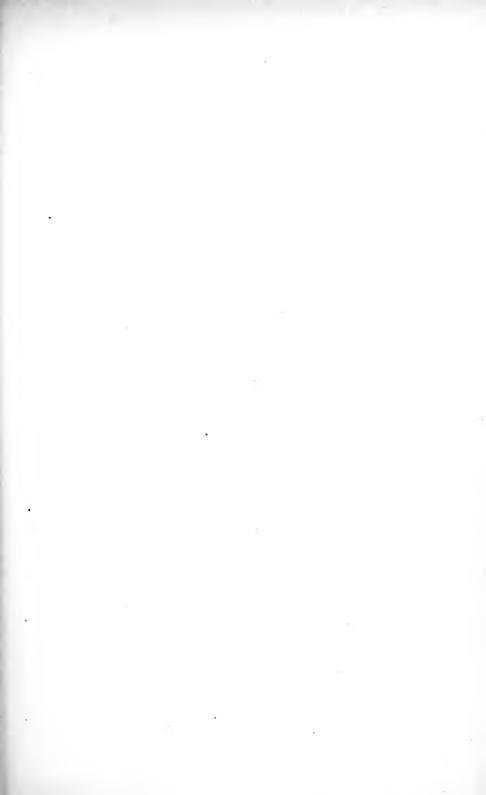
This system will relieve the manufacturer of this as well as other useless expenses. Our unexcelled facilities for rapid transportation and instantaneous transmission of intelligence conspire to make the carrying out of this plan the more easy. The manufacturers will not be compelled to buy more than one month's supply ahead, knowing that a sufficient supply can be had at any time. They will not be compelled to borrow large sums of money at exorbitant interest, for the manufacturers will find out at once that the crop will not be sold to speculators, but held for consumption. The eliminating of speculation will enable producers to carry more from the manufacturer; hence self-interest, if nothing more, will make the producer, manufacturer, and consumer co-operate in supporting this demand.

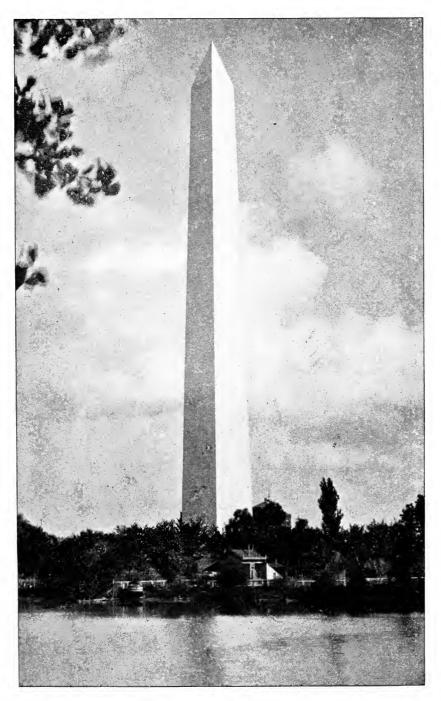
It is a well-known fact that the railroads are blocked with freight for about three months during the year, by the haste now practised in marketing the crops. Railroads are compelled, in order to hold their trade, to buy large additions to their rolling stock, to stand idle upon the sidings for nine months in the year. This necessitates a large outlay of capital, which of course is added to the freights, and in the end is always charged to the producer. This system will distribute the shipments through the entire year, and enable the railroads to give their employees regular employment; hence it is to the interest of railroads that our system should be put in operation.

This system will enable the millions of farmers of the West to pur-

chase thousands of tons of coal from the starving miners of the East, and feed the miner and his family on the corn that speculation now compels them to burn for fuel. What an absurdity to cry overproduction when those who raise bread burn it for fuel, while those who dig coal must quit because they cannot exchange it for bread! Our system will emancipate the true merchant, manufacturer, farmer, and laborer. That it benefits the railroads and every other legitimate industry; that the prosperity of our people demands it; that common sense, honesty, and fair play demand it; that every principle of humanity demands it; that the genius of advancing civilization demands it; that the perpetuation of free and just government demands it; that the plan is perfectly feasible; that its cost is insignificant; that its benefits will be enormous; that no more pressing necessity could exist for it; that it will make every industry prosperous; that no one will be injured by it; that no sound reason can be urged against its adoption, — for these, and many other reasons, every prompting of an honest heart demands that we adopt it. Let us align ourselves on the side of right, and forever free our people from the power of money to oppress, and march forward to a new civilization, thereby making our institutions the beacon light of liberty to the oppressed of all nations, and make of our people a nation of patriots, full of strength and prosperity. In such a country, every laboring man will own his own home, free from execution, across the threshold of which no usurer or other tyrant dare pass. Let'us unite in making our country -

> "The land of the free and the home of the brave, Where no man is master, and no one a slave."





WASHINGTON MONUMENT, WASHINGTON, D.C.

CHAPTER XXII.

BUSINESS EFFORTS OF THE ALLIANCE.

The term "business," as now understood, contains numberless factors within its meaning that did not obtain in ancient times. These increased and kept pace with the advancement of civilization, and will so continue as long as intellectual advancement is made. Primitive business was nearly, if not quite, a sort of limited barter, in which nothing but labor values were considered. It was a simple exchange of the product of one individual for the product of another, in which the amounts of patience and manual labor were the only factors, aside from desirability for use.

Under these conditions the products of individuals and tribes were exchanged. The fur of one tribe, for instance, was exchanged for the fish of another tribe in a different section. It soon became apparent that, in making these exchanges, one party or the other gained an advantage, as there was no method of dividing the different products so as to represent the exact divisions of labor values. In this dilemma resort was had to an expedient which proved so successful as to be accepted as an additional factor in all exchanges. By common consent certain shells, or beads made from shells or other materials, were endowed with the function of representing certain divisions of labor values. By this means, when a piece of fur was worth more in labor value than two fish, and not quite as much as three, the difference was evened up through the medium of these shells or beads. As exchanges multiplied, the demand for these shells and beads increased, until, most unfortunately for the human race, some one accumulated a sufficient number to make an exchange without the aid of barter. Then began the difficulty between currency and labor, which has come down to us under the modern term of a "war between capital and labor." The shells and beads of primitive business are the prototypes of the dollars and cents of the present generation. And the same desire which actuated the furclad possessor of these shells and beads, in demanding as much fur and fish for them as possible, is seen to-day in his modern imitator, the money-owner, who is seeking by all means, fair or otherwise, to obtain as much of the fruits of labor in production as he can, in exchange for his dollars and cents. Through the introduction of this medium of exchange, by which the necessity of barter was eliminated, an endless number of elements, conditions, methods, and factors has been added to the term now known as business.

In the evolution which time has brought about since the days of barter, many other materials have been used in the place of shells and beads, but the functions have remained the same. Usury soon made its appearance, and, as now, became a flourishing and remunerative occupation. Banks were operated with the usual results. Bank bills, or paper money, were invented, and the fine art of appropriating the substance of the people, without due course of law, has been carefully and successfully systematized. In all ages of the world the producer and consumer have protested against the demands and intrigues of capital. Sometimes these attempts have been successful, but as a rule they have resulted in failure. It would be both interesting and instructive to trace these different attempts, at different periods in the world's history, but space will not permit.

One of the most important parts of the declaration of principles of the Farmers' Alliance is the one that gives sanction to the idea that the membership are to strive for financial improvement. A belief seems to have prevailed in the order, from its earliest history, that direct financial improvement might be expected, as a result of co-operation in a business system by the membership. An outline of the effort made to secure this important result by that method, will be sufficient to show the principles involved and the lessons to be learned.

The first Farmers' Alliance was organized for business, and the entire order has been a business organization, for business purposes, from that day to the present; but the methods of co-operation to secure that end have been many, and often conflicting and expensive. The first effort at co-operation, to develop the business feature of the Alliance, seems to have been in the establishment of Trade Committees, as a part of the various County Alliances in the State of Texas. They usually consisted of five of the best men, chosen from different sections of the county. They were expected to meet the merchants and dealers in the county. and to receive, consider, and act upon any trade arrangement that might be offered. The idea upon which the system was based was that often a country town contained six or eight stores and dealers, where two or three could transact all the business, without an increase of force or investment, and that, could the trade be concentrated so as to employ a less number of men and less capital, the saving thus made should accrue to the purchaser, in the shape of lower prices on the commodities purchased. The Trade Committees, therefore, sought to get one or two

merchants in a town to make a written proposition to sell merchandise to members of the Alliance in good standing, who held "trade cards" stating that fact, at a specified rate of profit, which was to be much less than the average rate of profit current at the time in that locality; and in exchange for such concessions on the part of the merchant, the Trade Committee, if they decided to accept the proposition, had full authority, and would agree that the trade of the entire membership would be concentrated and placed with such merchant. All complaints of overcharge or any violation of agreement, were made to the Trade Committee. This committee also had access to the merchant's books. and were in possession of his cost mark, and had access to his invoices; and it was their duty to frequently examine into his business, and see that he was complying with the contract. As a further precaution, it was generally stipulated and agreed to, that the merchant should employ at least one Alliance clerk, who should be at liberty to report any violations of the contract to the Trade Committee.

While this trade contract system was being extensively tried, an effort was also made to co-operate in the sale of the products of the farm, and in some counties Alliance cotton yards were established. This feature was thoroughly discussed at the annual meeting of the State Alliance in Cleburne, Texas, in August, 1886, and the membership were advised to bulk their cotton and have sale days, to which buyers from the cities should be invited, to compete for the purchase; and when practicable, the Alliance was advised to establish their own cotton yards, for receiving, weighing, sampling, grading, and shipping that product.

The plan of bulking large lots of cotton, so as to secure buyers from a distance to compete in the purchase, was not successful. For a while it acted as a spur to local buyers, and kept up prices; but after several lots had been bulked, and all buyers had combined against it, the sale was sometimes made at a loss, and the plan as a whole, after two years' experience, was gradually abandoned. While the bulking system has been abandoned, the Alliance cotton yards have largely been developed into Alliance warehouses, and they have stood the test, and will remain as an important and permanent feature of the business effort.

In January, 1887, the National Farmers' Alliance and Co-operative Union was organized. No national business system was provided for; but the State Alliance of Texas, which met at the same time, modified its constitution so as to provide for a State business agent, to be elected by the Executive Committee, and to be under the control of that committee. This is the first record of any attempt at State co-operation in business by the order. All previous action by the State Alliance had

tended to produce co-operation in county efforts, but the establishment of a State agency was calculated to secure co-operation between the counties in a State effort. C. W. Macune of Milam County was chosen by the Executive Committee to fill the important position of State agent, and to devise and put into active operation co-operation between the counties. He received the appointment about March 1, 1887, and immediately issued a circular letter to the different County Alliances, calling on them to select a county business agent, place him under bond, provide for his expenses, and empower him to represent the county business effort. He then visited Boston and Fall River, to try to make arrangements for the sale of the next cotton crop. It was found that the agency could handle cotton and sell direct to the factories, provided it had sufficient capital behind it to be responsible for its contracts. This was reported to the State Alliance, which convened in August of that year, and was one of the causes that led to the formation of the State Exchange.

After the report of the State business agent was received by the State Alliance of Texas, in 1887, the following action was taken, authorizing the establishment of the Farmers' Alliance Exchange of Texas.

Committee on Dr. Macune's plan of the Alliance Exchange was composed of the following gentlemen: Harrison, McLellan County; Mathes, Coryell County; Rogers, Anderson County; Cagle, Montague County; Eddleman, Denton County; Binford, Kaufman County; who reported as follows:—

"By-Laws.

"This corporation shall be known as THE FARMERS' ALLIANCE EXCHANGE OF TEXAS.

"The object of this corporation is to negotiate the sale of the cotton and other products, and stock, and such other property, personal, real, or mixed, as may be desired by the members of the Farmers' State Alliance of Texas; also, the purchase of all such commodities, machinery, and other things as may be desired; also, to erect suitable buildings, storehouses, and appliances for conducting such business, and furnishing the necessary hall room and offices for the officers of the said Farmers' State Alliance, and such other purposes as may be desired by the said order.

"The capital stock of this corporation shall be \$500,000, divided into twenty-five shares of \$20,000 each, and one-tenth of one per cent shall be paid on the subscription of the stock. The twenty-five stockholders of this corporation shall be elected by the Farmers' State Alliance of Texas, as follows: At this present August session of said State Alliance, of 1887, there shall be two elected from each congressional district in the State, and three from the State at large; and immediately after election, their names shall be placed in a hat and drawn one at a time: the first nine drawn shall hold office one year, the next eight shall hold office two years, and the last eight shall hold office for each stockholder

shall hereafter be three years, and the said State Alliance shall, at each regular annual session, elect stockholders to fill all vacancies.

"Each stockholder shall hold one share of stock in this association, in trust for the benefit of the members of the Farmers' State Alliance, and shall discharge his duties as owner in trust of said stock, to the best interest of his constituents, and turn over all stock and every privilege accruing therefrom to his successor in office. The stockholders of this corporation shall elect from among their number an Executive Board of three members, who shall be the Board of Trustees, and who shall have the general supervision and management of all the business, and shall procure such charter or charters from the State of Texas as may be necessary to carry on the work and business desired to be done. They shall be governed by such general by-laws as the stockholders may from time to time adopt.

"In order to raise the capital stock above entrusted to the stockholders, for the benefit of the members of the Farmers' Alliance in the State of Texas, each Farmers' Alliance in the State of Texas is hereby called upon to vote an assessment of one dollar per member, both male and female, due and payable October 15, 1887; and one dollar per member, both male and female, due and payable December 1, 1887; and those voting in favor of said proposition shall immediately notify the State business agent of the fact; and the money on such assessment, when received, shall be sent to the secretary of this corporation, and a notice of the remittance sent to the secretary of the State Alliance.

"It is understood that, when as much as \$50,000 have been paid to the secretary, each share of stock will be credited with ten per cent paid in, and for each subsequent payment of that amount a like credit will be made.

"Unanimously adopted at regular session, in Waco, Texas, August 12, 1887.

"EVAN JONES, President.

"H. G. MOORE, Secretary."

The Trustee-Stockholders met and organized, by adopting by-laws and electing officers and a Board of Directors. C. W. Macune, as State business agent, presented a proposition from the business men of Dallas, which he, in connection with R. J. Sledge, had secured after much negotiation.

This proposition was adopted by the Trustee-Stockholders, and the Executive Board was instructed to go to Dallas and close the contract, according to the terms of the proposition, and locate the headquarters in that city.

As we have now seen, the Alliance membership of the State were to pay in the capital stock by an equal assessment of two dollars each, and the State Alliance was to elect twenty-five Trustee-Stockholders, who should represent the stockholders in all meetings, and elect from their number a Board of Directors, composed of seven men, who should control and operate the business. In organizing the business, the Board of Directors found it necessary to have a business manager, and they selected and employed for that purpose Brother C. W. Macune, paying

him a salary, and requiring of him a bond in the sum of \$25,000. He was not a member of the Board of Directors, nor a Trustee-Stockholder; he was simply employed to do a certain work, as directed by the Board of Directors. It is deemed best to give the organization of the Texas Exchange in detail, because it was a precedent for the establishment of an Exchange in many other States, and the history of the Alliance business effort must be a compilation of the State efforts, since no national effort has fully materialized up to this time.

The effort made by the Exchange to handle the Alliance cotton crop during that fall, was worth many thousand dollars to the farmers of that State. It was a very simple and effective system. The Exchange fitted up a very large sample room, and notified the brethren of the order that they could bulk their cotton in their home cotton yards or warehouses, and send packages of samples to the Exchange, where they would be displayed, and the cotton sold with the guarantee of the Exchange that it was correctly weighed and sampled. In this way the Exchange sold cotton direct to the mills or to Liverpool, and had it shipped from its home depot on a through bill of lading, thereby saving all local freights and other expenses of handling. There can be no doubt that this effort, together with the information as to the current price of cotton, every day sent out by the Exchange, raised the price of cotton to the farmers of that State at least one-half of one cent per pound, on the average, for every pound of cotton sold. This, on the crop of 1,300,000 bales of 500 pounds each, was a saving to the farmers of \$3,252,000 that had previously gone into the pocket of the speculator.

The people seemed to realize the great benefits they could derive from the Exchange, if they could only cut loose from the crop mortgage system, so as to be able to control their own cotton in the fall. But when it was mortgaged to the merchant, they could not sell it through the Exchange. In this emergency they began to appeal to the Exchange to provide a system of advancing on their crops, so as to enable the Exchange to control the cotton in the fall. In response to many such appeals, the Board of Directors agreed upon a plan, and instructed the business manager to submit it to the people of the State for ratification. This was done about the first of December, 1887, by a circular letter known as "Circular Letter No. 39." This plan and mortgage obligation are given on the opposite page.

[FRONT.] STATE OF TEXAS, Know all Men by these Presents, That County of..... we, the undersigned, hereby jointly and severally agree to pay the Farmers' Alliance Exchange of Texas, for value received, the sum of \$.....on the 15th day of November, 1888, for Goods, Wares, and Merchandise, purchased for and shippedas agent for the undersigned.

Further, we, the undersigned, hereby represent, for the purpose of obtaining credit for the above amount from the Farmers' Alliance Exchange, that the figures opposite our signatures, representing assets as designated by the column heads, are true and correct, and that we have and own the property thus indicated, and that they are in nowise a misrepresentation, and that we will mortgage the cotton and stock as specified; and that we agree to all the conditions expressed on back of this instrument.

Names.	No. acres of land I own.	Value of my real state.	Indebtedness on real estate.	No. acres I cultivate.	Acres in cotton.	Acres in grain.	Value of my stock.	Amount of advances needed from April 1 to October 1.	Number of bales I will mort-gage.	Amount I have paid on the assessment.	Remarks.
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[BACK.]

It is hereby expressly understood that the filling out of this blank by the members of Sub-Alliances in no way obligates the Farmers' Alliance Exchange to furnish any goods, wares, or merchandise, unless it has received the approval of the committee of acceptance, and notice returned to the Sub-Alliance that the obligation is accepted and that the goods, wares, and merchandise will be sent.

It is further understood that the amount of the obligation is divisible into six equal parts, if the Exchange shall so elect, and in that event the Exchange will be under no obligations to advance more

It is further angle in the city of Dallas, Texas.

It is further understood and agreed that all bills for advances under this proposition shall bear interest from the day of shipment until paid, at the rate of one per cent per month, and that payments are due and payable in the city of Dallas, Texas,

It is further agreed that, as this obligation is given jointly and severally, each signer thereof agrees to place at the disposal of the balance of the signers such a portion of its assets as may be necessary to secure them in joining him in the obligation, and should any one fail to properly work or gather his crop, he agrees that they may take possession of same and complete it to the best of his advantage.

It is further understood and agreed that the Exchange delivers all orders for goods, wares, and merchandise on board the cars in the city of Dallas, and that the parties signing the written agreement to receive and pay all freights on such goods, etc., so ordered, from the city of Dallas.

and seat of office, this	best evidence I can get, and so far as my own knowledge extends, believe all the statements herein made, to be true and correct.	I,
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The resolution passed by the Board was as follows: -

"Plan of relief adopted by the Board of Directors of the Farmers' Alliance Exchange of Texas, for the purpose of assisting the members of the Farmers' Alliance of Texas in purchasing their supplies for the coming year, and selling their products to the best advantage.

"First. The members of all Sub-Alliances wishing to avail themselves of the advantages to be offered by the Exchange, shall make a full showing of their collective responsibility, and an estimate of the amount of commodities they will require advanced on time after April, 1888, and a satisfactory showing that they are able and willing to pledge cotton to at least two times the amount of advances asked.

"Second. The county business agent from each county desiring to avail themselves of the benefits of the Exchange, shall give a good bond to the president of this Exchange, in a sufficient amount to cover all the transactions he will be called upon to perform. And it shall be his duty to make a careful examination of the records and the securities offered by any Alliance in his county, and report on a blank form to the secretary of this Exchange every item in regard to the business that may be required. It shall be his duty to have recorded in his county all obligations taken therein, and send certificates of record to the secretary, and perform such other duties as may be imposed on him by the general business management.

"Third. The secretary and two other members of this board, as may be hereinafter chosen, shall sit as a Board of Acceptance, and it shall be their duty to examine the application of every Alliance desiring to do business with this Exchange; and when they are satisfied with the showing made by a Sub-Alliance, and report favorably, then the business manager shall be authorized to deal with that Sub-Alliance according to the terms of the proposition so accepted, but no further. And the business manager shall in no case advance more than he has been authorized by the said Board of Acceptance.

"The Board of Acceptance shall also make estimates of the amounts of purchases necessary to meet the demands of the accepted contracts, and shall demand of the business management purchase adequate to meet such necessities in a satisfactory manner."

As shown above, this was not a proposition to do business on time. It was a call upon the membership to make known their wishes as to whether they desired the Exchange to undertake the business as outlined in the circular letter. This letter was sent out about December 1, 1887, and responses came in so slowly that, on the first of January, the time was extended. The membership clamored for more time in which to prepare the notes, and for advances to be made earlier than the first of April. To this clamor the Board of Directors yielded, and notes were received and accepted up to May, and goods were supplied freely in March. Had the business been carried out as outlined in the plan, the result might have been different; but the Board departed from that plan by accepting note obligations very much in excess of the prescribed limit of four times the actual cash capital paid in. When the Board of Directors met in March, they found that only about \$17,000 of the

capital stock had been paid in, and that their Board of Acceptance had approved and accepted joint notes to the amount of about \$128,000; and with the corporation thus overburdened they accepted a contract for the construction of a building upon their lots in Dallas, which increased their liabilities about \$35,000 more. They continued to accept notes from the people, until their obligations to supply merchandise aggregated about \$400,000, with a paid-in capital of about \$56,000 that could be used in the business. \To discharge this obligation required that the people be furnished merchandise to the value of over seven times the capital stock paid, and to do that it was necessary that the Exchange hypothecate these joint notes, at about eighty-five per centum of their face value. That was found impossible. On the average they had to be used as collateral, at about forty per cent of their face value; consequently the Exchange had undertaken more than it possibly could do, and it failed; not because the system was faulty, or the management bad, but because the people did not put in capital stock in proportion to the credit they asked, and because many of them did not pay their indebtedness. The following is the report of the committee, after a thorough investigation of all the facts: -

" To the Members of the Farmers' Alliance of the State of Texas:

"BRETHREN: In compliance with the request of a meeting held in the city of Waco, on the 15th day of May, 1888, by representative members of our order, from different parts of the State, requesting us to thoroughly examine the books and present financial condition of the Alliance Exchange of Texas, we, the undersigned, President and Executive Committee of the Texas State Alliance, beg leave to submit the following report:—

"We met in the city of Dallas on the 19th day of May, 1888, and, after a thorough and critical examination of the books and business generally, and the manner of conducting said business in all its departments, and those in charge of same, we are gratified to state that the entire business is, and has been, conducted upon sound, conservative, practicable business principles, and that the capital stock of said Exchange is intact, and that it has been self-supporting, and is entitled to your fullest confidence and support. The facts set forth in Brother Macune's report are true.

"We also find the Exchange has been crippled in its efforts to help the brethren, in consequence of not being able to negotiate loans upon the mortgage notes of the brethren, placed in their hands for that purpose, and by the acts of designing enemies of our order. This you will find more fully explained by Brother Macune's report, hereunto attached, and made a part of this report.

"We are, after a diligent and fair investigation, made in Dallas, deeply impressed with the great importance of the brotherhood moving with all their united force at once to the support of our Exchange, that we, as an Alliance, have built up.

"It is with regret we have to chronicle the fact that any class of men should be found in this enlightened age, whose love of power and money, and the emoluments

growing out of such, would prompt them to form an unholy and unhallowed combination for the purpose of throttling a business venture, established for the purpose of inaugurating a just and equitable system of distribution. Yet it is true, and, unless each member evinces patriotic zeal and loyalty, and promptly rises to a full conception of the dignity and gravity of the situation, and royally assumes at once his part of the burden, our efforts will be much hampered.

"It is now time for each brother to realize the fact that faltering now means unconditional surrender; it means a perpetuation of the invidious discriminations which now deprive, and have in the past deprived, us of a just share of the proceeds of our labor.

"Our faith in the zeal, fidelity, love of justice, and patriotism in the order is so strong that we look to you to say, by your actions, that a combination of schemers, now formed for selfish purposes, shall not thwart the efforts of a quarter of a million free men, fighting the battles of truth and justice.

"With unfaltering confidence in your ability and loyalty, we urge you to move with one accord forward, and victory awaits you.

"Yours fraternally,

"Evan Jones, President,

"B. J. KENDRICK,

" JOE SMELTZER,

"GEO. L. CLARK,

" Executive Committee."

The Exchange used the notes for the very purpose for which they were given, and did not sell or part ownership with one of them. True, some of them were forfeited as collateral, but that was no violation of the agreement on the part of the Exchange. That was a contingency that the makers of the notes took the chances of when they made the notes for that purpose.

The plan of business inaugurated by the Exchange was a great innovation upon the established usages and customs of the country at that. time; it was therefore attended with the two great drawbacks that always attend the introduction of an innovation, - bitter opposition and great difficulty in being understood. The people had been for twenty years taught the Rochdale system of conducting stores, and, as it had for its object an entirely different purpose from that taught by the Alliance, the Exchange could not use that plan, and therefore was compelled to undertake the difficult task of introducing a new system, and combating the opposition from within the order, of many who were wedded to the Rochdale plan of joint-stock (miscalled co-operative) stores. opposition of the merchants and dealers of the State was aroused against the Exchange plan, because it proposed to demoralize prices. A comparison will show the essential difference between the Exchange and the Rochdale systems. The latter proposed to establish stores, or rather to have the people in the different localities furnish the capital and start

stores, called co-operative, and sell commodities, as other merchants did, at the prices current in that place at the time. Then, at stated intervals of once or twice a year, the business would be balanced, and the profits, after paying the running expenses and interest on the capital stock, would be divided among the stockholders, on a basis of the amount of goods purchased by each. The object of this system was, therefore, to make a success of the business as a mercantile effort, so as to make money for its stockholders.

The Exchange did not encourage the people to establish stores. taught them to consider, before embarking in the enterprise, what object they expected to achieve; to decide whether the venture should be a success as a mercantile effort, or a success as an auxiliary to the farming effort; and whether they should make money at the expense of their brother farmers, or whether they would make the same money by assisting their brother farmers to make equally as much. To make this perfectly plain, note the difference in the following comparison: A Rochdale store in a county in Central Texas, in 1888, declared a dividend to its purchasers, equal to fifty per cent of its capital, on its first six months' business. Suppose it had maintained this degree of prosperity throughout the year, and it had a capital of \$5000 paid in by a hundred stockholders, and that the gross trade of the county amounts to about \$1,000,000. average profit on sales is twenty per cent, then this institution has sold \$25,000 worth of goods, and returns to its stockholders \$50 each as a dividend, and the gross profits of the other merchants of that county amount to \$195,000, as a profit on the other \$975,000 worth of business done in the county. This is very satisfactory to all the merchants and newspapers, lawyers and doctors, and especially to the stockholders in the co-operative store, who have got their original investment back, and begin to understand that merchandising pays better than farming. manager is lionized, and becomes a great man in the county. He is recognized as having a great influence among the farmers. The store will have a fine reputation as a successful mercantile institution, and everybody will congratulate the farmer on having such a good store, and praise him for his co-operative effort.

Now had an Alliance store been started in the place of the Rochdale store, in the same town, at that time, with a like capital, different conditions would have prevailed, and a very different result would have ensued. The Alliance store would have said: "We are strictly auxiliary to the farming effort, and therefore will not charge the membership the usual profits of merchants, and then return it to them as dividends. We will let them keep the profits in their pockets, by selling them the goods

at the cost of laying them down here and handling. The people will thereby be able to make their money go farther towards paying the expenses of the farming effort." It is found that they can pay all expenses of handling the goods with a profit of five per cent, and they commence selling the brethren at that margin. Immediately all other stores in that county drop to the same price, and sell many leading articles even lower, and open a bitter war on the Alliance store and its manager. They undersell him and get the trade; they slander him and ridicule his methods. It is found, at the end of the year, that his sales have been so small that the store has lost money, and stories are circulated that the manager has swindled the stockholders. A careful examination, however, fails to show any evidence, and all know in their hearts that they are false; but the store is regarded as a failure, and its enemies advertise it as a fraud. The stockholders have made nothing, perhaps not even interest on their stock. They may have lost a part of the original investment. Thus far this comparison has shown what is usually published in regard to these two systems, but simple justice demands that the investigation be pursued a little further, in order to see the effect of both upon agriculture.

As has been shown, the gross effect of the Rochdale plan was a dividend of \$50, on an average, to each of the one hundred stockholders, making an aggregate gain of \$5000. The gain from the business of the Alliance store accrued to the general public in the shape of reduced prices; and, as nine-tenths of the people of that county were farmers, nine-tenths of the gains accrued to agriculture. This gain consisted in the difference between five per cent and twenty-five per cent on the \$800,000 worth of goods purchased from the merchants of that county. That is to say, under both systems the gross purchases of the merchants of the county were \$800,000. Under the Rochdale system, they sold the goods during the year for \$1,000,000, and under the Alliance store system they sold the same goods for \$840,000, making a clear gain to the people of that county, on their purchases, of \$160,000; and if ninetenths were farmers, the gain to the farming interests of the county would be \$144,000 in a single year, as a result of the Alliance store. from this the five thousand, as gross gains of the Rochdale store, and it shows the difference to be \$139,000 in a single county, in one year, in favor of the Alliance store, as a benefit to agriculture.

The stockholders, however, were not perceptibly benefited, and notdisposed to perpetuate a store that perhaps fulfilled the divine injunction, and benefited its enemies. It was impossible to make the people generally understand that it paid to run a store that was a failure. They could not be made to comprehend the fact that their stores, cotton yards, and Exchange were practically option houses, and that the less business they did, the less expense they would have and the better the result would be, provided general prices were kept down.

The Exchange did about \$1,000,000 worth of business in 1888, and reduced general prices throughout the entire State of Texas, saving the farmers of the State, at the very lowest estimate, several millions of dollars. No one man had over \$5 invested in the capital stock, and the final loss of the entire capital stock, amounting in the aggregate to less than \$100,000, was a mere drop in the bucket to the gains that accrued to the membership from the reduction of general prices.

The business effort of the Alliance Exchange of Texas taught that profit was wrong; that a man was entitled to pay for his work, and to interest on his investment, but to no profits; and advised farmers in the different sections not to invest their money in stores, but to select an agent and provide a place for storage; have such goods as they were sure to need shipped to these "supply stations," as they were called, and have the agent there one or two days in each week, to divide out the goods to those who participated in making the note and ordering the goods. Whether the plan contained merit or not, its benefits, when compared with its expense, including the loss of the original capital, demonstrate it to have been the greatest financial success ever started in this country, and the only reason this fact is not recognized is because the benefits have been distributed in small amounts to the pockets of millions of farmers, instead of being placed to the credit of the bank account of one single capitalist.

In May, 1888, the business agents of the different States met as a committee of the National Alliance, for the purpose of organizing a State business agents' association. The matter was thoroughly discussed and a plan formulated. This plan formed the basis upon which many State Exchanges were started. The following plan, on which the State Alliance of Georgia has organized its Farmers' Alliance Exchange, will give a correct idea of the objects and methods by which the Exchange system is operated, and is a very good example of the laws governing the Exchanges in the other States:—

[&]quot;I. The name of this corporation shall be 'The Farmers' Alliance Exchange of Georgia.'

[&]quot;2. The purposes for which this corporation is organized are: To conduct a general mercantile business; to act as agent for the purchase and sale of all kinds of farm and orchard products, and general forwarding agent for all kinds of commodities; to erect, manage, and operate warehouses, stock-yards, grain elevators, packing

establishments; to manufacture guano or other fertilizers; and all such other enterprises as may be found necessary or advisable to profit and betterment.

- "3. This corporation shall have the power, by and under its corporate name, to enjoy the following rights and privileges, to wit: It shall be capable in law to purchase, receive, and hold and enjoy, lands, goods, chattels, and property of any kind and effects whatsoever; the same to grant, sell, mortgage, and dispose of, sue and be sued, plead and be impleaded, contract and be contracted with; to make a common seal, to alter or break the same; to establish and put in execution by-laws governing the corporation; to issue and float debenture or other bonds; to do a printing and publishing business.
- "4. The capital stock of the corporation shall be \$1,000,000 twenty-five per cent of stock subscribed to be paid in during the year 1888, the remainder in three instalments of twenty-five per cent annually; and when \$50,000 is paid in, the board of directors shall begin operations. The capital stock shall be divided into 10,000 shares of \$100 each.
 - "5. The term for which this corporation shall exist shall be ninety-nine years.
- "6. Subscriptions for shares of capital stock shall be made by Farmers' Alliances, and not by individuals, and shall be accompanied by twenty-five per cent in cash of the amount of subscription.
- "7. It is hereby understood or agreed that each Sub-Alliance adopting this Exchange system, and thereby ratifying this plan, is firmly bound to subscribe for and make settlement on stock, as above specified, to the number of shares due from it, under the following schedule of ability, to wit: Those having less than thirty-five members shall be apportioned one share; thirty-five to sixty-five members, two shares; sixty-five to ninety-five members, three shares; all above ninety-five members, four shares; Provided, this shall not prevent any Alliance from taking as many shares as they choose.
- "8. Each Farmers' Alliance shall be entitled to one Trustee-Stockholder, who shall be elected annually at the time of the regular election of officers. He shall represent such subordinate body in the meeting of Trustee-Stockholders, from and for all the subordinate bodies in that county, and shall be entitled to as many votes as he represents shares of stock. The county convention of Trustee-Stockholders shall, at a regular annual meeting, elect from their number one delegate from all shares of stock owned in that county, who shall be known as County Trustee-Stockholder, and be authorized to represent the stock held in that county in the State meetings of the Trustee-Stockholders of the corporation, and shall be entitled to as many votes as they represent shares of stock. Each Trustee-Stockholder shall be the representative of the Exchange in his Alliance, and shall give bond in the sum of —— dollars for the faithful performance of duty.
- "9. The next Trustee-Stockholders' meeting shall be at the time and place of the next meeting of the Farmers' State Alliance of Georgia, unless sooner convened by call from the Board of Directors of the Exchange.
- "10. The Trustee-Stockholders shall elect annually eleven from their number, as a Board of Directors, to be chosen one from each congressional district in the State, and one from the State at large. Seven of these directors will constitute a quorum.
- "II. The Board of Directors shall elect from their number a president, vice-president, and a secretary and treasurer. They may employ or discharge such assistants as necessary, taking sufficient bonds to cover all responsibility reposed. They shall enact suitable laws and regulations, subject to approval by the next meeting of stock-

holders: Provided, all such by-laws and regulations shall have the full force of law, until the stockholders shall have refused to concur in them."

Just prior to the national meeting at St. Louis, a call was issued, inviting all State business agents to meet at the same time, to consider the propriety of forming a national organization. Business agents from nearly all the organized States were present, and a general discussion of the whole subject was entered into. The benefits of such an association were at once apparent, and immediate steps were taken for its formation.

The following business agents were present: J. S. Bird, Alabama; W. W. Holland, Kentucky; George A. Gowan, Tennessee; J. O. Winn, Georgia; Felix Corput, Georgia; T. A. Clayton, Louisiana; W. H. Worth, North Carolina; D. B. Hatfield, Arkansas; T. J. Galloway, Tennessee; W. K. Cessna, Florida; G. G. Grose, Dakota; Allen Root, Nebraska; J. D. Furlong, Minnesota; J. B. Dines, Missouri; August Post, Iowa; J. L. Seaver, Washington; S. M. Hoskins, Indiana; M. B. Wade, Kansas; S. W. Wright, Jr., Illinois; S. P. A. Brubaker, Virginia; B. G. West, Mississippi; T. W. Haynes, Kentucky; W. B. Collier, Missouri; Colonel I. May, Wisconsin; W. J. Cox, Indiana; J. A. Mudd, Maryland; A. S. Mann, Florida; Oswald Wilson, New York. Brother J. B. Dines was elected President, W. W. Holden, Vice-President, and Oswald Wilson, Secretary. A constitution was adopted, and other business of detail transacted to the satisfaction of all.

The association adjourned to meet with the National Alliance the following December.

ANNUAL MEETING OF THE STATE BUSINESS AGENTS' ASSOCIATION.

Ocala, Florida, December 1, 1890.

The States Business Agents' Association met in hall of Donnelton Phosphate Company, with the following officers and members present:—
J. B. Dines, President, St. Louis, Missouri; W. L. Peek, Vice-President, Atlanta, Georgia; Oswald Wilson, Secretary, 335 Broadway, New York; J. K. P. House, Kansas; M. D. Coffeen, Illinois; G. A. Gowan, Nashville, Tennessee; W. K. Cessna, Jacksonville, Florida; G. F. Gaither, Birmingham, Alabama; W. H. Worth, Raleigh, North Carolina; T. A. Clayton, New Orleans, Louisiana; A. R. Venable, Jr., Richmond, Virginia; J. J. Rogers, Norfolk, Virginia; S. S. Harvey, Pensacola, Florida; S. D. A. Duncan, Dallas, Texas; J. M. Moore, San Francisco, California; R. M. Humphrey, Houston, Texas; R. C. Betty, Indian Territory; B. G. West, Memphis, Tennessee; M. L. Donaldson,

Greenville, South Carolina; W. H. Holland, Louisville, Kentucky; Joseph A. Mudd, Washington, District of Columbia.

Much important business was transacted, the constitution was revised, and a general agreement was arrived at in regard to business methods among the different agencies. The meeting was entirely satisfactory to all concerned.

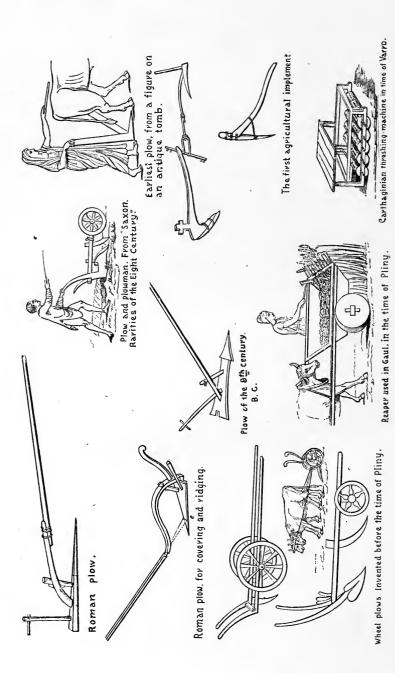
The following officers were elected: -

J. B. Dines, President; W. L. Peek, Vice-President; Oswald Wilson, Secretary; J. K. P. House, Treasurer; M. D. Coffeen, Member of Executive Committee.

Adjourned to meet at the place designated by the National Farmers' Alliance and Industrial Union for their next annual meeting.

No one can estimate the benefits which may be derived from this national association, if properly managed. It can protect the weak and bid defiance to the strong, and thereby save millions to the hard-working farmer. If space would permit, a report from each State business agent, as to the volume of business, benefits derived by the brethren, and the prospects for the future, would be both instructive and entertaining. Suffice it to say that a great work is being done by these agencies. Millions of dollars are being saved to the members, and true business principles are being taught to the order. In many respects these agencies are made an auxiliary of no little importance, in the education of the brethren, regarding the correct doctrine of the Alliance. That they are an important factor in the Alliance movement, no one should deny, and that they should be patronized and supported, every one should concede.





ANCIENT AGRICULTURAL IMPLEMENTS.

DIVISION III.

AGRICULTURE.

CHAPTER I.

HISTORY OF AGRICULTURE.

Nothing, perhaps, would be more interesting to the American farmer than a correct detailed description of the agricultural methods of antiquity. It would serve to mark the progress that has been made in that pursuit, and disclose the fact, which many seem to doubt, that the steady, plodding farmer has performed his full share in bringing about the civilization of the present, by making rapid strides in the development of every branch of his vocation. It would also be gratifying to know how the nations of the long ago tilled the soil, sowed, planted, reaped, or gathered; what crops they cultivated, and by what methods they were converted into use. Such information, however, has been withheld, as the records which have come down to us are all but silent upon these topics.

The fact that agriculture, as an industry, antedates all others, is admitted by every one. The first want of man is food, and his first resource for it was the ground. Whether herbs or fruits were resorted to must have depended upon their relative abundance in the locality where man began his career upon earth. Doubtless the fruits were preferred at first, until the use of fire, in the preparation of the herbs, was discovered. Upon this hypothesis, the first care and labor of man would have been bestowed upon fruit trees, and hence gardening may be said to have been the art of earliest invention.

But man is also a carnivorous animal, and this propensity of his nature would soon lead him to attempt to domesticate such animals as he found most useful in affording him milk, food, or clothing, or would assist him in his labor. From this may have come the origin of pasturage, and the industry of raising stock. The invention of tilling the soil must have been coeval with the discovery of the use of the cereal grasses, and may be considered as the last step in the invention of husbandry, as well as the most important. Such conclusions, while simply conjectural, are nevertheless based upon sufficient reason to warrant a respectful consideration.

In the earlier stages of civilization, these branches of economy, in common with all the arts of life, would naturally be practised by every family for itself; but the great advantages of separating the occupations would soon present themselves, and the result, no doubt, is the present designations of farming, gardening, grazing, etc.

The importance of agriculture is obvious to every thinking person, not only by its affording the direct supply of our greatest wants, but as the parent of manufacture and commerce. Without agriculture, there can be neither civilization nor population. It is not only the most universal of all the arts, but the one which requires the greatest number of operators. The larger portion of the inhabitants, in every country, are employed in agricultural pursuits; and the most prosperous and enlightened nation is the one whose agricultural population are the best remunerated for their labor.

In the earlier ages of the race, before tillage was invented, doubtless the surface of the earth was held in common by all the inhabitants, and every family pastured its flocks, pitched its tent, or erected its hut where it seemed best; but when tillage came into use, it must have become necessary to assign to each family or tribe a portion of territory, and of this portion that family or tribe became the recognized proprietors and cultivators. From this, perhaps, came the beginning of property in land; of purchased cultivators, or slaves; hired cultivators, or laborers; of farmers, or proprietors; and the various laws and customs, in regard to ownership and occupation of landed property, which, in a modified or intensified form, obtain at the present time.

After a careful examination of numerous authors upon ancient agriculture, I have selected the writings of Mr. J. C.

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Loudon, printed in England, in 1834, from which I shall make extended quotations.

Mr. Loudon says that the history of agriculture may be considered chronologically, or in connection with that of the different nations, which have successively flourished in different parts of the world; politically, as influenced by the different forms of government which have prevailed; geographically, as affected by different climates; and physically, as influenced by the character of the earth's surface.

The first kind of history is useful, by displaying the relative situation of different countries as to agriculture; instructive, as enabling us to contrast our present situation with that of other nations and former times; and curious, as discovering the route by which agriculture has passed from primitive ages and countries to our own.

The political and geographical histories of the art derive their value from pointing out causes favorable and unfavorable to improvement, and countries and climates favorable or unfavorable to particular kinds of cultivation and management. Traditional history traces man back to the time of the deluge. After that catastrophe, of which the greater part of the earth's surface bears evidence, man seems to have recovered himself in the central parts of Asia, and to have first attained to eminence in arts and government on the alluvial plains of the Nile. Egypt colonized Greece, Carthage, and some other places on the Mediterranean Sea; and thus the Greeks received their arts from the Egyptians; afterwards the Romans from the Greeks; and finally, the rest of Europe from the Romans.

Such is the route by which agriculture is traced to our part of the world. How it may have reached the eastern countries of India and China is less certain, though, from the great antiquity of their inhabitants and governments, it appears highly probable that arts and civilization were either coeval there, or, if not, that they travelled to the east much more rapidly than they did to the west. Very few facts are recorded on the subject, previous to the time of the Romans. That enterprising people considerably improved the art, and extended its practice with their conquests. After the fall of their empire, it declined throughout Europe, and, during the Dark Ages, was chiefly

preserved on the estates of the Church. With the general revival of arts and letters, which took place during the sixteenth century, agriculture also revived; first in Italy, and then in France and Germany; but it flourished most in Switzerland and Holland; and finally, in recent times, has attained its highest degree of perfection in England.

The modern agriculture of America is copied from that of Europe; and the same may be said of the agriculture of European colonies, established in different parts of the world. authors whose writings relate to the period under consideration are few, and the relations of some of them very contradictory. The earliest is Moses (B.C. 1600). Herodotus and Diodorus Siculus, who wrote more particularly on the history and geography of Egypt, lived, the former in the fifth, and the latter in the sixth, century B.C.; and Hesiod, the ancient Greek writer on husbandry, in the tenth century preceding our era. It is truly remarkable that, in the eastern countries, the state of agriculture and other arts, and even of machinery, at that period, does not appear to have been materially different from what it is in the same countries at the present day. Property in land was recognized, the same grains cultivated, and the same domestic animals reared or employed. Some led a wandering life and dwelt in tents, like the Arabs, and others dwelt in towns or cities and pursued agriculture and commerce, like the fixed nations. is reasonable, indeed, and consistent with received opinions, that this should be the case; for, admitting the human race to have been nearly exterminated at the deluge, those who survived that catastrophe would possess the more useful arts and general habits of life of the antediluvian world. Noah, accordingly, is styled a husbandman, and is said to have cultivated the vine, and to have made wine. In little more than three centuries afterwards, Abraham is stated to have had extensive flocks and herds, slaves of both sexes, silver and gold, and to have purchased a family sepulchre with a portion of territory around it. Isaac, his son, during his residence in Palestine, is said to have sown and reaped a hundred fold.

Grain seems to have been grown in abundance in Egypt, for Abraham, and afterwards Jacob, had recourse to that country during times of famine. Irrigation was also extensively practised there, for it is said that the plains of Jordan were watered everywhere, even as the garden of the Lord, like the land of Egypt. Such is the amount of agricultural information contained in the writings of Moses, from which the general conclusion is that agriculture in the East has been practised, in all or most of its branches, from time immemorial.

Agriculture of Egypt. — The origin of agriculture has been sought by modern philosophers in natural circumstances. Man, in his rudest state, they consider, would first live on fruits or roots; afterwards, by hunting or fishing; next, by the pasturage of animals; and lastly, to all of these he would add the raising of grain. The culture of the soil for this purpose is supposed to have been first practised in imitation of the effects produced by the sand and mud left by the inundations of rivers. These take place, more or less, in every country, and their effects on the herbage, which spontaneously springs up among the deposited sand and mud, must at a very early period have excited the attention of the people.

This hypothesis seems supported by the traditions and natural circumstances of Egypt, a country overflowed by a river, civilized from time immemorial, and so abundant in grain as to be called the granary of the world. The situation and natural phenomena of Upper Egypt rendered it fitter for the invention of cultivation than the low country; for, while Lower Egypt was a marsh, formed by the deposits of the Nile, the principal part of Upper Egypt was a valley, a few leagues broad, bounded by mountains, and on both sides declining to Hence it was overflowed only for a certain time the river. and season. The waters rapidly declined, and the ground, enriched by the mud, was soon dry and in a state fit to receive seed. The process of cultivation in this country was also most obvious and natural; for the ground being every year covered with mud brought from the Nile, and plants springing up spontaneously after its recession, must have given the hint that nothing more was necessary than to scatter the seeds and they would vegetate. Secondly, the ground was prepared by nature for receiving the seed, and required only stirring sufficient to cover it. From this phenomenon the surrounding nations learned two things: first, that the ground before sowing should

be prepared and cleared from plants; and, secondly, that the mixture of rich mould and sand would produce fertility.

The invention of agricultural implements must have been coeval with the invention of cultivation; and, accordingly, they are supposed to have originated in Egypt. Antiquarians are agreed that the primeval implement used in cultivating the soil must have been the pick. A medal of the greatest antiquity, dug up at Syracuse, contained an impression of such an instrument; and its progress till it became a plow has been recognized in a cameo, published by Menestrier, on which a pick-like plow is drawn by two serpents. It may also be seen on a medal from the village of Enna, in Sicily, in a figure given as found on an antique tomb, in an Etruscan plow copied from a fragment in the Roman college at Rome, by Lasteyrie. This plow, there can be little doubt, was used in war as well as in agriculture, and seems to have been of that kind with which the Israelites fought against their enemies, the Philistines.

Whether the culture of grains was invented in Egypt or not, all testimonies concur that cultivation was carried to a higher degree of perfection there than in any other country of antiquity. The canals and banks which still remain in Lower Egypt, and especially in the Delta, are evidences of the extent to which embanking, irrigation, and drainage have been carried.

Landed property, in ancient Egypt, it would appear, was the absolute right of the owners, till, by the procurement of Joseph, in the eighteenth century B.C., the paramount or allodial property of the whole was transferred to the government. The king, however, made no other use of that right than to place the former occupiers in the situation of tenants, bound to pay a rent or land tax of one-fifth of the produce. This, Moses says, continued to be the law of Egypt down to his time; and the same thing is confirmed by the testimony of Herodotus. soil of Egypt is compared by Pliny to that of the Leontines, formerly regarded as the most fertile in Sicily. There, he says, grain yields a hundred for one; but Cicero has proved this to be an exaggeration, and that the ordinary increase in that part of Sicily is eight to one. Granger, who paid much attention to the subject, says that the lands nearest the Nile, which during the inundation were covered with water forty days, did not,

in the most favorable seasons, yield more than ten for one. This, however, is owing to their present neglected state.

Of the animal or vegetable products of Egyptian agriculture, very little is known. The ox seems to have been the chief animal of labor from the earliest period, and rice at all times the principal grain in cultivation. By an ancient painting it would appear that the operation of reaping was performed much in the same way as at present, the ears being cropped by a hook, and the principal part of the straw left as stubble.

Herodotus mentions that, in his time, wheat was not cultivated, and that the bread made from it was despised and reckoned not fit to be eaten; beans were also held in abhorrence by the ancient inhabitants, but it is highly probable that, in later times, when they began to have commerce with other nations, they laid aside these and other prejudices, and cultivated what they found best suited to the foreign market. Agriculture was, no doubt, the chief occupation of the Egyptians; and though they are said to have held the profession of shepherd in abhorrence, yet it appears that Pharaoh not only had considerable flocks and herds in his own possession, but was desirous of introducing any improvement which might be made in their management; for when Jacob, in answer to his questions, told him that he and his family had been brought up from their youth to the care of live-stock, he expressed a wish to Joseph, "If thou knowest any men of activity among them, then make them rulers over my cattle."

Agriculture of the Jews and Other Nations of Antiquity. — Of the agriculture of the nations contemporary with the Egyptians and Greeks, nothing is distinctly known; but, assuming it as most probable that agriculture was first brought into notice in Egypt, it may be concluded that most other countries, as well as Greece, would begin by imitating the practices of that country. On the agriculture of the Jews we find there are various incidental remarks in the books of the Old Testament. On the conquest of Canaan, it appears that the different tribes had their territory assigned to them by lot; that it was equally divided among the heads of families, and by them and their posterity held by absolute right and impartial succession. Thus every family had originally the same extent of territory;

but, as it became customary afterwards to borrow money on its security, and as some families became indolent and were obliged to sell, and others extinct by death without issue, landed estates soon varied in point of extent.

In the time of Nehemiah a famine occurred, on which account many had "mortgaged their lands, their vineyards, and houses, that they might buy corn for their sons and daughters, and to enable them to pay the king's tribute." Some were unable to redeem their lands, otherwise than by selling their children as slaves, and thereby "bringing the sons and daughters of God into bondage." Boaz received three estates by inheritance, and also got him a wife, after much curious ceremony. Large estates, however, were not approved of. Isaiah pronounces a curse on those "that join house to house, that lay field to field, till there be no place, that they may be placed alone in the midst." While some portions of land near the towns were enclosed, the greater part was in common, or in alternate proprietorship and occupation, as in our common fields. This appears, both from the laws and regulations laid down by Moses, as to the herds and flocks, and from the beautiful rural story of Ruth, who, to procure sustenance for herself and her widowed mother-in-law, Naomi, "came and gleaned in the field after the reapers, and her hap was to light on a part of the field (that is, of the common field) belonging unto Boaz."

It would appear that every proprietor cultivated his own lands, however extensive; and that agriculture was held in high esteem, even by their princes. The crown lands, in King David's time, were managed by seven officers. One was over the storehouses; one over the work of the field and tillage of the ground; one over the vineyards and wine-cellars; one over the olive and oil stores, and sycamore plantations; one over the herds; one over the camels and asses; and one over the flocks. King Uzziah "built towers in the desert, and digged many wells: for he had much cattle, both in the low country and in the plains: husbandmen also and vine-dressers in the mountains, and in Carmel: for he loved husbandry." Even private individuals cultivated to a great extent, and attended to the practical part of the business themselves. Elijah found Elisha in the field, with twelve yoke of oxen before him, and himself

with the twelfth. Job had five hundred yoke of oxen, five hundred she-asses, seven thousand sheep, and three thousand camels. Both asses and oxen were used in plowing, for Moses forbade the Jews to yoke an ass with an ox, their step or progress being different, and of course their labors unequal.

Among the operations of agriculture are mentioned watering by machinery, plowing, digging, reaping, threshing, etc. "Doth the plowman plow all day to sow? doth he open and break the clods of his ground? When he hath made plain the face thereof, doth he not cast abroad the fitches, and scatter the cummin, and cast in the principal wheat, and the appointed barley, and the rye in their place?" The plow was probably a clumsy instrument, requiring the most vigilant attention from the plowman, for Luke uses the figure of a man at the plow looking back, as one of utter worthlessness. Covered threshing-floors were in use, and, as it appears in the case of Boaz and Ruth, it was no uncommon thing to sleep in them during the harvest.

Wheat was threshed in different ways. "The fitches," says Isaiah, "are not threshed with a threshing instrument, neither is a cart-wheel turned about upon the cummin; but the fitches are beaten out with a staff, and the cummin with a rod. Bread corn is bruised; because he will not ever be threshing it, nor break it with the wheel of his cart, nor bruise it with his horsemen." Grain was "winnowed with the shovel and the fan." Sieves were also used, for Amos says, "I will sift the house of Israel among all nations, as corn is sifted in a sieve"; and Christ is represented by St. Luke as saying, "Simon, Simon, behold, Satan hath desired to have you, that he may sift you as wheat." Isaiah mentions the "digging of hills with the mattock," to which implement the original pick would gradually arrive.

Vineyards were planted on rising grounds, fenced around, the soil well prepared, and a vintage-house and watch-tower built, in a central situation, as it is still done in European Turkey and Italy. Moses gives directions to the Jews for cultivating the vine and other fruit trees. The first three years after planting the fruit is not to be eaten, the fourth is to be given to the Lord, and it is not till the fifth year that they are "to eat of the fruit thereof." The intention of these precepts was, to

prevent the trees from being exhausted by bearing, before they had acquired sufficient strength and establishment in the soil.

Agriculture of the Greeks. — What we know of the agriculture of Greece is chiefly derived from the poem of Hesiod, entitled "Works and Days." Some incidental remarks on the subject may be found in the writings of Herodotus, Xenophon, Theophrastus, and others. Varro, a Roman, writing in the century preceding the commencement of our era, informs us that there were more than fifty authors at that time, who might be consulted on the subject of agriculture, all of whom were ancient Greeks, except Mago, the Carthaginian. Among them he includes Democritus, Xenophon, Aristotle, Theophrastus, and Hesiod. The works of the other writers he enumerates have been lost.

The writings of Hesiod are the chief resource for details as to Grecian agriculture. This author flourished in the tenth century B.C., and was therefore contemporary with Homer. He lived at Askra, a village at the foot of Mt. Helicon, in Bœotia. he kept a flock, and cultivated soil which he describes as "bad in winter, hard in summer, and never good," - probably a stiff clay. "The Works," which constitute the first part of his poem, are not merely details of agricultural labors, but comprise directions for the whole business of family economy in the country. The poem sets out by describing the state of the world, past and present, for the purpose of exemplifying the condition of human nature. This condition entails on man the necessity of exertion to preserve the goods of life, and leaves him no alternative but honest industry or unjust violence; of which the good and evil consequences are respectively illustrated. Dissension and emulation are represented as two principles, actively at work; much is said of the corruption of judges, and the evils of litigation; contentment is apostrophized as the true secret of happiness; virtue and industry strongly recommended. poet now proceeds to describe the prognostics of the seasons of agricultural labor, and gives directions for providing a house, wife, slaves, and two steers; how and when to cut down timber, to construct carts and plows, and make clothes and shoes; when to sow, reap, and dress the vine, and make wine. He then treats of navigation, and gives caution against risking everything in one voyage. He describes the seasons fit for the coasting trade, and advises great care of the vessel at such time as she is not in use, and hanging up the rudder and other tackle in the smoke of the chimney. He concludes "The Works" with some desultory precepts of religion, personal propriety, and decorum; and enjoins some curious superstitious observances, relative to family matters. "The Days" contain a division of the lunar month into holy, auspicious, and inauspicious days, mixed and intermediary days, the latter being such as are entitled to no particular observance.

Property in land, among the Greeks, seems to have been absolute in the owner, or what we would term freehold. the matter of inheritance, the sons seem to have divided the patrimony in equal portions. One of Solon's laws forbade men to purchase as much land as they desired. An estate containing water, either in springs or otherwise, was highly valued, especially in Attica; and there a law existed relating to the depth of wells, the distance they were to be dug from other men's grounds, what was to be done when no water was found, and other matters to prevent contention as to water. Lands were enclosed, probably with a ring fence or boundary mark, or, most likely, the enclosed lands were such as surrounded the villages, and were in constant cultivation, the great breadth of the country being, it may be presumed, in common pasture. Solon decrees that, "He who digs a ditch or makes a trench nigh another's land shall leave so much distance from his neighbor as the ditch or trench is deep. If any one make a hedge near his neighbor's ground, let him not pass his neighbor's landmark. If he build a wall, he is to leave one foot between him and his neighbor; if a house, two feet. A man building a house in his field must place it a bow-shot from his neighbor's."

The operations of culture, as appears by Hesiod, required to be adapted to the season. Summer fallows were in use, and the ground received three plowings,—one in autumn, another in the spring, and a third immediately before sowing the seed. Manures were applied. In Homer, an old king is found manuring his fields with his own hands, and the invention of manures is ascribed by Pliny to the Grecian king Augeas. Theophrastus enumerates six different species of manures, and adds that a

mixture of soils produces the same effect. Clay, he says, should be mixed with sand, and sand with clay.

The seed was sown by hand and covered with a rake. Grain was reaped with a sickle, bound in sheaves, carted to a well-prepared threshing-floor, in an airy situation, where it might be threshed and fanned by the wind, as is still practised in modern Greece, Italy, and other countries of the Continent. Afterward it was laid up in bins, chests, or granaries, and taken out as wanted by the family, to be pounded into meal in mortars or quern-mills.

Thorns and other plants for hedges were produced from the woods, as we find in a passage from Homer, in which he represents Ulysses as finding Laertes digging and preparing to plant a row of quicksets. The implements enumerated by Hesiod are, a plow, of which he recommends two be provided, in case of accident, and a cart ten spans (seven feet six inches) in width, with two low wheels. The plow consisted of three parts, — the share-beam, the draught-pole, and the plow-tail. beam is to be made of oak, and the other parts of elm or bay. They are to be joined firmly with nails. The beasts of labor mentioned are oxen and mules. The former were more common, and it would appear, from a passage in Homer, were yoked by the horns. Oxen of four years and a half are recommended to be purchased, as most serviceable. In winter, both oxen and mules were fed under cover, on hay and straw, mast, and the leaves of vines and various trees.

The most desirable age for a plowman is forty. He must be well fed, go naked in summer, rise and go to work very early, and have a sort of an annual feast, proper rest, good food, and clothing consisting of coats of kid skins, worsted socks, and halfboots of ox hides in winter. He must not let his eyes wander about while at the plow, but cut a straight furrow; nor be absent in mind while sowing the seed, lest he sow the same furrow twice.

The vine is to be pruned and staked in due season, the vintage made in fine weather, and the grapes left a few days to dry, and then carried to the press. The products of Grecian agriculture were the grains and legumes at present in cultivation, with the vine, fig, olive, apple, date, and other fruits. The live-stock consisted of sheep, goats, swine, cattle, mules, asses, and horses. It does not appear that artificial grasses or herbage plants were in use; but recourse was had, in times of scarcity, to the mistletoe and the *cytisus*. What plant is meant by the latter designation is not agreed upon. Hay was, in all probability, obtained from the meadows and pastures, which were used in common. Flax, and probably hemp, was grown. Wood for fuel, and timber for construction, were obtained from the natural forests, which, in Solon's time, abounded with wolves. Nothing is said of the olive or fig by Hesiod; but they were cultivated in the fields for oil and food, as well as the vine for wine.

One of Solon's laws directs that olive and fig trees must be planted nine feet from a neighbor's ground, on account of their spreading roots. Other trees might be planted within five feet. In Hesiod's time almost every citizen was a husbandman, and had a portion of land which he cultivated himself, with the aid of his family, and perhaps one or two slaves. The produce, whether for food or clothing, appears to have been manufactured at home. The progress of society would, no doubt, introduce the usual division of labor and of arts, and the commercial cultivators, or such as raised produce for the purpose of exchange, would, in consequence, arise; but when this state of things occurred, and to what extent it was carried on when Greece became a Roman province, the ancient writers afford us no means of ascertaining.

Agriculture among the Romans, or from the Second Century before Christ to the Fifth Century of our Era. —In the first ages of the Commonwealth, the lands were occupied and cultivated by the proprietors themselves; and, as this state of things continued for four or five centuries, it was probably the chief cause of the agricultural eminence of the Romans. When a person had only a small portion of land assigned to him, and the maintenance of his family depended entirely upon its productions, it is natural to suppose that the culture of it employed his whole attention. A person who has been accustomed to regular and systematic habits of action, such as those of a military life, will naturally carry those habits into whatever he undertakes. Hence it is probable that there was a degree of industrious application, exactness, and order in performing oper-

ations, in a soldier-agriculturist, which would not be displayed by men who had never been trained to any regular habits of action.

The observation of Pliny confirms this supposition. He asserts that the Roman citizens, in early times, "plowed their fields with the same diligence that they pitched their camps, and sowed their corn with the same care that they formed their armies for battle." Grain, he says, was then abundant and cheap. Afterward, when Rome extended her conquests and acquired large territories, rich individuals purchased large estates. The culture of these fell into different hands, and was carried on by bailiffs and farmers, much in the same way as in modern times. Columella informs us that it was so in his time, stating that "the men employed in agriculture are either farmers or servants, the last being divided into free servants and slaves." It was a common practice to cultivate land by slaves during the time of the elder Pliny, but his nephew and successor let his estates to farmers. In the time of Cato the Censor, the author of "The Husbandry of the Ancients" observes, though the operations of agriculture were generally performed by servants, yet the great men among the Romans continued to give particular attention to it, studied its improvements, and were very careful and exact in the management of all their country affairs. This appears from the directions given them by this most attentive farmer.

These great men had both houses in town and villas in the country; and, as they resided frequently in town, the management of their country affairs was committed to a bailiff or overseer. Now their attention to the culture of their lands, and every other branch of husbandry, appears from the directions given them how to behave upon their arrival from the city at their villas. "After the landlord," says Cato, "has come to the villa and performed his devotions, he ought that very day, if possible, to go through his farm; if not that day, at least the next. When he has considered in what manner the fields should be cultivated, what work should be done, and what not, the next day he ought to call the bailiff and inquire what of the work is done, and what remains; whether the laboring is far enough advanced for the season, and whether the things that remain

might have been finished; and what is done about the wine. corn, and all other things. When he has made himself acquainted with all these, he ought to take an account of the workmen and the working days. If a sufficiency of work does not appear, the bailiff will say that he was very diligent, but that the servants were not well; that there were violent storms; that the slaves had run away, and that they were employed in some public work. When he has given these and many other excuses, call him again to an account of the work and the workmen. When there have been storms, inquire for how many days, and consider what work might be done in rain. Casks ought to have been washed and mended; the villa cleaned; corn carried; dung carried out; a dunghill made; seed cleaned; old ropes mended; new ones made; and the servants' clothes mended. On holidays old ditches may have been scoured; a highway repaired; briars cut; the garden digged; the meadows cleared from weeds; twigs bound up; thorns pulled; far [bread corn] pounded; all things made clean. When the servants have been sick, the ordinary quantity of meat ought not to have been given them. When he is fully satisfied in all these things, and has given orders that the work that remains be finished, he should inspect the bailiff's accounts; his account of money, corn, fodder, wine, oil; what has been sold, what exacted, what remains; what of this may be sold; whether there is good security for what is owing. He should inspect the things that remain, buy what is wanting for the year, and let out what is necessary to be employed in this manner. He should give orders concerning the works he would have executed, and the things he is inclined to let out, and leave his orders in writing. He should inspect his flocks, make a sale, sell the superfluous oil, wine, and corn. If they are giving a proper price, sell the old oxen, the refuse of the cattle and sheep, wool, hides, old carts, old iron tools, and old diseased slaves. Whatever is superfluous, he ought to sell; a farmer should be a seller, not a buyer."

The landlord is thus supposed, by Cato, to be perfectly acquainted with every kind of work proper on his farm, and the seasons for performing it; and also to be a perfect judge of how much work, both within and without doors, ought to be per-

formed by any number of servants and cattle in a given time, the knowledge of which is highly useful to a farmer, and what few perfectly acquire. It may be observed, likewise, that the landlord is here supposed to inquire into all circumstances, with a minuteness of which there is scarcely even an actual farmer in this age who has any conception. Varro complains that, in his time, the same attention to agriculture was not given as in former times; that the great men resided too much within the walls of the city, and employed themselves more in the theatre and circus than in the corn fields and vineyards.

Columella complains that, in his time, agriculture was almost entirely neglected. However, from the directions which he gives to the proprietors of land, it appears that there were still a few who continued to pay a regard to it; for, after mentioning some things which he says, by the justice and care of the landlord, contribute much to improve his estates, he adds: "But he should likewise remember, when he returns from the city, immediately after paying his devotions, if he has time, if not, next day, to view his marshes, inspect every part of his farm, and observe whether, in his absence, any part of discipline or watchfulness has been dispensed with; and whether any vine, any other tree, or any fruits are missing. Then, likewise, he ought to review the cattle and servants, and all the instruments of husbandry, and the household furniture. If he continues to do all these things, for some years, he will find a habit of discipline established when he is old; and at no age will he be so much impaired with years as to be despised by his servants."

The earliest farmers, among the Romans, seem not to have been upon the same footing as in Britain. The stock on the farm belonged to the landlord, and the farmer received a certain proportion of the products of his labor. The farmer who possessed a farm upon these terms, was called politor or polintor, from his business, being the dresser of the land; and partuarius, from his being in a kind of copartnership with his landlord, and receiving part of the products of the farm for his labor. Cato takes notice of this kind of farmers only, and it is probable that there were no others in his time. "The terms," he says, "upon which land ought to be let to a politor; in the good land of Casinum and Venafrum, he receives the eighth basket;

in the second kind of land he receives the seventh; in the third kind he receives the sixth. In this last kind, when the grain is divided by the *modius*, he receives the fifth part; in Venafrum, when divided by the basket, he receives only the ninth. If the landlord and the *politor* husk the grain in common, the *politor* receives the same proportion after as before; of barley and beans divided by the *modius*, he receives a fifth." The small proportion that the *politor* receives makes it evident that he was at no expense in cultivating the land, and that he received his proportion clear of all deductions.

Farmers mentioned by Columella seem to have paid rent for their farms. The directions given to landlords by this author, concerning the mode of treating them, are curious as well as important. "A landlord," he says, "ought to treat his tenants with gentleness; should show himself not difficult to please, and be more vigorous in exacting culture than rent, because this is less severe and upon the whole more advantageous; for when a field is carefully cultivated, it for the most part brings profit; never loss, except when assaulted by a storm or pillagers, and therefore the farmer cannot have the assurance to ask any ease of his rent. Neither should the landlord be very tenacious of his right in everything to which the farmer is bound, particularly as to days of payment, and demanding the wood, and other small things which he is obliged to, besides paying his rent, the care of which is a greater trouble than expense to the rus-Nor is every penalty in our power to be exacted, for our ancestors were of the opinion that the rigor of the law is the greatest oppression. On the other hand, the landlord ought not to be entirely negligent in this matter, because it is certainly true, what Alpheus the usurer used to say, good debts become bad ones, by being not called for."

These directions are valuable, even with reference to the present time; and they instruct us respecting the general management of landed property among the Romans. It appears that the landlord was considered as understanding everything respecting the husbandry of his estate himself, and that there was no agent or intermediate person between him and the farmer. The farmers paid the rent for the use of their farms, and were bound to a particular kind of culture, according to the

conditions of their lease; but they were perfectly free and independent of their landlords, so much so as to sometimes enter into lawsuits with them.

The habits of a people take their rise, in a great degree, from the climate in which they live, and the native or cultivated productions with which the country abounds. As respects agriculture, it may be sufficient to mention that the great heat of the climate, by relaxing the frame, naturally produces indolence in many, and leads to a life of plunder in some. Hence, then as now, the danger of thieves in that country; and hence, also, the custom of performing field labor early in the morning and in the evening, and resting during the noontide heat. The general use of oil and wine as food and drink, and also of the fig as an article of nourishment, are habits which arise immediately from the circumstance of these articles being the natural product of the country, but are ultimately, like most other habits, to be referred to the climate.

The Roman authors are much more copious in describing farm culture and economy, than in relating the state of landed property, as to extent and proprietorship. Their directions, being founded on experience, are in great part applicable at the present day. They are remarkable for their minuteness, but we can give only a very brief compendium, beginning with some account of the farm, the villa or farmery, and taking in succession the servants, beasts of labor, implements, operations, crops cultivated, animals reared, and profit produced.

In the choice of a farm, Cato recommends a situation where there are plenty of artificers and good water; which has a fortified town in its neighborhood; is near the sea or a navigable river, or where the roads are good and easy. To these requisites Varro adds: a proper market for buying and selling; security from robbers and thieves; and the boundaries planted with useful trees. The interior of the farm was not subdivided by enclosures, which were seldom used but for their gardens, and to form parks in the villas of the wealthy. The soil preferred by Columella, and all the Roman authors, is the fat and free, as producing the greatest crops, and requiring the least culture; next, fat, stiff soil; then, stiff and lean soil, that can be watered; and last of all, lean, dry soil. The state of a farm

preferred by Cato and some other writers, is that of pasture, meadow, and watered grass-lands, as yielding produce at the least expense; and lands under vines and olives, as producing the greatest profit according to the expense. The opinions of the Roman agriculturists, however, seem to disagree on the subject of meadows, apparently from confounding a profitable way of management with a capacity of yielding great profit with superior management, and none without.

The servants employed in Roman agriculture were of two sorts, freemen and slaves. When the proprietor, or farmer, lived on the farm and directed its culture, these were directly under his management. In the other cases, there was a bailiff or overseer, to whom all the servants were subordinate. This was the case as early as the time of Cato, who is very particular in his directions respecting the case of a bailiff, who ought to take care of the servants, the cattle, and the laboring utensils, and in executing his master's orders. The bailiff was generally a person who had received some education, and could write and keep accounts; and it was expected that he should be careful, apt to learn, and capable of executing his master's orders, with a proper attention to situations and circumstances. Columella, however, says that "the bailiff may do his business very well though he is illiterate." Cornelius Celsus says that "such a bailiff will bring money to his master oftener than to his book, because, being ignorant of letters, he is the less capable to contrive accounts, and is afraid to trust another, being conscious of fraud." There are some things mentioned by this author with respect to the bailiff, that are very proper, and show particularly the attention of the Romans. "He ought not," he says, "to trade on his own account, nor employ his master's money in purchasing cattle or any other goods, for this trading takes off his attention, and prevents him from keeping square accounts with his master. But when he is required to settle them, he shows his goods in the place of money. This, above all, he should be careful of; not to think he knows anything he does not know, and always to be ready to learn what he is ignorant of; for as it is a great advantage to do a thing well, so it is most hurtful to have it done ill. This one thing holds true in all rustic work, to do but once what the manner of culture requires; because,

when imprudence or negligence in working is to be set to rights, the time for the work is already wasted, nor are the effects of the amendment such as to make up for the lost labor, and balance the advantages that might have been gained by improving the season that is past."

The qualities of the other villa servants are represented by the same author, in this manner: "The careful and industrious," he says, "should be appointed masters of the works. qualities are more necessary for this business than stature or strength of body, for this service requires diligent care and art." Of the plowman, he says: "Though a degree of genius is necessary, it is not enough. There should be joined to it a harshness of voice and manner to terrify the cattle; but he should temper strength with clemency, because he ought to be more terrible than cruel, so that the oxen may obey his commands, and continue the longer at their work, not being spent at the same time, both with the severity of labor and stripes. What the offices of masters of works and of plowmen are, I shall mention in their proper place. It is sufficient, at present, to observe that tallness and strength are of great use in the one, and of very little in the other; for we should make the tallest man a plowman, both for the reason I have already mentioned, and because there is no rustic work by which a tall man is less fatigued than by plowing; because, when employed in this, walking almost upright, he may lean upon the handle of the plow." Of the common laborer he says: "He may be of almost any size, providing he is able to endure fatigue"; of the vinedresser: "Vineyards do not require such tall men, providing they are thick and brawny, for this constitution of body is most proper for digging, pruning, and other culture necessary for them. In this work diligence is less necessary than in other works of husbandry, because the vine-dresser ought to perform his work in company, and under the eye of a director. Commonly, wicked men are of a quicker genius, which this kind of work requires; and, as it requires not only a stout servant but one of active contrivance, vineyards are commonly cultivated by slaves in chains." Thus we see that, among the Romans, laborers were appointed to the different works of husbandry according to their size, strength, and genius.

With respect to the wages of agricultural labor, among the Romans, very little benefit can be derived from knowing the absolute sum of money paid for any article, unless it be compared with the price of other commodities. The price of a slave, in Cato's time, was about \$250. In the time of Columella, it had risen to \$300, or to the price of eight acres of good land. good vine-dresser cost \$350, and a good plowman or laborer not less than \$300. The interest of money, at that time, was six per cent per annum; therefore, in stating the expense of farm labor, a slave must be rated at not less than 12 per cent, as being a perishable commodity; so that one who cost \$300 would fall to be charged at the rate of \$36 per annum, besides his maintenance and clothing. This may give some idea of the wages that would be paid to a free servant, who hired himself by the year, of which, however, there appears to have been no great number, their wages not being stated. All servants were maintained and clothed by the farmer or proprietor, and, as may be supposed, it was the interest of the latter that this should be done in a good and sufficient manner.

Columella mentions what he calls an old maxim concerning the bailiff: "That he should not eat but in the sight of all the servants, nor of anything but what was given to the rest." He mentions the reason for this: "For thus," he says, "shall he take care that the bread be well baked, and the other things be prepared in a wholesome manner." The same author mentions the treatment the masters ought to give their slaves: "So much the more attentive," he says, "ought the master to be in his enquiry concerning this kind of servants, that they may not be injured in their clothes, and other things afforded them, inasmuch as they are subjects to many, such as bailiffs, masters of works, and gaolers; and the more they are liable to receive injuries, the more they are hurt through cruelty or avarice, the more they are to be feared. Therefore a diligent master ought to inquire, both of themselves and likewise the free servants, in whom he may put greater confidence, whether they receive the full of what is allowed them. He himself ought likewise to try, by tasting, the goodness of the bread and drink, and examine their clothes, mittens, and shoes." In another place he says that, "The bailiff should have the family clothed rather usefully

than nicely, and carefully fortified against the wind, cold, and rain; all which they will be secured from by sleeved leather coats, old centones (thick patchwork, as bed quilts), for defending their heads, or cloaks with hoods. If the laborers are clothed with these, no day is so stormy as to prevent them from working without doors."

Cato likewise makes particular mention of the clothes of the slaves. He says: "A coat and a gown three feet and a half long, should be given once in two years. Whenever you give a coat or a gown, first receive the old one; of these make centones. Good shoes should be given once in two years." He also informs us what quality of bread and wine, and what kind of meats were given to laborers. Of bread, each laborer was allowed at the rate of three pounds avoirdupois, or of three pounds twelve ounces avoirdupois, in the day, according to the severity of his labor. During the winter, the bailiff should have four modii of wheat each month, and during the summer four modii and a half each month, and the housekeeper or the bailiff's wife and the shepherd should have three. During the winter the slaves should have four pounds of bread each in the day. From the time that they began to dig in the vineyards to the ripening of the figs, they should have five pounds each, after which they should return again to four. To this bread there was a daily allowance of wine. During the three months that immediately followed the vintage, the servants drank a weak kind of wine called lora. The manner in which this liquor was made is described both by Pliny and Columella, and from the descriptions given by them it may well be supposed to have been as good as the small beer given to servants in England. It does not appear that the Roman slaves were much restricted in the quantity. Cato mentions no measure, he only says that they have this to drink three months after the vintage. He proceeds in this manner: "The quantity of wine for each man in the year is eight quadrantals. Now an addition must be made to this, according to the work in which the slaves are employed. It is not too much for them to drink ten quadrantals each in the year." This allowance of wine, it must be acknowledged, was not inconsiderable, being at least seventy-four gallons in the year, or an average of 1.62 pints in the day.

Besides the bread and wine the slaves got what was called pulmentarium, which answers to what, in some parts of the country, is called kitchen drippings or fat. For this purpose, Cato recommends the laying up of as many fallen olives as can be gathered; afterwards the early olives, from which the smallest quantity of oil is expected—at the same time observing that these must be given sparingly, that they may last the longer. When the olives are finished, he desires salt fish and vinegar to be given, and, besides, to each man a sextarius of oil in the month, and a modius of salt in the year.

Columella, for this purpose, directs apples, pears, and figs to be laid up. He adds: "If there is a great quantity of these, the rustics are secured in no small part of their meat during the winter, for they serve for drippings or fat."

The laboring cattle used by the Romans, as well as by all other ancient nations, were chiefly the ox, sometimes the ass, the mules for burdens, and but very rarely the horse. horse, however, was reared, but almost exclusively for the saddle, the chase, or for war. The respect for the ox which existed among the Egyptians, Jews, and Greeks, was continued among the Romans; so much so that Varro, and after him Columella and Pliny, adduce an instance of a man having been indicted and condemned for killing one, to please a boy who longed for a dish of tripe. The breeding, breaking, feeding, and working of the ox, are very particularly treated of by the ancient authors. The cows that Columella "most approves of, are of a tall make, long, with very large belly, very broad forehead, eyes black and open, horns graceful, smooth, and black, hairy ears, straight jaws, very large dewlap and tail, and moderate hoofs and legs." "Bulls," says Palladius, "should be tall, with huge members, of a middle age, rather young than old, of a stern countenance, small horns, a brawny and vast neck, and a confined belly."

"Breeders, both of horses and cows," Virgil observes, "should attend principally to the make of the female. If any one fond of the prize at the Olympic games breeds horses, or if any one breeds stout bullocks for the plow, he chiefly attends to the make of the mother, who ought to be large in all her parts." The same maxim is enforced scientifically by Cline. For breaking and training cattle to the yoke, Varro and Columella

give very particular directions. "To break bullocks," says Varro, "put their necks between forked stakes, set up one for each bullock, and give them meat from the hand. They will become tractable in a few days. Then, in order that by degrees they may become accustomed to the yoke, let an unbroken one be joined with a veteran, whom he will imitate; then let them go upon even ground without a plow; then yoke to a light plow in a sandy soil. That they may be trained for carriages, they should be first put to empty carts, and driven, if convenient, through a village or town; the habit of hearing frequent noises and seeing a variety of objects, will soon make them fit for use." Training commences with the calf state; and "calves," says Virgil, "which you intend for country labor, should be instructed while their youthful minds are tractable and their age manageable. First, bind round their necks wide wreaths of tender twigs; then, when their free necks have been accustomed to servitude, put real collars upon them so that they may print their steps only upon the top of the dust; afterward, let the beechen axle groan under the heavy load, and the pole draw the wheels joined to the weighty carriage."

Laboring oxen were fed with the mast, or nuts of the beech, or sweet chestnut; grape stones and husks, after being pressed; hay, wheat, and barley straw; bean vetch and lupine chaff; all parts of corn and pulse, grass, green forage, and leaves. The leaves used were those of the holm-oak, ivy, elm (considered the best), the vine, the poplar, etc. The poplar leaves were mixed with the elm leaves, to make them hold out, and when there were no elm leaves, the oak and fig leaves were used. The food preferred before all others, by Columella, is good pasturage in summer, and hay and corn in winter; but he says that the food and manner of feeding differ in different countries.

Oxen were worked in pairs abreast, both with the cart and plow, and stood in the stables also in pairs, in stalls made for this purpose. They were carefully matched, in order that the stronger might not wear out the weaker. They were yoked either by the horns or neck, but the latter mode was greatly preferred. "Yoking by the horns," Columella observes, "is condemned by almost all who have written on husbandry, because cattle can exert more strength from the neck and breast than the horns,

as in one way they press with the whole weight and bulk of their bodies, whereas in the other way they are tormented with having their heads drawn up and turned back, and with difficulty stir the surface of the earth with a light plow," Oxen, when in the plow, were not allowed to go a great way without One hundred and twenty feet was the length fixed upon, and further than this it was thought improper for them to pull hard without stopping. The Rev. A. Dixon thinks it "probable that the breaks or plats for the different kinds of corn and pulse, were laid out nearly of this length and breadth," and there appear to be grounds for concluding that the case was the same among the Jews and Greeks. It was thought proper that oxen, in plowing, should be allowed to stop a little at the turning, and when they stopped that the plowman should put the yoke a little forward, that their necks might cool. "Unless their necks are carefully and regularly cooled," says Columella, "they will soon become inflamed, and swellings and ulcers will arise." The same author directs that the plowman. when he has unvoked his oxen, "must rub them after they are tied up; press their backs with his hands; pull up their hides, and not suffer them to stick to their bodies; for this is a disease that is very destructive to working cattle. No food must be given them till they have ceased from sweating and high breathing, and then by degrees, in portions as eaten, and afterward they are to be led to the water and encouraged by whistling."

In purchasing working oxen, Varro directs to choose such as have "spacious horns, rather black than otherwise, a broad forehead, wide nostrils, a broad chest, and thick dewlaps." All the Roman authors agree that the best color is red or dark brown; that the black are hardier, but not so valuable; that the hair should be short and thick, and the whole skin very soft to the touch; the body in general very long and deep, or, as Columella and Palladius express it, compact and square. The particular parts they also describe at length, in terms such as would, for the most part, be approved by experienced breeders of cattle. Making due allowance for the difference between choice for working and choice for fatting, they all concur in recommending farmers to rear at home what oxen they want, as

the change of soil and climate often disagrees with those brought from a distance.

The horse was scarcely, if at all, used in Roman agriculture, but was reared for the saddle and the army by some farmers. Varro and Columella are particular in their directions as to the choice of mares, and breeding and rearing their young; but as these contain nothing very remarkable, we shall merely say that the signs of future merit in a colt were said to be a small head, well-formed limbs, and contending with other colts or horses for superiority in running, or in any other thing.

The dog is a valuable animal in every unenclosed country, and was kept by the Roman farmers for its use in assisting the shepherds, and also for watching. Varro mentions two kinds: one for hunting, which belongs to fierce and savage beasts; and one for the shepherd and the watch-box. The latter are not to be bought from hunters or butchers, because they are either lazy, or will follow a stag rather than a sheep. The best color is white, because it is most discernible in the dark. They must be fed in the kitchen, with bread and milk, or broth with bruised bones, but never with animal food, and never allowed to suffer from hunger, lest they attack the flock. That they may not be wounded by other beasts, they wear a collar made of strong leather set with nails, the inward extremities of which are covered with soft leather, that the hardness of the iron may not hurt their necks. If a wolf or any other beast is wounded by these, it makes other dogs that have not the collar remain secure.

The Romans used a great many instruments in their culture and farm management, but their particular forms and uses are so imperfectly described that very little is known concerning them. The plow, the most important instrument in agriculture, is mentioned by Cato as of two kinds, — one for strong, and the other for light soils. Varro mentions one with two mould-boards, with which, he says, "when they plow, after sowing the seed, they are said to ridge." Pliny mentions a plow with one mould-board, for the same purpose, and others with a coulter, of which he says there are many kinds. It is probable that the ancients had many kinds of plows, though not so scientifically constructed as those of modern times. They had plows with mould-boards and without mould-boards; with and without

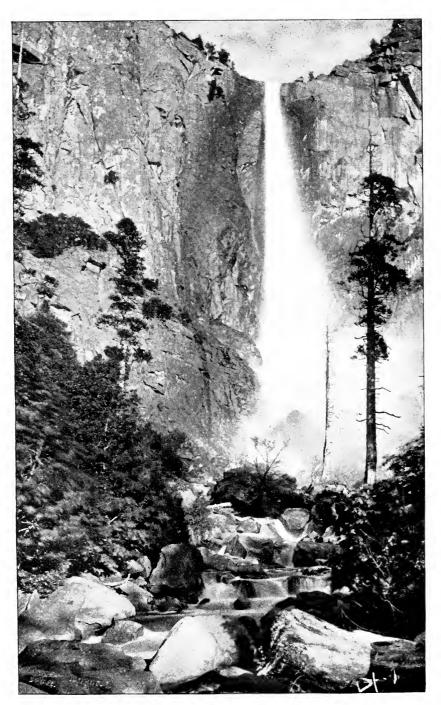
coulters; with and without wheels; with broad and narrow pointed shares; and with shares not only with sharp sides and points, but also with high raised cutting tops. Amid all this variety of plows, no one has been able to depict the simplest form of that implement in use among the Romans. The plow described by Virgil had a mould-board, and was used for covering seed and for ridging, but that which we have depicted was the common form used in stirring the soil. To supply the place of our mould-boards, this plow required either a sort of diverging stick inserted in the share-head, or to be held obliquely and sloping towards the side to which the earth was to be turned. The Romans did not plow their fields in beds, by circumvolving furrows, as we do, but the cattle returned always on the same side, as in plowing with a turn-wrist plow.

"Wheel plows," Lasteyrie says, "were invented in or not long before the time of Pliny, who attributes the invention to the inhabitants of Cisalpine Gaul." Virgil seems to have known such plows, and refers to them in his Georgics. In the Greek monuments of antiquity are only four or five examples of these. Lasteyrie has given figures of these wheel plows, from Caylus' "Collection of Antiquities," and from a Sicilian medal. urpex seems to have been a plank with several teeth, used as our break or cultivator, to break rough ground and tear out roots and weeds; the crates seems to have been a kind of harrow; the rastrum, a rake used in manual labor; the sarculum, a hand hoe, similar to our draw hoe; the marra, a hand hoe of smaller size; the bidens seems to have been a two-pronged hoe of large size, with a hammer at the other end, used to break clods. These were used chiefly in cultivating vineyards. The ligo seems to have been a spade; and the pala a shovel, or a sort of a spade, probably a synonym. The ligo and pala were made of wood only, of oak shod with iron, or with the blade entirely of iron. The securis seems to have been an axe, and the same term was applied to the blade of the pruning-knife, which was formed like a crescent. The dolabra was a kind of adze for cutting roots, in tree culture. The reaping-hook seems to have been the same as that in modern times. Some were used for cutting off the ears of corn, and these, it may be presumed, were not serrated like

our sickles; others for cutting wheat and barley near the ground, like our reaping-hooks.

In the south of Gaul, Pliny informs us they had invented a reaping-machine. From his description this machine must have borne a considerable resemblance to that used in Suffolk for cropping the heads off clover left for seed, and not unlike other modern attempts at an engine of this description. There were threshing-implements for manual labor, and for being drawn by horses; and some for striking off the ears of grain, like what are called rippling-combs, for combing off the capsules of newly pulled flax. A variety of other instruments for cleaning grain, and for the wine and oil press, are mentioned, but too obscurely to admit of description.





BRIDAL VEIL FALLS, YOSEMITE, CAL.

CHAPTER II.

HISTORY OF AGRICULTURE - continued.

OF simple agricultural operations, the most important are plowing, sowing, and reaping; and such as compound, or involve, various simple operations, such as fallowing, manuring, weeding, and field watering. "What," says Cato, "is the best culture of land? Good plowing. — What the second? Plowing in the ordinary way. — What the third? Laying on manure."

The season for plowing was any time when the land was not wet. In plowing, the furrow is directed to be kept equal in breadth throughout, one furrow equal to another, and straight furrows. The usual depth is not mentioned, but it was probably considerable, as Cato says that grain land should be of good quality for two feet in depth. No scamni or balks (hard, unmoved soil) were to be left; and to ascertain that this was properly attended to, the farmer is directed, when inspecting the work done, to push a pole into the plowed ground in a variety of places. The plow was generally drawn by one pair of oxen, which were guided by the plowman without the aid of a driver. In breaking up stiff land, he was expected to plow half an acre, in free land an acre, and in light land an acre and a half, each day.

Fallowing was a universal practice among the Romans. In most cases a crop and a year's fallow succeeded each other; though, when the manure could be got, two crops or more were taken in succession, and on certain rich soils, which Pliny describes as favorable for barley, a crop was taken every year. In fallowing, the lands were first plowed after the crops were removed, generally in August. They were again cross-plowed in spring, and at least a third time before sowing, when spring grain or winter grain was the crop. There was, however, no limit to the number of plowings, and, when occasion required, manual operations, the object being, as Theophrastus observes, "to let the earth feel the cold of winter and the sun of summer;

to invert the soil and render it free, light, and clear of weeds, so that it can most easily afford nourishment."

Manuring was held in such high esteem by the Romans that immortality was given to Sterculius for the invention. collected manure from every source which has been thought of by the moderns, - vegetable, animal, and mineral; territorial, aquatic, and marine. Animal dung was divided into three kinds, — that produced by birds, that by men, that by cattle. Pigeon dung was preferred to all other, and next human ordure. Pigeon dung was used as a top-dressing, and human dung, mixed with the cleaning of the villas, was applied to the roots of the vine and the olive. "Varro," says Pliny, "extols the dung of thrushes from the aviaries, as food for the swine and oxen, and asserts that there is no food that fattens them more quickly." Varro prefers it also as a manure, on which Pliny observes, "We may have a good opinion of the manners of our times, if our ancestors had such large aviaries as to procure from them dung to their fields." Dung hills were directed to be placed near the villa, their bottoms hollowed out to retain the moisture, and their sides and tops defended from the sun by twigs and leaves. Dung usually remained in the heap a year, and was laid on in the autumn and spring, the two sowing seasons. No more was to be spread than could be plowed in the same day. Crops that were sickly were revived by sowing over them the dust of dung, especially that of birds; that is, by what is now called a top-dressing. Frequent and moderate dungings are recommended as preferable to occasional and very abundant supplies.

Green crops, especially lupines, were sown, and before they came into pod plowed in as manures. They were also cut and buried at the roots of fruit trees for the same purpose. Trees, twigs, stubble, etc., were burned for manure. Cato says: "If you cannot sell wood and twigs, and have no stone that will burn into lime, make charcoal of the wood, and burn in the fields the twigs and small branches that remain." Palladius says that lands which have been manured by ashes of trees will not require manure for five years. Stubble was very generally burned, as it was also among the Jews. Lime was used as a manure, especially for vines and olives. Cato gives particular

directions how to form the kiln and burn it. He prefers a truncated cone, ten feet in diameter at the bottom, twenty feet high, and three feet in diameter at the top. The grate covers the whole bottom; there is a pit below for the ashes, and two furnace doors, one for drawing out the burnt stone, and the other for admitting air to the fire. The fuel used was wood or charcoal. Marl was known to the earlier Roman authors, but not used in Italy. It is mentioned by Pliny as having been "found out in Britain and Gaul." "It is a certain richness of earth," he says, "like the kernels in animal bodies that are increased by fatness." He adds that "marl was known to the Greeks; for is there anything that has not been tried by them? They call the marl-like white clay leucargillos, which they use in the lands of Megara, but only where they are moist and cold." But though the Romans did not use marl, because they had not discovered it in Italy, they were aware, as Varro and others inform us, of its use. "When I marched an army," says Varro. "to the Rhine in Transalpine Gaul, I passed through some countries where I saw the fields manured with white fossil clay." This must have been either marl or chalk.

In reaping grain, it was a maxim that it is "better to reap two days too soon, than two days too late." Varro mentions three modes of performing the operation, — cutting close to the ground with hooks, a handful at a time; cutting off their ears with a curved stick and a saw attached; and cutting the stalks in the middle, leaving the lower part, or stubble, to be cut afterward. Columella says: "Many cut the stalks by the middle, with drag-hooks, and these either beaked or toothed; many gather the ears with merga, and others with combs." This method does very well when the crop is thin, but it is very troublesome when the grain is thick. If, in reaping with hooks, a part of the straw is cut off with the ears, it is immediately gathered into a heap, and, after being dried by being exposed to the sun, is threshed. But if the ears only are cut off, they are carried directly to the granary, and threshed during the winter. To these modes Pliny adds that of pulling up by the roots, and remarks, that "generally, where they cover their houses with stubble, they cut high, to preserve this of as great

length as possible. When there is a scarcity of hay, they cut low, that the straw may be added to the chaff."

A reaping machine, used in the plains of Gaul, is mentioned by both Pliny and Palladius, which is thus described by the latter: "In the plains of Gaul they use this quick way of reaping, and, without reapers, cut large fields with an ox in one day: for this purpose a machine is made, carried upon two wheels; the square surface has boards erected at the side, which, sloping outwards, make a wider space above. The board on the fore part is lower than the others; upon it there are a great many small teeth, wide set in a row, answering to the height of the ears of grain, and turned upward at the ends. On the back part of this machine two short shafts are fixed, like the poles of a litter; to these an ox is yoked, with his head to the machine, and the yoke and traces likewise turned the contrary way; he is well trained and does not go faster than he is driven. When this machine is pushed through the standing grain, all the ears are comprehended by the teeth, and heaped up in the hollow part of it, being cut off from the straw which is left behind, the driver setting it higher or lower as he finds it necessary; and thus by a few goings and returnings the whole field is reaped. This machine does very well in plain and smooth fields, and in places where there is no necessity for feeding with straw."

The Romans did not bind their grain into sheaves, as is customary in northern climates. When cut off it was sent directly to the area to be threshed; or, if the ears were only cropped, sent in baskets to the barn. Among the Jews, Egyptians, and Greeks, the grain was bound in sheaves; at least, some kinds were so treated, as appears from the story of Ruth, "gleaning among the sheaves"; of Joseph's dream in which his "sheaf arose"; and from the harvest represented by Homer, on one of the compartments of Achilles' shield. Reapers were set in bands, on the opposite side of the field, and worked towards the centre. As the land was plowed in the same manner, from the sides to the middle, there was an open furrow left there, to which the reapers hastened in the way of competition. A reaper was expected to cut down a jugerum of wheat in a day and a half; of barley, legumes, and clover, in one day; and of flax, in three days.

Threshing was performed in the area, or threshing-floor, a circular space of from forty to sixty feet in diameter, in the open air, with a smooth, hard surface. The floor was generally made of well-wrought clay, mixed with the leeds of oil. Sometimes it was paved. It was generally placed near the barn, in order that, when a sudden shower happened during the process of threshing, the ears might be carried in there out of the rain. Sometimes, also, the ears of unthreshed wheat of the whole farm were first put in this barn, and carried out to the area afterward. Varro and Columella recommended that the situation of the area be high and airy, and within sight of the farmer's or bailiff's house, to prevent fraud; distant from gardens and orchards, because, though dung and straw are beneficial to the roots of vegetables, they are destructive when they fall on. their leaves. The grain being spread over the area a foot or two in thickness, it was threshed or beaten out by the hoofs of cattle or horses, driven around, or a machine dragging over it. "This machine," Varro informs us, "was made of a board, rough with stones or iron, with a driver of great weight placed on it." A machine composed of rollers studded with iron knobs, and furnished with a seat for the driver, was used in the Carthaginian territory. Sometimes they also threshed with rods or flails. Wheat was cleaned or winnowed by throwing it from one part of the floor to another (in the wind, when there was any) with a kind of a shovel called a ventilabrum; another implement, called a van, probably a kind of sieve, was used when there was no wind. After being dressed, the grain was laid in the granary, and the straw either laid aside for litter, or, what is not a little remarkable, "sprinkled with brine," then, when dried, rolled up in bundles, and so given to the oxen for hay.

Haymaking, among the Romans, was performed much in the same way as in modern times. The meadows were mown when the flowers of the grass began to fade. "As it dries," says Varro, "it is turned with forks. It is then tied up in bundles of four pounds each, and carried home, and what is left strewn upon the meadow is raked together and added to the crop." "A good mower," Columella informs us, "cuts a jugerum of meadow, and binds twelve hundred bundles of hay." It is probable that this quantity, which is nearly two tons, was the

produce per acre of a good crop. A second crop was cut, called *cordum*, and was chiefly used for feeding sheep in winter. Hay was also made of leafy twigs, for the same purpose. Cato directs the bailiff to "cut down poplar, elm, oak spray, and put them up in time, not over dry, for fodder for the sheep."

Weeding and stirring the soil were performed; the first by cutting with a hook, or pulling the weeds up with the hand; the second by sarcling or hoeing. Beans were hoed three times; the first time they were earthed up, but not the second or third. Lupines were not hoed at all, because, "so far from being invested with weeds they destroy them." Horse hoeing was also practised, the origin of which is thus given by Pliny: "We must not omit," says he, "a particular kind or method of plowing, at this time practised in Italy, beyond the Po, and introduced by the injuries of war. The Salassi, when they ravaged the lands lying under the Alps, tried likewise to destroy the panic and millet that had just come above the ground. Finding that the situation of the crops prevented them from destroying it in the ordinary way, they plowed the fields; but the crop at harvest being double what it used to be, taught the farmer to plow among the grain." This operation, he informs us, was performed either when the stocks were beginning to appear, or when the plant had put forth two or three leaves. The grain being generally sown in drills, or covered with the plow, so as to come up in rows, readily admitted this practice.

Pasturing and harrowing grain, when too luxuriant, were practised. Virgil says, "What commendation shall I give him, who, lest his grain should lodge, pastures it while young, as soon as the blade equals the furrows?" Pliny directs to "comb the grain with a harrow before it is pastured, and hoe it afterward."

Watering on a large scale was applied to both arable and grass land. Virgil advises, "to bring down the waters of a river upon sown grain, and when the field is parched, and the plants dying, convey it from the brow of the hill in channels." Pliny mentions the practice, and observes that the water destroys the weeds, nourishes the grain, and serves in place of hoeing. Watering grass-lands was practised whenever an opportunity was offered. "As much as is in your power," says Cato, "make watered meadows." "Land that is naturally rich and in good

heart," says Columella, "does not need to have water set over it, because the hay produced in a juicy soil is better than that excited by water. When the poverty of the soil requires it, however, water may be let over it." The same author describes. very particularly, the position of the land for water meadows: "Neither a low field with hollows, nor a broken field with steep, rising grounds, is proper; the first because it contains too long the water collected in the hollows, and the last because it makes the water to run too quickly over it. A field, however, that has a moderate descent, may be made a meadow, whether it be rich or poor, if so situated as to be watered; but the best situation is where the surface is smooth, and the descent so gentle as to prevent either showers, or the rivers that overflow it, from remaining long, and on the other hand to allow the water that comes over it gently to glide off. Therefore if, in any part of a field intended for a meadow, a pool of water should stand, it should be let off by drains, for the loss is equal, either from too much water or too little grass." Old water meadows were renewed by breaking them up and sowing them with grain for three years. The third year they were laid down with vetches and grass seed, and then watered again, but not with a great force of water, till the ground had become firm and bound together with turf. Watering, Pliny informs us, was commenced immediately after the equinox, and restrained when the grass sent up flower stalks; it was recommended in mowing grounds, after the hay season, and in pasture lands at intervals.

Drainage, although an operation of an opposite nature to watering, is yet essential to its success. It was particularly attended to by the Romans, both to remove surface water, and to intercept and carry off under the surface the water of springs. Cato gives directions for opening the furrows of sown fields, and clearing them so that the water might find its way readily to the ditches; and for wet-bottomed lands he directs to make drains three feet broad at the top, four feet deep, and a foot and a quarter wide at the bottom; to lay them with stones, or, if these cannot be got, with willow rods placed contrariwise, or twigs tied together. Columella directs both open and covered drains to be made sloping at the sides, and, in addition to what Cato says respecting the waterways of covered drains, directs to make the

bottom narrow, and fit a rope made of twigs to it, pressing the top firmly down and putting some leaves or pine branches over it before throwing in the earth. Pliny says that the ropes may be made of straw, and that flint or gravel may be used to form the waterway, filling the excavations half full, or to within eighteen inches of the top.

Fencing was performed by the Romans, but only to a limited extent. Varro says that, "the limit of a farm should be fenced by planting trees, that families may not quarrel with their neighbors, and that the limits may not want the decision of a judge." Palladius directs to enclose meadows, gardens, and orchards. Columella mentions folds for enclosing the cattle in the night time, but the chief fences of his time were the enclosures called parks for preserving wild beasts, and forming agreeable prospects from the villas of the wealthy. Pliny mentions these, and says that they were the invention of Fulvius Lapinus. Varro describes fences raised by planting briars or thorns, and training them into a hedge; and these, he says, have the advantage of not being in danger from the burning torch of the wanton passenger. Fences were also made of stalks interwoven with twigs, ditches of earthen dykes, and walls of stone or brick, or rammed earth and gravel.

Trees were pruned and felled at different times, according to the object in view. The olives were little cut; the vine had a winter dressing and one or two summer dressings. Green branches or sprays, of which the leaves were used as food for oxen and sheep, were cut at the end of summer; copse-wood for fuel, in winter; and timber trees generally at that season. Cato, however, directs that trees which are to be felled for timber should be cut out at different times, according to their natures; such as ripen seed, when seeds are ripe; such as do not produce seed, when the leaves drop; such as produce both flowers and seeds, at the same time also as when the leaves begin to drop; but if they are evergreens, such as cypress and pine, they may be felled at any time.

Fruits were gathered by hand. The ripest grapes were cut first. Such as were selected for eating were carried home and hung up, and those for the press were put into baskets and carried to the wine-press, to be picked and then pressed. Olives

were picked by hand, and some selected for eating. The rest were laid up in lofts for future bruising, or were immediately pressed. Such as could not be reached by ladders, Varro directs to be "struck with a reed rather than a rod, for a deep wound requires a physician." It does not appear that green olives were pickled and used for food, as in modern times.

Such are the chief agricultural operations of the Romans, of which it cannot fail to be observed, as most remarkable, that they differ little from the rural operations of the Jews and Greeks on the one hand, and from the practices of modern times on the other. The cereal grasses cultivated by the Romans were chiefly the triticum, or wheat; the far, or spelt; and the hordeum, or barley; but they sowed also the siligo, or rye; the holcus, or mouse-barley; the panic grass; and the avena, or oats. Of legumes they cultivated the faba, or bean; the pisum, or pea; the lupinus, or lupine; the ervum, or tare; the lens, or flat tare; the chickling vetch; the chick, or mouse pea; and the kidney bean. The bean was used as food for the servants and slaves; the others were grown principally for food to the laboring cattle. The sesamum, an oily grain, was cultivated for the seeds, from which an oil was expressed, and used as a substitute for olive oil, as it still is in India and China, and as the oil of the poppy is in Holland, that of the walnut in Savoy, and that of the hemp in Russia.

The herbage plants were chiefly the trifolium, or clover; the medica, or lucern; and the cytisus. What the latter plant is, has not been distinctly ascertained. The turnip and rape were much esteemed and carefully cultivated. Pliny says that they require a dry soil; that the rape will grow almost anywhere; that it is nourished by mists, hoar-frosts, and cold; and that he has seen some of them upward of forty pounds in weight. The turnip, he says, delights equally in cold, which makes it both sweeter and larger; while by heat they grow to leaves. He adds: "The more diligent husbandmen plow five times for the turnip, four times for the rape, and apply manure to both." Palladius recommends soot and oil, as a remedy against flies and snails, in the culture of the turnip and rape. While the turnips were growing it appears that persons were not much restricted from pulling them. Columella observes that, in his

time, the more religious husbandmen still observed an ancient custom, mentioned by Varro, as being recorded by Demetrius, a slave. This was that, while sowing them, they prayed that they might grow, both for themselves and their neighbors. Pliny says that the sower was naked.

Of crops used in the arts may be mentioned flax, the sesamum already mentioned, and the poppy. The two latter were grown for their seeds, which were bruised for oil. The ligneous crops were willows, both for basket making and as ties and poles for olives and vines. Copse-wood was grown in some places for fuel, but chiefly in natural woods, which were periodically cut. Timber was also procured from the natural forests, which were abundant in oak, elm, beech, pine, and larix. The fruit trees cultivated extensively were the vine and olive. The figs were grown in gardens and orchards, and also the pear; and in the gardens of the wealthy were found most fruits in present use, with the exception of the pineapple, the gooseberry, and perhaps the orange, though the lemon seems to have been known in Palladius' time. The vine was supported by elms or poplars, or tied to different sorts of trellises, as in Italy at the present day.

Such are the principal field crops of Roman agriculture, from which, and from the list given by Pliny, it appears that they had most plants and trees now in use, with the exception of the potato and one or two others of less consequence. Of animals reared, the quadrupeds were of the same kind as at present; and to the common sorts of poultry they added thrushes, larks, peacocks, and turtle-doves. They also reared snails, dormice, bees, and fish. The care of the poultry was chiefly committed to the wife of the farmer or bailiff, and it was principally near Rome and Naples that the more delicate birds were extensively reared. When Rome was at her greatest height, in the time of the Cæsars, the minor articles of farm produce bore a very high price. Varro informs us that fat birds, such as thrushes, blackbirds, etc., were sold at 2s., and sometimes five thousand of these were sold in a year from one farm. Pea-fowls were sold at \$5 and upward, and an egg was sold at 74 cents. A farm produced sometimes as many of these fowls as would sell for \$2500. A fine pair of doves were commonly of the same price

with a peacock. If very pretty, they were higher in price, sometimes selling for \$41.60. Anius, a Roman knight, refused to sell a pair under \$60. Some kinds of fish were very highly valued among the Romans, in the time of Varro. Hortensius, whom Varro used frequently to visit, would sooner have parted with a pair of his best coach-mules than with a bearded mullet. Herrius' fish-ponds, on account of the quality of fish, were sold for \$166,666.

In every art which has long been practised, there are maxims of management which have been handed down from one generation to another, and in no art are there more of these than in agriculture. Maxims of this sort were held among the Romans in the greatest estimation, and their writers have recorded a number from the lost Greek writers, and from their own traditionary or experimental knowledge.

A few of these will be noticed, as characteristic of Roman economy, and not without their use in modern times. "To sow less and plow better," was a maxim indicating that farms ought to be kept within proper bounds. Pliny and Virgil consider large farms as prejudicial, and Columella says one of the seven wise men had pronounced that there should be limits and measures to all things. "You may admire a large farm, but cultivate a small one"; and the Carthaginian saying that, "The land ought to be weaker than the husbandman," were maxims to the same effect.

The importance of the master's presence, in every operation of farming, was inculcated by many maxims. "Whosoever would buy a field ought to sell his house, lest he delight more in the town than in the country," was a saying of Mago. "Wherever the eyes of the master most frequently approach," says Columella, "there is the greatest increase."

That more is to be gained by cultivating a small spot well than a large space indifferently, is illustrated by many sayings and stories. "A vine dresser had two daughters and a vineyard. When his elder daughter was married, he gave her a third of his vineyard for a portion, notwithstanding which, he had the same quantity of fruit as formerly. When his younger daughter was married he gave her half of what remained, and still the produce of his vineyard was not diminished."

Pliny mentions a freedman, who, having much larger crops than his neighbors, was accused of witchcraft, and brought to trial. He produced in the forum a stout daughter, and his excellently constructed iron spades, shears, and other tools, with his oxen, and said: "These, Romans, are my charms." He was acquitted.

Profuse culture was not less condemned than imperfect culture. "The ancients," says Pliny, "assert that nothing turns to less account than to give land a great deal of culture. To cultivate well is necessary; to cultivate to an extraordinary manner is hurtful." "In what manner then," he asks, "are lands to be cultivated to the best advantage?" To this he answers: "In the cheapest manner, if it is good"; or, "By good bad things," which, he says, were the words in which the ancients used to express this maxim.

Industry is recommended by numerous maxims. "The ancients," says Pliny, "considered him a bad husbandman who buys what his farm can produce to him; a bad master of a family who does in the day time what he may do at night, except in the time of a storm; or worse, who does on common days what is lawful to do on holidays; and worst of all, who on a good day is employed more within doors than in the fields."

Kindness and humanity to servants and slaves are strongly recommended. "Slaves," says Varro, "must not be timid nor petulant. They who preside must have some degree of learning and education; they must be frugal, older than the workmen, for the latter are more attentive to the directions of these than they are to those of younger men. Besides, it must be more eligible that they should preside who are experienced in agriculture, for they ought not only to give orders, but to work, and that they may consider that he presides over them with reason, because he is superior in knowledge and experience. Nor is he to be suffered to be so imperious as to use coercion with stripes rather than words, if this can be done. Nor are many to be procured of the same country, for domestic animosities often arise from this source. You must encourage those who preside by rewarding them, and you must endeavor to let them have some privilege, and maid servants wedded to them, by whom they may have a family; for by these means they become more

steady and attached to the farm. On account of these connections, the Epirotic families are so distinguished and attached. To give the persons who preside some degree of pleasure, you must hold them in some estimation; and you must consult with some of the superior workmen concerning the work that is to be done. When you behave thus, they think they are less despicable, and that they are held in some degree of esteem by their masters. They become more eager for work by liberal treatment, by giving them victuals, or a large garment, or by granting them some recreation or favor, as the privilege of feeding something on the farm, or some such thing. In relation to those who are commanded to do the work of greater drudgery, or who are punished, let somebody restore their good will and affection to their master, by affording them the benefit of consolation."

Knowledge in matters relative to agriculture is inculcated by all the rustic authors. "Whoever," says Columella, "would be perfect in this science, must be well acquainted with the qualities of soils and plants; must not be ignorant of the various climates, so that he may know what is agreeable and what is repugnant to each; he must know exactly the successions of the seasons and the nature of each, lest, beginning his work when showers and wind are just at hand, his labor shall be lost. He must be capable of observing exactly the present temper of the sky and seasons; for these are not always regular, nor in every year do the summer and winter bring the same kind of weather; nor is the spring always rainy and the autumn always dry. know these things before they happen, without a very good capacity, and the greatest care to acquire knowledge, is, in my opinion, in the power of no man." To these things mentioned by Columella, Virgil adds several others: "Before we plow a field to which we are strangers," says he, "we must be careful to obtain a knowledge of the winds; at what points they blow at particular seasons; and when and from whence they are most violent'; the nature of the climate, which in different places is very different; the customs of our forefathers; the customs of the country; the qualities of the different soils, and what are the crops that each country produces and rejects."

The making of experiments is a thing very strongly recom-

mended to the farmer, by some authors. "Nature," says Varro, "has pointed out to us two paths, which lead to the knowledge of agriculture; viz.: experience and imitation. The ancient husbandmen, by making experiments, have established many maxims. Their posterity, for the most part, imitate them. We ought to do both, — imitate others and make experiments ourselves, not directed by chance, but by reason."

The topics of produce and profit in agriculture are very difficult to be discussed satisfactorily. In manufactures, the raw material is purchased for a certain sum, and the manipulations given by the manufacturer can be accurately calculated; but in farming, though we know the rent of the land and the price of the seed-grain, which may be considered the raw materials, yet the quantity of labor required to bring forth the produce depends so much on seasons, accidents, and other circumstances, to which agriculture is more liable than any other art, that its value or cost price cannot be easily determined. It is a common mode to estimate the profits of farming by the numerical returns of the seed sown. But this is a most fallacious ground of judgment, since the quantity of seed given to lands of different qualities and of different conditions is very different; and the acre which, being highly cultivated and sown with only a bushel of seed, returns forty for one, may yield no more profit than that which, being in a middling condition, requires four bushels of seed, and yields only ten for one. The returns of the seed sown, mentioned by the ancients, are very remarkable. We have noticed Isaac's sowing and reaping at Gerar, where he received a hundred for one. In St. Mark's gospel, good seed sown upon good ground is said to bring forth in some places thirty, in others forty, in others sixty, and in others even an hundred "A hundred fold," Varro informs us, "was reaped about Garada, in Syria, and Byzacium, in Africa." Pliny adds, that, from this last place, there were sent to Augustus, by his factor, nearly four hundred stalks, all from one grain; and to Nero three hundred and forty stalks. He says that he has "seen the soil of this field, which, when dry, the stoutest oxen cannot plow, but after rain I have seen it opened up by a share, drawn by a wretched ass on one side and an old woman on the other."

The returns in Italy were less extraordinary. Varro says:

"There are sown, on an acre, four pecks of beans, five of wheat, six of barley, and ten of far, more or less as the soil is rich or poor. The produce is in some places ten for one, but in others, as in Tuscany, fifteen for one." This is, in round numbers, at the rate of twenty-one and thirty-one bushels per English acre. On the excellent lands of Leontinum, in Sicily, the produce, according to Cicero, was no more than eight to ten for one. In Columella's time, when agriculture had declined, it was still less.

The farmer's profit cannot be correctly ascertained; but, according to a calculation made by the Rev. A. Dixon, the surplus produce of good land, in the time of Varro, was about fifteen pecks of wheat per acre; and in the time of Columella, lands being worse cultivated, it did not exceed three and one-third pecks per acre. What proportion of this went to the land-lord cannot be ascertained. Corn, in Varro's time, was from 4d. to $5\frac{1}{2}d$. per peck; seventy years afterwards, in the time of Columella, it had risen to 1s. 9d. per peck. Vineyards were so neglected in the time of this author that they did not yield more to the landlord, as rent, than 14s. or 15s. per acre.

The price of land, in the time of Columella and Pliny, was twenty-five years' purchase. It was common, both these writers inform us, to receive four per cent for capital so invested. The interest of money was then 6 per cent; but this 6 per cent was not what we would call legal interest; money among the Romans being left to find its value, like other commodities. Of course the interest was always fluctuating.

Such is the essence of what is known as to produce, rent, and the price of lands among the Romans.

Roman Agriculture in respect to General Science and the Advancement of the Art.—The sciences cultivated by the Greeks and Romans were chiefly of the mental and mathematical kind. They knew nothing of chemistry or physiology, and very little of other branches of natural philosophy; and hence their progress in the practical arts was entirely the result of observation, experience, or accident. In none of their agricultural writers is there any attempt made to give the *rationale* of the practices described; absolute directions are either given, as is frequently the case in Virgil and Columella, or the historical relation is adopted, and the reader is informed what is done

by certain persons, or in certain places, as is generally the case with Varro and Pliny.

Wherever the phenomena of nature are not accounted for scientifically, recourse is had to supernatural causes, and the idea of this kind of agency once admitted there is no limit that can be set to its influence over the mind. In the early and ignorant ages, good and evil spirits were supposed to take a concern in everything; and hence the endless and absurd superstitions of the Egyptians, some of which have been already noticed, and the equally numerous, though perhaps less absurd, rites and ceremonies of the Greeks, to procure their favor or avert their evil influences. Hesiod considered it of not more importance to describe what works were to be done, than to describe the lucky and unlucky days for their performance. Homer, Aristotle, Theophrastus, and all the Greek authors are more or less tinctured with this religion,—or superstition, as we are pleased to call it,—of their age.

As the Romans made few advances in science, they consequently made equally few in divesting themselves of the superstitions of their ancestors. These, as most readers know, entered into every action and art of that people, and into none more than agriculture. In some cases it is of importance for the general reader to be aware of this before perusing their rustic authors, as in the case of heterogeneous grafting, and the spontaneous generation and transmutation of plants, which, though stated by Virgil and Pliny and others as facts, are known to every physiologist to be impossible. Other relations are too gross to be entertained as truths by any one.

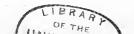
It is curious to observe the religious economy of Cato. After recommending the master of the family to be regular in performing his devotions, he expressly forbids the rest of the family to perform any, either by themselves or others, telling them that they were to consider that the master performed sufficient devotions for the household. This was intended to save time, and also to prevent such slaves as had naturally more susceptible imaginations than the others from becoming religious enthusiasts.

What degree of improvement agriculture received from the Romans is a question we have no means of answering. Agriculture appears obviously to have declined from the time of

Varro and Cato to Pliny, and therefore any improvements it received must have taken place antecedently to their era. As these authors, however, generally refer to the Greeks as their masters in this art, it appears very doubtful whether they did anything more than imitate their practice. As a more luxurious people, they introduced new fruits, and probably improved the treatment of birds and other minor products; for these belong more to gardening and domestic economy than to field cultivation. In the culture of grain, herbage, plants, and fruit trees, and in the breeding and rearing of cattle, Noah and his sons, the Jews, the Babylonians, Egyptians, and Greeks, may have been as advanced as the Romans, for anything that appears to the contrary. The great agricultural advantage which mankind has derived from the Romans, is the diffusion of the art by their almost universal conquests.

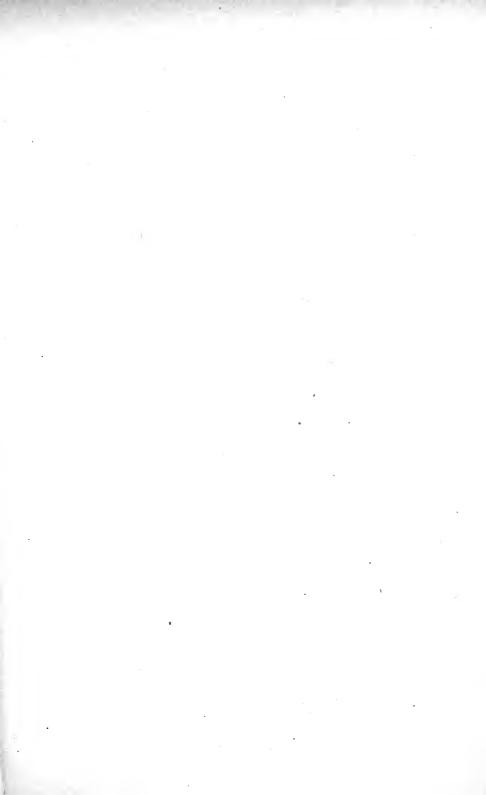
The Extent to which Agriculture was carried in the Roman Provinces, and its Decline. — The art of agriculture was not only familiar to, but held in estimation by, every Roman soldier. It was practised by him in every foreign country where he was stationary, and he taught it to the inhabitants of such as were uncultivated. In some countries, as in Carthaginia, a large part of Spain, and a part of the southeast of France, agriculture was as far advanced as in Italy; because, at Carthage and Marseilles, the Greeks had planted colonies which flourished anterior to the Romans, or at least long before they extended their conquests to these countries; but in Helvetia, Germany, and Britain, it was in a very rude state, or unknown.

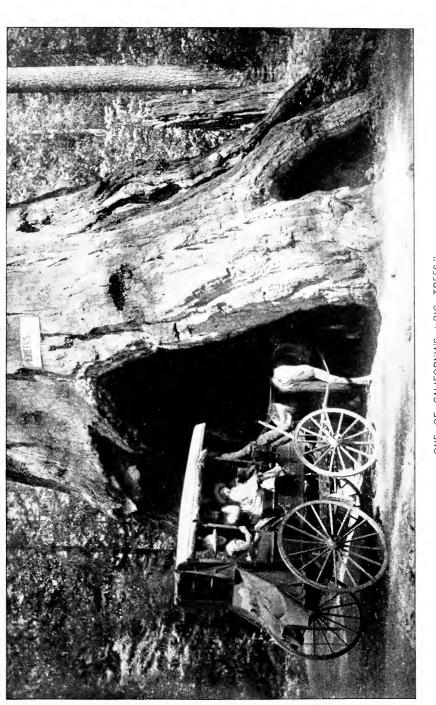
In Germany, except on the borders of the Rhine, agriculture was never generally practised. The greater part of the country was covered with forests, and hunting and pasturage were the chief occupations of the people, when not engaged in war. The decline of the Roman power in that country, therefore, could make very little difference as to its agriculture. In Britain, according to Cæsar, agriculture was introduced by colonies from Belgium, which took shelter there from the encroachments of the Belgæ from Germany, about 150 B.C. These colonies began to cultivate the sea coasts, but the natives of the inland parts lived on roots, berries, flesh, and milk, and it appears from Dionysius that they never tasted fish. Pliny mentions the use



of marl as being known by the Britons, and Diodorus Siculus describes their method of preserving grain, by laying it up in the ear, in caves or granaries. But the general spread of agriculture in Britain was no doubt effected by the Romans. The tribute of a certain quantity of grain, which they imposed on every part of the country, as it fell under their dominion, obliged the inhabitants to practise tillage. And from the example of the conquerors, and the richness of the soil, they soon not only produced a sufficient quantity of grain for their own use and that of the Roman troops, but afforded every year a very great surplus for exportation. The Emperor Julian, in the fourth century, built granaries to receive this grain, and on one occasion sent a fleet of eight hundred ships, "larger than common barks," to convey it to the mouth of the Rhine, where it was sent up the country for the support of the plundered inhabitants.

Agriculture among the Romans themselves had begun to decline in Varro's time, and was at a low ebb in the days of Pliny. Many of the great men in Rome, trusting to their revenues from the provinces, neglected the culture of their estates in Italy. Others, in want of money to answer the demands of luxury, raised all they could upon credit or mortgage, and raised the rents of their tenants to an oppressive height to enable them to pay the interest. The farmer was in this manner deprived of his capital; his spirits were broken and he ceased to exert himself; or he became idle and rapacious, like his landlord. The civil wars in the end of the second century, the tyrannical conduct of the emperors in the third, and the removal of the seat of empire to Constantinople in the middle of that which followed, prepared the way for the entrance of the Goths, in the beginning of the fifth century, which completed the downfall of agriculture and every peaceful art. It declined at the same time in all the western provinces; in Africa and Spain, from the incursions of the Moors; in France, from the inroads of the Germans; in Germany and Helvetia, from the inhabitants leaving their country and preferring a predatory life in other states; and in Britain, from the invasions of the Saxons and the inroads of the Scots and Picts.





ONE OF CALIFORNIA'S "BIG TREES."

CHAPTER III.

AGRICULTURE DURING THE MIDDLE AGES, OR FROM THE FIFTH
TO THE SEVENTEENTH CENTURY.

In the ages of anarchy and barbarism, which succeeded the fall of the Roman power in Europe, agriculture appears to have been abandoned, or at least extremely neglected. in troublesome times, is always preferred to tillage, because sheep or cattle may be concealed from an enemy, or driven away on his approach; but who would sow without a certainty of being able to reap? Happily, the weaknesses of mankind sometimes serve to mitigate the effects of their vices. the credulity of the barbarians of those times led them to respect the religious establishments, and in these were preserved such remains of letters and of arts as have escaped utter destruction. These institutions were at first very limited, both in their buildings and possessions, and the inhabitants were frugal and virtuous in their habits; but in a very few years, by the grants of the rich warriors, they acquired extensive possessions, erected the most magnificent buildings, and lived in abundance and luxury. Their lands were cultivated by servants, under the direction of the priests, who would have recourse for information to the Roman agricultural writers, which, in common with such other books as then existed, were to be found almost exclusively in their libraries. We know little of the progress of agriculture, under these circumstances, for nearly ten centuries, when it began to revive throughout Europe, among the lay proprietors.

Agriculture in Italy during the Middle Ages. — Little is known of the agriculture of Italy from the time of Pliny till that of Crescenzio, a senator from Bologna, whose work, "In Commodum Ruralium," written in 1300, was first printed at Florence, in 1478. From some records, however, it appears that irrigation had been practised in Italy before the year 1037. The monks of Chiarevalle had formed extensive works of this kind, and had become so celebrated as to be consulted and employed as

hydraulic engineers, by the Emperor Frederick I., in the thirteenth century. Silk-worms were imported from Greece into Sicily, by Roger, the first king of that island, in 1146, but they did not extend to the continental states for many years afterwards.

In the early part of the fourteenth century, the inhabitants of the south of Italy were strangers to many of the conveniences of life. They were ignorant of the proper cultivation of the vine, and the common people were just beginning to wear shirts. The Florentines were the only people of Italy who, at that time, traded with England and France. The works of Crescenzio are, in great part, a compilation from the Roman authors; but an edition published in Basle, in 1548, and illustrated with figures, may probably be considered as indicating the implements then in use. The plow is drawn by only one ox, but different kinds, to be drawn by two and four oxen, are described in the text. A driver is also mentioned, which shows that the plowmen in those days were less expert than during the time of the Romans, who did not use drivers. A wagon is described, with a wooden axle and low wooden wheels, each wheel formed either of one piece or of four pieces joined together. Knives, scythes, and grafting-tools, as well as their use, are figured. Sowing was then performed exactly as it was among the Romans, and is still, in most parts of Europe, where a sowing-machine is not employed. The various hand tools for stirring and turning the soil are described and exhibited, and the Roman bidens shown as in use for cultivating the vine. All the agricultural and horticultural plants described by Pliny are treated of, but no others.

Towards the end of the sixteenth century, Torrello's "Ricordo d'Agriculture" was published. In 1584 Pope Sixtus, according to Harte, forced his subjects to work, that they might pay the heavy taxes imposed on them, and by this means rendered them contented and happy, and himself rich and powerful. He found them sunk in sloth, overrun with pride and poverty, and lost to all sense of civil duties; but he recovered them from that despicable state, first to industry, and next to plenty and regularity. Naples being at that period a Spanish province, the wars in which Spain was engaged obliged her to put a tax upon fruit; and as fruits were not only the chief delicacies but

articles of subsistence among the Neapolitans, this imposition is said to have rendered them industrious. But though some agricultural books were published at Naples during the sixteenth century, there is no evidence that they made much progress in culture. Their best lands are in Sicily, and on them a grain crop, alternating with a fallow, was, and is, the rotation, and the produce seldom exceeded eight or ten for one, as in the time of the Romans. This is the case with Sicily at present, and it is likely that it was not different, at least that it was not better, from the fifth to the seventeenth centuries.

The greatest agricultural improvements in Italy, which took place during the period in question, were in Tuscany and Lombardy. In the former country, the culture of the vine and the olive was brought to greater perfection than anywhere else The oil of Lucca and the wines of Florence in Europe. became celebrated in other countries, and the commerce in these articles enriched the inhabitants, and enabled the proprietors to bestow increased attention upon the cultivation of their estates. Lombardy excelled in the management of grain and cattle, as well as of the vine. The butter, cheese, and beef of this country were esteemed the best in Italy. The pastures were at that time, and still are, more productive than any others in Europe, or perhaps in the world, having the three advantages of a climate so temperate in winter that grass grows all the year, a soil naturally rich, and an abundant supply of river water for irrigation. The irrigation of Lombardy forms the chief feature of its culture. It was begun and carried on to a considerable extent under the Romans, and in the period of which we speak it extended and increased under the Lombard kings and wealthy religious establishments. Some idea may be formed of the comfort of the farmers in Lombardy, in the thirteenth century, by the picture of a farmhouse, given by Crescenzio, who lived on its borders; which, as a French antiquarian has observed, differs little from the best modern ones of Italy, except in being covered with thatch.

History of Agriculture in France, from the Fifth to the Seventeenth Century. — The nations which conquered France in the fifth century were the Goths, Vandals, and Franks. The two former nations claimed two-thirds of the conquered lands,

and must, of course, have very much altered the state of property and the management of the affairs of husbandry. The claim of the Franks is more uncertain. They were so much a warlike people that they probably dealt more favorably with those whom they subjected to their dominion.

All that is known of the agriculture of these nations of France, till the ninth century, is derived from a perusal of their laws. These appear to have been favorable to cultivation, especially the laws of the Franks. Horses are frequently mentioned, and a distinction is made between the war horse and the farm horse, which shows that this animal was at that period more common in France than in Italy. Horses, cattle, and sheep were pastured in the forests and commons, with bells about the necks of several of them, for their more ready discovery. The culture of vines and orchards was greatly improved by Charlemagne, in the ninth century. He planted many vineyards on the crown lands, which were situated in every part of the country, and left in his Capitularies particular instructions for their culture. One of his injunctions prohibits an ox and an ass from being yoked together to the same plow.

During the greater part of the ninth and the tenth centuries, France was harassed by civil wars, and agriculture declined; but to what extent, scarcely any facts are left us to ascertain. A law passed at that period, respecting a farmer's tilling the land of his superior, enacts that, if the cattle are so weak that four could not go a whole day in a plow, he was to join these to the cattle of another and work two days instead of one. who kept no cattle of his own was obliged to work for his superior three days as a laborer. In the eleventh and twelfth centuries, the country enjoyed more tranquillity, and agriculture was improved. Judging from the Abbé Suger's account of the abbey lands of St. Denis, better farm-houses were built, waste lands were cultivated, and rents were more than doubled. The Church published several canons for the security of agriculture during this period, which must have had a beneficial effect, as the greatest proportion of the best lands in every country was then in the hands of the clergy. In the thirteenth century, little alteration took place; but the number of holidays diminished, and mills driven by wind, for grinding grain, were introduced. In the fourteenth and fifteenth centuries, agriculture suffered greatly by the English wars and conquests, and by political regulations relative to the export and market price of grain.

About the middle of the sixteenth century, the first agricultural work produced in France made its appearance. It was composed by Bernard de Palissy, a potter, who had written on various subjects. It is a very short tract, composed of economical remarks on husbandry, or rural and domestic economy. Toward the end of this century, under Henry IV. and his virtuous minister Sully, considerable enterprise was displayed. Canals were projected, and one begun, and, according to Sully, France in his time abounded with grain, pulse, wine, cider, flax, hemp, salt, wood, oil, dyeing drugs, cattle, great and small, and everything else necessary or convenient for life, both for home consumption and exportation.

Agriculture of Germany and Other Northern States, from the Fifth to the Seventeenth Century. — The nations north of the Rhine and the Danube, during the first half of these centuries, were chiefly employed in making inroads or conquests on their southern neighbors; and during the whole period they were more or less engaged in attacking one another. Under such circumstances, agriculture must either have remained in the state already described, or must have declined. In some states or kingdoms, it may have been less neglected than in others, or even may have improved; but, during the whole of this period, nothing was effected which demands particular attention. The earliest German author on husbandry is Conradus Heresbachius, who was born in 1508, and died in 1576. His work was published after his death. It is an avowed compilation from all the authors who had preceded him, and contains no information as to the state of agriculture around him. It is a dialogue in four books, and also includes gardening. other books on agriculture, of any note, appeared in Germany during the period under review.

About the middle of the sixteenth century, the Elector of Saxony, Augustus II., is said to have encouraged agriculture, and to have planted the first vineyards in Saxony; but, from the implements with which he worked in person, which are still preserved in the arsenal of Dresden, he appears to have been

more of a gardener than a farmer. It is to be regretted that the histories of the arts in the northern countries, during the middle ages, are very few, and so little known or accessible that we cannot derive much advantage from them.

Agriculture in Britain, from the Fifth to the Seventeenth Century. — Britain, on being evacuated by the Romans, was invaded by the Saxons, a ferocious and ignorant people, by whom agriculture and all other civilized arts were neglected. In the eleventh century, when the Saxons had amalgamated with the natives, and constituted the main body of the English nation, the country was again invaded by the Normans, a much more civilized race, who introduced considerable improvement. These two events form distinct periods in the history of British agriculture, and two others will bring it down to the seventeenth century.

Agriculture in Britain during the Anglo-Saxon Dynasty, or from the Fifth to the Eleventh Century. — At the arrival of the Anglo-Saxons, this island, according to Fleury, abounded in numerous flocks and herds, which these conquerors seized and pastured for their own use; and, after their settlement, they still continued to follow pasturage as one of the chief means of subsistence. This is evident from the great number of laws that were made, in the Anglo-Saxon times, for regulating the price of all kinds of tame cattle, for directing the manner in which they should be pastured, and for preserving them from thieves, robbers, and beasts of prey. The Welsh, in this period, from the nature of their country and other circumstances, depended still more upon their flocks and herds for their support; hence their laws respecting pasturage were more numerous and minute than those of the Saxons.

From these laws we learn, among many other particulars, that all the cattle of a village, though belonging to different owners, were to be pastured together in one herd, under the direction of one person, with proper assistants, whose oath in all disputes about the cattle under his care was decisive. By one of these laws they were prohibited from plowing with horses, mares, or cows, and restricted to oxen. Their plows seem to have been very light and inartificial; for it was enacted that no man should undertake to guide a plow who could not make one,

and that the driver should make of twisted willows the ropes with which it was drawn. Hence the names still in use, such as ridge-withy, wanty, whipping-trees, tail-withes, etc. But slight as these plows were, it was usual for six or eight persons to form themselves into a society for fitting out one of them, and providing it with oxen and everything necessary for plowing, and many curious and minute laws were made for the regulation of such societies. This is a sufficient proof, both of the poverty of the husbandman and of the imperfect state of agriculture among the ancient Britons, at that period. Certain privileges were allowed to any person who laid dung on a field, cut down a wood, or folded his cattle on another man's land for a year.

Such was the state of agriculture during this period, in Wales: it was probably in a still more imperfect state among the Scots and Picts, but this we have no means of ascertaining. Our Anglo-Saxon ancestors derived their origin and manners from the ancient Germans, who were not much addicted to agriculture, but depended chiefly upon their flocks and herds for their subsistence. These restless and haughty warriors esteemed the cultivation of their lands too ignoble and laborious an employment for themselves, and therefore committed it wholly to their women and slaves. They were even at pains to contrive laws to prevent their contracting a taste for agriculture, lest it should render them less fond of arms and warlike expeditions.

The division of landed estates into what is called inlands and outlands, originated with the Saxon princes and great men, who, in the division of the conquered lands, obtained the largest shares, and are said to have subdivided their territory into two parts, which were so named. The inlands were those which lay most contiguous to the mansion-house of the owner, which he kept in his own immediate possession, and cultivated by his slaves, under the direction of a bailiff, for the purpose of raising provisions for his famlly. The outlands were those which lay at greater distance from the mansion-house, and were let to the farmers of those times, at a certain rent, which was very moderate, and generally paid in kind.

The rent of lands in these times was established by law, and not by the owner of the land. By the laws of Ina, king of the West Saxons, who flourished in the end of the seventh and

beginning of the eighth century, a farm consisting of ten hides, or plow-lands, was to pay the following rent; viz.: ten casks of honey, three hundred loaves of bread, twelve casks of strong ale, thirty casks of small ale, two oxen, ten wethers, ten geese, twenty hens, ten cheeses, one cask of butter, five salmon, twenty pounds of forage, and one hundred eels. The greatest part of the crown-lands, in every country, was farmed in this manner, by farmers who, in general, appear to have been freemen and soldiers.

Very little is known of the implements or operations of husbandry, during this period. In one of Strutt's plates of ancient dresses, entitled "Saxon Rarities of the Eighth Century," may be seen a picture of a plow and a plowman. The plow is sufficiently rude, although it has evidently undergone some improvement from the hand of the delineator. The laborers were no doubt slaves, and the animals of draught, oxen. belonging to the monasteries were by far the best cultivated, because the secular canons who possessed them spent much of their time in cultivating their own lands. The venerable Bede, in his life of Esterwin, Abbot of Weremouth, tells us that "this abbot, being a strong man and of humble disposition, used to assist his monks in their rural labors, sometimes guiding the plow by its stilt or handle, sometimes winnowing grain, and sometimes forging instruments of husbandry with a hammer, upon an anvil; for in those times the husbandmen were under a necessity of making many implements of husbandry with their own hands."

Agriculture in Britain after the Norman Conquest, or from the Eleventh to the Thirteenth Centuries. — That the conquest of England by the Normans contributed to the improvement of agriculture, is undeniable; for, by that event, many thousands of husbandmen from the fertile and well-cultivated plains of Flanders, France, and Normandy, settled in this island, obtained estates or farms, and employed the same methods in the cultivation of them that they had used in their native countries. Some of the Norman barons were great improvers of their lands, and are celebrated in history for their skill in agriculture. "Richard de Rulos, Lord of Brienne and Deepiny," says Ingulphus, "was much addicted to agriculture, and delighted in

breeding horses and cattle. Besides enclosing and draining a great extent of country, he embanked the river Wielland, which used every year to overflow the neighboring fields, in a most substantial manner. He built many houses and cottages upon the banks, which increased so much that, in a little time, they formed a large town, called Deepiny, from its low situation. Here he planted orchards, cultivated commons, converted deep lakes and impassable quagmires into fertile fields, rich meadows, and pastures; in a word, rendered the whole country about it a garden of delight." From this description, it appears that this nobleman, who was chamberlain to William the Conqueror, was not only fond of agriculture, but also that he conducted his improvements with skill and success.

The Norman clergy, and particularly the monks, were still greater improvers than the nobility, and the lands of the Church, especially of the convents, were conspicuous for their superior cultivation; for the monks of every monastery retained in their own possession such of their lands as lay most convenient, which they cultivated with great care, under their own inspection, and frequently with their own hands. It was so much the custom of the monks to assist in the cultivation of their lands, especially in seed-time, harvest-time, and hay-time, that the famous Thomas à Becket, after he was Archbishop of Canterbury, used to go out into the field, with the monks of the monasteries where he happened to reside, and join them in reaping their grain and making their hay. This is indeed mentioned by the historian as an act of uncommon condescension in a person of his high standing in the Church, but it is sufficient proof that the monks of those times used to work with their own hands, at some seasons, in the labors of the field; and, as many of them were men of genius and invention, they no doubt made various improvements in the art of agriculture.

The twenty-sixth canon of the General Council of Lateran, A.D. 1179, affords a further proof that the protection and encouragement of all who were concerned in agriculture were objects of attention in the Church; for, by that canon it is decreed: "That all presbyters, clerks, monks, converts, pilgrims, and peasants, when they are engaged in the labors of husbandry,

together with the cattle in their plows, and the seed which they carry into the field, shall enjoy perfect security, and that all who molest or interrupt them, if they do not desist when they have been admonished, shall be excommunicated."

The implements of husbandry, in this period, were of the same kind with those that are employed at present, though all of them, no doubt, much less perfect in their construction. One sort of plow, for example, had but one stilt or handle, which the plowman guided with one hand, having in his other an instrument which served both for cleaning and mending his plow and breaking the clods. This implement was probably intended for breaking up strong lands. For such a purpose the wheels would contribute much to its steadiness, which would render two handles unnecessary, and thus leave the holder with one hand at liberty to use his axe-like instrument, in tearing away roots and clods, and otherwise aiding the operations of the plow. Another plow seems to have been without wheels, and was probably intended for light soil. The Norman plow had two wheels, and in the light soil of Normandy was commonly drawn by one or two oxen; but in England a greater number, according to the nature of the soil, was often necessary.

In Wales the person who conducted the plow walked backwards. Their harrows, sickles, scythes, and flails, from the figures still remaining, appear to have been nearly of the same construction as those that are now used. In Wales they did not use the sickle in reaping their grain, but an instrument like the blade of a knife, with a wooden handle at each end.

Water mills for grinding grain were very common, but they had also a kind of mill turned by horses, which were chiefly used in their armies and at sieges, or in places where running water was scarce. The various operations of husbandry, as manuring, plowing, sowing, harrowing, reaping, threshing, winnowing, etc., are incidentally mentioned by the writers of this period; but it is impossible to collect from them a distinct account of the manner in which these operations were performed. Marl seems to have been the chief manure, next to dung, employed by the Anglo-Normans, as it had been by the Anglo-Saxons and the British husbandry. Summer fallowing of lands designed for wheat, and plowing them several times, appear to

have been the common practices of the English farmer of this period; for Giroldus Cambernsis, in his description of Wales, takes notice of it as a great singularity in the husbandry of that country, "that they plowed their lands only once a year, in March or April, in order to sow them with oats, but did not, like other farmers, plow them twice in summer and once in winter, in order to prepare them for wheat." On the border of one of the compartments of the famous tapestry of Bayeux, we see the figure of one man sowing, with a sheet about his neck, containing the seed under his right arm, and scattering it with his left hand; and of another man harrowing with a harrow drawn by one horse.

Agriculture in Scotland seems to have been in a very imperfect state during this period; for, in a parliament held in Scone, by King Alexander II., A.D. 1214, it was enacted that such farmers as had four oxen or cows, or upwards, should labor their lands by tilling them with a plow, and should begin to till fifteen days before Candlemas; and that such farmers as had not so many as four oxen, though they could not labor their lands by tilling, should delve as much with hand and foot as would produce a sufficient quantity of grain to support themselves and their families. But this law was probably designed for the highlands, the most uncultivated parts of the kingdom; for, in the very same parliament, a very severe law was made against those farmers who did not extirpate a pernicious weed called guilde out of their lands, which seems to indicate a more advanced state of cultivation. Their agricultural operations, as far as can be gathered from old tapestries and illuminated missals, were similar to those of England. Threshing appears to have been performed by women, and the reaping by men, which is the reverse of the modern practice in that and in most coun-Such is the account of Henry.

The field culture of the vine, which had been commenced by the monks for their own use, was more extensively spread by the Normans. William of Malmsbury, who flourished in the early part of the twelfth century, says there was a greater number of vineyards in the vale of Gloucester than anywhere else, and that from the grapes was produced a wine very little inferior to that of France. Orchards and cider were also abundant, and the apple trees, it is said, lined the roads in some parts of the country, as they still do in Normandy, whence, in all probability, the plants, or at least the grafts, were imported.

Agriculture in Britain from the Thirteenth Century to the Time of Henry VIII. - Agriculture in the thirteenth and fourteenth centuries, it appears, was still carried on with vigor. Sir John Fortescue, in a work in praise of the English laws, mentions the progress that had been made in planting hedges and hedge-row trees, before the end of the fourteenth century. Judge Fortescue wrote his "De Laudibus Legum Angliæ" in the fifteenth century, but it was not published till the reign of Henry VIII. In the law book called "Fleta," supposed to have been written by some lawyers, prisoners in the Fleet, in 1340, very particular directions are given as to the most proper times and best manner of plowing and dressing fallows. The farmer is there directed to plow no deeper in summer than is necessary for destroying the weeds, nor to lay on his manure till a little before the last plowing, which is to be with a deep and narrow furrow. Rules are also given for the changing and choosing of seed; for proportioning the quantity of different kinds of seed to be sown on an acre, according to the nature of the soil and the degree of richness; for collecting and compounding manures, and accommodating them to the grounds on which they are to be laid; for the best seasons for sowing seeds of different kinds on all the varieties of soil; and, in a word, for performing every operation in husbandry, at the best time and in the best manner. In the same work, the duties of the steward, bailiff, and overseer of a manor, and all other persons concerned in the cultivation of it, are explained at full length, and with so much good sense that, if they were well performed, the manor could not be ill cultivated. This work, as well as others of the kind. is written in Latin, and even the farming accounts in those days were kept in that language, as they are still in the greater part of Hungary.

During the greater part of the fifteenth century, England was engaged in civil wars, and agriculture, as well as other arts, declined. The laborers, called from the plow by royal proclamation or the mandates of their lords, perished in battle, or by accident and fatigue, in immense numbers. Labor rose in price,

notwithstanding various laws for its limitation, and this at last produced a memorable revolution in the state of agriculture, which made a mighty noise for many years. The prelates, barons, and other great proprietors of lands, kept extensive tracts round their castles, which were called their demesne lands, in their own immediate possession, and cultivated them by their villains, and hired servants, under the directions of their bailiffs. But these great landholders having often led their followers into the fields of war, their numbers were gradually diminished, and hired servants could not be procured on reasonable terms. This obliged the prelates, lords, and gentlemen to enclose the lands around their castle, and to convert them into pasturage grounds. This practice of enclosing became very general in England, about the middle of this period, and occasioned prodigious clamors from those who mistook the effects of depopulation for its cause. The habit of enclosing lands and converting them into pasture continued after the cause had ceased, and an act was passed to stop its progress, in the beginning of the reign of Henry VII.

The dearths of this period furnish another proof of the low state of agriculture. Wheat, in 1437 and 1438, rose from 12½ to 16 cents, the ordinary price per bushel, to 81 cents. Stow observes that, in these extremities, the common people endeavored to preserve their wretched lives by drying the roots of herbs, and converting them into a kind of bread. Land in those days was sold for ten years' purchase, so great was the insecurity of possession. Agriculture in Scotland was at a low ebb during the thirteenth, fourteenth, and fifteenth centuries, on account of the long and ruinous wars in which the country was engaged. A law, passed in 1424, enacts that every laborer of "simple estate" dig a piece of ground daily, seven feet square; another in 1457, that farmers who had eight oxen should sow every year one bushel of wheat, half a bushel of peas, and 40 beans, under the pain of 10 shillings, to be paid to the baron; and if the baron did not do the same thing to the lands in his possession, he should pay the same penalty to the king.

From the accession of Henry VII., in 1485, to nearly the middle of the seventeenth century, England enjoyed peace. To remove the effects of former wars, however, required consider-

able time. The high price of labor, and the conversion of so much land to tillage, gave rise to different impolitic statutes, prohibiting the exportation of grain, while a great demand was created for wool by the manufacturers of the Netherlands, which tended to enhance the value of pasture lands, and to depopulate the country. The flocks of individuals, in these times, sometimes exceeded twenty thousand, and an edict was issued by Henry VIII. restricting them to a tenth of that number. the restraints imposed upon the exportation of grain been transferred to wool, the internal consumption would have soon regulated the respective forces of those articles; the proportion between arable and pasture lands would soon have been adjusted, and the declining cultivation of the country restored. An improved cultivation was reserved, however, for a future period, when persecution extirpated manufactures from the Netherlands; then, when the exportation of English wool had subsided, and its price diminished, the farmer or landholder, disappointed of his former exuberant profits, discovered the necessity of resuming the plow, and restoring his pastures to culture.

Of the state of agriculture in Scotland, during the fifteenth and sixteenth centuries, little can be stated. According to Major, a native of Berwick, the peasants neither enclosed, nor planted, nor endeavored to ameliorate the sterility of the soil. According to Finney's "Moryson," the produce of the country consisted chiefly of oats and barley, but it would appear from Chalmers that wheat was cultivated in Scotland, at least upon the Church lands, as early as the thirteenth century. Different laws were enacted for planting groves and hedges, pruning orchards and gardens, and forming parks for deer; but it is not the barren injunctions of statutes that will excite a spirit of improvement in a country.

From the Time of Henry VIII. to the Revolution in 1688. — Agriculture, soon after the beginning of the sixteenth century, partook of the general improvement which followed the invention of the art of printing, the revival of literature, and the more settled authority of government; and, instead of the occasional notices of historians, we can now refer to regular treatises, written by men who engaged eagerly in this neglected

and hitherto degraded occupation. The culture of hops was either introduced or revived early in the reign of Henry VIII., and that of flax was attempted, but without success, though enforced by law.

The legislature at that time endeavored to execute, by means of penalties, those rational improvements which have since been fostered by bounties, or, what is better, pursued from the common motive of self-interest. The breeding of horses was now much encouraged. To the passion of the age, and the predilection of the monarch for splendid tournaments, may be attributed the attention bestowed upon a breed of horses of a strength and stature adapted to the weight of the complicated panoply with which the knight and his courser were both invested. Statutes of a singular nature were enacted, allotting for deer parks a certain proportion of breeding mares, and enjoining, not the prelates and nobles only, but those whose wives wore velvet bonnets, to have horses of a certain size for their saddle. The legal standard was fifteen hands in horses, thirteen in mares, and "unlikely tits" were, without distinction, consigned to execution. James the Fourth of Scotland, with more propriety, imported horses from foreign countries, in order to improve the degenerate breed of his own. The cultivation of grasses, for their winter provender, was still unknown, nor were asses propagated in England till a subsequent period.

The first English treatise on husbandry now appeared, written by Sir A. Fitzherbert, Judge of the Common Pleas. It is entitled "The Book of Husbandry," and contains directions for drainage, clearing and enclosing a farm, and for enriching and reducing the soil to tillage. Lime, marl, and fallowing are strongly recommended. The landlords are advised to grant leases to farmers, who will surround their farms, and divide them by hedges into proper enclosures; by which operation, he says, "If an acre of land be worth sixpence before it is enclosed, it will be worth eight pence by reason of the compost from the cattle." Another reason is, that it will preserve the grain without the expense of a herdsman. From the time of the appearance of this work, in 1534, Harte dates the revival of husbandry in England. "The Book of Surveying and Improvements," by the author of the "Book of Husbandry," appeared in 1539.

In the former treatise we have a clear and minute description of the rural practices of that period, and from the latter may be learned a great deal of the economy of the feudal system, in its decline. The author of the "Book of Husbandry" writes from his own experience of more than forty years; and if we except his Biblical allusions, and some vestiges of superstition of the Roman writers, about the influence of the moon, there is very little in his work that should be omitted, and not a great deal of subsequent science that need be added, with regard to the culture of grain, in a manual of husbandry adapted to the present time.

"It may surprise some of the agriculturists of the present day," an eminent agricultural writer remarks, "to be told that, after the lapse of nearly three centuries, Fitzherbert's practice, in some material branches, has not been improved upon; and that, in several districts, abuses still exist which were as clearly pointed out by him, at that early period, as by any writer of the present age." His remarks on sheep are so accurate that one might imagine they came from a store-master of the present day. Those on horses, cattle, etc., are not less interesting; and there is a very good account of the diseases of each species, and some just observations on the advantage of mixing different kinds in the same pasture. Swine and bees conclude this branch of the work. Then he points out the great advantage of enclosures, recommending "quyck settynge, dychynge, and heddgyng," and gives particular directions about settes, and the method of training a hedge, as well as concerning the planting and management of trees. We then have a short information "for a yonge gentylman that intendeth to thryve," and a "prologue for the wive's occupation," in some instances rather too homely for the present time. Among other things, she is to "make her husband and herself some clothes," and "she may have the lockes of the shepe, either to make blankettes and coverlettes or both." This is not so much amiss, but what follows will bring our learned judge into disrepute, even among our most industrious housewives. "It is a wive's occupation to wynowe all manner of grains, to make malte, to washe and wrynge, to make heye, shere corn, and in time of nede, to helpe her husbande to fyll the mucke wagyne or dounge cart, drive the ploughe, to loade heye, corne, and suche other, and to

go or ride to the market to sel butter, chese, mylke, chikyns, capons, hennes, pygges, gese, and all manner of grains." The rest of the book contains much useful advice about diligence and economy, and concludes after the manner of the age with much pious exhortation.

The state of agriculture in England, in the early part of the sixteenth century, and probably for a long time before, is thus ascertained; for Fitzherbert nowhere speaks of the practices which he describes or recommends, as of recent introduction. The "Book of Surveying" adds considerably to our knowledge of the rural economy of that age. "Four maner of commens" are described, several kinds of mills for grain and other purposes and also, "Guernes that goo with hand"; different orders of tenants, down to the "Boundmen," who, "in some places contynue as yet, and many tymes, by color thereof, there be many freemen taken as boundmen, and their land and goods is taken from them." Lime and marl are mentioned as common manures, and the former was sometimes spread on the surface to destroy heath. Both drainage and irrigation are noticed, though the latter but slightly. The work concludes with an inquiry, "How to make a township that is worth XX merke a yere worth XXIi a yere?" This is to be done by enclosing, by which, he says, live-stock may be better kept and without herds, and the closes, or fields, alternately cropped with grain, and "let lye" for a time.

Agriculture had attained a considerable degree of respectability during the reign of Elizabeth. According to Tusser, who wrote in that age, and whose work will be presently noticed, agriculture was best understood in Essex and Suffolk; at least, enclosures were more common in these counties than in any other, which is always a proof of advancement. "A farmer," according to Harrison, the geographer, "will think his gaine very small towards the end of his terme, if he has not six or seven years' rent lying by him, therewith to purchase a new lease, beside a fair garnish of pewter on his cupboard, with as much more in odd vessels going about the house; three or four feather-beds; so many coverlets and carpets of tapestrie; a silver salt; a bowle for wine, if not a whole neast; and a dozen of spoones to finish oute the sute."

The condition of a yeoman, before or about Elizabeth's time, is exemplified in the case of Bishop Latimer's father. "My father," says Hugh Latimer, "was a yeoman, and had no land of his own; only he had a farm of three or four pounds by the year at the utmost; and hereupon he tilled so much as kept half-a-dozen men. He had a walk for a hundred sheep, and my mother milked thirty kine, etc. He kept his son at school till he went to the university, and maintained him there. He married his daughters with five pounds, or twenty nobles apiece; he kept hospitality with his neighbors, and some alms he gave to the poor; and all this he did out of the said farm."

Cattle were not plentiful in England, at the beginning of Elizabeth's reign. In 1563, it was enacted that no one should eat flesh on Wednesdays or Fridays, on forfeiture of £3, unless in case of sickness, or of a special license, neither of which was to extend to beef or veal. Great pains were taken in the act to prove that it was a political, and not a religious measure.

The vast number of parks in the kingdom are complained of by Harrison. "There are not less," he says, "than a hundred in Essex alone, where almost nothing is kept but a sorte of wilde and savage beasts, cherished for pleasure and delight"; and, pursuing the same subject, he says that, "If the world last awhile after this rate, wheate and rie will be no graine for a poore man to feed on." In Scotland the civil dissensions, and even anarchy, which prevailed until a late period in the sixteenth century, operated as a harsh check on every improvement in agriculture, and the total expulsion of ecclesiastical landholders increased this evil, as the monks were easy landlords, and frequently not uninstructed in georgical knowledge.

The tillers of the earth in Scotland had at least their full share of their country's misfortunes, when private vengeance for private wrongs superseded the regular but timid proceedings of public justice. A statute was then formed for their particular benefit, whereby "the slayers and houchers of horses and uther cattle," with their employers and maintainers, are declared "to have incurred the paine of death, and confiscation of alle their gudes movvabil." A second act was passed in 1587, for the further protection of husbandmen, declaring that "all such as destroyed or maimed horses, oxen, etc., cut or destroyed plows

or plow-gears, in time of tilling, or trees and grain, should suffer death." Several acts of parliament were made, to protect farmers from petulant tithe-gatherers; the proper times of notice were herein pointed out, and liberty was given to the tiller of the land to proceed in his work, if this notice were neglected.

Great attention was still paid to the breeding of horses in England; but, during the reign of Elizabeth, it was found necessary to lower the standard appointed by Henry VIII. for stallions, from fourteen hands to thirteen. This modification, however, was only to take place in the counties of Cambridge, Huntington, Northampton, Lincoln, Norfolk, and Suffolk. No stallion of less height could be turned out on commons, in forests, etc., for fear of deteriorating the breed. Harrison extols the height and strength of the English draught-horses. "Five or six of them," he says, "will with ease draw three thousand weight for a long journey." An English traveller, who visited Scotland in 1598, observed a great abundance of all kinds of cattle, and many horses; not large, but high-spirited and patient of labor. Great care, indeed, was taken by the English, while the kingdoms were separate, to prevent the Scots from improving their breed. It was even made felony to export horses thither from England. This unneighborly prohibition was answered by a reciprocal restriction, in 1567, as to the exportation of Scottish horses: but France rather than England seems to be aimed at by that statute. One circumstance, pointed out by a curious antiquary, is a convincing proof of the modern improvement in the breed. For many years past eight nails have been used to each horse's shoe in the north. Six used to be the number. The proper season for turning horses to grass was thought a consideration worthy the attention of the Scottish government, avowedly to prevent the waste of grain. All horses were, therefore, ordered to be put to grass from May 15 to October 15, on pain of forfeiting each horse, or its value, to the king.

In England, the vine continued to be cultivated for wine, but not generally, for the vineyards of Lords Cobham and William of Thames are pointed out by Barnaby Googe as eminently productive. It is probable that this branch of culture declined with the suppression of the monasteries, and the more general culture of barley; as farmers and others would soon find that

good beer was a better and cheaper drink than any wine that could be made in this country. Though, in 1565, in this reign, the potato was introduced from Santa Fé, by Captain Hawkins, yet it did not come into general use, even in gardens, for nearly two centuries afterward. The principal agricultural authors, in Elizabeth's reign, are Tusser, Googe, and Sir Hugh Platt.

Hops, which had been introduced in the early part of the sixteenth century, and on the culture of which a treatise was published in 1574, by Reynolds Scott, are mentioned as a well-known crop. Buckwheat was sown after barley, and hemp and flax are mentioned as common crops. Enclosures must have been numerous in several counties, and there is a very good "comparison between champion (open fields) country, and severall."

The seventeenth century is distinguished by some important improvements in agriculture, among which are the introduction of clover and turnips into England, of hedges into Scotland and Ireland, and the execution of extensive embankments and drainages. Some useful writers also appeared, especially Norden, Gabriel Plattes, Sir Richard Weston, Hartlibb, and Blythe. For the adoption of the clover, as an agricultural plant, we are indebted to Sir Richard Weston, who, in 1645, gives an account of its culture in Flanders, where he says that he "saw it cutting near Antwerp on the 1st of June, 1644, being then two feet long and very thick; that he saw it cut again on the 29th of the same month, being twenty inches long; and a third time in August, being eighteen inches long." Blythe, in 1653, is copious in his directions for its cultivation, and Lisle, in the beginning of the eighteenth century, speaks of it as commonly cultivated in Hampshire, Wiltshire, Gloucestershire, and other counties. Turnips were probably introduced as a field crop by the same patriotic author, though they may have been grown in the gardens of the church establishments long before. "They are cultivated," he observes, "for feeding kine in many parts of England; but there is as much difference between what groweth in Flanders and here, as between the same thing which groweth in a garden and that which groweth wild in the fields." It is probable that the English turnips he alludes to were rape, which is mentioned by Googe in 1586; but though Gerarde, in 1597, and

Parkinson, in 1629, mention the turnip as a garden vegetable, neither of these authors gives the least hint of their field culture. Be that as it may, Ray, in 1686, informs us that they are sown everywhere in fields and gardens, both in England and abroad, for the sake of their roots.

The first notice of sheep being fed on the ground with turnips, is given in Houghton's "Collection on Husbandry and Trade," a periodical work begun in 1681. In 1684, Worlidge, one of Houghton's correspondents, observes: "Sheep fatten very well on turnips, which prove an excellent nourishment for them in hard winters, when fodder is scarce, for they will not only eat the greens, but feed on the roots in the ground, and scoop them hollow, even to the very skin. Ten acres, sown with turnips, clover, etc., will feed as many sheep as one hundred acres thereof would before have done."

Potatoes, first introduced in 1565, were at this time beginning to attract attention. "The potato," says Houghton, "is a bacciferous herb, with esculent roots, bearing winged leaves and a bell flower. This, I have been informed, was brought first out of Virginia, by Sir Walter Raleigh; and he stopping at Ireland, some was planted there, where it thrived very well, and to good purpose; for in their succeeding wars, when all the grain above ground was destroyed, this supported them; for the soldiers, unless they had dug up all the ground where they grew, and almost sifted it, could not extirpate them. From hence they were brought to Lancashire, where they are very numerous, and now they begin to spread all the kingdom over. They are a pleasant food, boiled or roasted, and eaten with butter and sugar. There is a sort brought from Spain that are of a longer form, and are more luscious than ours. They are much set by, and sold for sixpence to eightpence a pound."

The exportation of grain was regulated by various laws, during the sixteenth century, and importation was not restricted, even in plenty and cheapness. In 1663 was passed the first statute for levying tolls at turnpikes. Enclosures, by consent and by act of parliament, also began to be made during this century. The agriculture of Scotland, during the fifteenth and sixteenth centuries, continued to languish, especially upon the estates of the barons, where the profession of a soldier was regarded of

greater importance than that of a cultivator of the ground. But the ecclesiastical lands were considerably improved, and the tenants of them were generally much more comfortably circumstanced than those upon the estates of the laymen. The reformation of religion, beneficial as it was in other respects, rather checked than promoted agricultural improvements, because the change of property which then occurred occasioned a similar change of tenantry, and almost took husbandry out of the hands of the monks, the only class of people by whom it was practised upon correct principles. The dissolution of the monasteries and other religious houses was also attended with injurious consequences in the first instance; though latterly the greatest benefit had been derived from tithes and church lands having come into the hands of laymen. It is probable that, had not these circumstances occurred, a tithe system would still have remained in force, and Scottish husbandry would have continued under a burden which sinks and oppresses the cultivators in England and Ireland. But tithes having got into the hands of lay titulars, or impropriators, were in general collected or formed with such severity as to occasion the most grievous complaints, not only from the tenantry but also from the numerous class of proprietors, who had not been so fortunate as to procure a share of the general spoil. This, added to the desire shown by the crown to resume the grants made when its power was comparatively feeble, occasioned the celebrated submission to Charles I., which ended in a settlement that, in modern times, has proved highly beneficial, not only to the interests of the proprietors, but likewise to general improvement. Tithes are a burden, which operate as a tax upon industry, though it was a long time before the beneficial consequences of withdrawing them were fully understood.

Of the state of agriculture in Scotland, during the seventeenth century, very little is known. No professed treatise on the subject appeared till after the revolution. The southeastern counties were the earliest improved; and yet, in 1660, their condition seems to have been very wretched. Ray, who made a tour along the eastern coast in that year, says: "We observed little or no fallow grounds in Scotland; some ley ground we saw, which they manured with sea-wrack. The men seemed to

be very lazy, and may be frequently observed to plow in their cloaks. It is the fashion of them to wear cloaks when they go abroad, but especially on Sundays. They have neither good bread, cheese, nor drink. They cannot make them, nor will they learn. Their butter is very indifferent, and one would wonder how they contrive to make it so bad. They use much pottage made of colewort, which they call kail; sometimes broth of decorticated barley. The ordinary country houses are pitiful cots, built of stone and covered with turfs, having in them but one room, many of them no chimneys, the windows very small holes, and not glazed. The ground in the valleys and plains bears very good grain, but especially bears barley and oats, but rarely wheat and rye."

It is probable that no great change had taken place in Scotland from the end of the fifteenth century, except that tenants gradually became possessed of a little stock of their own, instead of having their farms stocked by the landlord. minority of James V., the reign of Mary Stuart, the infancy of her son, and the civil wars of her grandson, Charles I., were all periods of lasting waste. The very laws which were made during successive reigns, for protecting the tillers of the soil from spoil, are the best proofs of the deplorable state of the husbandman. The accession of James VI. to the crown of England is understood to have been unfavorable to the agricultural interests of Scotland, inasmuch as the nobles and gentry, being by that event led into great expenses, raised the rents of the tenantry considerably, while the very circumstance which occasioned the rise contributed to lessen the means of the tenant for fulfilling his engagements. Scotland, however, was much benefited by the soldiers of Cromwell, who were chiefly English yeomen, not only well acquainted with husbandry, but, like the Romans at a former period, studious also to improve and enlighten the nation which they had subdued.

The soldiers of Cromwell's army were regularly paid, at the rate of eightpence per day, a sum equal to the money value of two shillings of English currency; and, as this army lay in Scotland for many years, there was a great circulation of money through the country. Perhaps the low country districts were, at this time, in a higher state of improvement than at any

former period. In the counties of Lanark, Renfrew, Ayr, and Kirkcudbright, the rentals of various estates were greater in 1660 than they were seventy years afterwards; and the causes which brought about a declension in value are ascertained without difficulty. The large fines exacted from country gentlemen and tenants, in these counties, during the reign of Charles II. and his brother James, were almost sufficient to impoverish both proprietors and cultivators, had they even been as wealthy as they are at the present day. In addition to these fines, the dreadful imprisonments, and other oppressive measures pursued by those in power, equally contrary to sound policy and to justice and humanity, desolated large tracts, drove the oppressed gentry and many of their wealthy tenants into foreign countries, and extinguished the spirit of industry and improvement in the breasts of those who were left behind.

Yet, in the seventeenth century were those laws made which paved the way for the present improved system of agriculture in Scotland. By statute, 1633, landholders were enabled to have their tithes valued, and to buy them either at nine or at six years' purchase, according to the nature of the property. The statute, 1685, conferring on landlords a power to entail their estates, was indeed of a very different tendency as to its effects on agriculture. But the two acts in 1695, for the division of commons, and the separation of intermixed properties, have greatly facilitated the progress of improvement.

The literary history of agriculture, during the seventeenth century, is of no interest, till about the middle of that period. For more than fifty years after the appearance of Googe's work, there are no systematic works on husbandry, though there are several treatises on particular departments of it. From these it is evident that all the different operations of farming were performed with more care and correctness than formerly; that the fallows were better worked; the fields kept free of weeds; and much more attention paid to manures of every kind. Bees seem to have been great favorites with these early writers; and among others there is a treatise by Butler, a gentleman of Oxford, called the "History of Bees," printed in 1609. Markham, Mascall, Gabriel Plattes, Weston, and other authors, belonged to this period. In Sir Richard Weston's discourse on the hus-

bandry of Brabant and Flanders, published by Hartlibb in 1645, we may mark the dawn of vast improvements, which have since been effected in Britain. This gentleman was ambassador from England to the Elector Palatine and King of Bohemia, in 1619, and had the merit of being the first who introduced the great clover, as it was then called, into English agriculture, about 1645, and probably turnips also. In less than ten years after its introduction — that is, about 1655, — the culture of clover, exactly according to the present method, was well known in England, and had made its way even to Ireland.

A great many works on agriculture appeared during the Commonwealth, of which Blythe's "Improver Improved," and Hartlibb's "Legacy," are the most valuable. The first edition of the former was published in 1649, and of the latter in 1650, and both of them were enlarged in subsequent editions. In the first edition of the "Improver Improved," no mention is made of clover, nor of turnips in the second, but in the third, published in 1662, clover is treated of at some length, and turnips are recommended as an excellent cattle crop, the culture of which should be extended from the kitchen garden to the field.

Blythe's book is the first systematic work in which there are some traces of the convertible husbandry so beneficially established since, by interposing clover and turnips between culmiferous crops. He is a great enemy to commons and common fields, and to retaining land in old pastures, unless it be of the best quality. His description of different kinds of plows is interesting, and he justly recommends such as were drawn by two horses, - some even by one horse, - in preference to the clumsy, weighty machines, which required four or more horses or oxen. Nearly all the manures now used were then well known, and he brought lime himself from a distance of twenty miles. He speaks of an instrument which plowed, sowed, and harrowed at the same time; and the setting of grain was then a subject of much discussion. "It was not many years," says Blythe, "since the famous city of London petitioned the parliament of England against two anusancies or offensive commodities, which were likely to come into great use and esteem, and that was Newcastle coals, in regard of their stench, etc.,

and hops, in regard they would spyle the taste of drinck, and endanger the people."

Worlidge's "System of Agriculture" was published in 1668. It treats of improvements in general, of enclosing meadows and pastures, and of watering and draining them; of clovers, vetches, spurry, Wiltshire long-grass, (probably that of the meadows of Salisbury,) hemp, flax, rape, turnips, etc. A Persian wheel was made by his direction, in Wiltshire, in 1665, that carried water in good quantity above twenty feet high, for watering meadows, and another near Godalming in Surrey. Sowing clover and other seeds preserved the cattle in the fatal winter of 1673, in the southern parts of England; whereas, in the western and northern, through defect of hay and pasture, the greater part of their cattle perished. Hops enough were not planted, but were imported from the Netherlands, of a quality not so good as those grown in the country.

Among other writers of this century may be mentioned Bacon, who, in his natural history, has some curious observations on agriculture; Ray, the botanist, whose works are rich in facts; and Evelyn, a great encourager of all manner of improvements, as well as a useful writer on planting. Some of the works of the sixteenth and seventeenth centuries are now very scarce, and most of them little known to the agriculturists of the present day. In almost all of them there is much that is now useless, and not a little that is trifling and foolish; yet the labor of perusal is not altogether fruitless. He who wishes to view the condition of the great body of the people, during this period, as well as the cultivator who still obstinately resists every new practice, may be gratified and instructed in tracing the gradual progress of improvement, both in enjoyment and useful industry.

Agriculture began to be studied, as a science, in the principal countries of Europe, about the middle of the sixteenth century. The works of Crescenzio in Italy, Olivier de Serres in France, Heresbach in Germany, Herrera in Spain, and Fitzherbert in England, all published at about that time, supplied the materials for study, and led to improved practices among the reading agriculturists. The art of farming received a second impulse, about the middle of the seventeenth century, after the general

THE WHITE HOUSE, WASHINGTON, D.C.



Captain John Smith, who visited Virginia in 1609, says: "The greatest labor they take is in planting their corn, for the country is naturally overgrown with wood. To prepare the ground they bruise the bark of trees near the roots, then do they scorch. the roots with fire that they grow no more." This custom of theirs, it probably was, that suggested to our ancestors the process of belting or girdling, which killed the larger trees by cutting through the sap-wood, caused the fall of spray and lesser branches, and thereby admitted the sun and air to the crop cultivated in their intervals—a practice which, as compared with the method of clearing off the entire growth, enables the settler of new lands to increase the area of virgin soil under culture in more than geometrical ratio; which has kept pace with our ever advancing frontier, and which, more than any other, has enabled the white race "to enter in and possess the good land that lay before them,"

The land being cleared—and a field once thus prepared was used for many successive years — the squaws would make preparations for planting, early each spring. First burning the dead wood on the ground, and often bringing dry branches to burn, that they might obtain their fertilizing ashes, they would then cultivate, or rather root up the surface, with the flat shoulderblades of the moose, or with crooked pieces of wood. would then mark the future hills by making small holes (about four feet apart), with rude wooden hoes or clam-shells; put into each one an alewife from some adjoining stream, or a horse-shoe crab from the sea-shore; and on this stimulant drop and cover a half-dozen grains of corn. The land thus planted was guarded against the depredations of the birds, and as the corn grew the earth was laboriously scraped up around the stalks with clamshells, until the hills were two feet high. To use the words of Smith, "They hill it like a hop-field." While the stalk and leaves were yet green, the ears were plucked. The next year's seed was selected from those stalks which produced the most ears, and was triced up in their wigwams. The remainder of the crop was carried in back-baskets to stagings, where it was dried in the husk, on stagings, over smouldering fires; then husked, shelled, packed in large birch-bark boxes, and buried in the ground, below the action of the frost. "O-mo-nee" was

this dried corn, cracked in a stone mortar, and then boiled; when pounded into meal and sifted through a basket, to be made into ash-cakes, it was called "Sup-paun." The warriors, when on a war-path, subsisted on parched corn, which they called "Nokake." Roger Williams, the founder of Rhode Island, speaks of having "travelled with two hundred Indians at once, nearly two hundred miles through the woods, every man carrying a little basket of this at his back, sufficient for one man three or four days." "With their corn," says Smith, "they plant also peas they call assentamus, which are the same they call in Italy fagiolia. Their beans are the same the Turks call garnaness, but these they much esteem for dainties." "In May, also, among their corn they plant pumpeons, and a fruit like unto a musk-melon, but less and worse, which they call macocks." These additional crops not only keep the ground around the roots of the growing corn moist, but they supply materials for the celebrated Indian dish called "mu-siquatush," which has been changed into succotash. This was not then, however, simply composed of corn and beans, for we are told, by Gordkin, that they boiled in it "fish and flesh of all sorts, either new taken or dried - venison, bear's flesh, beaver, moose, otter, or raccoon, cut into small pieces; Jerusalem artichokes, ground-nuts, acorns, pumpkins, and squashes." At the northwest wild rice was gathered and kept for winter use; and Barlowe, who visited North Carolina in 1584, asserted that he saw there "both wheat and oats." It is not improbable that oats were found growing wild there, as they are known to grow wild on other portions of the continent; but doubts may be entertained as to the wheat, although he, an Englishman, should have known that grain. Dr. Hawks thinks, however, that he saw some variety of the triticum, and, without critical examination, pronounced it wheat. The sunflower was also cultivated for its seeds, of which bread was made.

"Mish-i-min," in the Algonquin tongue, signifies apple; although it is the opinion of some learned writers that this fruit was unknown among them before the arrival of the Europeans. Several old printed compilations of early voyages, however, reckon apples among the early native fruits; and, unless crabstocks were found, it does not appear how the large orchards,

mentioned by early writers, could have been made productive so soon. Mr. Walcott, a distinguished Connecticut magistrate, wrote in 1635 (certainly not more than five years after his colony was first planted), "I made five hundred hogsheads of cider out of my own orchard in one year." This would have been almost impossible, had he been obliged to raise his orchard from the seed, or had he planted trees of such a size as could have been transported through the trackless wilderness. The apple may not be indigenous to this country, and yet the Indians may have possessed it, as they did corn, which is not a native of their soil. Certain it is that they had orchards of cherries and of plums, large stores of which were dried for winter use. Tobacco was everywhere cultivated; huge grapevines entwined many a forest tree, and there was an abundance of berries in the woods. Gourds were raised in great numbers, and of all sizes, from the large "cal-a-bash-es" that would hold two or three gallons each, to the tiny receptacles of pigments used in painting for war.

From the sap of the maple they made a coarse-grained sugar, which, when mixed with freshly-pounded "sap-paun," and seasoned with dried whortleberries, was baked into a dainty dish for high festivals. The dried meats of oil-nuts, pounded and boiled in a decoction of sassafras, was their only beverage at such feasts; and from the green wax of the bayberry they made candles, with rush wicks, which gave clear lights, and yielded a pleasant fragrance while burning.

Their wigwams were constructed of saplings, set into the ground in a circle, and then drawn together at the top until they formed a conical frame some nine or ten feet high at the apex. This was covered with thick mats of woven grass, or with large sheets of birch-bark, sewed together with the dried sinews of the deer, and then calked with some resinous gum. A mat served as a door; in the centre was a stone hearth, with an opening above it for the escape of the smoke. The only article of furniture was a large couch, elevated about a foot from the ground, and spread with dressed skins and mats. Birch-bark boxes were used to hold finery and provisions, while the framework of the wigwam was hung with war-clubs, bows, bundles of arrows, fish-spears, hoes, axes, and other rude implements which

the Indians possessed. Unacquainted with the use of iron, their cutting instruments and sharp weapons were pointed with flint-stone, shells, or bones, and their earthen vessels were of the coarsest description. They had no domestic animals except a few small dogs, and no poultry.

Such was the primitive agricultural life of the Indians, who have been gradually blotted out from their pleasant homes, to make way for the "pale faces." On many sunny slopes now smiling with cultivation were their cheerless wigwams, their crabbed orchards, and their ill-tinted corn-patches. Beneath the shade of forests long since felled, and where flourishing communities now dwell, they tracked the wild beast to his lair, or reposed, weary of the chase, to partake of their slaughtered game. Where spires now point heavenward, and the doors of school-houses "swing on their golden hinges," the war-hatchet was unburied, or the "calumet" of peace was whiffed, or the "pow-wows" went through their mystic incantations. And as we meet at cattle-shows and agricultural anniversaries, so the Indians, in their day, celebrated the "green corn dance," or the "feast of the chestnut moon."

"Alas for them — their day is o'er;
Their fires are out from hill and shore.
No more for them the red deer bounds,
The plow is in their hunting grounds,
The pale man's axe rings through their woods,
The pale man's sail skims o'er their floods,
Their pleasant springs are dry."

Spanish Colonial Agriculture. — Spain having discovered America, endeavored to colonize the regions of which so many wonderful and mysterious accounts were circulated by the early navigators. As early as 1520 a royal edict, "in order the better to facilitate the emigration and permanent establishment of colonists," offered to all who wished to go, provisions for a year; to defray the transportation of their supplies and persons; exemption from all duties and imposts; and the perpetual ownership of the houses they might construct, and the lands they might cultivate. But the needy adventurers who flocked to the New World sought gold and glory rather than homes and lands, especially those who landed on the shores of Florida.

The adventurers who landed at Tampa Bay, and followed the stern De Soto to the Mississippi River, were in search of El Dorado, and had no desire to cultivate any of the fertile regions over which they passed during their toilsome march. But the home government desired a more permanent colonization, and, in 1565, we find that Spain granted to Francisco de Eraso "twenty-five leagues square (3,600,000 acres), to be located wherever he pleased, in Florida, with the office of governor, and various other titles and privileges for himself and heirs, exempting them from imposts and duties, on condition that he should provide several caravals for exploration, and colonize his tract, within three years, with 500 settlers, most of whom should be husbandmen, 500 slaves, 100 horses and mares, 200 heifers, 400 swine, and 400 ewes." Several colonies were thus established, but they did not prosper, and little was done to improve the cultivation of the soil until the English took possession in 1763. When the Spaniards regained possession, agriculture was again neglected, fields were allowed to grow up with briers, and sugarhouses to rot down.

The Puritan English Colonists.—The English Puritans, who settled in New England, were men who regarded civil and religious liberty as the primary object of rational beings. To use their own words, "They left their pleasant and beautiful homes in England to plant their poor cottages in the wilderness," that they might worship God as revelation and conscience might teach, and found a free agricultural state equal to Palestine in its palmiest days, when Israel's kings had "herds of cattle, both in the low country and on the plains, granaries for their abundant crops, husbandmen also, and vine-dressers in the mountains." sacred light of Biblical history was not to them like the sternlight of a vessel, only illuminating what had been passed over, but rather the pillar of cloud and the pillar of fire moving before them on the path of life, giving guidance by day and assurance by night. The fate of Babylon, of Nineveh, of Carthage, of Venice, of Genoa, and many commercial governments of Central Europe, warned them

> "That trade's proud empire hastes to swift decay, As ocean sweeps the labored mole away."

In England, agriculture has long been regarded as the most favorable occupation for the development of Christianity, and had, prior to the Reformation, received the special attention of the clergy. The first gardens and orchards were those of the Benedictine monks, and the general council of Lateran decreed that, "all presbyters, clerks, monks, converts, pilgrims, and peasants, when they are engaged in the labors of husbandry, shall, together with the cattle in their plows and the seed which they carry into the field, enjoy perfect security; and that all who molest and interrupt them, if they do not desist when admonished, shall be excommunicated." Nor were the followers of Luther less devoted to agriculture than their Roman predecessors, especially when it was found that the doctrines of the reformed Church made but slow progress in the cities and towns. Dorsetshire and Wiltshire, the English homes of the Puritans ere they made their exodus to a transatlantic Canaan, are even now remarkable for their almost total absence of the usual signs of trade and manufactures; and we are informed by Bancroft, that those who first went to Holland were anxious to emigrate again because they "had been bred to agricultural pursuits," yet were there "compelled to learn mechanical trades." "They sought our shores," said Mr. Webster, "under no high-wrought spirit of commercial adventure, no love of gold, no mixture of purpose, warlike or hostile, to any human being. Accustomed in their native land to no more than a plain country life and the innocent trade of husbandry, they set the example of colonizing New England, and formed the mould for the civil and religious character of its inhabitants."

This desire on the part of the Puritans that "New England" should be an agricultural community was strikingly manifested by the corporation of Massachusetts Bay, whose charter extended from a line three miles south of Charles River to another three miles north of "any and every part" of the Merrimac. Each contributor and each stockholder received two hundred acres of land for every £50 sterling paid in, while stockholders and others who emigrated at their own expense received fifty acres for each member of their family and each "indented servant." This shows that it was a rural home in this land of freedom, and not town lots or semi-annual dividends, that these

liberal adventurers sought, and we find further confirmation of their agricultural proclivities in the inventories of the supplies sent by the corporation to the new colony. "Vyne planters" are mentioned usually after "ministers"; then come hogsheads of wheat, rye, barley, and oats, unthreshed; beans, peas, and potatoes; stones of all kinds of fruits; apple, pear, and quince kernels; hop, licorice, and madder roots; flax and woad seed; currant plants and tame turkeys. Cattle were imported by the colonists, not only from various parts of England, but from Holland, Denmark, and the Spanish Main, forming a noble foundation for that "native stock" which, when carefully reared and well fed, is at least equal to many of the vaunted imported breeds. Horses, sheep, swine, and goats were also imported from Europe in large numbers. Neither was horticulture neglected, for we find that Governor Endicott had a vegetable garden and vineyard in 1629, and two years afterwards he planted the famous pear orchard of which one venerable survivor still bears the patriarchal honors.

The immigrants found that Boston had "sweet and pleasant springs, and good land affording rich corn grounds and fruitful gardens"; but, as their numbers and the numbers of their cattle increased, they formed colonies in various directions, especially in "Wonne-squam-sauke" (now Essex County), for amid its "pleasant waters" were unwooded meadows suitable for pasturage and for grass-cutting, while the uplands were well adapted for tillage. Squatter sovereignty was unknown, for no individuals were permitted to establish themselves within the limits of the colony. Each body swarmed out in community, with a regular allotment of individual farms, based in extent upon the wealth of the settlers, and a great pasture, a peat meadow, a salt marsh, and fishing-grounds held in common. These farms were so laid out that no house was over half a mile from the meeting-house, and it was with astonishing rapidity that agricultural communities sprang up, like the fabled warriors of Cadmus, into full-armed life. Like those mythological knights, they were armed with weapons, not for their own destruction, but for the defence of their liberties and their From these small farming hamlets have grown up most of the towns and cities of our country, and from one of

them afterwards went forth the Alpha of colonization in the Great West. In the log cabin of that agricultural era were first cultivated the true, though austere religion, the domestic virtues, the sturdy habits of frugal industry, the daring spirit, and the devoted love of liberty that have so advanced the prosperity and the glory of this Western Continent. The acorns planted by our fathers have become stately trees, under whose umbrageous foliage thousands of their descendants and others, whom the grateful shade has invited from less favored lands, find protection, shelter, and repose.

The immigrants were supplied with carts, chains, shovels, hoes, and rakes, but it was some years before a plow was introduced; and even so late as 1637 there were but 30 plows in Massachusetts. A yeoman in Salem that year made complaint that "he had not sufficient ground to maintain a plow" on his tract of 300 acres, and he was allowed an addition of 20 acres to his original grant, if he would "set up plowing." The plows first used were the imported English wheel-plows, but somewhat lighter although clumsy kinds were in time made by the village wheelwright and blacksmith. Then came what was long known as the Cary plow, with clumsy wrought-iron share, wooden landside and standard, and wooden mould-board plated over with sheet-iron or tin, and with short, upright handles, requiring a strong man to guide it. The bar-share plow was another form, still remembered by many for its rudely fitted wooden mould-board and coulter, and immense friction, from the rough iron bar which formed the landside.

Massachusetts was the first among the colonies to introduce the manufacture of scythes and other agricultural implements. In 1646 the General Court granted to Joseph Jenckes, of Lynn, a native of Hammersmith, in England, and connected with the first iron works in that colony, the exclusive privilege for fourteen years "to make experience of his abillityes and inventions for making, among other things, of mills for the making of sithes and other edge tooles." His patent "for ye more speedy cutting of grass" was renewed for seven years, in May, 1655. The improvement consisted in making the blade longer and thinner, and in strengthening it at the same time by welding a square bar of iron to the back, as in the modern scythe, thus

materially improving upon the old English scythe then in use, which was short, thick, and heavy, like a bush scythe. A century later, a Scotchman named Hugh Orr came to Massachusetts and erected at Bridgewater the first trip hammer in the colony, with which he manufactured scythes, shovels, axes, hoes, and other implements, for which that place has since enjoyed a deserved reputation.

Thanks to the industrious antiquarians who have gleaned from manuscripts, traditions, and old publications almost every detail of the domestic life of the first settlers, we can constitute ourselves a "committee on farms," and in imagination visit one of the early yeomen. Riding along a "trail" indicated by marked trees, we find his horse and cattle shed standing near an old Indian clearing, encircled by a high palisade, which also includes the spring, that water may be brought without danger from the "bloody savages." The house, which is over a small, deep cellar, is built of logs, notched where they meet at the corners, with a thatched roof, and a large chimney at one end, built of stones cemented with clay. The small windows are covered with oiled paper, with protecting shutters, and the massive door is thick enough to be bullet-proof. Pulling the "latch string" we enter, and find that the floor, and the floor of the loft which forms the ceiling, are made of "rifted" or split pine, roughly smoothed with the adze, while the immense hearth, occupying nearly an entire side of the house, is of large, flat stones. There are no partition walls, but thick serge curtains are so hung that at night they divide off the flock beds, upon which there are piles of rugs, coverlets, and flannel sheets. A high-backed chair-or two, a massive table, a large chest with a carved front, and some Indian birch-bark boxes for wearing apparel, are ranged around the walls, while on a large dressoir we see wooden bowls and trenchers, earthen platters, horn drinking-cups, and a pewter tankard. The corselet, matchlock, and bandoliers are ready for defence, with a halberd, if the senior occupant of the house holds a commission in "ye train band," and from a "lean-to" shed comes the hum of the great wheel, or the clang of the loom, as the busy "helpmates" hasten to finish their "stents." High on the mantel shelf, with a "cresset lamp" on one side and the time-marking hour-glass on

the other, is the well-thumbed Bible, which was not left for show. "Our especial desire is," say the company's instructions, "that you take especial care in settling these families that the chief in the family be grounded in religion, whereby morning and evening family duties may be duly performed, and a watchful eye held over all in each family by one or more in each family appointed thereto, that so disorders may be prevented, and ill weeds nipt before they take too great á head."

The fare of the Puritan farmers was as frugal as it was wholesome: Pease porridge for breakfast; bread, cheese, and beer or cider for luncheon; a "boiled dish," or "black broth," or salt fish, or broiled pork, or baked beans, for dinner; hasty pudding and milk for supper, and a constant succession of fruit or berry pies at every meal, when the housewife had time to make them in addition to her other cooking, her dairy, washing, mending, carding, spinning, weaving, and knitting. Swedish turnips were the staple vegetable. The bread was generally made of corn, barley, or rye meal, and if the diet was rather farinaceous than animal, there was less demand for medicine, and a larger, longer-lived growth of men and women than in these degenerate days of luxury and "progress."

The Cavalier English Colonies. — The tide-water regions of Maryland and Virginia, and the Carolinas, were originally settled by the cavalier aristocracy of England, with their servants and their slaves. Next came the Scotch merchants and mechanics, a moral, industrious, and honest race, who located themselves in the towns. Afterwards there was an immigration of French Huguenots, of high character and attainments; and in later years, the unsuccessful rebellions of the elder and younger Pretenders forced large numbers of Scotch Jacobins to seek new homes on the Western Continent. Many indentured white servants, and some transported convicts, were also sent over from England; but after a generation or so all of these became blended into a homogeneous race of "cavaliers"; aristocratic, because they had an inferior race beneath them.

An idea of the immigration by which Virginia, the mother of the South Atlantic States, was colonized, may be formed from the response of Governor Sir William Berkeley to one of the many interrogatories propounded to him by the British Lords Commissioners of Foreign Affairs; viz.: "What number of English, Scotch, and Irish have for these seven years last past come yearly to plant and inhabit with your government; and also, what blacks or slaves have been brought in within the same?" "Yearly there comes in of servants about fifteen hundred; most are English, few Scotch, and fewer Irish, and not above two or three ships of negroes in seven years!" He says nothing of the free immigrants, though included in the interrogatory, and their number was doubtless too inconsiderable for notice.

The feudal system was transplanted to Virginia, and the royal grants of land gave the proprietors baronial power. One of these grants, or "patents," as they were called, gave the patentee the right "to divide the said tract or territory of land into counties, hundreds, parishes, tithings, townships, hamlets, and boroughs; and to erect and build cities, towns, parish churches, colleges, chapels, free schools, almshouses, and houses of correction, and to endow the same at their free will and pleasure, and did appoint them full and perpetual patrons of all such churches so to be built and endowed; with power also to divide any part or parcel of said tract or territory, or portion of land, into manors, and to call the same after their own or any of their names, or by other name or names whatsoever; and within the same to hold a court in the nature of a court baron, and to hold pleas of all actions, trespasses, covenants, accounts, contracts, detinues, debts, and demands whatsoever, when the debt or thing demanded exceed not the value of forty shillings, sterling money of England; and to receive and take all amercements, fruits, commodities, advantages, perquisites, and emoluments whatsoever, to such respective court barons belonging or in any wise appertaining; and further, to hold within the same manors a court leet and view of frank pledge of all the tenants, residents, and inhabitants of the hundred within such respective manors," etc., etc.

The Maryland and Virginia estates were large, extending far back in the country, from their fronts on the Chesapeake Bay or its tributaries, near which the buildings were located. Tidewater was at every cavalier planter's door, and ships from England brought him his annual supplies of merchandise in exchange for his crop of tobacco, while smaller crafts came with the prod-

ucts of the New England fisheries and of the West India plantations, to barter for his tobacco, cotton, wheat, or corn. The neighboring waters swarmed with many varieties of wild fowl, and abounded with fish, oysters, soft crabs, and turtle, while in the woods was an abundance of game.

Tobacco became the staple product of Virginia soon after the first settlement of the British colonists, and although many and stringent laws were enacted to prevent its cultivation, little attention was paid to any other crops beyond what was needed for home consumption. Attempts were made to encourage other branches of rural industry. But the Virginia landowners preferred the exhausting tobacco plants, with a continuous cropping, shallow plowing, and no supplies of fertilizers, until every particle of nourishment had been drawn from the soil by the plants, or washed out by the rains. The implements used were small plows and heavy hoes; and when the tobacco had been gathered, cured, and packed into hogsheads, these were rolled to the nearest inspection wharf. The roads were bad, and there were but few wagons, so a pole and whiffletrees were attached to each hogshead, by an iron bolt driven in the centre of each head, and it was converted into a large roller. For many years the places for deposit and inspection of tobacco on the river were called "rolling houses."

King James the First, prompted doubtless by his antipathy to "the Virginia weed," and "having understood that the soil naturally yieldeth store of excellent mulberries," gave instructions to the Earl of Southampton to urge the cultivation of silk in the colony, in preference to tobacco, "which brings with it many disorders and inconveniences." In obedience to the command, the earl wrote an express letter on the subject to the governor and council, in which he desired them to compel the colonists to plant mulberry trees, and also vines. Accordingly, "as early as the year 1623, the colonial assembly directed the planting of mulberry trees; and in 1656 another act was passed, in which the culture of silk is described as the most profitable commodity for the country, and a penalty of ten pounds of tobacco is imposed upon every planter who shall fail to plant at least ten mulberry trees for every hundred acres of land in his possession. In the same year a premium of 4000 pounds of tobacco was given to a person, as an inducement to remain in the country and prosecute the trade in silk; and in the next year a premium of 10,000 pounds of tobacco was offered to any one who should export £200 worth of the raw material of silk." About the same time, 5000 pounds of the same article were promised "to any one who should produce 1000 pounds of wound silk in one year."

Cotton, which is the staple of the Southern States settled by Virginians, was first grown by the early colonists in 1621, but it was not an article of general home consumption, or of export, for many years. In 1748 seven bags of cotton-wool, valued at £3 11s. 5d. a bag, were among the exports of Charleston, South Carolina; and after the Revolution the growth and exportation of the sea-island cotton was commenced, seed having been obtained from one of the Leeward Isles. Originally the cotton was separated from the seed with the fingers, and afterwards there were several contrivances used, among them the employment of a long bow fitted with a number of strings, which, being vibrated by the blows of a wooden mallet while in contact with a bunch of cotton, shook the seed and dust from the mass. In 1742, M. Dubreuil, a wealthy planter of New Orleans, invented a cleaning-machine, which was so far successful as to give quite an impulse to the cotton culture in Louisiana, and several other inventions were subsequently used in other sections of the South; but none of them accomplished the desired work. 1794, Eli Whitney, a native of Massachusetts, then residing in Georgia, invented the saw-gin, which completely removes all extraneous matters without injury to the fibre, and enables a man to clean 300 pounds a day instead of one pound, as he had been able to do by hand. This wonderful labor-saving machine has exerted an influence on the industrial interests of the world, and has placed cotton foremost among our national exports.

The production of wine in the Atlantic colonies was believed to be practicable by many of the early settlers, and several of the governors endeavored to encourage the planting of vineyards. In 1758, the "London Society for the Encouragement of Arts, Commerce, and Manufactures" proposed the following premium for the wine itself: "As producing wines in our American colo-

nies will be of great advantage to those colonies, and also to this kingdom, it is proposed to give to that planter, in any of our said colonies, who shall first produce, within seven years from the date hereof, from his own plantation, five tuns of white or red wine, made of grapes, the produce of these colonies only, and such as in the opinion of competent judges, appointed by the society in London, shall be deemed deserving the reward—not less than one tun thereof to be imported at London—one hundred pounds." This premium was continued to be advertised to 1765, the period appointed for bringing in the claims, and then dropped. After the year 1759, a nota bene was added to the advertisement, which expressed "that the method of cultivating vines for wines, and the manner of making wines in different countries, were to be found in 'Miller's Dictionary,' edit. 1758."

The "London Society for the Encouragement of Arts, Commerce, and Manufactures" also offered premiums for hemp, opium, olives, pot and pearl ashes, barilla, logwood, scammony (produced from the *Convolvulus Scammonia*), myrtle wax (produced from the candleberry myrtle), sarsaparilla root, and gum from the persimmon tree. It was thought that this gum might take the place of gum-arabic, and directions were given for gathering, but it was ascertained that the cost would be three shillings sterling a pound, and as gum-arabic could be bought at London for less than one-sixth of that price, the premiums were discontinued after having been offered for three years.

The French Colonists. — While the tide-water region of the Atlantic coast was being colonized, from the Penobscot to the Altamaha, by the British, by the Dutch, and by the Swedes, the French ascended the St. Lawrence and the Great Lakes, crossed to the head-waters of the Mississippi, and descended that river to its mouth. They were explorers, not settlers, — and when they established posts it was for hunting, rather than agriculture. Their leaders, stamped with martial virtues and martial faults, ambitiously endeavored to grasp the entire Western Continent, rather than to cultivate a portion of it, and the historian's account of their adventures is a romance. Plumed helmets gleamed in the shade of the forests which bordered the lakes and rivers of what was then the far West, and priestly vestments were to be seen around the fitful light of the camp-fires. Men of courtly

nurture, heirs to the polish of a far-reaching ancestry, established their "seigniories" here and there, but paid little attention to the cultivation of the soil.

Louisiana was the only French colony in which especial attention was paid to agricultural pursuits. A variety of crops was tried successively, but none proved as remunerative as the sugar-cane, which had been taken from India to Spain, by the Saracens, thence to Madeira, and thence to the West India Islands. In 1751 a French transport, having on board 200 troops for the garrison of the colony of Louisiana, touched at St. Domingo. The Jesuits located in the bay of Port-au-Prince obtained leave to send on board, for their branch establishment at New Orleans, a supply of cane, with a few negroes used to its cultivation and the manufacture of sugar. These canes were landed and planted, but for several years the Jesuits, and those to whom they gave canes, were equally unsuccessful either in their cultivation or in the manufacture of sugar.

A quaint engraving, executed in Germany, represents the process of manufacture. The cane was stripped of its leaves and ground, or rather crushed, by a heavy stone, made to revolve by manual force. The expressed juice, after having been boiled in a cauldron, was ladled into large stone jars, which were exposed to the rays of the sun until the sugar crystallized.

In 1764 the Chevalier De Mazan tried the experiment on his plantation, on the opposite shore of the Mississippi River, with more success. In the following year, Destrehan (then treasurer of the king of France, in the colony), and several other planters, put up works below the city, on the left bank, but with the same result. The planters were disheartened, and in 1769 the manufacture of sugar in Louisiana was entirely abandoned, and the planters turned their attention to the cultivation of indigo, cotton, tobacco, rice, corn, etc. A few small gardeners continued the planting of sugar-cane in the neighborhood of the city, which they retailed in the market for the use of children, or expressed the juice, making syrup, which they sold in bottles. More than twenty-five years elapsed before further efforts were made in its cultivation.

. In 1791 A. Mendez, of New Orleans, purchased the apparatus, land, etc., which now forms a part of the Oluren plantation, at

Terre aux Bœufs, below the city, and, nothing daunted, resolved to carry on the manufacture of sugar. He secured the services of M. Morie, who had gained some experience in the manufacture at St. Domingo. He was more successful; and at a grand dinner with Don Reindin (then Spanish Intendant of Louisiana), given to the public authorities of New Orleans, he exhibited as a curiosity a few small loaves of refined sugar, the first ever produced in Louisiana.

In 1792 Etienne Bord, a planter living a few miles above the city, finding his indigo crops a failure, determined, as a dernier resort, to try the cultivation of sugar. At length, in 1795, his success was partial, and in the following year, under the auspices of Morie, it was rendered complete. He was induced to make further improvements and essay new experiments, until he fully established this, one of the most productive branches in Louisiana.

At that time there were but two varieties of cane in Louisiana—the Malabar or Bengal, and the Otaheite; these have disappeared, or nearly so, and have given place to the purple or redribbon cane of Java or Batavia. The Dutch introduced it, about the middle of the last century, to St. Eustatius, Curaçoa, Guiana, and Surinam, whence it spread all over the West Indies, and over a portion of the South American continent.

In 1814 an American schooner imported a few bundles of this cane into Georgia, and in 1817 about a dozen of these plants were brought to New Orleans by John Joseph Coiron, who planted them in his garden at Terre aux Bœufs. Meeting with the most gratifying success in their cultivation, Mr. Coiron, in 1825, imported a sloop load from Savannah, which he planted on his estate, known as the St. Sophie plantation, about thirty-six miles below the city. Thence originated the ribbon-cane, or Javanese, now most generally grown throughout Louisiana and Texas.

The French were the first to collect agricultural statistics on this continent. The governors of Canada and of Louisiana, from the year 1689 until the termination of the French rule in those colonies, obtained every year the number of acres cultivated, the amount of crops raised, the number of horses, cows, sheep, and swine, and the success which attended the cultivation of new

crops introduced by order of the home government. These interesting agricultural statistics, with the exception of a few missing years, are now in the archives of France.

The Revolutionary Period.—The American colonists not only subdued the wilderness, but conquered its savage occupants, and carried on expensive wars, fighting bravely at Quebec and at Louisburg, at Ticonderoga and at Fort Duquesne. As they advanced in civilization, attempts were made to improve their cultivation of the soil, being stimulated by the premiums offered in England. In 1747 Jared Elliot, a Connecticut clergyman, published a useful work on field husbandry, and the invoices of the London tobacco factors show that there was a demand for the works of Jethro Tull, by the Virginia planters.

When Dr. Franklin went to England, as the agent of Pennsylvania, he was not unmindful of its greatest interest, and he sent home for distribution, in 1770, seeds, mulberry cuttings, silkworms' eggs, etc., thus initiating that system of government supply which has been productive of such important results.

The glorious aid given by the planters and farmers in the Revolutionary struggle of 1776 forms a bright chapter in the annals of American agriculture. Had we had many large cities then, as now, it is doubtful if independence would have been declared, for we should have been so accessible to attack that it would have been madness to have commenced that "resistance to tyrants" which is "obedience to God." As it was, Tories abounded in the cities, each of which was in turn occupied by the redcoats; and all must admit that British power was prostrated on this continent by the hard-handed operatives of iron nerve, a majority of them yeomen, who left their plows in the furrows to aid the farmer of Mount Vernon in unyoking their land from tyranny. In recalling the patriotic devotion of our forefathers, which has since been imitated again and again, when the war-trumpet has been heard in the land, let us bear in mind that when Rome — that victorious imperial mother of nations suffered her noble urban citizens to "crush out" the cultivators by unjust taxation and the free admission of agricultural products, her power began to wane. Long before the race of the patricians had become extinct, the free cultivators had disappeared from the fields, leaving no recruits for the once victorious

cohorts, who now fled before the invading Goths. Truly Goldsmith said:—

"Princes or kings may flourish or may fade,
A breath can make them as a breath has made;
But a bold yeomanry, their country's pride,
When once destroyed, can never be supplied."

General Washington, while "first in war," never "virtually ceased," we are told by Irving, "to be the agriculturist. Throughout all his campaigns he had kept himself informed of the course of rural affairs at Mount Vernon. By means of maps, on which every field was laid down and numbered, he was enabled to give directions for their several cultivation, and receive account of their several crops. No hurry of affairs prevented a correspondence with his overseer or agent, and he exacted weekly reports. Thus his rural were interwoven with his military cares; the agriculturist was mingled with the soldier; and those strong sympathies with the honest cultivators of the soil, and that paternal care of their interests, to be noted throughout his military career, may be ascribed, in a great measure, to the sweetening influence of Mount Vernon."

The deplorable condition of the agriculture of the republic was not unnoticed by the "fathers of the country." Washington commenced making experiments on his farm at Mount Vernon, and John Adams on his farm at Quincy, and Jefferson on his estate at Monticello. Many of the reverend clergy made their parsonage farms and glebe lands models to the counties round, and there was a great demand for agricultural literature. Mr. Jefferson also exercised his mechanical tastes in improving the mould-board of plows, which he afterwards adapted to an improved plow sent him by the Agricultural Society of the Department of the Seine, in France. His son-in-law, Mr. Randolph, whom Mr. Jefferson thought the best farmer in Virginia, invented a side-hill plow, adapted to the hilly regions of that State.

Mr. Jefferson advocated an adherence to scientific principles in the construction of the plow. The first attempt to carry out these suggestions was made by Robert Smith, of Pennsylvania, who took out the first patent for the mould-board alone of a plow. Peace spread her wings over the new republic, and her

soldiers returned to their farms. Their system of agriculture, however, was of a low order and, as such, was deprecated by all who understood its importance. Washington, Adams, and others, both by precept and example, sought to instruct and encourage the farmers to more methodical habits and better cultivation.

It was not, however, until after the War of 1812 that such an idea was seriously considered; but when it did come it took a strong hold, and the improvements of the present are the results of it. There were many causes for this. The rich and abundant lands of the United States, the variety of soil and climate, together with the rapid increase in immigration, and the almost universal desire to be independent in every sense of the word, led the bulk of the people to choose agriculture as a calling. It required but little skill, and was cheap, and the idea of having a home of their own seemed to obtain quite generally among the people. Then, too, each farmer was a pioneer, and as such learned to do without many of those helps and conveniences that are now seen on every hand.

After peace had again been secured, the real work of building a nation began. Statesmen were not wanting who could clearly discern the potent, conservative force that waited upon a permanent and contented element of farmers. The purchase of lands was made comparatively easy, the interests of the farmer cared for, and a general desire was manifested to aid and protect that industry. The growth of agriculture in the United States has been marvellous, and is yet really in its infancy. The possibilities of this branch of the economy of the nation, under kindly laws, would be difficult to conceive. With the invention of farm machinery has come a rapid increase in production. New territory has been opened up, and the railroad has almost eliminated the idea of distance. Taken altogether, American farmers, with a proper and just method of distribution, would stand at the head of the world's producers.

There have been several periods of great prosperity among the farmers, and again like periods of distress. The farmers of America are at the present time suffering from a series of years of business depression, and are calling loudly for a change of conditions. They assert that, during the last quarter of a century, laws have been made that bear unevenly upon their interests, in consequence of which they are the losers. They show, by statistics, that, notwithstanding their production has increased, the remuneration that should follow has been diminished. President L. L. Polk, of the National Farmers' Alliance and Industrial Union, said, in his speech before the Committee on Agriculture:—

"With kindly climatic conditions; with varieties of soil admirably adapted to the successful cultivation of all the staple products demanded by commerce; with transportation facilities equal to the productive power of the country; with the world as his customer; with all the natural facilities and conditions for making his home the happiest, the most prosperous, the proudest heritage which the God of nature ever vouchsafed to man; urgent and extraordinary indeed must be the exigencies which thus impel the farmer to break his long and wonted silence.

"Never in our history have we witnessed such marvellous progress and development as have marked the two past decades. The flourishing growth of cities, towns, and villages; the rapid expansion of our railway system; the unparalleled prosperity of manufacturing enterprise, in all its departments; the easy and ready accumulation of prodigious fortunes; - all conspire to impress the superficial observer with the happy belief that all departments of effort, and all interests, share in common this apparently unparalleled condition of prosperity. We are, therefore, not wholly unprepared for the argument presented by some, even in high official position, that our straitened financial condition, as farmers, is largely, if not entirely, due to the munificent and bounteous provisions of a merciful Providence. Nor, indeed, in the wild rush of this almost bewildering progress, are we surprised to hear, in response to our earnest protestations of suffering and distress, a proposition to send a commission, at heavy expense, throughout the country, to visit money centres and marts of trade, to investigate and report whether or not, after all, this universal cry for relief, by the wealth producers all over the land, does not proceed from their total misconception of the situation.

"In justification, therefore, of this most unusual proceeding on the part of the farmers, in applying to the law-making power for relief, we must appeal to facts and truth — facts as substantiated by statistics, and to the truth of history—and I shall endeavor to present nothing which is not derived from, and supported by, official records. Testimony carrying with it the argument, rather than argument itself, is what is desired.

"In 1850 the farmers of the United States owned 70 per cent of the total wealth of the country. In 1860 they owned about one-half of the wealth of the country. In 1880 they owned about one-third of the wealth of the country. In 1889 they owned a fraction less than one-fourth of the wealth of the country.

"DEPRECIATION IN THE VALUE AND ACREAGE OF FARMS.

In 1860 the value of farms		\$6,645,045,007
In 1850 the value of our farms	٠	3,271,575,421
Total increase of value in 10 years		\$3,373,469,586
Average yearly increase in value		337,346,958

"Now take the 20 years following: -

In 1880 the value of farms.			-			\$10,197,096,776
In 1860 the value of farms .						6,645,045,007
Total increase of value	in	20	y y	ears		\$3,552,051,769
Average yearly increase in va	lue					177,602,588

"That is, the average yearly increase in the value of our farms dropped from 10½ per cent, as in the years 1850 to 1860, to 2½ per cent, as in the years 1860 to 1880. And this fearful depreciation in the value of our farms occurred during a period of unexampled prosperity and development in the commercial, financial, and manufacturing enterprises of the country.

Again, increase of the acreage of	farm	s fro	m	185	0	Acres.
to 1860, was						113,640,000
Average yearly increase						11,364,000
Increase from 1860 to 1880, 20 year	ars .					128,881,835
Average yearly increase						6,444,090

"That is, the increase in the farm acreage, from 1850 to 1860, was 38 per cent, while, from 1860 to 1880, it dropped to 31 per cent. This heavy decrease took place during the same prosperous period to which I have referred, and during which the population of the country had more than doubled.

				,				rer	cent.
From	1850 to	1860,	farm	values	increased				IOI
From	1860 to	1870,	farm	values	increased				43
From	1870 to	1880,	farm	values	increased				9

"Yet notwithstanding this alarming decline in farm values, the aggregate wealth of the country increased, from 1870 to 1880, 45 per cent, and the agricultural population increased over 29 per cent.

"AGRICULTURE AND MANUFACTURING.

"It may not be uninteresting or uninstructive to notice, in this connection, the comparative progress between agriculture and manufacturing.

"From 1850 to 1860, agriculture led manufacturing, in increased value of products, 10 per cent. From 1870 to 1880, manufacturing led agriculture 27 per cent; showing a difference of 37 per cent in favor of the growth of manufacturing.

"The exports of American labor products show equally disparaging and discouraging exhibits:—

					. Agriculture.	Manufactures.
In 1881					\$730,394,943	\$89,219,380
In 1888					500,840,086	130,300,087

"An increase during these seven years, in our exports of manufactures, of 46 per cent, and a decrease in those years, of agricultural products, of 31 per cent.

"VALUES OF STAPLE CROPS.

	In 1866 the wheat, corn, rye, barley, buckwheat, hay, oats,
\$2,007,462,231	potatoes, cotton, and tobacco sold for
	The same crops for the year 1884, eighteen years later, sold
2 042 500 481	for

"Notwithstanding the cultivated acreage had nearly doubled, and farm hands had doubled, and agricultural implements and machinery had vastly improved, yet the crops named for the year 1884 sold for only thirty-six millions, or less than 2 per cent more than they did for the year 1866.

"The average price of our cereal crops, in 1867, was very nearly one dollar per bushel, and in the year 1887 it was less than fifty cents per bushel. The loss on the crop of 1887, as compared with that of 1867, was over thirteen hundred million dollars.

"For ten years from 1867, the average value of yield per acre of oats was \$12.10. For the past six years the average value has been less than eight dollars, and is lower to-day than ever before in our history. For the period named, the average value per acre, in yield of wheat, was \$14.39; for the past six years it has been less than \$9. For the period named, the average value per acre, in yield of corn, was \$14.16; for the past six years it has averaged less than \$9 per acre. The average value per acre, in yield of all our crops, in 1867, was \$19; in 1887, twenty years later, it was about nine dollars.

"To show that this depression in prices, this shrinkage in values, does not proceed from local conditions, and is not confined to any section, or crop, or department of husbandry, let us examine the statistics of the four leading staple crops of the country:—

"WHEAT.

Crop.	'			Bushels.	Price.	Value.
1885				421,086,160	\$1.10	\$463,194,776
1889				490,560,000	.86 to-day.	421,881,600

"As will be seen, the crop of 1889 exceeded the crop of 1885 by 69,473,840 bushels, yet the crop of 1885 would have brought, at point of export, \$41,313,186 more than that of 1889.

"The wheat crop of 1880, although 41,090,595 bushels less than the crop of 1889, would have brought, at point of export, \$280,036,551 more money.

1860 to 1870, average price per bushel				\$1.99
1870 to 1880, average price per bushel				
1880 to 1887, average price per bushel				1.07
Price to-day, 86 cents at point of exp	ort			

"So that the wheat farmer to-day pays, of the products of his labor, two and one-third times as much for a dollar as he did from 1860 to 1870.

"CORN.

Crop.					Bushels.	Value.
1888					1,987,790,000	\$677,561,580
1889					2,112,892,000	597,918,820

"So, while the crop of 1889 exceeded that of 1888 by 125,102,000 bushels, yet it would have brought, at point of export, \$79,642,760 less money.

				Cents.
1860 to 1870, average price per bushel				96
1870 to 1880, average price per bushel				63
1880 to 1887, average price per bushel				46
Price to-day				37

"So that the corn farmer to-day pays, in the products of his labor, over two and one-half times as much for a dollar as he did during the years 1860 to 1870. Indeed, throughout the great corn belt of the Northwest and West, it is claimed that he cannot sell it to-day at a price covering the cost of its production. The State Board of Agriculture of the great corn State of Illinois recently published, officially, that the farmers of that State lost on the corn crop of last year \$9.935,823; that is, it cost that much more to produce it than it is worth on the market.

"The yield of the three great staple crops of corn, wheat, and oats, for 1889, exceeded the yield of 1888 by 242,355,840 bushels, and yet the crop of 1888 was worth \$144,599,178 more to the farmers.

"COTTON.

Crop.				Bales.	Price.	Value.
1871				4,352,317	20 cents.	\$391,708,630
1887				6,513,623	10 cents.	293,093,035

"So that the crop of 1871 was 2,161,306 bales less than the crop of 1887, yet it brought the cotton farmers \$98,613,595 more money. The two crops of 1886 and 1887 aggregated 13,063,838 bales, three times as many bales as the crop of 1871, and yet these two crops brought our farmers only \$196,164,080, or about 50 per cent more than the crop of 1871.

"In 1870 the value of agricultural lands, in the ten cotton States, was \$1,478,000,000. In 1880 they were \$1,019,000,000, a decrease of \$459,000,000, or 31 per cent.

•				Cents.
1860 to 1870, average price per pound				48}
1870 to 1880, average price per pound				
1880 to 1887, average price per pound				11
Price to-day				11

"So that the cotton farmer pays, in the products of his labor, over four times as much for a dollar as he did in the years 1860 to 1870.

"If a farmer had given a mortgage, in 1870, for \$1000, he could have paid it with 1052 bushels of corn; but if he has paid one-half of it, the remaining \$500, without interest, would now require 1351 bushels of corn to pay it. He could have paid the \$1000 with 606 bushels of wheat, in 1870; but if he owed \$500 of the debt to-day, it would require 593 bushels to pay it. He could have paid the \$1000, in 1870, with 10 bales, or 5000 pounds of cotton; but if he owed \$500 of it to-day, it takes 10 bales, or 5000 pounds, to pay it. In other words, the farmer must pay his debts with the products of his labor, and he must work twice as hard, and give twice as much cotton, corn, or wheat to-day, as was required in 1870, to pay the same debt. But we are told, by those high in position, that the law of supply and demand controls prices. That may have been true before the operations of this ancient law of trade were practically supplanted by the more imperious law of greed, as now enforced under the mandates of monopolistic combinations for the pillage of honest labor.

"In 1881 we produced 498,549,867 bushels of wheat, or 9½ bushels per capita, and its price was \$1.15 per bushel. In 1889 we produced 490,560,000, or 7½ per capita, and its price is 79 cents per bushel. We should not forget that the financial history of all countries and of all ages shows that the law of supply and demand, as applied to money, is inexorable and never-failing in its operations. Scarcity of money has never failed to enhance its price; a plentiful supply means cheap money. A contraction of the circulating medium always raises the price of the dollar, and, as a natural result, it always depreciates the price of labor products. Nothing can so surely control or annul the law of supply and demand in labor products, as a reduction of the volume of currency below the legitimate requirements of business and trade.

"But, granting that the law of supply and demand is in full force and effect, there are two ways in which prices change under this law: Either a change in demand, supply remaining the same; or a change in supply, demand remaining the same. But I assert, and statistics will sustain the assertion, that there has been no change in the great staple products, relatively to demand or to population, to justify this great depreciation in prices; unquestionably the demand has not diminished. Where then has been the change? Has the weight of the dollar been increased? Has the area of our acre of land been curtailed, that it should have fallen in value from 33 to 50 per cent? Does not a pound of beef weigh now 16 ounces? Do we not now measure our wheat or corn by the same measure? Does not the cotton farmer give now the same number of ounces to every pound? Has the change been made in the quantity or quality of the commodity, or has it been made in money, the measure of its value? This is the great question that the farmers of the country desire and expect this Congress to explain.

"But I apprehend that the most zealous advocate of the theory that the law of supply and demand controls the prices of products, would not attempt to claim that it is applicable to all farm values. Farm lands, all over the

country, have shared the general depreciation or shrinkage in values, and in this, perhaps, is to be found the clearest and most undeniable proof of the alarming depression which prevails among the agriculturists of the country. Let us look briefly at the condition of the farmers, in some of the representative States of the different sections of the country.

"In Massachusetts, the value of the farm lands, in 1875, was \$116,629,849. In 1885 it was \$110,700,707; a loss, in ten years, of \$5,929,142. In 1865 that State produced 70,000,000 pounds of beef; and in 1885, twenty years later, it produced only 10,000,000 pounds. In 1845 it produced 1,015,000 pounds of wool; in 1865, 609,000 pounds, and in 1885, 255,000 pounds.

"The farm lands of the New England States: -

								Value.
1850.								\$ 372,348,543
1860.								476,303,837
1870.								585,167,473
1880.							١.	580,579,418

"Showing a yearly increase, for twenty years — 1850 to 1870 — of \$10,690,946, and the yearly decrease, from 1870 to 1880, was \$458,850.

"Take Georgia, one of the most progressive and enterprising States of the South. In 1860 the value of agricultural lands, returned for taxation, \$157,000,000. In 1886 it was \$105,000,000, a loss of 33 per cent. In 1866 the farmers of Georgia owned 72 per cent of the wealth of the State; in 1888 they owned only 24 per cent; yet during that time the population increased 60 per cent. In a recent address, made by Hon. L. F. Livingston, of that State, he said, that, during the past ten years, the property in the towns and cities of that State had increased in value \$60,000,000, while in the agricultural districts it had decreased \$50,000,000.

"From this State, great in resources and enterprise, let us turn to its peer in the Northwest:—

"In Illinois.

All mo	rtgages	and	l	totals	0	f	inde	ebt	edn	ess,	p	rino	cipa	l, and interest.
1880-														\$112,367,054
	Lots													79,346,851
	Chatte	ls .							•					12,747,429
	Total					•								\$204,461,334
1887 —	Lands													\$147,320,054
														246,704,827
	Chatte	ls .												22,354,187
	Total													\$416,379,068

[&]quot;An increase of this class of indebtedness, in seven years, of \$211,917,734, or 103 per cent.

[&]quot;On land alone, the increase of indebtedness, in seven years, was \$44,953,000, or 40 per cent.

"According to the report of Hon. J. R. Dodge, the surplus of the corn and wheat crops over home consumption, for the last year, was:—

	-					Bushels. 64,781,250 20,907,700	Value. \$14,899,687 14,635,390
						ıt	

"If every bushel of surplus corn and wheat of last year's crop were applied to the mortgage indebtedness in 1887, on the farm lands of the State, there would still remain \$117,784,977 to be paid out of other crops or earnings. Or, after applying every bushel of the surplus to the mortgage indebtedness of 1887 on lands, lots, and chattels, there would still remain \$386,843,991 unpaid. Or, applying every bushel of the surplus wheat and corn to the interest for one year, at 8 per cent, on the mortgage indebtedness, there would still remain unpaid, of interest, \$3,875,250. Of this mortgage indebtedness, non-residents and building and loan associations hold claims to the amount of \$69,355,639, or over double the amount of the surplus corn and wheat.

- "The increase in mortgage indebtedness on lands, for loans, from 1870 to 1880, was 21 per cent, and from 1880 to 1887 it was 23 per cent.
- "The great State of Pennsylvania is not exempt from the general depression which has been indicated by the cases before cited. In Lancaster County, the largest in agricultural products of all counties in the United States, the farmers are feeling most keenly the pressure. From one of the leading attorneys of Lancaster, I obtain the following statement: 'The assessed valuation of all the real estate of Lancaster County, including city, town, and farm property, is about \$82,000,000. The amount of indebtedness on this property is about \$25,000,000. The depreciation in farm values, in the past ten years, in Lancaster County, is fully 40 per cent, and still decreasing.'
- "Recently one of the assessors for the State of New York reported to the *New York Tribune* that he had visited fourteen counties, in one of its finest agricultural districts, and that, while city property is advancing, farm property is growing less and less valuable.
 - "Why multiply proofs? The depression is widespread and universal.
- "In a somewhat elaborate presentation of 'agricultural depression and its causes,' in his March report, Hon. J. R. Dodge, agricultural statistician, says: 'Diversification is essential to agricultural salvation.' That is, to secure reasonable reward for labor and investment, the farmers should cultivate a greater variety of crops. To arrest the downward tendency in the market values of crops, and to restore the values of lands, a greater effort should be made to meet all the demands for all kinds of food products. Has this system been tried, and has it failed? Let us see. Take the energetic and enterprising State of Michigan, than which no State in the Union, perhaps, has a broader system of diversified farming. Its whole surface is dotted with thriving villages, towns, and cities, and the farmers have easy

access to large outside markets. The State Labor Bureau of Statistics reports that the farms of that State are mortgaged to the amount of \$130,000,000, or 47 per cent of them, and at an average interest of 7 per cent. The wheat crop of that State, for 1889, was 23,709,000 bushels; required for home consumption, 9,246,510 bushels; leaving net amount for sale, 14,462,490 bushels. To pay the interest on farm mortgages for one year, at 7 per cent, would require 455,544 bushels more than the entire net crop.

"The Commissioner says in his report: 'The indications are that mortgage indebtedness is rapidly increasing, and that farmers are not getting out of debt.' From his investigations he deduces the following facts:—

- "'1. That one-half of the farms of Michigan are mortgaged, and are paying a double tax.
- "'2. That by reason of this mortgage indebtedness and double taxation, business of all kinds is seriously affected.
- "3. That men who loan money do not bear their just proportion of public expenses, in return for the protection given them, while the majority escape taxation."
- "In the year 1887 there were 1667 mortgages foreclosed, and of that number only 131 were redeemed. This, briefly stated, is the condition of a people who possess peculiarly favorable facilities for the prosecution of diversified farming. But it may be said that it is a Western State, one of the younger in the great family of States, and is, therefore, not a criterion. We might grant the exception, but it applies as well to the great States of Kansas and Nebraska. I quote from the *Alliance Motor*, published at Broken Bow, Nebraska, and dated April 17, 1890:—
- "'The denial that the State is heavily covered with mortgages, is met with the following table, compiled from the official record of Saline County, one of the wealthiest counties in the State.'

"'Real estate mortgages unsatisfied, on record.

Lands					•	•		•			•			•	•				\$1,816,388 23
Town lot	s		•							•		•	•	•	•	٠			370,963 23
																			\$2,187,351 46
Bonded o	lel	bt,	cit	ies	an	d s	cho	ols											97,739 15
Bank loa	ns	ar	id d	lisc	ou	nts													1,418,954 41
Chattel	mo	ort	gag	es	he	ld	by	pr	ivat	te	par	ties	s (bar	ıks	nc	t i	n-	
cluded),	ur	irel	eas	ed,	fil	ed	sin	ce [Jan	uar	y I	, 1	889					332,584 44
To	ota	al																	\$4,036,629 46
"'Th	e	ass	ess	ors	, v	alu	e of	f pr	оре	erty	ag	ain	st	this	in	del	ote	dne	ss is, viz.:—
Lands																			\$1,234,958 00
Lots .																			425,773 00
																			808,266 oo
T	ota	al																	\$2,468,997 00

"So that, in this single county, the assessed value of the property is \$1,567,649.96 less than the recorded indebtedness of that county.

"Let us come, then, to a State possessing, pre-eminently, advantages superior to any other State in the Union, for the successful and profitable prosecution of that 'diversification' which is 'essential to our agricultural salvation.' I refer to that beautiful garden spot in the broad field of American agriculture, the State of New Jersey. Diversified farming, I presume no one will deny, should be most profitable where it has easy access to ready markets, or to great centres of population. Not only have the farmers of New Jersey advanced to the front rank in all the appliances and most improved systems of agriculture, but the whole State is, or should be, the kitchen garden of a population, in towns and cities, within and immediately on its borders, of not less than four and three-quarter millions of people. The County of Salem has splendid facilities for reaching markets. It is adapted to truck growing. The board of agriculture of that county made an official report to the governor of the State, only a few weeks since, in response to inquiries propounded by him to the various boards, in which it was stated that the lands of that county had decreased in value 40 per cent.

"Go to the States of Vermont and New Hampshire, whose every farm, almost, is within the sound of the bells or whistles of villages, towns, cities, workshops, mills, or factories—the land where the farmer is peculiarly blessed with what are popularly known as 'home markets.' Where are the picturesque beauty and charming loveliness that once crowned those hills, in the glories of 'diversified farming'? The doleful answer comes back from fields abandoned to brier and brush, and from thousands of once happy homes, now given over to the spider and the bat. I hold in my hand a pamphlet of 104 pages, descriptive of some of these abandoned farms in New Hampshire, and issued by the Commissioner of Agriculture and Immigration for that State. On page 9 he tells us: 'There have been reported to us, by the selectmen of the various towns (townships), 1442 vacant farms, with tenantable buildings.' The reasons given for the abandonment of these farms, whose 'large and comfortable buildings, substantial fences, and permanent improvements make them in every way desirable,' is, in some instances, by death of former occupant, but chiefly the occupants have gone into other business. He distinctly states that it is for 'reasons traceable to other sources than inferiority of soil.'

"I hold in my hand a circular from the 'Commissioner of the Agricultural and Manufacturing Interests' of the State of Vermont, 'prepared,' as he says, 'in answer to the many letters of inquiry relative to the unoccupied lands of Vermont,' and it is but a repetition of the same sad, sad story.

"The same appalling story may be told of the farms tributary to the Baltimore market.

"The Philadelphia *Times* of last week asserted that the farm lands in the vicinity of that city had depreciated in value 33 to 50 per cent, within the past decade.

"Within the sweep of vision from the dome of this Capitol, with its 300,000

mouths in this city to feed, hundreds and thousands of acres of as fine farm land as may be found on the Atlantic slope, have depreciated in value from 33 to 50 per cent. What do these startling facts and figures demonstrate? They do not disprove that, under ordinarily favorable conditions, a judicious diversification in farm husbandry is most conducive to comfort, prosperity, and success, but they do conclusively demonstrate that, with our present environments and surroundings, to adopt it as a factor 'essential to our agricultural salvation' would be to follow a fatal delusion.

"But, Mr. Chairman, there are other and still more serious and important phases of this subject to be considered.

"From 1870 to 1880 the number of farms in the United States, under 3 acres, decreased 38 per cent, while those of 100 to 500 acres increased 300 per cent. The number of farms of 3 to 10 acres decreased 21 per cent, while those from 500 to 1000 acres increased 478 per cent. The number of 10 to 20 acres decreased 13 per cent, while those of 1000 or more acres increased 770 per cent. In 1880 we had 145,553 less farms under 50 acres than we had in 1870, and yet our agricultural population had increased, during that decade, 29 per cent.

"To my mind, no more serious aspect of the situation, or of the downward tendency of the times, can be found than is presented in these figures. They stand as a strong witness to the fearful and deplorable truth that, through the rapid congestion of wealth, enriching the few at the expense of the many, our population is being rapidly resolved into two classes — the extremely rich and the extremely poor — classes which, in all ages, have proven themselves to be the weakest defenders of civil liberty. To the student of history, and to those who have given thought to the theory of our government and the genius of our free institutions, this rapid absorption of the small farms, and this rapid expansion of large landed estates, portends the sure approach of the crucial era of our republican form of government. And when that day shall come, upon whom will devolve the responsibility and task of preserving and perpetuating the blessings of free government and of civil liberty, but the great conservative, patriotic middle class of our population? Will that people be prepared to meet it? In seeking a true answer, we cannot turn a deaf ear to the ominous declaration proclaimed in the following figures, which point unerringly the road which is strewn with the ruins of wrecked republics: -

"WEALTH OF THE UNITED STATES.

1850.

Total value of taxed and untaxed property	٠	\$13,500,000,000
Assessed value of property		5,275,000,000
Of which the farmers were assessed		4,500,000,000

1860.

Total value of taxed and untaxed property	\$31,000,000,000
Assessed value of property	12,000,000,000
Of which the farmers were assessed	10.500.000.000

1870.

Total value of taxed and untaxed property	\$30,000,000,000
Assessed value of property	
Of which the farmers were assessed	12,500,000,000

188o.

Total value of taxed and untaxed property	\$43,500,000,000
Assessed value of property	17,000,000,000
Of which the farmers were assessed	14,000,000,000

"In 1850 the farmers of the United States owned 70 per cent of the total wealth of the country, and paid 85 per cent of its taxes. In 1860 they owned half the wealth of the country, and they paid 87 per cent of its taxes. In 1880 they owned only one-fourth of the wealth of the country. The increase in their farm values, during the twenty years from 1860 to 1880, had dropped from 101 per cent to only 9 per cent, and yet, in this desperately reduced and weakened condition, they paid 80 per cent of the taxes of the country.

"Mr. Chairman, is the agricultural interest of the country depressed? And is it due to a want of energy, of industry, and of economy, on the part of the farmer? All over the country, he has been told for years, by a certain school of political economists, that indolence, inattention to business, and extravagance were the prime causes of his increasing poverty. But when he comes to the capitol of the nation, venerable Senators and prominent government officials inform him that his financial ruin has been wrought through his industry and the merciful providence of nature's God; that he is absolutely bowed to the earth under a crushing load of overproduction. Are either of his advisers correct? In answer to the first, I assert, without hesitation, that no class of citizens in our country work so hard, live so hard, and receive so little reward for their labor, as the average American farmer. In answer to the second, I ask: Overproduction in what? Is it in breadstuffs? We produced 93 bushels of wheat, per capita, in 1888, which was worth \$1.15 cents per bushel. We produced, in 1889, only 71 bushels per capita, and it was worth only 79 cents per bushel. Our exports of food products, under proper and just conditions, should be the true measure of our production. But is it so? The normal ration of flour, as established by our government, and which has been kindly furnished me by the Secretary of War, is 18 pounds per day, or 410 pounds per year. Assuming that our population numbers 65,000,000, to give each one a normal ration would require 26,650,000,000 pounds, whereas we produced last year (deducting 56,000,000 bushels for seed), only 17,282,-400,000 pounds, a deficit of 7,267,600,000 pounds. But if our population had consumed 23 ounces per day, per capita, more than they did consume, nothing would have remained for export. Will any sane man doubt, with our millions of people in our crowded cities, in our towns, in our mines, and all over the land, in their hovels of poverty, who are existing in a state of semistarvation, that we could have consumed this additional pittance? And if the ruinous decline in prices be due to overproduction, why should it not be confined to those commodities for which a surplus is claimed? Why should all

departments of labor share this universal depression in prices? No, Mr. Chairman, it is not overproduction, but under-consumption. There can be no overproduction in a land where the cry for bread is heard.

"But we are told that we should be content and happy; that 'a dollar will buy more to-day than ever before.' Mr. Chairman, the American farmer stands a faithful and sorrowing witness of the truth of that declaration. No man living knows better than he the purchasing power of the dollar. He knows that its power has been so augmented that it now demands double the amount of his labor, and the surrender of his profits, to meet its unjust and cruel exactions. Indeed, so arbitrary and domineering has its power become, that it has forced upon the public mind the grave question, whether the citizen or the dollar is to be the sovereign in this country. But with all its power, will it pay for the farmer more interest? Will it pay more on his mortgage? Will it pay more debt? Will it pay more taxes? Will it pay more physicians' and lawyers' fees?

"From all sections of this magnificent country comes the universal wail of hard times and distress. The farmer sows in faith, he toils in hope, but reaps in disappointment and despair. He sees a 4 per cent United States bond, due in 1907, selling at a premium of 28 per cent; a bond that would be valueless, but for the sturdy blows of his strong arm; and yet he knows that there are few farms in all this country that could be mortgaged for one-third their value, at 7 per cent, for the same length of time, which mortgage would sell for its face value. He sees centralized capital allied to irresponsible corporate power, overriding individual rights, controlling conventions, corrupting the ballot-box, subsidizing the press, invading our temples of justice, intimidating official authority, fostering official corruption, robbing the many to enrich the few, destroying legitimate competition, dictating legislation, defying the Constitution, and annulling the law of supply and demand. In vain do the people plead for relief. In vain have they suffered and endured patiently, submissively, uncomplainingly. Over one thousand years ago the old Shiek Ilderim, of Medina, said to certain Romans: 'Do you dream that, because the prophet of Allah dwells now beyond the bridge of Al Sirat, therefore, he is deaf, and dumb, and blind? I tell you, by the splendor of God, that a tempest is brooding on his brow; there is lightning gathering in his soul for you.' Do men dream that, because the sovereign, oppressed people have thus suffered, thus endured, therefore they have become deaf, and dumb, and blind? But we are told that these forms of oppression are not prohibited by law. There are no people on earth who have greater reverence for law than the farmers of these United States, but they know that no tyranny is so degrading as legalized tyranny; that no injustice is so oppressive as that which stands entrenched behind the forms of law; and, worthy descendants as they are of a grand old revolutionary ancestry, they may not forget that the tyrannical mandates of George the Third were accompanied by the boastful declaration that he, too, was the rightful occupant of the British throne, under the forms of law.

"Mr. Chairman, retrogression in American agriculture means national

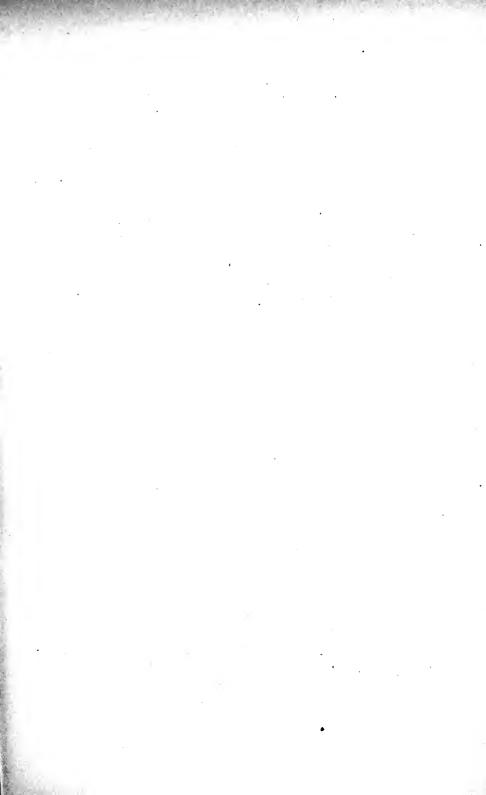
decline, national decay, and ultimate and inevitable ruin. The glory of our civilization cannot survive the neglect of our agriculture; the power and grandeur of this great country cannot survive the degradation of the American farmer.

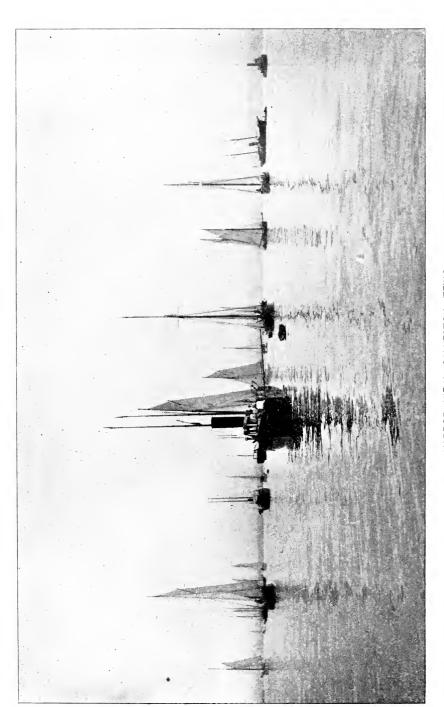
"Struggle, toil, and suffer as he may, each recurring year has brought to him smaller reward for his labor, until to-day, surrounded by the most wonderful progress and development the world has ever witnessed, he is confronted and appalled with impending bankruptcy and ruin. Crops may fail, disaster may come and sweep away his earnings as by a breath, prices may go below the cost of production, but the inevitable tax-collector never fails to call upon him with increased demands. Is it any wonder that these struggling and oppressed millions are organizing for relief and protection?

"THE CAUSES.

"We protest, and with all reverence, that it is not God's fault. We protest that it is not the farmers' fault. We believe, and so charge, solemnly and deliberately, that it is the fault of the financial system of the government—a system that has placed on agriculture an undue, unjust, and intolerable proportion of the burdens of taxation, while it makes that great interest the helpless victim of the rapacious greed and tyrannical power of gold:—a system through which, despite the admonitions of history and the experience of all countries, in all ages; despite the teachings and warnings of the ablest men in the science of political economy, in this and in all countries; our currency has been contracted to a volume totally inadequate to the necessities of the people and the demands of trade, and with the natural and inevitable result—high-priced money and low-priced products."

Such is the condition of American agriculture at the present time, as given by the president of the greatest farmers' organization the world ever saw. And here we will leave it, hopingthat those who shall come after may be able to give a more gratifying statement of the condition of agriculture in America.





HARBOR VIEW, GALVESTON, TEXAS.

CHAPTER V.

THE FARM AND FARM BUILDINGS.

"There is more difference between farmers than there is between farms," wrote a veteran agriculturist to his son, many years ago. That this statement is true the most superficial observer must admit. A poor farmer always has a poor farm, while a good farmer, in nearly all cases, will have a good farm in the end. The one begins in ignorance, and, as a rule, ends in disaster, while the other begins with a desire to learn, and forces success by persistency and increased intelligence. The successful farmer is the inquiring, intelligent, careful farmer. No matter if he knows but little outside his farm, he is always sure to know at least what pertains to its successful conduct. Usually such a person works hard, observes closely, and remembers his own and others' experiences. He is quick to perceive an advantage, and is always content with his calling.

Another class, greater in number, and usually found enjoying the blessings of life, are those who read, think, and make careful deductions. Their homes are filled with books and papers, and their evenings are spent in profitable and pleasant communion with the best thoughts of others, on general topics of information. This is the class of American citizens that make up that conservative element of society, alike valuable in times of peace and plenty, as in periods of trouble and distress. It may seem humiliating to other classes who assume superiority, but it is none the less true that these farmers are the final adjudicators of all legislation. Disciplined in the school of cause and effect, always seeking for legitimate results, their minds are peculiarly fitted to analyze and bring to light the ultimate bearing and final effect of measures, either material or economic. It is true, their conclusions are not rapidly matured, and in not a few instances have been deferred much longer than seemed necessary; but when once formed, they were a fiat against which nothing could prevail.

It is in the hands of this class of farmers, and its counterpart found in other branches of productive industry, that the future of this nation lies. And it is through them that the glory and perpetuity of this government must be secured. The grandeur of this republic is not reflected by a few mighty intellects, a certain number of immense cities, or here and there examples of vast accumulations of wealth. These serve only as objects of emulation or envy, and, in either case, may lead to vicious rivalry. The greatness of our country, and the results of its free institutions, are disclosed in the thousands of happy farm homes, and their millions of intelligent, conservative, and industrious inhabitants.

The careless observer is often led to look with wonder upon the rapid advancement in the arts and sciences, during the century, and fall into the error of consenting that it is the greatest of all. The railroad, the steamship, the telegraph and telephone, are considered the acme of intellectual research and, without farther inquiry, placed at the head of all modern improvements. Such conclusions are erroneous, and will not bear the test of candid reflection. During the last three-quarters of a century, there has been going on, among the agricultural portion of our people, a silent but constant evolution that is truly wonderful in its extent. Dotted here and there, over hill and valley, across the boundless prairie, and among the mountains and sterile portions of our country, can be seen the dwellings of the farmers. These men are industriously plying their vocation; nature is being successfully combated at every point, and forced to yield fruit and products for the feeding and clothing of the nation. The very elements even are made to serve them in beneficial capacities, not in their regular sphere. This pursuit is so intelligently, manfully, and successfully carried on that the idea must honestly obtain among the thoughtful, and find expression through honest convictions, that the American farmer is the finished product of the nineteenth century.

This conclusion may seem unwarranted, but the proof is abundant and at hand. For example, it has taken greater skill, required more persistent effort, and a much larger outlay of time and money, to evolve from the kinds of farm stock known and used at the beginning of the present century, the magnifi-

cent specimens now seen on every hand, than it did to perfect the present system of railways. It has taken brains and business aptitude to accomplish this, as well as to build up the greatest of modern improvements. Then why should the calling of the farmer be considered as conducive to a lower order of intelligence, or as being barren of intellectual results? Such conclusions are wanting, both in common sense and a proper conception of human effort, and disclose a prejudice equalled only by its folly, and the ultimate harm that it may produce. "But," says one, "the life of a farmer is isolated, and he is of necessity prevented from sharing in the benefits of society." While this is true to some extent, he has the more time for study and reflection, which are the natural adjuncts to a higher and better education. That modernized society is not a promoter of these conditions, no one should dispute.

Considered from every point, a proper system of agriculture, with just and reasonable remuneration, will afford better opportunities for educational advancement to the man of business than any other calling. Men in such conditions, if they so elect, can enjoy a continued intellectual growth that is denied any other class that labors in production or exchange. The danger which threatens to prevent such results lies in the farmer's becoming negligent, of his getting into the habit of delaying investigation for a more convenient time, thereby losing interest and falling into the rear ranks of his fellows. Again, constant toil, which brings no adequate reward, or which brings a burden of debt that labor will not remove, resulting from unkindly laws or a want of business judgment, does not conspire to add pleasures to farm life, but does drive men to the cities.

A careful, intelligent farmer, under proper and equitable economic conditions, is the most independent, self-reliant, and conservative man of all classes or professions. The curse of agriculture, at the present time, is the assumed superiority of other occupations. It is this that is drawing the sons and daughters of the farmers to the cities and villages. It is a desire to exchange the coarse boot for the patent leather shoe, the coarse woollen for the smooth broadcloth, and the discolored, horny hands of the farm for the soft, white ones of the city. It is this fetish, this unreasonable desire, that drains the country

and burdens the city. Such people forget that less than three out of each hundred business men succeed. They little dream of the ceaseless, brain-racking, nerve-destroying labor that awaits the one who plunges into the whirlpool of modern business. The impecunious, briefless lawyer; the half-starved, patientless doctor; the churchless preacher; and the tramping mechanic, seem to make no impression upon the calculations or intentions of the man or boy who has become dissatisfied with farm life—some succeed, but it is the exception and not the rule.

It is unnecessary and quite impossible to give anything but general advice upon the subject of farm duties. It might be well to say that the judgment of the farmer should always be supported by an intelligent consideration of all the surrounding circumstances and conditions. With this rule for a guide, a failure must be a matter of accident. The farm itself should be purchased with judgment, its numerous adjuncts and its condition considered with care, and its labor applied and directed with intelligence and discretion. While the profits of agriculture, under favorable conditions, are quite sure, they are never large enough to warrant the taking of many risks; hence conservatism is usually wise and generally brings better results. To this end, and for this purpose, the farmer should seek for the best information, which is only found in the recorded experiences of others.

Apart from any question of economy or interest, I would strongly urge every man who finds it possible for him to do so, and who means to end his days on a farm, to buy his land. Let the farm be smaller, and even less convenient than he could hire; let him go in debt, if necessary; but I deem him to be a happier man who owns a small place, even with a mortgage for his shadow, than he who, with better facilities for his daily occupations, and better conveniences for his daily life, has hanging before his eyes the fact that some day, when he is older and less able to commence farming again, he must resign his improvements to his landlord, turn his keys on his home, and pitch his tent in strange fields. The question of economy, however, cannot be set aside. There are many farmers who aim to see how much money can be obtained from the land to invest in bonds and mortgages; but every man who means to take a broader

view of farming, and recognizes the fact that the most substantial part of the returns of his labor and of his outlay consists in better buildings, better soil, and better stock, will see a sufficient reason for wishing to become the owner of the fee of his farm.

In the other transactions of life, where the principle holds good that anything is worth what it will bring in the market, business men invest money with a view to the chances of its return, at any time when they shall choose to sell. In farming, the principle does not hold good; at least, not with regard to the farm itself. It is better that the question of selling be not at all considered, for a valuable farm is always a very difficult thing to sell, and rarely brings as much as it is worth. There are persons who speculate in farms, who buy worn out land at a low price, and, after improving it, sell it at a high price. They often make money by the operation, and they generally do good. They are a useful class of enterprising men, but they are not the kind of men I have in my mind now, - men who intend to follow farming as a permanent occupation, who have made up their minds that it is the thing to do, and who regard it not so much as an enterprise as a living. To such I say, buy your farm judiciously and, of course, as cheaply as you can. Make up your mind whether it will suit you, before you buy, and, having bought it, don't entertain the idea of selling it, nor consider the money you invest in improvements in the light of the sellingvalue they will add to the farm, so much as with reference to the annual return they will bring in convenience, economy, or fertility. In short, consider your farm as a part of yourself, and let it "grow with your growth, and strengthen with your strength." You will find your yearly advantage in so doing.

The first thing to be decided is, whether to remain in well settled parts of the country, or to emigrate to virgin land. In the latter case, the question should be; How far will large crops and lighter work compensate for want of good schools, good society, and good home markets? In the former case, the question should be; How far will the social, educational, and commercial advantages make up for the poorer quality of the soil? The far West, with its newer and more fertile lands, is very tempting to one class of men, and the older settled parts of the

country, with their older civilization and their more dense population, have equal charms for another class. There is much to be said in favor of both; but, as the broader culture and more careless feeding, which are practised on the larger farms of new countries, require less exact knowledge and less close economy than is indispensable on high-priced lands, the object of this work will be best attained if attention is confined to the requirements of the more thorough system of agriculture that small farms make necessary. These are based on universal principles, and the extent to which they may be, or must be, modified, as land grows cheaper, farms larger, labor dearer, and produce less valuable, must be decided by every man for himself.

While the settlement of wild lands is often a good thing for the settler, and always a good thing for the country, it is often undertaken with the mistaken idea that it offers the only chance for a man of small capital. Choose a small farm, small in proportion to your capital. No man is wise who, in the East, goes in debt for more than 50 acres. With plenty of capital, a farmer of good executive ability can hardly have too much land. Any one who has to work himself out of debt, mainly by the labor of his own hands, will find 50 acres better than more. chances will be better with 10 acres than with 100. one man's work is concerned, especially with small means for the purchase of stock, implements, and manure, the more it is concentrated, the better it will tell in the end; and 50 acres, brought to the highest state of cultivation of which the land is susceptible, will produce more, at much less cost, than will 100 acres only half so well cultivated.

Buy a farm that is very much run down and out of repair, rather than a good farm with good improvements which are not exactly what you will require, unless you can get the improvements for much less than it would cost you to replace them. Better pay \$50 an acre for a place that \$50 will make exactly right, than \$100 for a place that will never be exactly right. Remember that to clear up swamps, build stone walls, and dig out rocks and stumps costs much labor and delays legitimate farm operations. Farmers are not apt to reckon these things at their full cost, because they do not usually pay out money to

have them done; forgetting that their own labor, thus spent, might be more advantageously applied to better land. The tile drainage of wet clays may be undertaken with more confidence, because such soils when thoroughly drained are usually the most profitable of all for cultivation; still, in purchasing land of this sort, we should calculate to pay out from \$30 to \$60 an acre for draining tiles and labor, - an expenditure which not unfrequently comes back in two or three years, from the increased production, while the improvement is permanent, and often increases yearly for a long time, yet does not consume capital. Be sure that the place is adapted to the sort of farming you mean to follow. Do not hope to raise the best fruit on moist, cold land, exposed to the highest winds, nor to raise the best grass on a ground that is too high and dry. If your soil will require heavy manuring, and your system of farming will not produce such manure, you should be near enough to a town to haul out stable manure, or other fertilizers, without too great cost.

Bear in mind that the farm is to be your home. You are a man, and your work is out of doors. If you have comfortable lodgings and sufficient shelter, you may get on without being made unhappy by a dismal house. But your wife and children have equal claims to consideration, and you make a grave mistake if you compel them to live in an uncomfortable or cheerless house, with no pleasant surroundings and no hope of having them. Unhappily, a very large majority of farmers do make this mistake, and they are rewarded for it by the promptness with which their children run from the old homestead as soon as their age and circumstances will allow it; not always, it is true, to better their condition, but always in the hope of a more agreeable life. It will be better for agriculture in America, and therefore better for America and for the world, when farmers' children can find no pleasanter home than the place where they were born, and when they realize the fact (for it is a fact), that the life of a farmer may be as comfortable and as elegant as that of a merchant or manufacturer. Buy a good farm, or one that you can afford to make good, in a good situation, with schools, churches, and society for your family, and you will have a good prospect of a happy life.

Farmers who have gone before you - for thousands of years - have learned a good deal, and what they have learned has been written and printed. Other farmers are trying experiments, as valuable for you as for them. Men in other walks of life have applied their knowledge to finding out how plants grow, and what influence is exerted upon them by soils and manures. Their discoveries have been published, and many of them have been approved by practice on farms. Altogether, this constitutes more knowledge about the operations of the farm than you could gain by experience if you lived ten lives, and spent every day of all of them in the most energetic work on your farm; more than you could think out for yourself, if you were to keep up a steady thinking until doomsday; and it is, very much of it, knowledge which you, as a farmer, need to have, just as much as a doctor needs to know what others have learned of medicine. The best use you can make of a portion of your money is to spend it for agricultural books and papers; and the best use you can make of your leisure time is to spend a fair share of it in reading them. Let your neighbors call you a book farmer, if they will, and let them decry theories; you will work none the less faithfully for anything learned out of agricultural books, and, in the end, you will find that a ton of hay will cost no more because you know something of the principles of haymaking, and of the laws which operate in the growth of grass. The condition of your farm ten years hence will be a sufficient answer to those who have ridiculed the habit of reading about farming. Still, you should read with great caution and with judgment. There is a great deal in agricultural books, and still more in agricultural papers, which is crude and fanciful, and which cannot be successfully applied in practice. Read faithfully, making use of what is read with great care, and avoid trying, at least on a large scale, anything which is not actually proven to be suited to your case.

The first out-of-doors operation should be to make a map of cleared land, with division fences and the location of the buildings. This map need not be very accurate. What is necessary is to have something that will serve as a reminder, when studying over future operations in the house, in bad weather. It will cost very little to have a surveyor make a diagram of your boun-

-dary lines, from description in the deed; and you can pace off the starting points of division-fences, so as to make a map good enough for your own use. When the winter has really set in. and you have long evenings and stormy days for house-work, study well this map, and develop a plan for future operations: what to do about fieldings; what fences to remove, so as to enlarge fields; what to rebuild; what land, if any, to drain; what crops to plant; what stock to keep; how to improve the pastures; which meadows to break up; which to top-dress and bring into better mowing condition. These, and a hundred other questions, will present themselves, and they must all be decided with the most careful judgment. Though you do your best, many mistakes will occur; and when, in the spring, you come to review in the field the winter's work in the house, you will see many reasons for changing plans. But, for all that, these plans will be profitable in many ways, and you will be in a better position to decide on the best course, after having made them

FENCES.

It will be a happy day for American farmers when they can escape the necessity for building expensive fences, and can bring into their fields, and into clean cultivation, the weedy headlands which are now worse than wasted. But that day will not come in many long years, and, for the present, we must content ourselves with making them with as little expense, and as little of a nuisance as possible.

In the ordinary management of a farm, fences must be had around all fields, and in whole or in part for pasture. Lawful fences must also be built around the entire farm and along the roads. The smallest amount of fencing that will accomplish this should be carefully considered. In the usual methods of farming, pasture-lands should be divided into smaller lots than the lands to be used for raising crops. In fact, lands used for cultivation need not be burdened with inside fences. Fences are always in the way of the plow and other machinery, and should be eliminated wherever possible. It is impossible to establish any universal rule for all farms, or for all farmers; but it may be stated, as a general rule, that fences are an expensive

nuisance, and should be built only when necessary. The kind of fence should depend entirely upon the cost of material and labor, and should be the subject of careful consideration.

FARM BUILDINGS.

Although the dwelling is a very important element of farm economy, the tastes of individuals, and their ability to spend money for ornament and for convenience, vary so greatly that even a tolerably full discussion of the architecture of farm dwelling-houses would require very much more space than could here be given to it. In the vicinity of towns, there are always architects and builders whose services can be commanded when necessary. In the more remote frontier districts, the simpler style of dwelling, which is all that the opportunities of the situation allow, is usually built without the aid of skilled labor, and for temporary purposes only.

Barns, sheds, poultry-houses, etc., belong more properly to the range of subjects under consideration. The first principle to be observed is, so far as possible, to bring everything within the same four walls, and under the same roof, and to adjust the size of the structure, not so much to the present requirements as to the future needs of the farm. In a very large majority of cases it is not practicable to follow this rule. It would require a larger investment at the outset than most farmers would be able to make, especially in view of the many other expenses, which must be defrayed from their usually limited capital; yet, in all cases when such a complete barn as is above referred to cannot be built at once, the possibility of building it at a future day, and the importance of approaching it as nearly as possible at the outset, should be kept constantly in view. A given amount of space can be more cheaply enclosed in one large building than in several small ones; while the concentration of stock and food under one roof, the greater ease with which the barn-work may be done in a conveniently arranged large barn, and the much more complete supervision which a farmer is enabled to have over the indoor work of his assistants, are strong arguments in favor of the plan.

Formerly, when hay-wagons had to be unloaded entirely by

hand, the height of the hay-bays of a barn had to be regulated by the height to which it was practicable to pitch hay; but the rapidly extending use of the hay-fork or elevator has done away with this restriction. Hay can now be easily and rapidly raised to any height, and not only may we gain the extra space which the greater height of the bay gives, but a considerably greater capacity in proportion to the height, which comes from the closer packing at the bottom of a high bay. That it is much more convenient, easier, and cheaper to feed stock in the building in which all of the hay and other fodder is stored, every farmer knows without being told. How much easier it is, is only known to those who have spent their lives in foddering cattle in sheds and yards, from distant hay-barns, from which every forkful of hay must be carried in bundles or on a cart. Furthermore, the more the hay has to be carried about the more it is wasted, and the more liable it is to be injured by bad weather, while the convenience of keeping manure is in exact proportion to the concentration of the stock, under the most favorable circumstances.

Mr. Thomas, in the "Register of Rural Affairs," gives the following very useful hints to those who are about building barns: "Estimating the capacity of barns, very few farmers are aware of the precise amount of shelter needed for their crops, but lay their plans of out-buildings from vague conjecture and guessing. As a consequence, much of their products has to be stacked outside, after their buildings have been completed; and if additions are made, they must of necessity be put up at the expense of convenient arrangement. A brief example will show how the capacity of the barn may be accurately adapted to the size of the farm. Suppose that the farm contains 100 acres, of which 90 are good, arable land, and that one-third each is devoted to meadow, pasture, and grain. Ten acres of the latter may be corn, stored in a separate building. The meadow should afford 2 tons per acre and yield 60 tons. The sown grain, 20 acres, may yield a corresponding bulk of straw, or 40 tons. The barn should, therefore, besides other matters, have a capacity for 100 tons, or over 1 ton per acre, as an average. Allowing 500 cubic feet for each ton (perhaps 600 would be nearer), it would require a bay, or mow, 40 feet deep and 19 feet wide,

for a ton and a half to each foot of depth. If 20 feet high, it would hold about 30 tons. If the barn were 40 feet wide, with 18 feet posts, and 8 feet of basement, about 45 tons could be stowed away in a bay reaching from basement to peak. Two such bays, or equivalent space, would be required for the products of 90 well cultivated acres. Such a building is much larger than is usually allowed; and yet, without it there must be a large waste, as every farmer is aware, who stacks his hay out, or a large expenditure of labor in pitching and repitching sheaves of grain in threshing.

"In addition to this, there should be ample room for the shelter of domestic animals. In estimating the space required, including feeding, alleys, etc., a horse should have 75 square feet; a cow, 45 feet; and sheep, about 10 square feet each. The basement of a barn, therefore, 40 by 75 feet in the clear, will stable 30 cattle and 150 sheep, and a row of stalls across one end will afford room for eight horses. The 30 acres each of pasture and meadow, and the 10 acres of corn fodder already spoken of, with a portion of grain and roots, would probably keep about this number of animals, and consequently a barn with a basement of less size than 40 by 75, would be insufficient for the complete accommodation of such a farm in its highest state of cultivation."

Form of Barn Buildings.— It was formerly a practice, highly commended by writers, and adopted by farmers, to erect a series of small buildings in form of a hollow square, affording an open space within this range, sheltered from severe winds. But later experience, corroborated by reason, indicates the superiority of a single large building. There is more economy in the materials for walls, more in the construction of roofs,— a most expensive portion of farm structures,—and a saving in the amount of labor in feeding, threshing, and transferring straw and grain, when all are placed more compactly together. The best barns are those with three stories, and nearly three times as much accommodation is obtained thus under a single roof, as with the old mode of erecting only low and small buildings.

An important object is to avoid needless labor in the transfer of the many tons of farm produce which occupy a barn. This object is better secured by a three-story barn than by any other, where a side hill will admit of its erection. The hay and grain are drawn directly to the upper floor, and nearly all is pitched downward. If properly arranged, the grain is all threshed on this floor, and both grain and straw go downward; the straw to a stack or bay, and the grain through an opening into the granary below. Hay is thrown down through shoots made for this purpose, to the animals, and oats are drawn off through a tube to the horse's manger. The cleanings of the horse stables are cast through a trap-door into the manure heap in the basement. These are the principal objects gained by such an arrangement, and, as the labor of attendance must be repeated perpetually, it is very plain how great the saving must be over barns with only one floor, where hay, grain, manure, etc., have to be carried many feet horizontally, or thrown upward.

How to plan a Barn. — The first thing the farmer should do, who is about to erect a barn, is to ascertain what accommodations he needs. How to determine the amount of space has already been pointed out. He should next make a list of the different apartments required, which he may select from the following, comprising most of the objects usually sought: I. Bay or mow for hay; 2. Bay or mow for unthreshed grain; 3. Bay or mow for straw; 4. Threshing-floor; 5. Stable for horses; 6. Stable for cattle and calf pens; 7. Shelter for sheep; 8. Root cellar; 9. Room for heavy tools and wagons; 10. Manure sheds; 11. Granary; 12. Harness room; 13. Cisterns for rain water; 14. Space for horse power.

If these are all placed on one level, care should be taken that those parts oftenest used should be nearest of access to one another, and that arrangements are made for drawing with a cart or wagon in removing or depositing all heavy substances, as hay, grain, and manure. In filling the barn, for example, the wagon should go to the very spot where it is unloaded; the cart should pass in the rear of all stalls to carry off manure; and, if many animals are fed in stables, the hay should be carted to the mangers, instead of doing all these labors by hand. If there are only two stories in the barn, the basement should contain: I. Stables for cattle; 2. Shelter for sheep; 3. Root cellar; 4. Manure shed; 5. Cistern; 6. Horse power; 7. Coarse tool room. The second floor should contain; I. Bays for hay

and grain; 2. Threshing-floor; 3. Stables for horses; 4. Granary; 5. Harness room.

For three stories, these should be so arranged that the basement may be similar to the two-story plan, and the second story should contain: I. Bay for hay; 2. Stable for horses; 3. Granary; 4. Harness room. The third, or upper, story should contain: I. Threshing-floor; 2. Continuation of hay-bay; 3. Bays for grain, including space over floor; 4. Opening to granary below. In all cases, there should be ventilators, shoots for hay, ladders to ascend bays, and stairs to reach quickly to every part, besides which every bin in the granary should be graduated like the chemist's assay-glass, so that the owner may, by a glance at the figures marked inside, see precisely how many bushels there are within.

A blackboard should be in every granary, for marking or calculating; one in the stable, to receive directions from the owner in relation to feeding or keeping accounts of the same; and a third should face the threshing-floor for recording any results. In conclusion, I would say that I have found it to be to my own advantage, and I am sure all farmers would, to employ a competent architect to make complete plans of the whole work before commencing operations. It saves material, saves time, and saves the cost and annoyance of many alterations, which are sure to suggest themselves during the progress of the work, unless the details have been previously studied as they only can be with the assistance of complete drawings, made to a scale.

Barn-yards. — The barn-yard must necessarily be regulated by the character of the land on which, largely for other considerations, it has been found necessary to locate the buildings; yet it should have its due weight in determining the location. As the cattle are at pasture, at least during the daytime, in summer, it should be a very good reason that induces a farmer to so place his barn that he cannot have his yard on the warmest and sunniest side of it. Ordinarily the coldest winds of winter blow from the north and northwest, while the warmth of the morning sun in winter falls best into nooks whose lookout is toward the southeast; therefore a southeast exposure is usually the best. If there are several buildings, they should be so arranged as to shelter the yard from the north and the west.

Shelter from the east is not so important, but if it can be conveniently procured, it has a certain advantage, if so arranged as to allow the early morning sun to fall into the yard. A close fence, six or seven feet high, would be better than a high building. When a shed is to be used, it is a good plan to build the barn on the north side and the shed on the west side of the yard. The barn-yard ought always to have sufficient slope for surface drainage, but the wash should be collected in a pit or deep pond hole at one side; and into this, straw, leaves, and muck may be thrown, to absorb the liquids reaching it.

- If cattle are to be fed in the yard, and are expected to make manure of a large amount of corn-fodder and straw, it is well to have nearly a level yard, with a slight depression in the centre, and to give them a dry footing by a profuse feeding of these materials, of which they will consume the best parts, trampling the refuse under foot. Such an accumulation, properly composted during the summer, will make excellent manure for autumn use. No farmer, however, who has once learned the feeding value of both corn-fodder and straw, when cut and mixed with other food, will continue to waste them under the feet of his animals, unless he is entirely careless of his own interests, or has a superabundance of fodder that he cannot sell to advantage. By hook or by crook, he will contrive in some way to make them available for food. Whatever plan is pursued, the surface of the barn-yard should receive no water, save such as falls upon it directly from the clouds. Surface gutters should protect it against the flow of the water from the other ground, and the roofs should be supplied with eave-troughs, discharging into cisterns, or outside of the yard. It will always pay to build a rough shed over that part of the yard which is to contain the pit or hollow for the manure and the yard drainage, especially if the droppings of the cattle are daily removed from the rest of the yard and added to a compost under the sheds.

Farm Roads. — I would not feel justified in recommending that extra men and teams be employed to make substantial farm roads, but there are at least a hundred half days in the year when the regular force of the farm can be occupied with such work, adding by every hour's work to the permanent future efficiency of the teaming appliances. Anything which will

enable each team, in all future time, to carry a heavier load than is now practicable, or to carry the same load more easily, must add to the permanent money value of the farm.

What is Underdraining? — It is an axiom of good farming that all land shall be thoroughly underdrained; underdrained, of course, either naturally or artificially. There is nothing mysterious, either in the operation or in its effects. The ability to plow and plant early in the spring; the perfect germination of seeds, and rapid and luxuriant growth of healthy plants; the ability to plow and otherwise cultivate growing crops; and the opportunity for seasonable harvesting and for fall plowing, all depend more upon the condition of the soil as to moisture than on any other single circumstance. For the purpose of illustration, we will suppose an acre of land to be enclosed in a water-tight box, its bottom being four feet below the surface, with no outlet at any point. The whole acre lies open to the rain, and the whole depth is saturated by every heavy storm. This acre of land may have the most thorough cultivation of which it is capable, and may be manured as land was never manured yet, and its produce will inevitably be precarious. In very good seasons it may be fair; in wet seasons it will be weak and badly matured; and in dry ones it will be mean and stunted. Now let us knock the bottom out of our box and see the result. Of course we must assume that it is underlaid by a stratum of gravel or other porous material. The water which has filled the spaces between the particles of the soil, lying there until evaporated at the surface, sinks slowly away and leaves the whole mass pervaded by air, the particles themselves holding by absorption enough water to make them sufficiently moist for the highest fertility, but affording very little for the cooling operation of evaporation at the surface. When a heavy rain falls, the soil may be for a short time saturated with water, and this drives out all of the air it has contained. As the water settles away after the rain, fresh air follows and embraces every atom with its active, fertilizing oxygen, and deposits, in the upper layers, carbonic acid and ammonia, and all else that makes air impure and soil rich. Indeed, the water itself has washed the air clean, and then, on filtering through the loose soil, has deposited all of its impurities near enough to the surface to be within

easy reach of the roots. Seed planted now finds as much moisture as it needs for germination, and only as much. Its rotting in the ground is impossible; and if we follow all of the processes of growth, and all of the operations of cultivation and harvesting, we shall find that the former are never impeded by too great wetness of the soil, and that the latter may be performed always in good season and with the best effect. Neither are the crops destroyed, or even greatly injured, by drought; for if there is one effect of underdraining that is established beyond doubt, it is that it is at least the basis of all those operations by which we most successfully attempt to overcome the effects of a drought. Instead of being a pest to the farmer, disappointing half of his hopes and baffling his best skill, this acre of land has become a pliant tool in his hands. So far as it is possible for him to be independent of the changes of the weather, he has become independent of them, and he works with a certainty of the best reward, which changes his occupation from a game of hazard to a work of fair promise.

To answer the question, then, which stands at the head of this article, underdraining is knocking the bottom out of the water-tight box in which our soil is encased. If we are the happy occupiers of land through which the water settles away as it falls, we have no need of the operation; but if our only or chief outlet is at the surface, with the drying sun and wind for draining tiles, we do need it, and can never hope for the success to which our seed, our manure, and our labors entitle us, until we adopt it. How it is best to do the work depends upon the soil, situation, price of labor, price of material, and depth of outlet that can be secured. Stone drains, tile drains, brush drains, board drains, mole-plow tracks, and all other conduits are proven pretty good, so long as they continue to afford a channel through which the water can run freely. The choice between them is based upon questions of durability, cost, and availability. The only positive rules, applicable to all cases, are that the drain should be a covered one, and not an open ditch, and that it should be, whenever possible, at least three, and better four, feet deep.

Farm Drainage. — While it would be hardly fair to say that farmers are slower than men of other classes to adopt improve-

ments in the methods of their trade, hardly any other industry has been within the same time so completely revolutionized as has farming, in the single item of hay-making, since the introduction of the mowing-machine. Yet there are some improvements whose practical usefulness and applicability are universally acknowledged, which find it hard work to fight their way to general adoption. The drainage of moist land is one of these. We use the expression moist land, because land which is absolutely wet is either drained or let alone, as a matter of course. Every farmer knows that his swamps must either be made dry, or at least only moist, or be left to the bulrushes. The far larger part of our cultivated farms, which come under the designations "late," "naturally cold," "heavy," "sour," "springy," (the larger part of our fertile lands, that is), are cultivated year after year, under heavy disadvantages, their half crops, and the extra labor and "catching" work that they entail, being accepted as a sort of doom from which there is no available means of relief. Almost every farmer of such land is ready to admit that it would be better for being drained, but he has got on so long without it, and draining is such expensive work, that having no example of its benefits before his eyes he "gets on" without it to the end of his days. It does seem hard to believe that, on solid upland, that only costs \$50 an acre in the first instance, and produces fair crops fair seasons, it will pay to spend from \$50 to \$100 an acre to make it a little drier, when more of the same sort can be bought at the original price. But exactly this must be believed before farming can become, in America, what it has already become, by means of drainage, in England, and before our farmers can be as successful as they ought to be, and as they have the means of becoming. Land that remains wet so far into the spring as often to delay the plowing until it is time to plant, after being drained, may often be plowed in March instead of May. When the seed is planted, it will never be rotted in the ground and call for a new planting, if the water can find its way to the drains below. Weeds, which grow while the land is too clammy to be hoed, and get beyond control, so that, when the ground is dry, hoes and horse-hoes have to wage an unequal warfare against them, may, on drained land, be attacked on almost any sunny day, and killed with little work. And when

the time comes for hauling off the crop, as in spring in hauling on manure, it will not be necessary to wait weeks for the ground to be solid enough for the teams to work, nor will the ground be so much injured in the operation. In short, work can be done in proper season, done in proper manner, and done with a definite certainty of a fair return, and with very much less dependence upon the weather, than when the water of heavy rains has to lie soaking in the soil until dried up by the sun and wind. What is needed is more general information upon the subject, more practical examples of the beneficial effects of draining, and cheaper draining tiles. All of these will come slowly at first, but they are coming surely, and they cannot fail to increase in rapid progression, by the very effect of their own influence.

Underdraining versus Drought. — That land should be made damper by being made drier; that underdraining should be one of the best preventives of the ill effects of drought, —this is the apparently anomalous proposition on which one of the strongest arguments in favor of draining is based. When we see a field baked to the consistence of a brick, gaping open in wide cracks, and covered with a stunted growth of parched and stunted plants, it seems hard to believe that the simple laying of hollow tiles four feet deep in the dried-up mass would do anything at all toward the improvement of its condition. the present season it would not, but for the next it would, and for every season thereafter, and in an increasing degree, so long as the tiles acted as effective drainage. The baking and cracking, and the unfertile condition of the soil, are the result of a previous condition of entire saturation. Clay cannot be moulded into bricks, nor can it be dried into lumps, unless it is made soaking wet. Dry or only damp clay, once made fine, can never again be made lumpy unless it is first made thoroughly wet, and is pressed together while in its wet condition. Neither can a considerable heap of pulverized clay, kept covered from the rain but exposed to sun and air, ever become even apparently dry, except within an inch or two of its surface. Underdraining, if the work is properly done, of course, after it has had time to bring the soil, for a depth of two or three feet, to a thoroughly well-drained condition, will equally prevent it from

becoming baked into lumps, or from being, for any considerable depth below the surface, too dry for the purpose of vegetation.

In the first place, the water of heavy spring rains, instead of lying soaking in the soil until the rapid drying of summer bakes it into coherent clods, settles away and leaves the clay, within a few hours after the rainfall ceases, and before rapid evaporation commences, too much dried to crack into masses. course, this is only the beginning of the operations of improvement. It is merely the foundation, but on heavy soils it is the necessary foundation of the processes, natural and artificial, by which the improvement is effected and made permanent. The only direct effects of draining are to prevent the soil from ever being completely saturated for any considerable time, and to remove from below water which, if not so removed, would evaporate from the surface. The formation of a crust on the surface of the ground is in direct proportion to the quantity of water that is removed by evaporation, and the crust constitutes a barrier against the admission of air, in direct proportion to its thickness. Consequently, the larger the quantity of water that is removed by the drains, the smaller is the obstacle offered to the entrance of air. The more constantly the lower parts of the soil are relieved from excess of water and supplied with air, the more deeply will roots descend; and the easier its communication with the atmosphere, the more frequently will the air in the lower soil be changed. On these two principles depend the immunity from drought which underdraining helps secure.

In dry weather, the soil gets its moisture from the deposit of dew on the surface, during the night, and on the surfaces of the particles of the lower soil constantly, day and night. The familiar example of the sweating of a cold pitcher that stands in the sun and wind, on a hot July day, illustrates the manner in which the dew-laden air of our driest weather gives up its moisture (greater than at any other time), to the particles of the cool, shaded lower soil with which it comes in contact. A box of finely pulverized earth, two feet deep, previously dried in an oven, placed in the sun and wind on the driest and hottest days of summer, would soon become sufficiently moist for the growth of plants, by the deposit of dew among its lower and cooler particles. Let the same earth be saturated with water and

closely compressed, and it would, under the same circumstances, be baked and dry throughout its whole depth. No air could enter for the deposit of dew, and, from its compact condition, all of the moisture that it contains would move, by capillary attraction, from particle to particle, to supply the evaporation at the surface, while the crust thus formed on the surface would prevent the free admission of air, even if the lower soil were loose and porous.

It is the same in the field. A heavy clay soil, saturated with water, dries up to a condition that will not admit of the circulation of air. Even if the thin surface soil, containing much vegetable matter, is loose enough, it is soon heated to such a depth that the little moisture it receives during the cooler parts of the day is dried out by the midday sun, while the compact subsoil is impervious to all atmospheric influence. Plants grow well enough during the weeks that separate the rains of early spring from the heat of midsummer, but when the drought sets in, the roots being only in the surface soil, — for roots will not enter a cold, saturated subsoil, - vigorous vegetation ceases, and we accuse Providence of having sent us a scourge for our sins. As well blame Providence for our loss if we neglected to plow, and harrow, and plant at seed time, as for loss from neglect to drain away the water that places us at the mercy of the drought. If we underdrain the land, even without the use of the subsoil plow, - but better with it, - the early growth will be less precarious and more uniform, and the roots of our crops will push down into the subsoil, where they will find, all through the driest summer, enough moisture for their uses. For the first year or two, of course, we could only hope to modify our evils, but in time we should find that, if we keep the surface of our underdraining ground well stirred, a six weeks' drought, that lays the whole country-side bare, has little power to diminish our crops.

CHAPTER VI.

LIVE-STOCK.

LIVE-STOCK is more or less important to the farmer, according to the circumstances under which his business is carried on. In extensive grain-growing regions, where the policy is simply to raise the largest possible crops, rather by extent of cultivation than by excessive production per acre, and where it is intended either to trust to luck for fertility of land, or deliberately to exhaust and abandon it, live-stock forms no important part of the farm interest, it being necessary to keep only such teams as are required for plowing and harvesting. In other extensive regions, where the chief, almost the entire, business of the farmer is confined to the grazing of large flocks and herds on natural pastures, he cares for little else than live-stock; but, at the same time, his animals live almost in a state of nature, require scarcely any attention beyond the annual branding and the annual selection of droves for market, and he needs to know almost nothing concerning their management, as understood by skilful husbandmen. Live-stock becomes an important element in the economy of the farm only when our object is to raise fine animals, to raise beef for market, or wool, or dairy products, or poultry, as a means for converting the production of the land into a marketable form.

Mixed farming requires close attention and a knowledge of means, methods, and results, that can only be acquired through practice. Everything raised on the farm should be consumed on the farm, if possible. Skill in feeding stock economically is one necessary requirement in a successful farmer. Care in handling stock is another, and the judicious selection of kind, age, and number, is perhaps the most difficult of all. One farm is adapted to cattle, another to sheep, a third to neither, and a fourth to them all. To make a wise selection as to the farm, the kind of stock to keep, and the proper number, supplemented with convenient buildings, careful management, and economical

feeding, requires a quality of judgment that would conduct almost any other branch of productive industry. To be a successful stock-raiser, one must read, think, calculate, and work. It is no easy task, but requires constant application. The slothful or negligent never succeed at this business. As the country becomes older and more settled, the quality of all kinds of stock becomes improved, for men learn that the best are always in demand, while the poorest are hard to sell. There is a great future for the American stock-raiser; and the progress in that line during the past half century is only an example of what may be expected in the years to come. Nature has placed all the requirements for success in this line within easy reach of the farmer, and those who neglect these opportunities will surely repent when too late. Horses, cattle, sheep, swine, and poultry, should all reach the highest types of perfection here in the United States. The choice of breeds must be a matter of judgment with the farmer, and no definite rules can be laid down. Suffice it to say, that, be the number more or less, they should be selected with discretion, cared for attentively, and fed economically.

If these rules fail to bring success, the cause must be looked for elsewhere. For the purpose of showing the importance of stock-raising, I quote from the last report of the Department of Agriculture, upon that subject. These tables should be studied with care.

There has been a feeling for a number of years that more accurate data should be obtained in regard to the number of the range cattle in the various States and Territories. It is probable that no accurate census of the range cattle has ever been secured, and nearly all the estimates, on account of the inherent difficulties of the case, have varied widely from one another, and probably from the true figures. In order to clear up this question somewhat, an effort was made during the year 1888 to obtain reliable data from the Western States and Territories. Accordingly, trusted agents of the Bureau, well acquainted with the range-cattle industry, were sent into the field to gather the most accurate figures possible from the cattle-owners' organizations and from other sources of information. The estimates of the Statistical Division of this Department

have, as a rule, been taken as approximately correct for the number of cattle in the States; but in some cases these estimates have been revised in accordance with more recent information received from the agents of this Bureau. The population since 1880 has been estimated on a basis of a 2 per cent annual increase, in addition to the immigration.

Taking our figures from these sources, we obtain the following table:—

Table showing population, total number of cattle, and number of cattle per 1000 of population (estimated since 1880) in the United States and Territories.

						-		TOTAL CATTLE.				
		Y	EARS	S.			Population.	Number.	PER 1000 OF POPULATION.			
1850							23,191,876	17,778,907	767			
1860						.	31,443,321	25,620,019	815			
1870						.	38,558,371	23,820,608	618			
188e						.	50,155,783	37,008,453	738			
1881						.	51,828,330	38,551,471	744			
1882						.	53,653,889	40,672,765	758			
1883							55,330,289	42,777,898	773			
1884							56,955,487	44,800,674	787			
1885							58,489,943	46,794,256	800			
1886							59,993,945	47,612,283	794			
1887							61,683,933	48,308,623	783			
1888							63,464,501	48,923,880	771			
1889	1				٠.	.	65,172,405	49,417,101	758			

This table shows some interesting facts. At the first approximately accurate census of cattle, in 1850, there were 767 cattle to the 1000 of population. This number increased in 1860 to 815, showing a large stock of cattle on hand. In 1870, partly from the effects of the war, and partly from an underestimate by the census of that year, we find the number of cattle reduced to 618 per 1000 of population. In 1880 the number per 1000 increases to the extent of 120, and reaches 738. In 1881 there is an increase of 6 per 1000; from 1881 to 1882, the increase is 14 per 1000; from 1882 to 1883, it is 15 per 1000, being the

largest apparent increase in any one year; from 1883 to 1884, the increase is 14 per 1000; and from 1884 to 1885 it is 13 per 1000, reaching the highest point since 1860, or 800 cattle per 1000 population.

Since 1885 there has been, according to these estimates, a steady decrease in the relative number of cattle. From 1885 to 1886, this was 6 per 1000; from 1886 to 1887, it was 11 per 1000; from 1887 to 1888, it was 12 per 1000; and from 1888 to 1889, it was 13 per 1000. The total decrease in cattle, per 1000 population, from 1885 to 1889, amounted to 42, and the proportion was then as 758 to 1000.

A somewhat clearer presentation of the beef supply is obtained by considering the other cattle by themselves. These figures will be found in the table which is given below:—

Table showing the total number of milch cows and of other cattle, and the number of each per 1000 of population.

						Milch	Cows.	OTHER CATTLE.			
	Years.		Number.	PER 1000 OF POPULATION.	Number.	PER 1000 OF POPULATION.					
1850						6,385,094	275	11,393,813	491		
1860				٠,		8,585,735	273	17,034,284	542		
1870						8,935,332	232	14,885,276	386		
1880						12,443,120	248	24,565,333	490		
1881						12,538,216	242	26,013,255	502		
1882						12,666,031	236	28,006,734	522		
1883			٠	•		13,127,267	237	29,650,631	5 36		
1884						13,502,899	237	31,297,775	550		
1885						13,906,534	238	32,887,722	562		
1886						14,237,327	237	33,374,956	556		
1887						14,524,158	235	33,784,465	548		
1888						14,858,634	234	34,065,246	537		
1889						15,300,934	235	34,116,167	523		

One of the remarkable facts brought out by this table is that, since 1870, the proportion of milch cows to population has been practically constant. In 1850 there were 275 per 1000, and in 1860, 273 per 1000. In 1870 this number decreases to 232, or about 15 per cent, and increased in the ten years from 1870

to 1880 to 248, being at the rate of 1.6 per annum. In the seven years from 1882 to 1889 there has been a variation of only 2 per 1000 in either direction from the number in the first-named year. The reduction from 275 per 1000 in 1850 to 235 per 1000 in 1889, or about 15 per cent, has undoubtedly been more than counterbalanced by improvements in the quality of the stock, so that the quantity of dairy products yielded in proportion to the population is greater instead of being less than in 1850.

If we turn our attention now to the "other cattle," from which our beef supply is mostly obtained, we find, in 1850, 491 per 1000 of population. In 1860, this number increased to 542 per 1000, or over 10 per cent, and in consequence of the war and an incorrect estimate had dropped by 1870 to 386, a decrease in ten years of 28.7 per cent. In 1880, the number of this class of cattle per 1000 of population had increased to 490, the proportion being almost exactly the same as in 1850. From 1880 to 1885, there was a continuous and rapid increase, which was due to the remarkable development of the range-cattle industry in that period. Thus, in 1881, there were 502 per 1000; in 1882, there were 522 per 1000; in 1883, 536 per 1000; in 1884, 550 per 1000; and in 1885, 562 per 1000. The increase in the five years, from 1880 to 1885, was 72 per 1000 of population, or about 15 per cent.

Since 1885 there has been a perceptible and continuous decrease in the proportion of cattle to population. From 1885 to 1886, this decrease was only 6 per 1000 of population; from 1886 to 1887, it was 8 per 1000; from 1887 to 1888, it was 11 per 1000; and from 1888 to 1889, it was 14 per 1000. In the four years the decrease amounted to 39 per 1000 of population, or about 7 per cent of the number given for 1885. The proportion of cattle to population in 1889 was almost exactly the same as in 1882.

In considering the proportion of cattle to population, and in drawing conclusions as to the relative beef supply in different years, the fact should not be overlooked that there has been a great change within the last twenty years, in the character of steers that have been sent to market. New and better blood has been infused into the old stock, and the result is that steers

are marketed younger, weigh more, and yield a larger proportion of carcass than formerly. The beef supply obtained from a given number of cattle is for this reason considerably larger than it was a few years ago. The increased number of cattle per 1000 of population does not, therefore, represent the whole increase in the beef supply which has taken place since 1870. There is, in addition, an increase resulting from early maturity, size, and quality, which can only be estimated with great difficulty and uncertainty.

It is impossible to obtain accurate imformation as to the number of steers slaughtered annually in this country for beef, or to reach this number by even an approximate estimate. For this reason, the actual beef supply which yearly goes upon the market is an unknown quantity. It becomes necessary, therefore, to judge of the supply by the total stock of cattle on hand in the country. Such deductions are subject to grave errors, which are liable to arise from a larger proportion of cattle being marketed one year than another, in order to meet financial emergencies, because of lack of feed, or because of a better price for cattle, as compared with the price of corn and hay.

The demand for meat for home consumption should be tolerably constant in a series of years like those of the present decade, during which there has been no marked financial depression. There is undoubtedly, however, a considerable influence exerted upon the demand for beef by the quantity and price of pork products. In other words, when the production of pork is abundant and the price low, there will be less beef consumed than when these conditions are reversed. The quantity of beef exported must also have an important influence upon the demand and upon the price.

With the facts mentioned above in mind, the following table is presented to show the relation between the relative number of cattle in the country and the mean price of steers. It is impossible to give a true average price of steers from the data on hand, but the mean price is a sufficient indication of the extent and direction of the fluctuations from year to year. The mean prices of cattle and hogs given in the tables which follow are computed from quotations given in the *Drovers' Journal*.

Table showing the proportion of cattle to population, the value of cattle and beef products exported, and the mean price of beef steers in Chicago.

	Years.				No. of Cattle (excluding Milch Cows) per 1000 of Population.					EXPORTS OF CATTLE				MEAN PRICE OF STEERS IN CHI- CAGO, PER 100 POUNDS.			
1878															•		\$4.25
1879																	4.60
1880									490			\$	31	,544	1,3	60	5.75
1881									502				32	,80	1,7	05	5.90
1882									522				22	,680	0,2	72	6.77
1883									536				25	,004	1,7.	46	5.67
1884									550				36	,286	5,6	26	6.05
1885									562				32,	012	1,0	02	5.15
1886									556				27	,320	0,39	90	4.75
1887						•			548				21,	853	3,7	18	4.60
1888		•							537					764			4.87
1889									523				35	535	, I	34	4.35

The above table shows that, in 1880, with a steady increase in the price of steers since 1878, with 490 cattle other than milch cows to the 1000 of population, and with an export of cattle and beef products amounting to \$31,544,360, the mean price of butchers' steers in the Chicago market was \$5.75 per 100 pounds. From 1880 to 1881, there was an increase in the number of cattle of 12 per 1000 of population, the exports increased over \$1,000,000, and the mean price of steers increased 15 cents per 100 pounds.

In 1882, we find a remarkable increase in the price of steers, which cannot be explained by the data furnished. With an increase of 20 cattle other than milch cows, per 1000 of population, and a falling off in the export trade of over \$10,000,000, the price of cattle not only advanced, but reached the highest point of the decade. The increase in the mean price of steers, from 1881 to 1882, was 87 cents per 100 pounds.

The mean price of steers in 1883 was \$1.10 per 100 pounds lower than in 1882. The exports for the year had increased \$2,500,000, and the number of cattle other than milch cows, per 1000 of population, was 14 greater than in the preceding year. Here again the fluctuation of price is much greater than the

table would lead us to expect. In 1884, with an increase of \$11,500,000 in the exports, and with 14 more cattle per 1000 of population, the price advanced 42 cents, and reached \$6.05 per 100 pounds. In 1885, with the number of cattle per 1000 of population at the highest point, and with a falling off of \$4,000,000 in exports, the price dropped to \$5.15 per 100 pounds. In 1886 and 1887, with a slight decrease in the relative number of cattle, and with a large reduction in exports, the price of steers decreased 35 cents in 1886, and 15 cents in 1887. The export trade revived somewhat in 1888, and the number of cattle in proportion to population continued to decrease; we are not surprised to find, therefore, an advance of 27 cents per 100 pounds in the mean price of beef steers. In 1889, with an increase of nearly \$10,000,000 in the exports, and a decrease of 14 cattle other than milch cows, per 1000 of population, the mean price of steers declined 52 cents per 100 pounds.

Having examined the table given above somewhat critically, we are forced to the conclusion that the fluctuation in the price of steers cannot be explained by the simple consideration of the number of cattle in proportion to the population, or by combining this information with the statistics of the export trade. The chief disturbing condition, and one to which we have already referred, is the price of hogs. To illustrate the influence of these conditions, the following table is added:—

Table showing the mean price of hogs and beef steers in Chicago, for the years from 1879 to 1889, inclusive.

		3	(EA)	RS.			MEAN PRICE OF HOGS IN CHICAGO, PER 100 POUNDS.	
1879							\$3.52	\$4.60
1880			٠.				5.05	5.75
1881							. 5.95	5.90
1882							7.32	6.77
1883							6.07	5.67
1884							5.75	6.05
1885							4.12	5.15
1886							4.25	4.75
1887							4.88	4.60
1888							5.82	4.87
1889							4.38	4.35

Now, comparing the mean price of hogs and steers, we find that the extraordinary advance in the price of steers, in 1882, coincided with the even greater advance in the price of hogs. The largely decreased price of steers in 1883 also coincided with the equal decrease in the price of hogs. In 1884, we find a decrease of 32 cents per 100 pounds in the price of hogs, and an increase of 38 cents per 100 pounds in the price of steers; this would appear to be due to the large exports of cattle and beef products in that year. In 1885 and 1886, the large number of cattle in proportion to population, the falling off in the export trade, and the low price of hogs, all exerted a downward influence on the price of cattle.

The price of hogs increased considerably in 1887, but the price of steers declined still further. This was no doubt the result of the falling off in our export trade, from \$27,320,390 in 1886 to \$21,853,718 in 1887. The slight advance in cattle prices, in 1888, coincides with the much greater advance in the price of hogs, but must have been also influenced by the increased exports of cattle and beef products. In 1889, the mean price of hogs dropped \$1.44 per 100 pounds, and this coincided with the decline in the mean price of steers of 52 cents per 100 pounds, a greater decline in the price of steers being evidently prevented by the large increase in the export trade. It has been evident, from the receipts of cattle at the leading stockyards of the country, that a very large number of such animals have been marketed in proportion to the stock on hand, and this has been one of the leading factors which operated to decrease the price of steers. With the decline in the prices the profits in cattle-raising have been greatly reduced, and in many localities this industry has been conducted at a positive loss. The inevitable tendency has therefore been to sell off the stock and reduce the business, and consequently the proportionate number of cattle marketed has been much greater than during the years from 1881 to 1884, when the industry was paying and the stock on hand was being increased. For this reason the markets of the country have not felt the influence of the reduction of the stock of cattle in proportion to the population, which the tables plainly show has occurred, and which must continue at an increasing rate from year to year.

The tendency of prices with cattle will probably be to advance within the next year or two, on account of the improbability of increasing the stock of cattle as rapidly as the population is augmenting, but this advance will be slow and uncertain for a number of years. It will be at least two years before the stock of cattle has been reduced to the proportion, as compared to population, which existed in 1878, and then the mean price of steers was but \$4.25 per 100 pounds, or ten cents less than in 1889. In other words, the price of steers for several years in the future will depend more on the price of hogs, upon the value of the exports of cattle and beef products, and upon the proportion of steers marketed, than upon any changes likely to occur in the number of cattle per 1000 of population existing in the country.

The Export Trade in Animals and Meat Products. — During the calendar year 1889, the exports of animals and meats were unusually large. The number of cattle exported reached 329,271. The largest number sent abroad in any preceding year was 190,518, in 1884. The large exports of 1889 were due primarily, no doubt, to the low price of cattle in the United States. The active demand in Great Britain has been an important factor, as also the freedom of nearly the whole of the United States from any dangerous contagious disease. With the rapid eradication of pleuro-pneumonia in this country, the confidence in American beef cattle has increased, and there is greater willingness to receive and handle them. The following tables show the exports of animals and meat products for the calendar years 1888 and 1889:—

Table showing number and value of animals exported for the calendar years ending December 31, 1888 and 1889.

	A		_		1	888.	1889.			
	ANI	MAL	AALS.		Number.	Value.	Number.	VALUE.		
Cattle .					154,813	\$12,998,977	329,27 I	\$25,673,366		
Hogs .					19,396	159,198	87,353	741,264		
Horses					2,287	417,483	4,288	689,964		
Mules .					2,902	362,674	3,197	376,391		
Sheep.			٠		117,718	243,483	143,161	393,185		

Table showing exports of meat products for the calendar years ending December 31, 1888 and 1889.

	38x	38.	1889.			
MEAT PRODUCTS.	Pounds.	VALUE.	Pounds.	Value.		
Beef products:						
Beef, canned	45,298,849	\$3,807,685	71,769,708	\$6,026,970		
Beef, fresh	106,411,092	9,591,481	170,992,606	13,002,713		
Beef, salted or pickled	50,377,426	2,819,047	72,915,854	3,881,077		
Beef, other cured .	106,255	10,665	209,968	18,658		
Tallow	75,470,826	3,736,488	99,637,118	4,717,229		
Hog products:						
Bacon	302,128,689	25,958,915	471,743,869	36,320,774		
Hams	40,243,275	4,622,032	55,469,050	5,990,570		
Pork, fresh	47,265	3,354	227,735	13,080		
Pork, pickled	57,772,922	4,414,923	77,231,712	4,997,687		
Lard	270,245,146	23,516,097	398,337,428	30,422,370		
Mutton	205,822	16,955	350,779	30,642		

The following tables, showing the exports for eleven years ending with 1889, are added for reference and comparison. It should be observed that the years referred to in these tables are fiscal years ending June 30, while in the preceding tables they are for the calendar year ending December 31.

Table showing number and value of animals exported for each year from 1879 to 1889, inclusive.

	CA	TTLE.	Н	ogs.	, H	ORSES.	M	ULES.	SHEEP.	
YEARS.	Num- BER.	VALUE.	Num- BER.	VALUE.	Num- BER.	Value.	Num- BER.	VALUE.	Num- BER.	Value.
1879	136,720	\$8,379,200	75,129	\$700,262	3,915	\$770,742	4,153	\$530,989	215,680	\$1,082,938
1880	182,756	13,344,195	83,434	421,089	3,060	675,139	5,198	532,362	209,137	892,647
1881	185,707	14,304,103	77,456	572,138	2,523	390,243	3,207	353,924	179,919	762,932
1882	108,110	7,800,227	36,368	509,651	2,248	470,183	2,632	320,130	139,676	603,778
1883	104,444	8,341,431	16,129	272,516	2,800	475,806	4,237	486,560	337,251	1,154,856
1884	190,518	17,855,495	46,382	627,480	2,721	424,317	3,742	498,809	273,874	850,146
1885	135,890	12,906,690	55,025	579,183	1,947	377,692	1,028	127,580	234,509	512,568
1886	119,065	10,958,954	74,187	674,297	1,616	348,323	1,191	148,711	177,594	329,844
1887	106,459	9,172,136	75,383	564,753	1,611	351,607	1,754	214,734	121,701	254,725
1888	140,208	11,577,578	23,755	193,017	2,263	412,774	2,971	378,765	143,817	280,490
1889	205,786	16,616,917	45,128	356,764	3,748	592,469	2,980	356,333	128,852	366,181

Table showing quantity of beef products exported for each year from 1879 to 1889, inclusive.

		BEEF, CANNED.			ED.	Beef, Fresh.	BEEF, SALTED, PICKLED, AND OTHER CURED.	Tallow.		
1879				Pounds.				Pounds. 54,025,832	Pounds. 36,950,563	Pounds. 99,963,752
1880				:		:		84,717,194	45,237,472	110,767,627
1881								106,004,812	40,698,649	96,403,372
1882								69,586,466	45,899,737	50,474,210
1883								81,064,373	41,680,623	38,810,09
1884								120,784,064	43,021,074	63,091,10
1885								115,780,830	48,716,138	50,431,71
1886								99,423,362	59,728,325	40,919,95
1887				43	,05	0,5	88	83,560,874	36,479,379	63,278,40
888						8,3		93,498,273	49,084,420	92,483,05
1889				51	,02	5,2	54	137,895,391	55,200,435	77,844,55

Table showing value of beef products exported for each year from 1879 to 1889, inclusive.

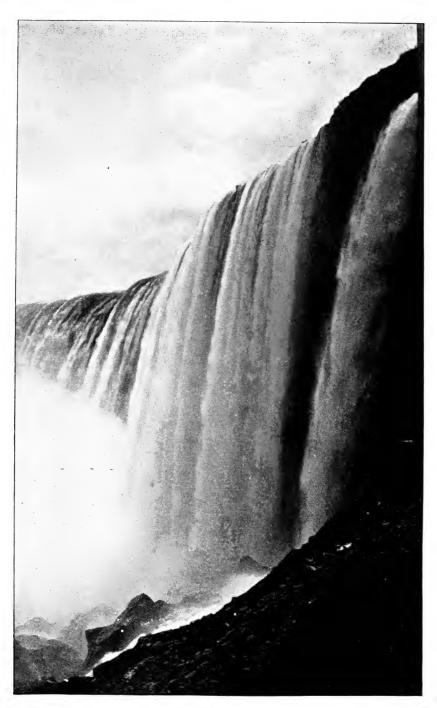
	YEA	RS.		Beef, Canned.	Beef, Fresh.	BEEF, SALTED OR PICKLED.	BEEF, OTHER CURED.	TALLOW.
1879				\$7,311,408	\$4,883,080	\$2,336,378		\$6,934,940
1880				7,877,200	7,441,918	2,881,047		7,689,232
1881				5.971,557	9,860,284	2,665,761		6,800,628
1882				4.208,608	6,768,881	3,902,556		4,015,798
1883				4,578,902	8,342,131	3,742,282		3,248,749
1884				3,173,767	11,987,331	3,202,275	\$67,758	4,793,375
1885				4,214,791	11,199,481	3,619,145	73,895	3,322,476
1886				3,436,453	9,291,011	3,544,379	89,593	2,144,499
1887				3,462,982	7,228,412	1,972,246	17,942	2,836,300
1888				3,339,077	8,231,281	2,608,479	9,204	4,252,653
1889				4,375,213	11,481,861	3,043,324	17,819	3,942,024

Table showing quantity and value of pork products exported for each year from 1879 to 1889, inclusive.

Years.						BACON A	ND HAMS.		RESH AND	LARD.	
		ΥE	AR	s.		Pounds.	VALUE.	Pounds.	Value.	Pounds.	VALUE.
1879						732,249,576	\$51,074,413	84,401,676	\$4,807,568	326,658,686	\$22,856,673
880						759,773,103	50,987,623	95,949,780	5,930,252	374,979,286	27,920,367
88ı						746,944,545	61,161,205	107,928,086	8,272,285	378,142,496	35,226,575
882 .						468,026,640	46,675,774	80,447,466	7,201,270	250,367,740	28,975,902
883 .						340,258,670	38,155,952	62,116,302	6,192,268	224,718,474	26,618,04
884 .						389,499,368	39,684,845	60,548,730	4,762,715	265,094,719	25,305,953
885 .	•		٠	•		400,127,119	37,083,948	72,073,468	5,203,943	283,216,339	22,595,21
886		•	٠			419,788,802	31,640,211	87,267,715	5,123,411	293,728,019	20,361,78
887 .	•	•		٠	•	419,922,955	33,314,670	85,893,297	5,641,327	321,533,746	22,703,92
888 .		٠	.•	٠		375,439,683	32,175,633	58,900,153	4,373,114	297,740,007	22,751,10
889 .	٠.					400,224,646	34,651,847	64,133,639	4,735,077	318,242,990	27,329,17

The large export trade of the year just ended has done much to relieve the markets of this country, and to maintain the price of cattle and beef. While cattle have sold somewhat lower than during 1888, the decline has been very much less than in pork, as has been shown in the preceding section of this report. The enormous corn crop of this year, with the low average price of this important article of animal food, has been a most important factor in depressing the price of both hogs and cattle. According to the estimates of the statistical division of this department, the average price of the last corn crop is but 28.3 cents per bushel, being much the lowest average of any crop raised during the last ten years.





NIAGARA FALLS.

CHAPTER VII.

FRUITS.

FRUIT is one of the first considerations of a good farmer, and usually one of the most pleasant and profitable departments of the farm. In a work of this character, no extended details can be expected, but a few hints in that direction will not be out of place.

Planting. — The tree to be planted should be as young as circumstances will allow. The season is just when the leaves become yellow, or as early as possible in the spring. ground being prepared and the tree taken up, prune the roots with a sharp knife, so as to leave none more than about a foot long; and if any have been torn off near the stem, prune the part, so that no bruises or ragged parts remain. Cut off all the fibres close to the roots, for they never live, and they mould and do great injury. If cut off, their place is supplied by other fibres more quickly. Dig the hole to plant in three times as wide, and six inches deeper than the roots actually need as mere room. And now, besides the fine earth generally, have some good mould sifted. Lay some of this six inches deep at the bottom of the hole. Place the roots upon this, in their natural order, and hold the tree perfectly upright while you put more sifted earth upon the roots. Sway the tree backward and forward a little, and give it a gentle lift and shake, so that the fine earth may find its way among the roots and leave not the smallest cavity. Every root should be closely touched by the earth in every part. When you have covered all the roots with the sifted earth, and have seen that your tree stands just as high, with regard to the level of the ground, as it did in the place where it stood before, allowing about three inches for sinking, fill up the rest of the hole with the common earth of the plat, and when you have about half filled it, tread the earth that you put in, but not very hard. Put on the rest of the earth, and leave the surface perfectly smooth. Do not water by any means.

Water poured on in this case sinks rapidly down, and makes cavities among the roots and lets in air. Mould and canker follow, and great injury is done.

Cultivation. — In the first place, the ground is always to be kept clear of weeds, for whatever they take is just so much taken from the fruit, either in quantity or quality, or in both. It is true that very fine orchards have grass covering all the ground beneath the trees; but these orchards would be still finer if the ground were kept clear from all plants except the trees. Such a piece of ground is at once an orchard and a pasture. What is lost in one way is probably gained the other; but if we come to fine and choice fruits, there can be nothing that can grow beneath to balance the injury done to the trees. The roots of trees go deep; but the principal part of their nourishment comes from the top soil. The ground should be loose to a good depth, which is the certain cause of constant moisture; but trees draw downward as well as upward, and draw more nourishment in the former than in the latter direction.

If crops be grown under trees in orchards, they should be wheat, rye, winter barley, or something that does not demand a plowing of the ground in the spring. In the garden, dig the ground well and clean, with a fork, late in November. Go close to the stems of the trees, but do not bruise the large roots. Clean and clear all well close around the stem. Make the ground smooth just there. Ascertain whether there are insects of any sort there; and if there are, take care to destroy them. Pull or scrape off all the rough bark at the bottom of the stem. If you even peel off the bark a foot or two up, in case there are insects, it will do all the better. Wash the stems in water in which tobacco has been soaked, and do this whether you find insects or not. Put the tobacco into hot water and let it soak twenty-four hours, before you use the water; this will destroy or drive away all insects. But for the purpose of removing all harbor for insects, make the ground smooth just around the stem of the tree, and let the rest of the ground lie as rough as you can; for the rougher it lies the more it will be broken by frost, which is a great enricher of all land. When the spring comes, and the ground is dry at the top, give the whole of the ground a good deep hoeing, which will make it level and smooth enough.

GROWING APPLES IN THE NURSERY ROW."

In every kind of business there is a right way and a wrong way. This is as true in the growing of apple trees as it is in any other business process. My aim shall be to outline the right way.

Seed. — This may be procured from cider mills in the fall, and kept until about the first of January, when it should be mixed with sand and placed where it will freeze. If it can be kept frozen solid till planting time, it will be all the better for it; but if not, it must be shovelled over once a day after thawing out, to prevent heating and subsequent destruction of the seed.

Growing the Seedlings. — Ground should be ploughed about eight inches deep, and subsoiled in the bottom of this furrow to a further depth of about nine inches. At least seventeen inches of mellow soil are needed to grow the proper length of root in an apple seedling. A number one apple seedling root is from eight to fifteen inches long, and in hard ground the roots branch so much that they are of little use for grafting. For budding, however, the branched root is preferred, as it is likely to grow faster. In the fall the seedlings should be taken up and stored in a cellar, out of danger from heat or frost, until the time for grafting.

Grafting.—Scions should be cut in November, or early in December, before the arrival of cold weather, and packed in sawdust in the cellar. The time for grafting will depend mainly on the amount of help and the quantity of work to be done. It can be done at any time during late winter and early spring. For grafting, the roots of seedlings are cut into sections about four inches long, and the scions into pieces of about the same length. The upper end of the section of root is cut smooth and sloping, and the lower end of the scion is cut at about the same angle. In each of these bevelled ends a tongue is cut, so that when the cut surfaces of the root and scion are in contact these tongues shall hold them firmly together. The secret of success in this operation is to secure an intimate contact of the cambium layer or inner bark of root and scion. Without this no union

of the two can occur. To secure this, careful and observant experience is essential, and therein lies the skill of the grafter. For tying the grafts, the best material is crochet cotton No. 20, prepared by boiling the balls in melted wax, composed of one-fourth lard and three-fourths rosin. With this the grafts are wound to hold the scion in place until it has united with the stock. Only a few turns around the joint are necessary; many grafters do not even tie the ends of the cotton, trusting to the adhesive power of the wax to hold it in place. After winding, the grafts should be tied in small bunches, 50 or 100 in each, labelled, and packed in boxes of sawdust in the cellar. Boot boxes are a convenient size, and nothing but pine sawdust, slightly moistened, should be used. If stored in this way, they can be left until time to plant out in the spring.

Planting the Grafts.—Ground should be plowed and subsoiled as for growing seedlings, and should be harrowed and rolled until thoroughly pulverized and compacted, forming a fine but solid bed. In planting, use steel dibbles one foot in length. Plunge the dibble into the soil, and press to one side to leave room for the graft. Insert the graft alongside the dibble, leaving only about an inch of the scion above the surface. Press the soil firmly against the graft with the dibble, and it may be expected to grow if conditions are favorable.

For budding, the seedlings are planted out at the same time with grafts, and are budded in the following August or September. The next spring the top of the seedling is cut off close above the bud, and any seedling sprouts that may come out are removed. With some varieties much nicer trees can be grown by budding than by grafting.

Growing the Tree. — Whether budded or grafted, after the desired varieties are secured they must be thoroughly cultivated, trimmed, and headed, and at the end of three or four years they are ready for the orchard.

APPLE ORCHARD AND ITS MANAGEMENT.

That location and soil have much to do with the success or failure of an apple orchard, no observing person will deny. My ideal location is a plat sloping toward the south. The soil,—any

that will produce good crops of wheat and corn, and that naturally drains itself. A sandy loam, rich in vegetable matter, containing, also, a large quantity of lime, is most excellent for this purpose. The subsoil should be somewhat of the same nature, so that no artificial drainage is needed. There are also a variety of soils, running from the light blow sand of the plains to the heavy, undrained clay bottoms, much of which may be made to produce good apples by making such places conform, as nearly as possible, to our ideal. The orchard should have perfect drainage and sunlight. Trees will not thrive in shaded places, or in soils containing an excess of water. With our best soils and locations, and good varieties, it is hardly possible not to grow an abundance of choice fruit in favorable years. Such soils contain a large amount of plant food at present, but the process of exhaustion is going on, and many of our best apple crops are obtained without seeming effort on the part of the grower.

Varieties. - In selecting varieties one should be governed greatly by a knowledge of good varieties that are vigorous growers, and bear well in his own locality. Many sad failures could be cited where persons setting new orchards ignored this principle. A few thoughts about some of the leading established varieties may prove acceptable. That the Baldwin heads the list of commercial apples there is little doubt. Indeed, it is really a good family apple, and combines more good qualities, taking tree and apple together, than any other apple I know of. The Greening is another widely known and popular apple, and notwithstanding its antics in bearing, no one seems willing to ostracize it. The Northern Spy completes the trio of popular winter apples. A very good reason for setting largely of these varieties is that, while all of them are really good, consumers have learned their names and ask for them, often because they do not know the names of other varieties. The Pippin family contains some excellent fall varieties; chief among them is Hubbardston's Nonesuch. They are all good family apples, and the trees are vigorous growers and good bearers. The Chenango Strawberry is a most excellent late harvest apple. For an early harvest, it is rather unfortunate that we have nothing better to offer than the Red Astrachan. Like most of its Russian

neighbors, it has nothing to recommend it save hardiness and color. For a permanent orchard of 1000 trees, I would set the following varieties: 5 Astrachans, 25 Chenango Strawberry, 50 Hubbardston's, 50 20-ounce and Fall Pippins, 100 each of Greenings, Spys, and Jonathans, and 500 Baldwins. I would set a few Seek-no-furthers, for those who believe it to be the best eating apple on earth; the remainder I would set to new varieties, as an educational feature. I have given more early varieties than are generally given for an orchard of this size, because the time is at hand when really good early apples will be in demand.

How to Plant. — The distance apart to set apple trees in an orchard can never be arbitrarily fixed. The difference in soils and treatment is so great that what would prove too close in one case would give plenty of room in another. Trees should never crowd one another in the orchard. Where they do so, it is economy to remove some of them. The distance varies from two to four rods — there are some varieties for which two rods apart is far enough. Mr. Granger has a scheme of utilizing the ground while the orchard is growing, by planting between the trees that make up what he calls the permanent orchard, varieties that bear early in life — notably the Wagener — to be removed when they crowd themselves or the other trees. In this way he recommends setting the trees not farther than one rod apart. This, to be practicable and economical, should be followed by good tillage.

Before commencing on this part of the subject, however, let it be understood that the great object in tillage, aside from destroying weeds, is husbanding the moisture of the soil, the importance of which may be readily seen if we consider only briefly some of the functions of water in vegetable life. Water enters largely into the constitution of all living plants, and forms more than one-half of the newly gathered vegetable substances we are in the habit of cultivating. In the midst of abundant spring showers, plants shoot forth with an amazing rapidity, while they wither and die when water is withheld. It contains great solvent power over solids, and especially decayed animal and vegetable matter. Its great affinity for these substances, such as are supposed to be capable of ministering to the growth of plants, brings them within easy reach of their roots. It is

only by having it in excess that the circulation of the sap of plants is carried on, and the exhalation of a medium-sized apple tree, on a hot summer's day, is truly astonishing. It is quite evident, then, that water is a very necessary article to have and to husband, by every owner of an apple orchard. In seasons when showers come frequently and regularly, there is moisture enough, with fair care, for the trees to mature good crops of apples. It is only in protracted droughts that irrigation or tillage becomes imperative. By tillage it is not meant that any moisture is added to the soil; it only prevents it from evaporating too suddenly, and thereby husbands it to be drawn on by the plant when needed.

Cultivation. — There continues to be considerable difference of opinion whether fruit orchards should be cultivated or not, after they are four or five years old. All are agreed that they should receive the best tillage up to that time. Standard pear trees seem to do decidedly better in grass, after arriving at a stage where they are able to take care of themselves. Instances can be given where such trees, believed to be one hundred and fifty years old, standing in sod which has not been disturbed in fifty years, produce abundant crops of fine fruit, and the trees are yet in a thrifty condition. But as to dwarf pear and apple trees, the treatment should be quite different. Such orchards should be as well cultivated as our corn fields, or any portion of our vegetable garden. I cannot believe, however, that tillage is all; that we can obtain good fruit by this means alone, any more than we can good butter and beef from wind and water in other words, something for nothing; although farmers come as near doing this in the management of their orchards as is done in any other business that I know of. Trees must be fed, and if the food is not already in the soil, it must be put there. A large crop of apples taken from an orchard draws immensely on the plant food in the soil, and if the practice of taking from and never giving back is continued, the soil will become exhausted, the trees refuse to bear, and finally die of starvation. We must not cheat the soil out of any portion belonging to it, if we expect fine orchards and fine fruit. I know of nothing better for an apple orchard than good stable manure, spread evenly over the entire surface. It is better that this manure

should be well worked into the soil by good tillage; but, put on as a top-dressing on sod, it will do a great deal of good. Unleached wood ashes are recommended as specially good for nearly all kinds of fruit, and where they can be easily obtained may be used. Apple trees require less frequent renewal than other fruit trees, and under the best management will grow and bear fruit a great number of years.

Pruning.—A moderate amount of pruning, especially of dead limbs, may be done in the fall of the year, but if the trees are to receive much cutting, it makes them tender for the time, and should be left till early spring. There can be no fixed rule for pruning apple trees; remembering only that sunlight is absolutely necessary to the health and growth of the tree, and the production of good fruit, and that stove wood cut from healthy trees is the dearest ever paid for. There is much work that may be done in an apple orchard. Moss will accumulate on trees in wet seasons, no matter how good the treatment or cultivation, and the task of removing it is a tedious one. But the destruction of nests and rings of eggs on the branches, as well as cocoons and insects in the crevices of the rough bark removed, will undoubtedly prevent much damage to the foliage in the spring, and recompense for all trouble.

Spraying apple trees with the arsenites to destroy the codlin moth, I am satisfied, from the testimony of those who have tried it, and the common sense there is in it, we shall all have to practise, either voluntarily or by statutory compulsion. I think it is settled beyond question that spraying apple trees in early spring destroys the codlin moth. I am not so positive about its destroying the moth crop in August, after the apple is pretty well grown. However, it is claimed by the advocates of spraying that it will kill the August crop of worms. It was also claimed that spraying with arsenites would destroy curculio in plums. Now the same persons, after years of experience, believe the jarring process the only effective one. It may prove to be the case with spraying apple trees in August.

PICKING, GRADING, AND PACKING APPLES FOR MARKET.

It is of great importance that the apple be picked as soon as ripe. Most fruit-growers delay too long. My experience would

indicate that all varieties of fall and winter fruit should be picked about two weeks earlier than we ordinarily pick them. The apples exhibited at a fair held previous to the middle of September, three years ago, were placed in my cellar after the fair, and were compared, at different times during the winter and spring, with those picked at the regular picking season in October. The early picked fruit kept better and was of a more delicate color. Perhaps as good a way as any to pick fruit is to use a common grain-bag with the corners tied together and passed over the shoulder and under the opposite arm. Strong, light ladders are needed, long enough to reach high limbs.

Grading. — In seasons of comparative failure, we grade closer than commonly, but ordinarily we should not make more than two grades. The man who packs honestly and grades well will sometimes profit thereby, though not always; certainly not always when his name is unknown on the market. In marketable apples there should be three grades, — good, better, best. Not many shippers can pack the "best," but large growers would find it profitable to do so. Below the standard, the fruit may be said to grade bad, worse, worst, and worthless. These sometimes get on the market, but should go to the evaporators and cider-mills.

Marketing. — The conditions of growers vary, and so no invariable rule for marketing can be given. Where men grow a variety of fruits, and so are aquainted with the market through the season, they can often do best by shipping their apples on their own account. As a rule, however, the farmer can do better by selling to shippers, either in the orchard or at the shipping-point.

SMALL FRUITS.

Cherries. — Cherries are budded or grafted upon stocks raised from cherry stones of any sort. If you want the tree tall and large, the stock should come from the small black cherry tree, that grows wild in the woods. If you want it dwarf, sow the stones of a Morrello or a May-duke.

Currants. — There are red, white, and black — all well known. Some persons like one best, and some another. The propagation of all sorts is the same. The currant tree is propagated

from cuttings. When the tree has stood two years in the nursery, plant it where it is to remain permanently. Take care that it has only one stem. Let no limb come out to grow nearer than six inches to the ground. Prune the tree every year. Keep it thin of wood. Keep the middle open and the limbs extended, and when these get to about three feet in length, cut off last year's shoots every winter. If you do not attend to this, the tree will be nothing but a great bunch of twigs, and you will have but little fruit, and that of an inferior quality. Cultivate and manure the ground as for other fruit trees. In this country the currant requires shade in summer. If exposed to the full sun, the fruit is apt to become too sour. Plant it, therefore, in the south border.

Grapes. — The grape vine is raised from cuttings or from layers. As to the first, you cut off, as early as the ground is open in the spring, a piece of the last year's wood; that is to say, a piece of a shoot which grew last summer. This cutting should, if convenient, have an inch or two of the former year's wood at the bottom of it; but this is by no means absolutely necessary. The cutting should have four or five buds or joints. Make the ground rich; move it deep and make it fine. Then put in the cutting with a setting stick, leaving only two buds or joints above ground. Keep it cool and moist.

Layers from grape vines are obtained with great ease. You have only to lay a shoot or limb, however young or old, upon the ground, and cover any part of it with earth. It will strike out roots the first summer, and will become a vine to be carried and planted in any other place. But observe that vines do not transplant well. For this reason, both cuttings and layers, if intended to be removed, are usually set or laid in flower-pots, out of which they are turned, with the ball of earth with them, into the earth where they are intended to grow and produce fruit.

Peach. — The soil should be a light, warm, sandy, or gravelly loam, in a sunny exposure, protected from bleak winds. Thus situated, and in favorable latitudes, it often flourishes in luxuriance, and produces the most luscious fruit. Transplanted at two or three years of age, they are worn out, cut down, and burned, at the age of from six to twelve years. They should be

planted at from 16 to 20 feet apart, according to situation, soil, and exposure. Constant cultivation of the ground, without cropping, is necessary for their best growth and bearing.

The peach tree is liable to many diseases and to the depredation of numerous enemies. The yellows is the most fatal disease, and this can only be checked by the immediate removal of the tree from the orchard. Of the insects, the grub, or peach worm, is the most destructive. It punctures the bark and lays its egg beneath it at the surface of the earth, and when discovered it should be killed with a penknife or pointed wire. A good prevention is to form a cone of earth around the trunk about the first of June. If made of leached ashes it would be better. Remove this heap in October, and the bark will harden below the reach of the fly the following year.

Pears.—Pears are grafted on pear stocks or quince stocks, or on those of the white thorn. The last is best because the most durable; and for dwarf trees much the best, because they do not throw up wood so big and so lofty. For orchards, pear stocks are best; but not from suckers on any account. They are sure to fill the orchards with suckers. The pruning for your pear trees in the garden should be the same as that for the peach. The pears will grow higher, but they may be made to spread at the bottom, and that will keep them from towering too much.

Raspberry. — They are raised from suckers, though they may be raised from cuttings. The suckers of this year are planted out in rows six feet apart, and the plants two feet apart in rows. This is done in the fall or early in the spring. At the time of planting, they should be cut down to within a foot of the ground. They will bear a little late, and will send out several suckers which will bear the next year. About four are enough to leave, and those of the strongest. These should be cut off in the fall, or early in the spring, to within four feet of the ground, and should be tied to a small stake. A straight branch of locust is best, and then the stake lasts a lifetime at least, let the life be as long as it may. The next year more suckers come up, which are treated in the same way.

Strawberry.—They are propagated from young plants which grow out of old ones. In the summer the plant sends forth

runners. When these touch the ground, at a certain distance from the plant come roots, and from these roots a plant springs up. This plant is put out early in the fall. It takes root before winter, and the next year will bear a little and send out runners of its own. To make a strawberry bed, plant three rows a foot apart, and at eight inches apart in the rows. Keep the ground clean, and the new plants coming from runners will fill up the whole of the ground, and will extend the bed on the sides. Cut off the runners at six inches distance from the sides, and then you have a bed three feet wide, covering all the ground. This is the best way, for the fruit then lodges on the stems and leaves, and is not beaten into the dirt by heavy rains, which is apt to be the case if the plants stand in clumps, with clear ground between them.

The Garden. — If it be practicable, make a garden near to running water, and especially to water that may be turned into the garden. Watering with a watering-pot is seldom of much use, and cannot be practised upon a large scale. It is better to trust to judicious tillage, and to the dews and rains. The moisture which these do not supply cannot be furnished to any extent with the watering-pot. A man will raise more moisture with a hoe or spade in a day, than he can pour on the earth out of a watering-pot in a month.

Soil.—The plants which grow in a garden prefer the best soil that can be found. The best is loam, several feet deep, with a bed of limestone, sandstone, or sand below. But we have to take what we find, or rather what we happen to have. If we have a choice, we ought to take that which comes nearest to perfection; and, if we possibly can, we ought to reject clay and gravel, not only as top soil but as a bottom soil, however great their distance from the surface. Having fixed upon the spot for the garden, the next thing is to prepare the ground. This may be done by plowing and harrowing until the ground at the top is perfectly clean; and then, by double plowings,—that is to say, by going with a strong plow that turns a large furrow and turns it clearly, twice in the same place, and thus moving the ground to the depth of 14 or 16 inches. The advantage of deeply moving the ground is very great indeed.

A Hot-bed. — If it can be so arranged, it should be built

against a shed or board fence, with its face to the southeast or south. Horse manure is the best to use for this purpose. Make a frame of boards or planks, as large as desired, and a foot and a half higher at the back than at the front, so as to furnish a slanting support for the glass to rest upon. It should be two feet high in front. Place the manure in the bottom, to the depth of a foot and a half. It should be well fermented and warmed. Over it spread a few inches of good garden soil, in which is a fair mixture of sand. Cover the bed with the window-sash, and let the sun blaze in upon it through two or three bright days, having taken the precaution to bank the bed on the outside with soil and manure. Plant the seeds in rows, with labelled sticks between the different kinds. warm water over the bed, with a garden sprinkler, and adjust the sashes. Give the bed fresh air at noon on every fair day, and see that the young plants do not suffer for water. When the plants come up, they will soon tell you all about air; for, if they have not had enough, they will draw up long-legged, and will have small seed-leaves. Indeed, if they are too much deprived of air, they will droop down and die. Take care in time to prevent this. Let them grow strong rather than tall. Short stems, broad seed-leaves, very green, — these are the signs of good plants and proper management. When necessary to water, take off a light at a time, and water with a wateringpot that does not pour out heavily. Water at just about sunset, and then shut down the lights: the heat will then rise, and make the plants grow prodigiously.

Saving and Preserving Seed.—This is a most important branch of the gardener's business. As to the saving of seeds, the truest plants should be selected; that is to say, such as are of the most perfect shape and quality. In the cabbage, seek small stem, well-formed leaf, few spare, or loose leaves; in the turnip, large bulb, small neck, slender-stalked leaves, solid flesh or pulp; in the radish, high color (if red or scarlet), small neck, few and short leaves and long top. The marks of perfection are well known, and none but perfect plants should be saved for seed. They should stand till perfectly ripe, if possible. They should be cut, or pulled, or gathered, when it is dry; and they should, if possible, be as dry as dry can be, before they are

threshed out. If, when threshed, any moisture remains about them, they should be placed in the sun, or near a fire in a dry room; and, when quite dry, they should be put into bags and hung up in a very dry room, against a dry wall or dry boards, where they will not accidentally get damp. The best place is some room where there is, occasionally at least, a fire kept in winter.

Sowing. — The first thing relating to sowing is the preparation of the ground. It may be more of less fine, according to the sort of seed to be sown. Peas and beans do not, of course, require the earth as fine as small seed do; but still, the finer the better for everything, for it is better if the seed be actually pressed by the earth in every part. Many seeds, if not all, are best situated when the earth is trodden down upon them.

Transplanting. — The best weather for transplanting, whether of table vegetables or of trees, is the same as that for sowing. If you do this work in wet weather, or when the ground is wet, the work cannot be well done. It is no matter what the plant is, whether it be a cucumber plant or an oak tree. It has been observed, as to seeds, that they like the earth to touch them in every part, and to lie close about them. It is the same with roots. If possible, therefore, transplant when the ground is not wet. But here again, as in the case of sowing, let it be dug or deeply moved, and well broken, immediately before you transplant into it. If you transplant in hot weather, the leaves of the plant will be scorched, but the hearts will live; and the heat, assisting the fermentation, will produce new roots in twenty-four hours, and new leaves in a few days. Then it is that you see fine vegetation come on.

Cultivation. — If the subject be from seed, the first thing to see to is, that the plants stand at proper distances from one another. Carrots, parsnips, and lettuce ought to be thinned out in seed-leaf. Hoe or weed immediately. Weeds ought never to be suffered to reach any size, either in field or garden, and especially in the latter. But, besides the act of killing weeds, cultivation means removing the earth between the plants, while growing. This assists them in their growth; it feeds them; it raises food for their roots to live upon. A mere flat hoeing does nothing but keep down the weeds. The hoeing, when the

plants are becoming stout, should be deep. Deep hoeing is enough in some cases; but in others, digging is necessary to produce a fine and full crop.

A good garden and plenty of fruits are necessary adjuncts to a good farm. When once arranged and set out, the orchard will soon begin to bring in returns. Small fruits should not be forgotten, and with little care will furnish many delicious dishes for the table, or berries for canning and preserving. In fact, apples, small fruits, and a well kept garden, will supply many things for the family use that cost but a trifle, yet are necessary for health and comfort. The farm, under ordinary conditions, can be made the ideal home, where comfort, intelligence, conservatism, and health may always be found.

CHAPTER VIII.

FERTILIZERS.

By M. G. ELLZEY, M.D.

The chapter on fertilizers has been assigned to me by the editor-in-chief. I shall endeavor to make it simple, practical, and useful. The value of a fertilizer depends upon the use which is made of it. The fertilization of land must be regarded, not merely as a science, but as both a science and a practical art. The attempt to reduce the deductions of science strictly to practice may result in pecuniary disaster. Practice which does violence to the principles of the science may be temporarily successful, but the final result will be inevitable loss.

It is universally known that land cannot be continuously cropped without deterioration, unless, by some means, the elements of its fertility, removed by the crops, are restored to the soil. This cannot be fully accomplished by hap-hazard and random methods. Systematic practice, based upon scientific principles, is absolutely essential to anything like complete success. Let us not forget our responsibility as temporary occupiers and users of the national domain. We are bound to acquit ourselves of the charge of spoliation of the natural inheritance of posterity. With a great scientific establishment under control of a department of the national government; with endowed colleges and experiment stations in almost every. State, the knowledge of the scientific principles upon which the art of culture must be based is not beyond the reach of any.

The systematic and scientific use of fertilizers is necessarily based on a scientific and systematic farm practice. At the foundation of this lies a systematic, scientific, and judicious rotation of crops. Such a rotation of crops is the foundation of all systematic farming. The rotation must depend upon climate, soil, and access to market. One crop in the rotation, everywhere, should be a resting, or fallow crop, for the recuperation and benefit of the soil; but the fallow-crop may also be of great value for feeding or depasturing, the resulting manure to be

returned also to the field. Manuring by fallows and by animal manures, are merely different methods of returning to the soil a portion of its own product, and so reducing to the lowest practicable point the deportation of the elements of fertility which are sold off the farm. It is true that the fallow plant, during its growth, increases the amount of combined nitrogen in the soil, and thus, if wholly returned to the soil, increases the aggregate fertility. But if the products of the soil be fed out to animals, there will be retained by the animals some of the elements of fertility; and some further loss necessarily occurs in handling the manure. So the feeding of animals, unless a considerable portion of their food be bought and brought onto the farm from outside sources, depletes the soil to some extent, though by feeding out the product of the land upon the land, depletion will be minimized. A complete system of fertilization must embrace a fallow-crop; the feeding of animals, not only with as much as possible of the products of the farm, but also with as large an amount as possible of bought feed; and the fallow and farmyard manure so produced must be supplemented by the skilful use of commercial fertilizers. The formula is in the order of importance: green fallows, animal manures, and commercial fertilizers.

But a scientific system of fertilization may cost more than the product will sell for, and in that case it is simply impracticable. Under such circumstances, the pressure of necessity may drive the skilled and scientific farmer to rely upon skill in plundering the soil of its natural fertility, and of transmitting it to those who come after him, in a ruinous condition. Science and practice cannot be divorced, but we must not despoil the national domain, the natural inheritance of posterity, by divine right theirs.

The fallow-crop has called forth much discussion as to its true function and place in agriculture. It appears to be now fully established that the legumes, used for such crops, possess the power to produce combined nitrogen, in connection with certain microbes, during their growth. That growing plants arrest the escape of nitric acid from the soil by leaching, is perfectly clear, for they actively absorb and assimilate it during their growth. This nitric acid of soils is, in small part, of atmospheric

origin; in greater part, the result of the nitric ferment, acting upon the organic matter of the soil. The action of the fallow crop, therefore, results in the considerable increase in the soil of combined nitrogen, available for the nutrition of future crops. The carbon, hydrogen, and oxygen of plants, which in connection with nitrogen constitute the organic parts of all plants, are, as far as is at present known, of atmospheric origin.

The fallow crop cannot, of course, produce ash minerals of plants; nevertheless, its effects upon the condition and position of such minerals in the soil may be, and are, very important. the first place, the roots of the legumes, as a rule, penetrate the subsoil, whence they draw their mineral food, from depths far below the portion of the soil reached by the plow, or drawn upon by the roots of cereal crops to any great extent. The effect of this is that the fallow plant brings up from the subsoil, and deposits near the surface, within reach of succeeding cereal crops, a large store of mineral food, in precisely that condition easiest of assimilation by the cereals. Moreover, it appears that the legumes possess a much greater power for the absorption and assimilation of the crude and less soluble forms of minerals than is possessed by cereals. The obvious importance of this fact has, I think, been too much overlooked by writers on scientific agriculture. Suppose, for example, we desire to manure a wheat crop with insoluble and crude raw phosphate. Experience establishes the fact that phosphates of that sort are assimilated by wheat with difficulty, and to a limited extent. Let us apply such phosphates to clover, which assimilates them greedily, and brings them into a condition, and into a position in the soil where they are readily reached and assimilated by the wheat which succeeds the clover in rotation. Such a treatment of crude raw phosphate is, in my opinion, more scientific, more economical, and more effectual than chemical treatment of it by the ordinary manipulations with acid and drier, as practised in the manufacture of so-called soluble, or dissolved, or super-phosphates of commerce.

Attention is particularly invited to the point here made. It is believed that herein is disclosed a function of the fallow crop, by no means the least important. In British agriculture, phosphates are not applied to cereals in any form, but only to crops

in the rotation which precede the cereals. In this country, the direct application of phosphates to the cereals may be said to be the universal practice. Is this the best practice? Certainly it may be doubted. This question may well be propounded to our experiment stations.

The effect of the presence of organic matter in our soils is a matter of much importance, profoundly altering, as it does, color, texture, capacity for heat and moisture, and other physical characters. This question must be studied in its relations to the meteorology of the season of active development of our cereals, for it is certain that the conditions of their growth in America are all widely different from those of other countries. It is only necessary to point out that, in England, wheat is seeded during the same weeks as in Maryland and Virginia; whereas we reap ours in June, and they reap theirs in September. This is obviously due to different meteorological conditions there and here; but it shows that we cannot accept, as applicable here, the results of their experience, or deductions from their data, until fully tested with us. The results of English, French, or German experiments may prove misleading here, and cannot be safely adopted without strict verification, subject to all the conditions which prevail with us. I believe that the importance of abundant organic matter in the soil is very much greater in this country than in either of those. The results obtained with chemical salts, by their experimenters, have never been equalled here, nor do I believe it to be possible. The huge rains, alternating with intense sunshine and parching heat, which prevail here in late spring and early summer, have no counterpart there. The effects of such alternations are of themselves disastrous, and are greatly intensified by the absence of abundant organic matter, the effect of which is to intensify the injury to crops by parching heat and drought, and by leaching rains. Abundant organic matter increases the hygroscopic powers of the soil, or its retentiveness of moisture, and lessens its capacity for heat. In view of the foregoing facts, the conclusion is easily reached that the weak point of American agriculture is the depletion of our arable land of organic matter, resulting from the too exclusive reliance upon commercial fertilizers, and the consequent neglect of fallow crops and animal manures.

Farm-yard manure contains an immense amount of water, but if dry matter alone be considered, the nature and proportion of the materials added by it to the soil do not usually differ very widely from those in the fallow crop; the effects of its application are substantially the same as are produced by the turning under of a fallow crop. The value of farm-yard manure depends upon the composition of the feeding-stuff, the manner of saving and applying the manure, and, in some measure, upon the kind, age, and breed of animals kept. No animal adds anything to the feeding-stuff in converting it into manure. Young and growing animals extract from the feed the elements which form their bones and other tissues. Mature animals, whose bones are complete, and whose growth has ceased, practically return the whole of the valuable fertilizing elements of their food supply in the manure. Young animals, reared on the farm and sold off, make much larger draught upon the soil than mature animals bought to be fattened and sold. This important consideration is frequently left entirely out of view.

It is perfectly clear that those animal industries which involve the handling of mature animals make larger returns to the soil, from a given amount of feeding-stuff, than those which involve the rearing of young animals for sale. To put the matter in simpler form, it may be said that the manure of mature animals is of more value than that of young and actively growing animals. Of course the value of a ton of farm-yard manure will depend largely upon the amount of coarse fodder, straw, and water it contains, besides the excreta, or food residue, of the animals fed. Dollar and cent valuations of farm-yard manure serve well enough for comparison, but they depend so largely upon a multitude of ever-varying factors that they are delusive. The same remark applies, with greater force, to dollar and cent valuations of chemical or commercial fertilizers.

Feeding-stuffs, like cotton seed, linseed, and the like, which abound in combined nitrogen, and also in the ash minerals required by crops, yield manure of great value; whereas, ensilage, or dry fodder, straw, and hay, yield manure of little value. To understand such facts, no recourse is necessary to any other

source of information than common knowledge and common sense. No display of technical formulæ, nor of learned terminology, is needed to convince a man of common sense that, when he feeds rich rations, he gets rich manure, and when he feeds poor rations, he gets poor manure. There are many published tables of analyses of feeding-stuffs, exhibiting their contents of nitrogen and phosphatés, upon which the value of the manure largely depends. The question of the comparative manure value of a ration may be settled by an inspection of one of these tables, and no extended discussion of the point is called for here.

Without attempting exact money valuations, it may be stated that the manure produced by a ton of bran is nearly 30 per cent more valuable than that produced by a ton of corn; that produced by linseed is three times as valuable; and that by decorticated cotton seed, worth five times as much. The practical farmer knows that the purchase of the best of the above articles, to be combined with ensilage, or chopped hay, fodder, or straw, steamed together, and fed to selected animals of the best breeds, will pay if well managed. I repeat it; I understand perfectly well that pecuniary considerations may compel a farmer to adopt a practice which his judgment condemns.

It is easy to advise a farmer to buy good animals and feed them well, for the sake of profit on the animals, and the value of their manure. But if he has no money and no credit, — and too many have neither, — how can he buy? In this place it is supposed to be best not to discuss economic questions, not a part of the subject immediately in hand. On the other hand, the practical man should understand that unfavorable economic conditions, due to causes foreign to our discussion, may render scientific conclusions null and void in practice, for the time being, but cannot set them aside.

Much has been written on the subject of feeding animals for profit, and, incidentally, for the value of the manure; nevertheless, a thoroughly practical treatise on the subject, in the light of the latest knowledge, is wanting. "Feeding Animals," by E. W. Stewart, is the best we have; but if the health of the author admits of it, it should be revised, brought down to date, condensed, and a new edition published.

The limits of the present chapter are such that it must be suggestive only. It advances no pretension to be either learned or exhaustive. The design is to present an outline sketch of a scientific system of fertilization, the details of which will vary with circumstances, but always answering to the demands of science, by making restitution to the soil of the elements of fertility deposited in the crops.

The economical saving and application of farm-yard manure demands methodical and judicious practice. Extravagance and neglect are the two extremes of wastefulness. Having expensive buildings and arrangements, the interest on the cost of which, and the expense for repairs of which, exceed the annual value of all the manure saved, resembles the policy of saving at the spile and losing at the bung. Allowing valuable manure to be leached out, and washed away, and then hauling out the mere carbonaceous residue, may be likened to a cask which leaks at both spile and bung, and the contents of which run wholly to waste. Farm-yard manure accumulating in well littered yards during winter, suffers very little loss from leaching, because the fermentation is not very active and it is by means of this process that the valuable constituents are rendered soluble; but the manure must be gotten out early in the spring, for as the temperature rises the fermentation is hastened, and the loss will, in a short time, be very great.

The plan of allowing the manure to accumulate in stalls under the animals all winter, and keeping the stalls well littered so as to cover up the manure as fast as formed, and keep the animals clean, is to be condemned as doing violence to hygienic law, and not saving labor. The arrangement of the manure is largely a matter of judicious common sense. I have kept it in pens of stout poles or logs, about 8 feet by 18 or 20 feet, and about 3 feet high, mounding it over above the top of the pen, and by this plan have not found it to "fire-fang"; whereas, it is sufficiently rotted to be applied early in spring. There is no doubt that the plan of chaffing the roughness of the farm and steaming it with meal, or cake, or bran, or a mixture of all, and also using chaffed fodder for litter and bedding, is a great advantage to the manure; for not only does the steaming destroy fungi and larvæ, and eggs of destructive insects, but the manure is sooner

well rotted, and far more easily handled. Steamed food, and mixed and well-balanced rations, doubtless pay well for the labor and expense involved, in the increased relish of the animals, and their more rapid improvement. This may be said, without saying that a bushel of cooked meal will produce three times as much beef or pork as a bushel of raw meal. This has been said, and often times repeated; but no confidence should be placed in statements so extravagant, and having no carefully verified inductive basis. To the experiments of most amateurs, it is the element of verification that is lacking.

That part of a scientific system of fertilization which rests on the basis of fallow crops and animal manure, has now been suggestively sketched. If such a system has been carried to the highest development of which it proves capable, under the general plan of farming, and the pecuniary condition of the farmer, the foundation has been laid for the successful use of chemical salts and manipulated manures, or natural guanos. I am satisfied that a condition precedent to the scientific and successful use of this class of fertilizers, in this country, is the presence of an ample store of organic matter in the soil. And this condition being secured, in the manner suggested, by green fallows and animal manures, the skilful and scientific use of commercial fertilizers may be made profitable instead of ruinous. fallows and animal manures, supplemented by commercial fertilizers to sustain the rotation at its weak point, will constitute a complete scientific system of fertilization.

Under normal and just financial conditions, with the consumption of normal rations by the great mass of industrial workers, and the honest middle classes, which will insure fair prices for the products of the farm, we shall be once more able to live by agriculture; to pay our taxes, to improve our lands, to beautify and embellish our homesteads. We shall be able to introduce into our houses modern conveniences and sanitary improvements, and thus to restore to our families that social prestige of which existing conditions have deprived them.

If it has now been shown that the weak point in American agriculture is the depletion of our soils of organic matter; if it is true that we cannot use chemical salts, guanos, or manipulated commercial manures with profit, until the deficiency of

organic matter be remedied, and if it is true that we must depend upon fallow crops and animal manures to resupply the organic matter, we may pass on to the brief discussion of the scientific use of commercial fertilizers.

We must pass by the question of the disposal of town sewage, without meaning by any means to ignore its prodigious importance. Thirty-five millions of urban population consume, including waste, more than 150,000,000 pounds daily of the products of the soil of the national domain, of which the merest trifle is in any form returned to the soil. A distinguished English scientist is said to have abandoned the study of agricultural chemistry, because he said it afforded no scope for his genius, "being a mere matter of nitrogen and phosphates." If his genius had not scope to see any further into the subject than that, it was well that he went no further. The scope which was lacking appertained rather to the genius than to the chemistry of agriculture. It is true, however, that the nutrition of plants can never be well understood as long as the solution of its infinitely complex problems is attempted exclusively from the chemical side. The plant, no less than man himself, is a living organism. The presumption that its acts of imbibition, circulation, assimilation, secretion, excretion, respiration, are purely chemical phenomena, under the dominion of purely chemical and physical laws, has led many minds far from the truth. All the phenomena in which the plant is concerned, which culminate in the production of living matter from non-living mineral matter, are vital phenomena, and under the dominion of physiological law, which, within the sphere of its action, subordinates or supplants the ordinary chemical and physical laws of nature.

The ordinary chemical view is that the valuable constituents of commercial fertilizers are nitrogen, phosphoric acid, and potash. This dictum is accepted generally in an absolute sense, and the deductions drawn from it are consequently elaborately erroneous. Nitrogen, phosphoric acid, and potash, are arbitrarily valued at so much per pound; the number of pounds of each in a ton is determined approximately by the approximate determinations of an analyzed sample, and the errors of analysis affecting a few grains are multiplied into errors affecting tons; the resulting figures are multiplied by the arbitrary prices per

pound, and the gross result is the scientific valuation per ton. Physical condition, and original sources of the materials, are left out of account; and yet these very considerations affect the value of the fertilizers to an extent often greater than the facts disclosed by the analysis. Upon this basis rests much legislation in behalf of the farmer.

The chemist makes an arbitrary distinction between three forms of phosphoric acid; viz.: soluble, insoluble, and what he calls "reverted," for which distinctions the chemist has, of course, his fee. In some cases, and by the laws of some States, the insoluble acid is classed with sand and water, as valueless material. On this point it is only necessary to remark that, under that law, raw ground bones contain nothing of value, except 80 pounds of nitrogen per ton, and would be valued at about \$14 per ton; the 1100 pounds per ton of phosphate of lime which bones contain being classed under the law with sand and water, as valueless material. In one State, Georgia, the law is, or was, that any goods containing no soluble phosphoric acid, offered for sale in the State, shall be confiscated; so that a man offering to sell to the farmers of that State probably the best and most honest fertilizer for the money now to be found in the market, is made a law-breaker and a criminal, subject to pains and penalties. Or else, if an exception is made of the insoluble phosphoric acid in raw bone, the law is selfcontradictory, and the state stultifies itself. The law and the State of North Carolina are obnoxious to the same criticism.

Phosphoric acid, combined with three equivalents of lime, commonly called tri-calcic phosphate, is the sort styled insoluble, and said to be "invaluable" to plants. When this tricalcic phosphate is treated with sulphuric acid, a portion of the lime leaves its combination with the phosphoric acid, and forms, with the sulphuric acid, sulphate of lime. The remaining biphosphate of lime is soluble in water, and this yields the so-called soluble phosphoric acid of the chemist. But what is reverted phosphoric acid? No man is able to say what it is. It is a chemical nonentity. If a sample of commercial manure is treated with pure cold water, the soluble phosphoric acid is removed. If the residue be treated with a solution of ammonium citrate, an additional quantity of the phosphoric acid will

be removed, and this is called "reverted." The residue, which can only be dissolved out by acid, is called insoluble.

But what is the character of the phosphate soluble in solution of ammonium citrate? No chemist is able to say. It is certain that some portion of it is the tricalcic, so called "insoluble"; the quantity of which taken up will vary, and depends largely upon the fineness of the grinding, and the length of time the material is exposed to the solvent; and also to some extent upon the relative volume of the phosphate and the ammonium citrate solution. All that can be said is that the "reverted" phosphoric acid is that which is dissolved out of the fertilizer by the ammonium citrate solution. That this determination, if correctly made, is without the importance attached to it is certain. The practice of English analysts ignores this determination, and in their analyses are reported only phosphoric acid soluble in water, and insoluble in water.

In the case of nitrogen, the analytical practice is, to reduce all forms of it to ammonia, by incineration of a sample of the fertilizer in a combustion tube, along with a mixture of caustic soda and lime; to estimate this ammonia, and calculate the nitrogen from the ammonia. This process wholly fails to discriminate between the different materials yielding this ammonia, all being classed under one head and subjected to one valuation, which is based upon the cost of the highest priced and most valuable ammoniating materials found in the market. So the manufacturer is invited to cheat the farmer, under the protecting panoply of the law, and the indorsement of a defective and crude analysis. He is invited to "ammoniate" his goods with cheap and worthless trash, like parched leather scrap, which yields ammonia freely to the analytical process, but does the crop no good. It places his goods on an equality with those ammoniated with valuable and costly material, such as steamdried blood. This proceeding misleads and deceives every one concerned, and does so with the solemn sanction of the law. is high time that there should be an end of it. It is not within the power of any chemist to furnish the data upon which the cost of the materials in any fertilizer can be computed with any approach to certainty or accuracy.

With regard to the potash, the tendency has been to exagger-

ate its practical value, in the minds of farmers generally. On many soils it has been shown that very large additions of various potassic compounds fail to increase, in any way, the growth of the crop. There may be coastwise soils, of a sandy character, and tertiary or more modern origin, lacking potash, and upon which potassic fertilizers may be made to pay. On good clay loams, containing much decomposed feldspar and mica, it is a mere waste to apply potash. One of the best and most experienced farmers in Piedmont, Virginia, informed the writer that he had applied the German potash salts to his land, to various crops, and in various quantities, ranging as high as 1000 pounds per acre, without the smallest perceptible effect in any case; or upon any crop, grass, legume, cereal, root, or tobacco. He said he would not give \$2 a shipload for it, delivered in his barn-yard. And yet the old statements are everywhere repeated by misled scientific men, without any effort at verifica-tion. The time of the experiment stations is largely given to analyzing and reporting after the old fashion, and the pretence is still advertised, that millions are hereby saved to the farmers, by driving out of the markets worthless goods. No such thing is true; but it is true that a tax is laid upon the fertilizer trade, ultimately paid by the farmers, which tax goes mainly to pay the salaries and other expenses of the station. There never was any difficulty in detecting gross fraud in a fertilizer, either by analysis or without it, from results in the field. But as the matter now stands, the dealer has only to make the stuff analyze well, and, backed up by the station certificate, he goes into court and enforces collections for utterly worthless trash. This whole subject has been worked onto a false basis, and it needs to be reformed from bottom to top.

There is no room to doubt that, for twenty years past, there has been a pretty steady decline in the crop-producing value of manipulated commercial fertilizers; due, in part, unquestionably, to the exhaustion of the organic matter from our soils, by neglect of fallow crops and animal manures, and continual dependence upon fertilizers; but due, in greater measure, to the use of inferior materials, which analyze well in compounding the manipulated goods. This result has been encouraged, and

sustained, and mainly brought about, by the public analysts, and the laws passed at their instance.

The chief ammoniating materials, used in the manufacture of ammoniated superphosphates, are various nitrogenized organic matters, mainly of animal origin; sulphate of ammonia, and nitrate of soda; rarely, nitrate of potash is used. The phosphates used in making this class of goods are exclusively of mineral origin. Animal bone costs more than double as much as mineral phosphate, and no manufacturer using bone could compete in this trade. The term "bone phosphate of lime," often used in the report of the analysis, has led many to suppose that bone is the source of the phosphate; but "so much phosphoric acid equivalent to so much bone phosphate of lime" means only that that quantity of acid would combine with three equivalents of lime to form that quantity of tribasic phosphate, which is the form existing in bone. The statement is of no possible value, for the phosphoric acid referred to is the aggregate of soluble, insoluble, and so-called "reverted," found in the sample. The actual meaning is, that this quantity of phosphoric acid is chemically capable of forming the stated quantity of "bone" or tricalcic phosphate.

Among the "ammoniates" of organic origin used in this line of goods, undoubtedly the best is steam-dried blood, known to the trade as red blood; the fire-dried or black blood is partially charred, and of less value. Fish-scrap, or the refuse of fish-oil factories, is an excellent "ammoniate"; as is, also, slaughter-house refuse of one sort or another, sold as "Animal Fibre," "Flesh Dust," and by other names. Woollen refuse, hair, hoof and horn shavings, form a secondary class, which analyze well but produce very little effect in the field. Finally, parched and ground leather scrap, which is the refuse of shoe and harness factories, which analyzes remarkably well, is almost entirely worthless, and is unfortunately largely sold and used.

It is here that the false and misleading results of the work of analysts, as published, produce great mischief. All these ammoniates are indiscriminately reduced to ammonia, by the analytical process, and reported as of identical value, and that value deduced from the cost of such materials as steam-dried blood and sulphate of ammonia. That that which is inferior should be

made equal to that which is good; that which is cheap to that which is expensive; that which is fraudulent to that which is honest; and this under authority of law and by sanction of an officer of the law, is not defensible.

Ammonia sulphate, and sodium nitrate, are both costly and valuable articles. For application in the fall to a crop which lies dormant in winter, the sodium nitrate should not be used, on account of the fact that it leaches out of the soil somewhat rapidly, and a very large portion of it will be lost in the drainage water, before the crop begins to grow in spring. On the other hand, the ammonia salt does not leach out to any appreciable extent, and should always be used in preference to a nitrate for fall-sown crops. But the manipulator is compelled to work for an analysis, and he desires to get the best analysis at the lowest cost; therefore, if the sodium nitrate is cheaper than the ammonia salt, he uses the nitrate, regardless of whether it goes into the drainage water or not. Upon this highly important matter the station report is silent. The analyst, if interrogated, says he does not know anything more than what is stated in his report, which report complies fully with the law defining his duties. Under such circumstances, it is not remarkable that farmers by the thousand - nay, by the million - have been ruined by the use of these commercial fertilizers.

The supply of the natural ammoniated guanos is so nearly exhausted that they need scarcely be separately discussed. The phosphatic guanos, from which all the organic matter and ammonia salts have been leached out, still constitute important sources of phosphates for manipulated manures, and some of them have been found profitable in their natural condition. These phosphates are known in the markets by the names of the places where they are found; as the Navassa, Orchilla, etc. However, the chief source of mineral phosphate is at present the vast deposits of the State of South Carolina, which consist mainly of very ancient bones and teeth of marine animals. These materials are thoroughly fossilized, or mineralized; only a trace of organic matter is left. The proportion of actual tricalcic phosphates, or so-called bone phosphate, in them, is nearly the same as in recent bone. It may be inferred that the organic matter has been replaced by mineral matter, derived from the

surrounding soil. There are, in most countries, large quantities of mineral phosphates, — notably in Canada and Spain, — but no great deposit is so favorably located, with regard to commerce, as that of South Carolina. One of the most important sources of phosphate for agriculture is, and must continue to be, animal bone; not, as has been by many supposed, that the phosphate of animal origin is more valuable than that of mineral origin.

The great and increasing exportation of our live-stock is deporting from our fields vast and increasing quantities of phosphates. The wise and well informed would be glad to see this trade replaced by a normal home consumption of meat, by our own working people and the great middle class, which is rendered impossible under existing financial and industrial conditions. The time will come when the phosphate thus exported will have to be brought back to us, if our wheat area is to produce bread sufficient for our own people.

Many will still dissent from the remark just made, that phosphate of mineral origin is fully equal, as a fertilizer, to that of animal origin; but the fact has been fully demonstrated, in a series of field trials, conducted by Professor Jaimison on behalf of the Highland and Agricultural Society of Scotland; which experiments, for scientific accuracy and fulness of detail, cannot be surpassed. These same experiments have established the fact that, instead of the tribasic, or insoluble, phosphate being classed with sand and water, as not "available" to plants and worthless as a fertilizer, the dissolved phosphate does not exceed it by more than 10 per cent, in the increase of crop produced.

The question is no longer whether tribasic phosphate is "available" to plants, but how much its "availability" is increased by the usual treatment with sulphuric acid, converting it into superphosphate. The answer to that question, according to present information, is — not exceeding 10 per cent. That is, if a ton of raw phosphate will produce increase of crop worth \$10, the same phosphate, subjected to the usual treatment, will produce increase worth \$11. The manipulation consists in the addition of a ton of sludge acid, and of about 500 pounds of sodium chloride, as drier. Thus the one ton of raw phosphate,

after drying, produces rather more than two tons of dissolved phosphate. The cost of the acid, the drier, and the expense of manipulation, will make the cost of the dissolved phosphate more than four times that of the raw. Subtract from this the \$1 in every \$11, for the excess of increase of crop, and it readily appears how the case stands. It ought to be insisted and demanded that our colleges and stations should make exhaustive studies of this question, each in its own locality.

If the expense of the sulphuric-acid treatment and necessary drier can be eliminated from the commercial fertilizers, it ought unquestionably to be done. In British agriculture the ammoniated superphosphates have scarcely a place. Their animal manures and fallow crops are the chief source of combined nitrogen. They do not apply their phosphate to the wheat crop, but to the root crop which precedes the wheat in their rotations. In fact, they apply no fertilizer to the wheat, unless in spring it seems to grow off slowly, or has a yellow look; in which case, they apply from 100 to 150 pounds per acre of sodium nitrate.

Animal manure is evidently the sheet-anchor of British agriculture. It ought to be the sheet-anchor of American agriculture. It ought to be supplemented here, as it is there, by fallow crops and commercial manures. Unless a scientific system of fertilization is adopted, the American wheat area will in future rapidly decline in producing capacity; whereas, early in the new century, we shall have population able to consume the present product, unless, through pauperism intensified, the people are reduced to half rations and cheaper forms of food. The history of nations is before us: Will we be wise or foolish? Will we profit, or fail to profit, by the examples of the past? Having an abiding faith in the wisdom, courage, and patriotism of the people, this writer is convinced that the necessary reforms will be enacted into laws, at no distant day, which will cause prosperity to return to the people.

When agriculture begins again to be profitable, its scientific pursuit will begin again to be possible. At present it is not so. In general, and excluding certain local and special cases, a scientific system of fertilization will simply cost more than the value of the product in the hands of the producer. At present,

therefore, scientific fertilization may be said to be very plainly impracticable, over a great part of the country. The farmer cannot, any more than another man, perform impossible things. When wheat and corn fail to pay the cost of their production, under the guidance of science and practical skill; when livestock cannot be grazed and fed, except at a loss; when debt accumulates and taxes increase; no power is able to arouse the interest of the farmer in scientific inventions and methods of culture. The day has come when the great food-producing area of the United States must be scientifically fertilized, or rapid and continuous decline of its producing capacity is inevitable. There exists already an urgent lack of organic matter in the corn and wheat lands, and it is becoming more urgent with each season. Until there is a restoration of abundant organic matter, ammonia salts and acid phosphates will be applied only at a loss, accompanied by the ruin of the lands, left bare, and exposed to the leaching of the tremendous downpour of wintry rain.

Probably there has never been devised, for the corn and wheat area, a better rotation than the old five-shift system. Each field in succession lay in clover two years; the clover being seldom mown, but almost universally grazed both seasons; the stock being taken off early in the second season, and the aftergrowth turned under for wheat. The stubble of this wheat, cut very high, made of itself a dense cover for the land; and the heavy growth of foxtail and dogweed which came up prevented washing and leaching during winter. This was turned under the next spring for corn, and all the farm-yard manure also applied to the corn crop. The corn stubble was seeded again to wheat, with guano, and re-seeded to clover.

In addition to the five regular fields of the rotation, there were timothy meadows, and orchard grass, and clover lots, for grazing and mowing; and a permanent blue-grass pasture; only broken up as the condition of the lot, or meadow, or pasture, rendered it advisable. Large amounts of hay, straw, and corn fodder were produced and fed out on the farm; and besides, the usual practice then was to have the wheat ground, sell the flour, and feed out the wheat bran. The weak point in this rotation was the corn-land wheat, and this was judiciously and skilfully

brought up with guano and manipulated commercial manures, ground bone, etc. Ashes and lime were frequently applied to the clover fields, and gypsum invariably to both clover and corn, at the rate of a bushel and a half per acre.

The time of which I am writing was forty years ago, and the system described was an old practice then; yet it was a strictly scientific system of fertilization. There is none like it now, nor are there now any such crops as were then seen. At that day, agriculture was the leading profession; the farmers were the wealthiest people, and the best people, and ranked indisputably at the head of the community. Are such things gone, without return? It is for the farmers to determine at this time. A few more years such as these twenty-five years last past, and no power under heaven can restore the lost prestige of American agriculture.

With regard to the mode of applying commercial manures, I desire to offer a few suggestions. Experience clearly demonstrates that the effect of concentrated manures is much greater when applied in drills than when broadcast. One reason for the superiority of the drilling is found in the fact of the much greater uniformity of application by the machine. chief reason is that, by concentrating the material in the drill rows, the feeding roots gain readier and more complete access to it than if more widely diffused through the soil. It should be understood that, when once widely diffused by broadcasting, it does not become concentrated by any natural process, but has rather a tendency to further diffusion and dilution by the soil. Plant food does not exist in the soil in solution, but in moist mechanical admixture through, and adhesion to, the soil, to such an extent that percolating water does not move it. particles of plant food being thus nearly stationary in the soil, the plant in order to obtain it must lay its roots alongside of it, which is rendered difficult or impossible by great diffusion and dilution by the soil. It is well to keep this principle in mind at all times, in dealing with concentrated manures. In the old five-shift system, undoubtedly the correct place for the commercial manure was the corn-land wheat, because that was the third successive grain crop taken from the field, and was the weak point in the rotation. The usual mode of drilling in the fertilizer with the seed was also the best method of applying it. With those farmers who never sold grain, nor straw, nor hay, whose market products were mainly beef and pork, and who not only fed all the corn and hay they could grow, but also bought corn, and bran, and linseed, and cotton seed, to be fed to their cattle and hogs, the plan adopted was, — to feed on a grass-field to be broken in the spring for corn. One or two corn crops were taken, and then the field sown to wheat and reset in grass, which was usually a mixture of clover, timothy, and orchard grass. This wheat received also a heavy dressing of commercial manure, and was thus made to pay the way of the wheat crop, and secure a heavy stand of grass.

The most distinguished advocate of this system, in the Eastern States, was Colonel Robert Beverley, of Virginia. At one time he reported, with the items, a clear profit of \$10,000 from a farm of 800 acres. This profit declined, until last year Colonel Beverley refused to incur the loss of stocking it, and merely allowed it to drift, selling the hay crop for the first time in his life, to pay the tax. Colonel Beverley usually applied to his wheat 500 pounds per acre of commercial manure, and both corn crops were fed out on the land, and his yield averaged about 30 bushels per acre, which, before the collapse of prices, produced by the contraction of the currency, and the adoption of the mono-metallic or gold standard, paid a good profit on the wheat and cost of fertilizer, so that the heavy stand of grass might be regarded as additional gain. Now then, what has reduced the profits of this system from \$10,000 on an 800-acre farm to the point at which it was found necessary to abandon it, on account of the loss entailed? Observe, that it was a strictly scientific system which, while yielding large profits, brought the land up to the highest degree of productiveness. What, I ask, has wrought this ominous result?

Nothing appears to be left to the farmers of the great grass and grain producing States, whose staples are the bread and meat of nations, but the reflection that no land is, or can be made, rich enough, under existing conditions, to pay the cost of its cultivation, the tax laid upon it, and upon all stock and implements used in its cultivation, to purchase necessary manure, and to provide for the necessities of the farmer and his family, even

if there is no debt and no mortgage. There is no remedy in improved science or higher skill; none in more hours of toil and fewer of rest and sleep. Improved prices only can save the agriculture of that section.

Is the case the same with the great planting area, whose staples are cotton, sugar, tobacco, and rice? There is not upon the face of the earth such another country as this planting area of the United States. Here all natural resources, capable of contributing to the greatness of a people, are concentrated as nowhere else. With the great world-staple, cotton, alone, that country ought to be rich. There can scarcely arrive a period when this queen of crops will fail to pay those who pursue its culture intelligently. But, in order to put disaster out of the question, cotton-planters must free themselves of financial conditions which no other producers under heaven could support for a single season. They are between the upper and the nether millstones, — the factors and the banks.

The world's supply of bright tobacco must also come mainly from this same immensely favored country. The successful handling of this article demands a thorough practical knowledge and experience of a very highly skilled technique; but those who possess this knowledge and experience, with the necessary patience and energy, hold in their hands a practical monopoly of the highest grade of a staple which cannot fail to pay, until the burdens imposed by government have already destroyed the living of the great mass of producers. Is it too much to say, that a people living in the full blaze of all the lights of civilization, as it now exists, who shall permit such a fate to overtake them, will deserve that fate?

From all the piedmont steps of this magnificent country flow down, in all directions, to gulf and sea, unfreezing and unfailing water-powers which will one day become prime perennial sources of the mechanical forces of the great future; to wit, electricity and compressed air, which shall be distributed to every plantation and farm-house everywhere. The mineral wealth of this country is incalculable from present data. The potential bread and meat producing power of the section under consideration, under a skilled and scientific agriculture, is able to provide abundantly for more than one hundred millions of people. The

civilization which the close of the incoming century ought to discover in this place, surpasses conception. Nothing but the blindness and folly of man can disappoint the world of the fulfilment of this vision of earthly power, splendor, and glory.

In the great phosphate beds of the coast, notably already developed in South Carolina and Florida, and certainly existing elsewhere, nature has provided amply for the needs of the agriculture of thousands of generations; whereas the seed of the cotton crop is a vast supply of organic matter, containing more available nitrogen than any other material received at nature's hand. In the cotton seed and phosphates, the region under consideration possesses a permanent basis for a scientific system of fertilization. But this is not all. There are included in this area prodigious deposits of lime, gypsum, and marl; and, moreover, the long season of growth of vegetation is very favorable to the accumulation of organic matter and nitrates in the soil, and the season of leaching during the winter suspension of vegetation is very much shortened.

From these great natural facts, it is very clear that the problem of the conservation of the fertility of these soils is a far less serious and difficult one than that which confronts the agriculturists of the great middle and northwestern States. It seems needless to remark, that this problem presents greatly intensified difficulties in the New England States and Canada. And this fact greatly favors the agriculture of the Southern and Border States; viz.: that the fallow crops reach there their highest efficiency and value, both from their longer season of growth, and their natural adaptation to the climates and soils of the region.

The agricultural colleges and stations of this section have before them great possibilities of usefulness. It is for them to work out the details of the agricultural practice, at once answerable to the demands of science and practical economy. They must show how, in every-day practice, all the vast natural supplies of fertilizers may be fully utilized with the utmost attainable economy.

In such an article as this it cannot even be stated in detail what these problems are, according to the writer's views. It can be stated that a complete system of scientific agriculture, even as a model, has nowhere been formulated for discussion. It may be said, without fear of successful contradiction, that it is high time that the problem before these institutions was stated in plain, intelligible form; and the data comprising the various inductions, upon which the several general propositions rest, can then be more speedily, more easily, and more satisfactorily developed and arranged.

In general terms, the problem may be stated thus: What are correct rotation and methods of culture, for the given locality, having in view the full utilization of fallows, animal manures, and commercial fertilizers? It being settled what a correct rotation is, investigation will naturally fall into right channels; experiments will be directed to the best selection and management of a fallow crop, and its proper place in the rotation; the best animals to feed and how to feed them, no less than how best to save and apply the manure; at what point in the rotation the commercial manures should be applied, and the best method of application; as, of course, also the best forms of such manures to use.

The following great questions need solution; viz.: Can the full use of fallows and animal manures enable us to wisely dispense with ammoniated superphosphates? And can we wisely replace dissolved phosphates by the use of raw ground phosphates, in the rotation used? Should such raw phosphate be applied directly to the staple money crop, or to the fallow, or other crop, which precede the money crop in the rotation? Does not some other crop in the rotation, and especially the fallow, assimilate raw phosphate (or dissolved phosphate) more readily and completely than the money crop?

It is the opinion of the writer that we can and ought to devise a complete system of fertilization, in which we may dispense with the enormous cost of the sulphuric acid, drier, and manipulation of dissolved phosphates and ammoniated superphosphates. If our dealings in mineral manures can be as nearly as possible limited to natural products, less cost of manipulation, it will be an immense gain in economy of production of the great staples which mainly support the commerce of the world. This does not imply that we may dispense with dealers in commercial manures. Certainly mineral phosphates and raw bones must be

ground, and sacked, and delivered to the channels of trade. It may become a question whether clubs, granges, alliances, may own mills where all members can have their own supplies ground to order. The manufacture being simplified as above would facilitate such arrangements. It is also a question whether the State, as for example, South Carolina and Florida, should monopolize the great phosphate deposits, and deliver the finished product, no less than the raw material, to commerce. In the modern view, that the State should control all natural monopolies, this last view of the question cannot be lightly passed over.

In concluding this article, it is desired that it may be clearly understood that it makes no pretension to exhaustive technical treatment of any part of the subject. The design has been to summarize general principles with suggestive comment, as more appropriate to a chapter of this kind.

I believe that I have shown: That the weak point in American agriculture is the lack of organic matter in our soils, and that the bad effects of that deficiency are intensified by the peculiarities of our climate; that fallow crops and animal manures are the sources from which the necessary organic matter must be supplied, and that, therefore, these substances must be the basis of every scientific system of fertilization; that chemical or mineral manures, or natural guanos, which constitute the commercial fertilizers, cannot be successfully substituted for, but must supplement, fallows and animal manures; that the methods of preparing and using commercial manures need restudy at the hands of science, so as to determine more accurately the economies which govern their manipulation and use; that the methods of analysis and valuation in common use are inaccurate and often misleading, and the laws regulating inspections, in some cases, are vexatious, foolish, and inoperative, merely adding to the burdens of the farmer, and causing additional expense.

I have shown, moreover, that pecuniary considerations dominate in the practical application of scientific principles to productive industry; that under existing conditions, with rare and unimportant exceptions, in American agriculture the cost of production exceeds the net price of the product, and that, there-

fore, to produce what the world must have involves the farmer in ultimate ruin, without a change of conditions. This implies that there must be a change of conditions for the better, for to hold the contrary means that civilization itself must perish.

CHAPTER IX.

HISTORY OF GRASSES, GRAINS, AND PLANTS.

It could hardly be expected that, in a work of this character, anything like a detailed description of the many varieties of grasses and grains could be given; but a synopsis of this great branch of agriculture may be both interesting and profitable.

Dr. George Vasey, Botanist in the Department of Agriculture, makes the following report:—

Every thoughtful farmer realizes the importance of the production on his land of a good supply of grass for pasturage and hay. He who can produce the greatest yield on a given number of acres will be the most successful man; yet this is a subject which has been, and still is, greatly neglected.

In the United States we have many climates, many kinds of soil, many geological formations, many degrees of aridity and moisture. It must be apparent that one species of grass cannot be equally well adapted to growth in all parts of this extensive territory; yet hardly a dozen species of grasses have been successfully introduced into our agriculture. True it is that this number answers with a tolerable degree of satisfaction the wants of quite an extensive portion of the country, chiefly the northern and cooler regions. But it is well known that in other localities the same kinds of grasses do not succeed equally well, and one of the most important problems for those regions is to obtain such kinds as shall be thoroughly adapted to their peculiarities of climate and soil. This is particularly the case in the Southern and Southwestern States, the arid districts of the West, and in California.

The solution of this question is largely a matter of experiment and observation.

The grasses which we have in cultivation were once wild grasses, and are still such in their native homes.

The question then arises: Can we not select from our wild or native species some kinds which will be adapted to cultivation

in those portions of the country which are not yet provided with suitable kinds? Many observations and some experiments in this direction have already been made, and if proper research is continued, and sufficiently thorough experiments are followed up, there is no reason to doubt that proper kinds will be found for successful cultivation in all parts of the country.

The plains lying west of the one hundredth meridian, together with much broken and mountainous interior country, nearly treeless and arid, in New Mexico, Western Texas, and Arizona, are unreliable for the purposes of ordinary agriculture, but are becoming more and more important as the great feeding-ground for the multitudes of cattle which supply the wants of the settled regions of our country, as well as the constantly increasing foreign demand. The pasturage of this region consists essentially of native grasses, some of which have acquired a wide reputation for their rich, nutritious properties, for their ability to withstand the dry seasons, and for the quality of self-drying or curing, so as to be available for pasturage in the winter. This quality is due probably to the nature of the grasses themselves, and to the effect of the arid climate. It is well known that, in most countries, at lower altitudes, the grasses have much succulence; they grow rapidly, and their tissues are soft; a severe frost checks or kills their growth, and chemical changes immediately occur which result in rapid decay; whereas, in the arid climate of the plains the grasses have much less succulence, the foliage being more rigid and dry, and therefore when their growth is arrested by frost, the tissues are not engorged with water, the desiccating influence of the climate prevents decay, and the grass is kept on the ground in good condition for winter General Benjamin Alvord, of the United States Army, in an article on the subject of these winter-cured grasses, states that they only acquire this property on land which is 3000 feet above the level of the sea. The region having such an altitude includes, he says, all, nearly up to the timber line, of Montana, Idaho, Wyoming, Utah, Nevada, Colorado, and New Mexico; five-sixths of Arizona, one-half of Dakota, one-fourth of Texas, one-fifth of Kansas, and one-sixth each of California, Oregon, and Washington Territory, embracing about one-fourth of the area of the whole United States.

Many of the grasses of this extensive region are popularly known as "bunch-grass," from their habit of growth; others are known as "mesquite" and "grama-grass." These consist of many species of different genera, some of them more or less local and sparingly distributed, others having a wide range from Mexico to British America.

The most important of the "bunch-grasses" may be briefly mentioned as follows: Of the genus Stipa there are several species; Stipa comata and Stipa setigera occur abundantly in New Mexico, Texas, Arizona, and California, reaching to Oregon. In Colorado, Kansas, and all the prairie region northward, stretching into British America, Stipa spartea is the principal one of the genus. On the higher plateaus, and near the mountains, the Stipa viridula is very common, extending from Arizona to Oregon and British America. Somewhat related botanically is Oryzopsis cuspidata, a very rigid bunch-grass, with a fine, handsome panicle of flowers. It is equally widespread with the preceding. Another widely diffused grass is Deschampsia caspitosa, varying much in size and thriftiness, according to the altitude and amount of moisture where it grows, but always having a light, elegant, spreading panicle of silvery gray flowers.

One of the most extensively diffused grasses is *Kæleria* cristata, varying in height from one foot to two and one-half feet, with a narrow and closely flowered spike. Several species of fescue-grass (*Festuca*) are intermixed with the vegetation in varying proportions; the most important of these, probably, are *Festuca ovina* in several varieties, and *Festuca scabrella*, the latter especially in California, Oregon, and Washington.

The genus Calamagrostis (or Deyeuxia, as it has been called) furnishes several species which contribute largely to the vegetation of this region. They are mostly tall, stiff, and coarse grasses, but leafy, and some of them very nutritious. Of these, Calamagrostis sylvatica and Calamagrostis neglecta are the least valuable. Perhaps the best of them is Calamagrostis Canadensis, which is soft and leafy. Next in value, probably, is Calamagrostis Aleutica, of California and Oregon, extending into Alaska. Calamagrostis (Ammophila) longifolia, confined chiefly to the plains east of the Rocky Mountains, is tall and reed-like, growing in dense clumps, from four to six feet high.

Several species of Andropogon are diffused from Arizona to British America, but are not found on the western coast. The principal species are Andropogon scoparius, A. furcatus, and A. (Chrysopogon) nutans. Some of them are known under the name of "blue-joint."

Other grasses, also widely spread, but in more sparing quantity, are several species of Poa and Glyceria. Several varieties of Agropyrum repens, or couch-grass, occur abundantly in saline soils, and also Agropyrum glaucum, which is widely known as "blue-stem," and is considered among the most nutritious of Brizopyrum spicatum, now called Distichlis maritima, and some species of Sporobolus, also form extensive patches or meadows in saline soils. Besides, there is a large number of grasses of low growth and of more spreading habit, which are known in the Southwest and east of the Rocky Mountains under the names of "mesquite" and "buffalo" grasses. The former belong mostly to the genus Bouteloua, the most important species being B. racemosa, or tall mesquite, and B. oligostachya, or low mesquite. The true buffalo-grass is, botanically, Buchloë dactyloides, which in many places forms extensive fields over large areas. It is of a low and densely tufted or matted habit. Another similar grass, but of little value, spreading out in low, wide patches, is Munroa squarrosa. The above-mentioned species · form the larger proportion of the grassy vegetation of the great plains.

GRASSES FOR GENERAL CULTURE.

The grasses form one of the largest and most widely diffused families of plants, being spread over all habitable parts of the globe. Some kinds are restricted to particular localities, others are diffused over large countries, and a few are either native to all the continents or have followed in the tracks of commerce and discovery, so as now to be found in every principal country. Over 3000 species are now known and described. Among these there is an immense diversity in size and form of growth, some kinds never growing more than an inch or two high, and others in tropical regions attaining a height of 60 or 70 feet, with such a density of stem as to be useful in the building of houses, for

masts for vessels, and many other purposes; as the bamboos of China, Japan, and India.

The grasses are of greater economic importance, as furnishing food for man and animals, than any other or all other plants. The truth of this remark will at once be recognized when we consider that all the staple cereals of the world, as wheat, rye, barley, maize, rice, oats, millet, etc., are grasses.

These grasses have been objects of cultivation from time immemorial. There can be no doubt that they were originally selected from wild forms, on account of the size, quality, and nutritive value of their grains. The fact of their great value being discovered, the observation would soon follow that, by planting the seeds in suitable ground, and caring for the growing plants by the exclusion of all other vegetation, a certain and reliable resource for sustenance would be obtained.

This was the beginning of agriculture, and agriculture made possible the numerical increase and diffusion of human population.

History of Grass Culture. — The selection and cultivation of particular kinds of grasses, with reference to their superior grazing qualities, and for the greater production of hay is, however, a comparatively modern practice.

In the Philippine Islands, as we are informed by the United States Consul at Manilla (Mr. Julius G. Voight), a species of ricegrass (*Leersia hexandra*) is cultivated for the purpose of supplying feed for the few domestic animals which are kept for the cultivation of land, and for the carrying of burdens.

This grass (locally called zacate) is cultivated exclusively in low, wet ground, and is flooded occasionally after the manner of rice, being first started in seed-beds, and then transplanted to the previously flowed field. How far this custom prevails in other eastern countries, we do not know, but from the general antiquity and uniformity of the practices of husbandry in those countries, we may suppose that this practice there is of ancient origin.

But as far as western nations are concerned, the cultivation of special grasses for hay is a modern improvement. Mr. Martin J. Sutton, in a recent work on "Permanent and Temporary Pastures," states that *Lolium perenne*, or perennial rye-grass,

was the first grass gathered separately for agricultural purposes. He further states that it has been known since 1611, the date of the earliest agricultural book which mentions it. Mr. George Sinclair, in his advertisement to the fourth edition of the "Hortus Gramineus Woburnensis," says:—

"The time has been in this country [i.e., England] when providing sufficient forage for live-stock in winter was a matter of the greatest difficulty, and great losses were sustained, and many advantages given up, on account of the absolute want of winter fodder. Old turf, suitable either for grazing or for the scythe, was supposed to be a creation of centuries, and that a farmer, who wished to lay down a meadow in his youth, must see the end of his "three score years and ten" before he could possibly possess a piece of pasture capable of keeping a score of sheep or a couple of cows. So much was the want of grass-land felt among arable farmers in times past that the tenancy of it was eagerly sought, its value was consequently highly prized, and heavy fines were imposed for breaking it up. The banks of rivers were usually made commonable, in order that the surrounding farmers might each have a share; and these meadows were in many cases irrigated in order to increase still more the scanty stock of winter fodder."

Perennial rye-grass, as we have seen, began to be cultivated early in the seventh century, and it seems to have been about the only grass so cultivated for a hundred years longer. In 1763 it is said that a Mr. Wynch brought from Virginia into England the *Phleum pratense*, under the local name of timothygrass, it having been cultivated in the United States for some forty years. This was also soon established as an agricultural grass in England, and a few years later was followed by the introduction of orchard-grass (*Dactylis glomerata*) from Virginia, by the Society of Arts; at least this statement is made by Mr. Parnell in his work on British grasses.

As to *Phleum pratense* (timothy-grass), it is naturally widely diffused over Europe, but it is admitted by all that its cultivation was first undertaken in the United States, where it is also indigenous in mountainous regions. It is, however, well known that in Europe, up to about the year 1815, there were but three or four kinds of grass generally cultivated. At that time the Duke of Bedford instituted his famous series of experiments at Woburn, in England, for determining the nutritive properties of different grasses. These experiments brought into notice many before unnoticed grasses, and greatly stimulated their cultiva-

tion; and the subsequent development of this branch of agriculture has been the means of obtaining astonishing results, not only in the multiplied facilities for the grazing and fattening of cattle and sheep, but also in the reaction of this business on the cultivation of grain, by the greatly multiplied means of obtaining manures, by which the exhausted lands were renewed and the yield of grain increased.

History of Grass Culture in the United States. — In the early history of this country, particularly in the Northern States, while the settlements were sparse, the natural pasturage was abundant, and the natural meadows and marshes furnished a supply of hay for winter feeding. But in course of time, by the increase of population, the farms began to crowd each other, and the range for cattle was restricted.

Then probably arose the question of forming meadows and pastures of limited extent. Early in the last century, Mr. Jared Elliot (of Connecticut), made some valuable investigations respecting the grasses suitable for cultivation, and by practice and teaching sought to bring this subject to the attention of the people.

In 1749 he wrote a particular account of the fowl meadow-grass (*Poa serotina*) which is native in New England, giving an interesting account of its value as a meadow-grass.

He also refers to Herds-grass, or timothy, as having been found "in a swamp in Piscataqua by one Herd, who propagated the same." It is also said to have been cultivated in Maryland about the year 1720. This was some fifty years before its cultivation in England. It is also stated by Parnell, in his work on the British grasses, that orchard-grass (Dactylis glomerata) was first cultivated in the United States, and thence introduced into England about the middle of the eighteenth century. Probably soon after this date two other standard grasses came into use; viz.: Poa pratensis (Kentucky blue-grass) and Agrostis alba (red-Some other grasses have had a limited trial, but the timothy-grass, blue-grass, orchard-grass, and redtop have continued to be the principal meadow-grasses of the Northern States. To these should be added red clover, which, although not a grass, is a very common meadow crop, usually combined with timothy.

Grass in the South. - Although the Southern States were

earlier settled than the Northern ones, there was a very different condition of agriculture, as respects grazing and hay-making. In some of these States the climate permits of the growth of grasses during the greater part of the year, some species making their growth during the hot season and others during the colder months, so that cattle may commonly obtain subsistence in the field throughout the year, and hay is little employed, except for horses and cattle kept to labor.

But these places suffer from protracted droughts in summer and fall, which parch the pastures so that cattle and sheep are not then able to find a sufficiency of feed. The pasture and meadow grasses of the North have not been generally cultivated with success in the States which border on the Gulf of Mexico, and the greatest want of agriculture in that region is the introduction of grasses that will maintain growth and vigor during protracted droughts.

The same remarks may be made with respect to the grasses needed for cultivation in the arid districts of the West, and there is every reason to expect that grasses adapted to such conditions of climate and soil will be found.

Permanence of Pastures and Meadows. — It has long been a question as to how long land should be allowed to continue in pasture or meadow. The answer to this question will depend very much on circumstances.

Unquestionably the best plan for farming is the practice of mixed husbandry, or a mixture of raising grain crops and the fattening of domestic animals; for, with a diversity of products there is an alleviation of the evils of frequent crop failures, which are usually limited to one or two kinds, and also an alleviation of the fluctuations in the prices of crops, so that where some grain crops fail from any cause, the farmer has a resource in those of another kind, and in his live-stock. Besides, the rotation of crops, including the periodical laying down of cultivated ground to grass, and the change of grass-land to the growth of field crops, results in the best condition of the soil.

In the practice of most farmers, meadow-lands are seldom continued more than three or four years without a change to the plow. But pasture-lands are more frequently kept undisturbed for a longer time, and so long as they continue in a healthy, clean, and productive state, there can be no objection to their permanence; but whenever a pasture becomes overgrown with weeds, or filled with worthless or unproductive grasses, it is time for it to take its place in a system of rotation and renovation, at the same time regarding the needs of the soil in respect to fertilizing and cleaning from rocks, briers, and other shrubs.

Drainage of Grass-Lands. — Generally speaking, there is the same benefit to be derived from the proper drainage of grasslands, that is so conspicuously shown in lands devoted to other crops. All lands with an impervious subsoil of stiff clay, or soils that are water-clogged, may be greatly benefited by proper draining, both in the quality and quantity of the grass product. On such land, properly drained, the grass will start earlier in the spring and will continue to grow later in the fall than without drainage. All soils which rest upon a porous subsoil do not need it, and land may have so strong a slope that the water is discharged from it with sufficient rapidity without the aid of a drain. Wet, water-soaked pastures generally abound in rushes and sedges, which may grow luxuriantly, but are coarse and innutritious. The valuable grasses on such pastures are injured or destroyed by the tramping of cattle, whose hoofs penetrate the wet ground.

The Selection of Grasses. — The selection of the proper kinds of grasses to be employed for meadows or pastures must depend on several circumstances, such as soil, drainage, habit of growth, productions, etc. No one kind of grass can be expected to be adapted to all conditions, neither can any given mixture of grasses. There has been a great amount of empiricism in this matter. One man finds a certain grass to be very thrifty and productive on his farm, and thinks he has found the great desideratum, and at once proclaims his grass, perhaps gives it a new name, and recommends its use, without regard to the conditions or circumstances which may be absolutely essential to its success.

Others purchase seed of the new grass, perhaps at exorbitant prices, and, without a knowledge of its peculiar habits or wants, give it a trial and find it a failure, probably because climate or soil, or other essential conditions, are unsuitable to its wants.

In an old and well-settled country, there is much accumulated experience among farmers, which a beginner may avail himself of to the avoidance of serious mistakes. Still, an observing and progressive man will often find occasion for a departure from established rules and practices, in the introduction of new kinds for cultivation; indeed, it is only thus that progress and improvement can be made; but it will also be wise to make such experiments with caution and without incurring too much risk.

In some portions of our country the experience of the past is very unsatisfactory, with respect to grass culture; and in other portions, as in the new settlements of the arid districts, all culture must be in the nature of experiment, and much judgment and large information are needed to guide the experimenter to the best results.

Relation of Stock to Pastures. — The farmer and grazier should always bear in mind that his pastures should be adapted to the kind as well as the quantity of stock which he keeps. Cattle and sheep are very different in their feeding habits, the sheep cropping the grass very close, and cattle requiring to have the grass longer in order to get a bite. Horses, again, do not bite as close as cattle. By judiciously proportioning the kind of stock kept on the pasture, a much better result may be obtained by keeping both cattle and sheep than by keeping either alone. The field will thus be kept cleaner and in better condition.

Management of the Pasture. — Care must be observed that cattle or sheep be not put upon grass too early in the spring, before the grass has fairly commenced to grow. This rule applies particularly to sheep, who will in such cases eat the heart out of the grass crown, to its entire destruction. When, however, the grasses have made a good start there will be much of the taller stalks and coarser culms which the sheep will reject, and which cattle will crop with avidity. As the season advances, there are often bunches of grass neglected by both cattle and sheep, giving to the pasture a rough and uneven appearance, when the mower should be run over the pasture, after which the old tufts will send up another crop of tender blades.

No precise date can be given for beginning to graze pastures in the spring. Cattle should not be turned in until there is enough feed to keep them going without too much help from hay, nor until the ground is firm enough to prevent their hoofs from damaging the young shoots of the grasses.

On the other hand, if the grass gets too old, the animals refuse much of it, and the fodder will be lost. Pastures consisting largely of early, strong-growing grasses, particularly cock's foot (orchard-grass), will need to be stocked before others which produce finer and later varieties.

It is sometimes a nice question to determine when to take stock off the pastures in the fall. This will depend much on the length of the growing season in any particular locality. In northern latitudes the growth of vegetation will be arrested early, and when the grass has quite ceased to grow the stock should be removed, that the ground may be in proper condition for an early start in the following spring. Usually, however, in northern sections of the country, the question is effectually settled by the early descent of the winter snows. In southern latitudes the climate is so mild that the growing season continues all winter, so that stock live mainly or entirely upon the growing grass, there being sorts there which naturally make their principal growth in the coolest portion of the year.

Supplementary Feed.—It often happens that a drought occurs in the summer or fall, in which the pastures are dried and parched so that the cattle fail to get a sufficient amount of feed. It is, therefore, the practice of careful and provident farmers to have a tract of land sown to some kind of fodder, which may be drawn upon to supply the deficiency of pasturage, and not only to keep the animals from suffering, but to keep them also in a growing condition. Corn sown broadcast or in close drills, or sorghum sown in like manner, are some of the best grasses for this purpose.

Some varieties of sweet corn, combining earliness and productiveness, or large size, will be better than common field corn, especially to keep up the supply of milk from cows.

Hungarian grass and millet make excellent fodder crops. They are both considered to be but varieties of the same species, and there is practically little difference between them. If sowed on tolerably rich ground, they will produce sometimes a very large yield of grass. They are of rapid growth, and are fre-

quently ready to be cut two months from the time of sowing. They generally produce an abundance of nutritious seeds, on account of which cattle thrive better on them than on corn fodder. Beets and prickly comfrey are also recommended as fodder plants in some localities.

The pastures may also often be relieved by turning stock on to stubble after harvest.

Humanity dictates that a man should not keep any more stock than he can under ordinary circumstances care for and give sufficient feed. But a provident and good manager will be enabled safely to keep a much larger number than a man who is shiftless and careless. He will do this by making provision for casualties and probable contingencies. It is much better and more profitable to have a surplus of feed than to have a deficiency.

Kinds of Grasses for Meadows and Pastures.—In this country there has been very little variety in the kinds of grasses cultivated, the range being generally timothy, blue-grass, or Junegrass, orchard-grass, and redtop, usually combined more or less with red or white clover.

Farmers are influenced somewhat by the markets they supply. The most popular hay in the markets of the great cities is timothy, and meadows of this grass alone are very common, and when well managed are very satisfactory and profitable. It is also very common to combine timothy with red clover in various proportions.

In low, wet meadows, particularly in New England, redtop is considerably employed, and it is a common constituent of pastures in all the Northern States.

In England, great attention has been given to combining several kinds of grasses in meadows, and it is claimed that the practice is better for the land, and gives a larger yield than when one variety only is employed. By using a mixture, the ground may often be more uniformly covered, and in pastures there will be, from the different flowering time of the different species, a succession and continuation of a supply of tender foliage.

Some species of grass are adapted to clay lands, some to sandy soils, some to loam, some to dry upland, and some to low land; but even for land of a uniform quality it is believed that a mix-

ture of five or six suitable varieties will yield a larger crop than one alone. The mixture of several varieties is perhaps most valuable in land that is designated for pasturage, as then they reach maturity at different times and furnish a succession of good feed, and also cover more completely and uniformly the ground. But no general mixture of grass seed can be adapted to all situations and soils. Every farmer should study carefully the nature of his ground, its altitude, drainage, and composition, and then adapt his grasses to the circumstances.

Generally there are few cases where there will be any advantage in employing more than five or six well-selected varieties for cultivation in one field. For a permanent pasture, under most circumstances, the following kinds, in proper proportions, would make a good mixture; viz.: June-grass (blue-grass), foxtail (Alopecurus pratensis), redtop (bent-grass), timothy, tall fescue, and perennial rye-grass. This will give a succession as to earliness of growth and flowering.

But in some localities and for some soils, as in Kentucky, for instance, the farmer who has a good pasture of blue-grass will not think it capable of much improvement. As we speak of the individual kinds of grasses and their adaptation to different soils, the farmer will be able to judge how far they will suit his circumstances.

Mixed Grasses for Pasturage. — For pasturage, however, we recommend a variety of grasses and thick seeding. Stock like variety and thrive better on it. Each variety has its season of greatest excellence, and thus the best pasturage can be kept up throughout the year. The common red clover should be sown with the grasses for all pastures. It is a rank grower and resists drought admirably. We are glad more attention is being paid to pasturage. Improved farming cannot be carried on without it, and in nothing are the majority of our farmers more neglectful than in seeding more of their farms to good pastures.

A Kentucky farmer gives the following mixture, where an immediate pasture is wanted:—

Blue-grass .								8 p	ounds.
Orchard-grass							٠.	4	4.6
Timothy									
Red clover .								6	44

To this may be added Italian rye-grass, four pounds, and the same amount of fescue-grass if preferred, but the other is ordinarily sufficient. This quantity is a heavy seeding for one acre. The blue-grass will not be seen much at first, but by the time the clover dies out it will have taken hold of the entire surface.

A writer in the New England Farmer recommends the following formula for a permanent pasture:—

Early varieties -								
Red clover .							10	pounds.
Alsike clover .							5	4.6
Orchard-grass							I	bushel.
June-grass							I	6.6
Perennial rye-g	rass						I	4.6
Late varieties -								
Herds-grass .							$\frac{1}{2}$	6.6
R. I. bent-grass	s.						$\frac{1}{2}$	4.4
Redtop							I	6.6

This forms an unusually heavy seeding, and probably the quantities may be advantageously reduced, but the combination presents a variety that will give a succession from early till late in the season.

The more common mixture for meadows is as follows, per acre:—

Redtop								ı bushel.
Timothy .								1/2 ''
Red clover.								4 pounds.

On high lands, orchard-grass might be substituted for the redtop.

Time and Manner of Seeding Grass Seed.—There has been much diversity of opinion as to the proper time of seeding land to grass. A very common practice has been to sow the seed in the spring with a grain crop, generally of oats. If the season is favorable, this method succeeds very well, having the advantage of no loss in the regular crops of the land. The growing grain furnishes to the young grass shelter and shade from the heat of the sun, and after the removal of the crop the grass spreads, and sometimes the same season furnishes a light crop for the scythe or some grazing for the cattle. But the success of this plan of seeding is not by any means certain. In a very

dry season the young plants may perish from drought, or in a wet season the grain may lodge and smother the young grass. Hence others recommend late summer or early fall seeding. A writer in the *Massachusetts Ploughman* makes the following statement:—

"The last half of August is generally considered the best time for seeding; earlier than this the weather is apt to be too hot for the ready germination of the seed, and weeds will get a start before the grass. The first half of September is a good time, and we have sometimes had very good success with seeding as late as October 1, but would prefer to sow earlier if possible. If rye is sown with the grass seed, it is best done about the middle of September; too much rye will choke the grass, but a light seeding of about one-half to five-eighths of a bushel per acre will not injure the grass much, and will give a much better return the next season than the grass alone.

"Too little care is usually bestowed upon the preparation of the land for seeding; it should be worked only when just moist enough to make the lumps crush easily, and should be harrowed repeatedly and rolled before sowing the seed, then brushed and rolled again, which will leave the land in fine, smooth order for the mowing-machine or scythe.

"It is customary to mix Herds-grass, redtop, and clover seed in seeding, but we prefer to seed high land with Herds-grass (*Phleum pratense*), only low, moist land with redtop (*Agrostis vulgaris*) and fescue, and clover by itself in the spring, for the reason that the season of maturity of these grasses is very different; the clover should be cut about the 15th of June, while in blossom, the Herds-grass about July 1, and the redtop about July 15. When they are mixed it will be impossible to cut them all in perfection; and if the Herds-grass is cut too early in dry weather, it is almost sure to be killed out."

Cynodon Dactylon (Bermuda Grass). — This is undoubtedly, on the whole, the most valuable grass in the South. It is a native of Southern Europe, and of all tropical countries. It is a common pasture grass in the West Indies and the Sandwich Islands, and has long been known in the United States, but the difficulty of eradicating it when once established has retarded its introduction into cultivation. Its value, however, is becoming more appreciated now that more attention is being given to grass and relatively less to cotton, and better methods and implements of cultivation are being employed. Still, it seems probable, from the reports received, that at the present time a majority of farmers would prefer not to have it on their farms. It seeds very sparingly in the United States, and as the imported seed is not always to be had, and is expensive and often of poor

quality, those who have desired to cultivate it on a large scale have seldom been able to do so. It is generally used as a lawn grass, and to hold levees or railroad embankments, and for small pastures. In some localities, however, it has spread over a considerable extent of territory. Its natural extension into new territory has been slow, owing to the partial or entire absence of seed, but it spreads rapidly by its rooting-stems when introduced. It is usually propagated artificially by means of the sets or rooting-stems. These are sometimes chopped up with a cutting-knife, sown broadcast, and plowed under not very deeply; sometimes they are dropped a foot or two apart in shallow furrows, and covered by a plow; sometimes pieces of the sod are planted two feet apart each way. By any of these means a continuous sod is obtained in a few months, if the soil is good and well prepared.

The chief value of Bermuda grass is for summer pasture. It grows best in the hottest weather, and ordinary droughts affect it but little. The tops are easily killed by frosts, but the roots are quite hardy throughout the Southern States. It is grown to some extent as far north as Virginia, but in that latitude it possesses little advantage over other grasses. In Tennessee, according to Professor Killebrew, its chief value is for pasture, there being other grasses there of more value for hay. Farther south, however, it is highly prized for hay. To make the largest quantity, and best quality, it should be mowed several times during the season. The yield varies greatly according to soil, being generally reported at from a ton and a half to two tons per acre. Much larger yields have been reported, however, in specially favorable localities, where several cuttings were made.

Bermuda grass is more easily eradicated from sandy land than from clay, and on such land may be more safely introduced into a rotation. To kill it out, it should be rooted up or plowed very shallowly some time in December, and cultivated or harrowed occasionally during the winter. If severe freezes occur, most of it will be killed by spring; or it may be turned under deeply in spring, and the land cultivated in some hoed crop, or one which will heavily shade the ground.

Setaria Italica (Hungarian Grass; German Millet). — This grass is supposed to be a native of the East Indies, but it has

been extensively introduced into most civilized countries. It has long been cultivated as a fodder grass, both in Europe and in this country. It is an annual grass of strong, rank growth, the culms erect, two to three feet high, with numerous long and broad leaves, and a terminal, spike-like, nodding panicle, four to six inches long, and often an inch or more in diameter. varieties and forms of this grass differ greatly, so much so that some of them have been considered different species; but the general opinion of botanists is that they are all varying forms of the same species, dependent upon the character of the soil, thickness of seeding, moisture or dryness, and time of sowing. It owes its value as a fodder plant to the abundance of its foliage, and to the large quantity of seed produced. In some instances objection has been made to this grass on account of the bristles which surround the seed, and which have been said to penetrate the stomachs of cattle so as to cause inflammation and death. But it is plain that this opinion is not generally held, as the cultivation of the grass is widely extended and everywhere recommended.

For forage it should be cut as soon as it blooms, when, of course, it is worth nothing for seed; but it is most valuable for forage and exhausts the land much less. If left for the seeds to mature, they are very abundant and rich feed, but the stems are worthless, while the soil is more damaged.

Panicum Sanguinale (Crab-Grass). — This is an annual grass, which, although a native of the Old World, has become spread over most parts of this country, and indeed over all tropical countries. It is the most common crab-grass of the Southern States. It occurs in cultivated and waste grounds, and grows very rapidly during the hot summer months. The culms usually rise to the height of two or three feet, and at the summit have from three to six slender flower-spikes, each from four to six inches long. The culms are bent at the lower joints, where they frequently take root. At the New Orleans Exposition there were specimens of this grass five feet ten inches long.

Sorghum Halepense (Johnson Grass; Mean's Grass). — This grass is a native of Northern Africa and the country about the Mediterranean Sea.

It was introduced into cultivation in this country more than

fifty years ago, and has recently attracted renewed attention, especially in the Southern States. The name Johnson grass, which is the one now most generally adopted in this country, originated from William Johnson, of Alabama, who introduced the grass into that State from South Carolina, about the year 1840. It had previously been known as Mean's grass, and that name is still occasionally used. It has also been largely grown under the name of Guinea grass, but that name should be restricted to Panicum maximum, described in another part of this work. It has been called Egyptian grass, Green Valley grass, Cuba grass, Alabama Guinea grass, Australian millet, and Morocco millet. In California it is best known as evergreen millet, or Arabian evergreen millet. There seems to be good evidence that some of these names have been used at times in order to sell the seed as a new kind, at an unreasonably high price. Johnson grass seeds abundantly, and the seed may be obtained of nearly all seedsmen, under that name.

Calamagrostis (Deyeuxia) Canadensis (Blue-joint; Small Reed-Grass).—A stout, erect, tall, perennial grass, growing chiefly in wet, boggy ground, or in low, moist meadows. Its favorite situation is in cool, elevated regions. It prevails in all the northern portions of the United States, in the Rocky Mountains, and in British America. In those districts it is one of the best and most productive of the indigenous grasses. It varies much in luxuriance of foliage and size of panicle, according to the location.

Calamagrostis (Deyeuxia) Sylvatica (Bunch-Grass). — A coarse, perennial grass, growing in large tufts, usually in sandy ground in the Rocky Mountains at various altitudes, also in California, Oregon, and British America. It furnishes an abundant, coarse forage in the regions where it is found.

Holcus Lanatus (Velvet-Grass; Velvet Mesquite; Soft-Grass, etc.). — Introduced from Europe and naturalized in many parts of the United States. It makes a striking and beautiful appearance, but stock are not very fond of it, either green or cured. It is a perennial, but not very strongly rooted, and does not spread from the root as do most perennial grasses. It seeds abundantly, and is generally propagated by seed, though sometimes by dividing the plants. It prefers low land, but does

very well even on sandy upland, and its chief value is in being able to grow on land too poor for other grasses.

The seed has been in market many years, but it has come into cultivation very slowly, and it is not generally held in very high esteem as an agricultural grass, either in this country or in Europe. Some speak well of it, however, and it has frequently been sent to the Agricultural Department from the South, with strong recommendations for its productiveness.

Bouteloua Oligostachya (Grama-Grass; Mesquite-Grass). — This is the commonest species on the great plains. It is frequently called buffalo-grass, although that name strictly belongs to another plant (Buchloë dactyloides). On the arid plains of the West it is the principal grass, and is the main reliance for the vast herds of cattle which are raised there. It grows chiefly in small, roundish patches, closely pressed to the ground, the foliage being in a dense, cushion-like mass. The leaves are short, and crowded at the base of the short stems. The flowering stalks seldom rise over a foot in height, and bear near the top one or two flower-spikes, each about an inch long, and from one-eighth to one-quarter of an inch wide, standing out at right angles like a small flag floating in the breeze. Where much grazing prevails, however, these flowering stalks are eaten down so much that only the mats of leaves are observable. tom-lands and low, moist ground it grows more closely, and under favorable circumstances forms a pretty close sod, but even then it is not adapted for mowing, although it is sometimes cut, making a very light crop. Under the most favorable circumstances, the product of this grass is small compared with the cultivated grasses. It is undoubtedly highly nutritious. Stock of all kinds are fond of it, and eat it in preference to any grass growing with it. It dries and cures on the ground, so as to retain its nutritive properties in the winter. No attempt is made by stockmen to feed cattle in the winter; they are expected to "rustle around," as the phrase is, and find their living; and in ordinary winters, as the fall of snow is light, they are enabled to subsist and make a pretty good appearance in the spring; but in severe winters there are losses of cattle, sometimes very heavy ones, from want of feed.

Buchloë Dactyloides (Buffalo-Grass). — This grass is exten-

sively spread over all the region known as the Great Plains. It is very low, the bulk of leaves seldom rising more than three or four inches above the ground, growing in extensive tufts or patches, and spreading largely by means of stolons or off-shoots similar to those of the Bermuda grass, these stolons being sometimes two feet long, and with joints every three or four inches, frequently rooting and sending up flowering culms from the joints. The leaves of the radicle tufts are three to five inches long, one or one-half line wide, smooth or edged with a few scattering hairs. The flowering culms are chiefly diœcious, but sometimes both male and female flowers are found on the same plant, but in separate parts. Next to the grama-grass it is, perhaps, the most valuable plant in the support of the cattle of the plains.

Dactylis Glomerata (Orchard-Grass). — This is one of the most popular meadow grasses of Europe, and is well known to most farmers in the Northern and Eastern States. It is a perennial of strong, rank growth, about three feet high.

Of all grasses this is one of the most widely diffused, growing in Africa, Asia, every country of Europe, and all our States. is more highly esteemed and commended than any other grass, by a large number of farmers in most countries, a most decided proof of its great value and wonderful adaptation to many soils, climates, and treatments. Yet, strange to say, though growing in England for many centuries, it was not appreciated in that country till carried there from Virginia, in 1764. But, as in the case of timothy-grass, soon after its introduction from America it came into high favor among farmers, and still retains its hold on their estimation as a grazing and hay crop. It will grow well on any soil containing sufficient clay, and not holding too much water. If the land be too tenacious, drainage will remedy the soil; if worn out, a top-dressing of stable manure will give it a good send-off, and it will furnish several mowings the first year. It grows well between 20° and 48° latitude.

Kentucky Blue-Grass. — The *Poa pratensis* of the botanist has obtained a very wide reputation as the Kentucky blue-grass, and led many into the mistaken belief that it was a peculiarly American grass, confined to the famous pastures of the region whence it derived its name. On the contrary, it is one of the

most common grasses in nearly all parts of the country, being variably known as June-grass, green meadow-grass, common spear-grass, and Rhode Island bent-grass, and it is the well-known smooth-stalked meadow-grass, or greensward, of England. There is no grass that accommodates itself to any given locality with greater facility, whether it be the Mississippi Valley, New England, Canada, the shores of the Mediterranean, or the north of Russia. It is found thriving upon gravelly soils, alluvial bottoms, and stiff clay lands, in the permanent pastures of Missouri, and along the roadsides of Minnesota. Soil and climate cause varieties in its size and appearance, and this protean habit accounts for the various names by which it is known.

It probably attains its highest luxuriance and perfection as a pasture grass in the far-famed blue-grass district of Kentucky. The central part of Kentucky, an area of 15,000 square miles or more, over limestone foundation, seems to be the richest blue-grass country.

Trifolium Pratense (Red Clover; Common Clover). — Red clover is so well known to the agricultural community that it requires very little description. It is usually a perennial of a few years' duration, a native of Europe and Asia, but early introduced into this country. Its cultivation is said to have begun in England about two hundred and fifty years ago. It is one of the most important of cultivated crops, both for feed for animals and as an improver of the soil.

Trifolium Hybridum (Alsike Clover). — This differs from common red clover in being later, taller, more tender and succulent. The flower-heads are upon long peduncles, and are intermediate in size and color between those of white and red clover. The botanical name was so given from its being supposed by Linnaeus to be a hybrid between those clovers, but it is now known to be a distinct species. It is found native over a large part of Europe, and was first cultivated in Sweden, deriving its common name from the village of Syke in that country. In 1834 it was taken to England, and in 1854 to Germany, where it is largely grown, not only for its excellent forage, but also for its seed, which commands a high price. In France it is little grown as yet, and is frequently confounded with the less productive *Trifolium elegans*.

Trifolium Repens (White Clover; Dutch Clover). — This is a small perennial species, with prostrate stems which take root strongly at the joints. It is said to be the shamrock of Ireland. It is a native of Europe and Northern Asia, and has been introduced into, and naturalized in, many other countries. It is said that, although indigenous in England, it only began to be cultivated at the beginning of the eighteenth century. On account of its creeping habit, when once established, it soon covers the ground and spreads extensively.

Medicago Sativa (Alfalfa). — This plant is called Lucerne, medick, Spanish trefoil, French clover, Brazilian clover, and Chilian clover. It is not a true clover, though belonging to the same natural family as the clovers. Alfalfa, the name by which it is commonly known in this country, is the Spanish name, which came into use here from the fact that the plant was introduced into cultivation in California from South America, under the name of alfalfa, or Brazilian clover. The plant had previously been introduced into the Eastern and Southern States, but attracted little attention until its remarkable success in California. In Europe it is generally known as Lucerne, probably from the canton of Lucerne, in Switzerland, where it was largely cultivated at an early day. It has been known in cultivation from very ancient times, and was introduced from Western Asia into Greece about 500 B.C.

Lespedeza Striata (Japan Clover). — This plant was introduced in some unknown way, over forty years ago, from China into the South Atlantic States. It was little noticed before the war, but during the war it extended north and west, and has since spread rapidly over abandoned fields, along roadsides, and in open woods, and now furnishes thousands of acres of excellent grazing in every one of the Gulf States, and is still spreading northward in Kentucky and Virginia, and westward in Texas, Indian Territory, and Arkansas. It is an annual, and furnishes pasture only during summer, and until killed by frost in the fall.

Wheat. — There are three kinds of grain on which mankind principally feed, — wheat, rice, and Indian corn. Of these, wheat is chiefly confined to the colder regions, and in the United States is second in importance to corn. It belongs to

the botanical family of grasses. It is not found in a wild state, and its origin is unknown. Wheat grows in almost every kind of climate. It is commonly known under two distinct heads, spring and winter wheat, each divided into many varieties. The cultivation of wheat antedates history, and its existence is traced beyond the most ancient monuments.

Wheat was introduced into the United States in 1602, when it was sown on the Elizabeth Islands, in Massachusetts. 1611 it was sown in Virginia, and in 1648 many hundreds of acres were cultivated in the colony. In 1746 it became an article of export. Spring wheat was known in England as early as 1666, but has been much neglected. In the United States it is grown largely in the West, and is considered valuable for making flour. As a rule, the kernel is not as large as that of the winter variety. It contains more gluten, and makes a flour of a different quality and flavor, and brings a lower price in the market. Sir John Sinclair says that, from 1767 to 1812, it was a practice with the best Scotch farmers to sow fall wheat in spring, from February to April, though March was generally the favorite month. The real spring wheat does not appear to have been generally known in that country till the beginning of this century. Though sown in April or May, it ripened as early as winter-sown wheat. It was not, however, so productive as winter wheat, sown either in winter or spring, and the ears were shorter. There are many nominal varieties in the United States, the best probably being the Italian, the Siberian bald, or tea wheat, and the Black Sea wheat. Of this last there are again two varieties, the red and the white chaff, both of which are bearded. It is not known that the practice of sowing fall wheat in spring has ever prevailed in this country, though there is no apparent reason why it should not succeed as well as in Scotland, and be profitable in certain localities.

In the Northern States it is considered important that spring wheat should be sown as early as the season will permit. The soil may be lighter than for the fall variety; it ought to be in good condition, and is generally better if it has been plowed and laid up dry in the fall. From one and a half to two bushels is the proper quantity of seed per acre; more generally the

latter. The after-processes of harvesting and threshing are similar to fall wheat.

The varieties of fall wheat are very numerous, differing not only in appearance, but also in constituents, in adaptation to soil and climate, in hardiness as regards disease and insects, and in productiveness. There appears to be one fact ascertained regarding them, which is that they are constantly undergoing change in their relative productiveness. A new variety will be introduced into a given locality, and for a few years will succeed better than any other, after which it begins gradually to deteriorate in the qualities which at first recommend it. The ancient varieties appear to have been much inferior to some in the present day. There are four distinct divisions,—white, red, bald, and bearded; the red being generally harder, but coarser than the white; and the same may be said of the bearded as compared with the bald; but in other respects there is no material practical difference.

Wheat, especially in the North and West, has become the main crop production of the farmer. In the West, spring wheat is raised in vast quantities. In 1886 there were over 60,000,000 bushels of wheat exported from this country.

For seed, wheat should be allowed to stand until it is quite ripe, and then selected with care. The best wheat is raised from seed carefully selected from large heads. In former days, when wheat was winnowed by the wind, the largest and heaviest grains were preserved for seed. Great improvement, both in the variety and crop, may undoubtedly be effected by exercising care in this particular. Experiments seem to prove that wheat threshed by a machine frequently has the germinating power destroyed; and though it may throw out leaves, is deficient in roots, and therefore perishes.

When cut a fortnight before it is ripe, therefore, the entire produce of the grain is greater, the yield of flour is larger, and of bran considerably less, while the proportion of gluten contained in the flour appears also to be in favor of that which was reaped before the wheat was fully ripe.

Rye. — Next to wheat, rye is most consumed by mankind in those latitudes which are too cold for Indian corn. It is believed to be a native of Western or Central Asia.

M. DeCandolle says that a M. Koch, who has traversed Antolia, Armenia, the Caucasus, and Crimea, affirms that he has found rye under circumstances where it appears to be really spontaneous and native. On the mountains of Pont, in the country of Hemschin, upon granite, at an elevation of 5000 or 6000 feet, he found our common rye alongside the road. It was thin in the ear, and about one to two and a half inches long. No one remembered that it had ever been cultivated in the neighborhood, and it was not even known as a cereal.

It is cultivated to the north of Europe, in Scandinavia, on the western side to the parallel of latitude 67° N.; and on the eastern side to latitude 65° or 66° N. In Russia, the polar limit of rye is indicated by the parallel of latitude 66° 30′. It is extensively cultivated in Europe, forming the chief part of the bread of Germany, Poland, Russia, Switzerland, and other countries. In Great Britain and the southern countries of Europe it is little used. In America, it does not appear to be grown in Pembina, on Red River, in the Hudson Bay Territory, latitude 47° N., though wheat, barley, maize, tobacco, potatoes, etc., are cultivated with profit. It was introduced into the North American colonies soon after their settlement by the English; into Nova Scotia, 1622; into New England, 1648; and into South Virginia, previous to that year.

It is grown, more or less, in all the States except California and New Mexico.

It has been chiefly used for distilling and for feeding stock, though bread is made of it in some localities.

There is only one cultivated species, but several varieties,—common, multicole, St. John's Day, Siberian; also spring, winter and southern.

Of the common kind nothing need be said. The multicole (many-rooted) was introduced into this country by means of the Patent Office, about 1844–45. It was found to produce heavy crops and to stool out very perfectly—10 to 20 stalks growing from every seed. It also appears to be well adapted for high northern latitudes. The St. John's Day is a native of the Italian Alps, and was introduced into England about 1840, for soiling purposes. The seed is very small, dark, and hard, but the straw grows with great rapidity, and to a great height,

affording a remarkable quantity of green fodder. Siberian is a German variety, noted for the gigantic product of grain and stalk. The grain is large with a thin skin, yielding an excellent flour. The other varieties have arisen from the period of sowing, or from climate.

The flour of rye is not white like that of wheat, but has a pretty strong, grayish-brown tint, and does not bind so firmly with water. It yields a short, much less tough dough, out of which it is impossible to separate the gluten from the starch by washing with water. The cause of this is probably to be sought in some peculiarity of the gluten of rye. It contains very little fibrin, and on the contrary a nitrogenous substance, which Heldt has ascertained to be *vegetable gelatin*. The starch is of the same nature as that contained in other seeds.

The only parasitic fungus affecting rye is ergot.

Ergot is a kind of spur which issues from the grain of rye. It is not a fungus itself, but a morbid growth caused by the existence of minute fungi in the grain. It is not confined to rye alone, but has been observed occasionally in wheat and barley, and some of the grasses. It is a poison when eaten in bread, producing a spontaneous gangrene, called *ergotism*. It is also a powerful medicine, for which purpose it was first used in the United States, in 1807.

Barley. — The native country is unknown.

Barley is cultivated further north than any other of the grains. In Europe, its northern limits are as follows:—

Orkney and Shetland Islands			. La	ıt. 61° N.
Faroe Islands			"	' 61° to 61° 15' N.
Western Lapland			. "	' 70° N.
Russia (White Sea)			. '	' 67° to 68° N.
Archangel			. "	' 66° N.
Central Siberia			. "	' 58° to 59° N.

It cannot be grown in Iceland, latitude 63° 30′ to 66° N. Its northern limit in America does not appear to have been ascertained.

It is cultivated in the four quarters of the globe: in Syria and Egypt for more than 3000 years. It was introduced into the United States by Gosnold in 1602, and by colonists into

Virginia in 1611. By the year 1648, it was raised in abundance in that colony, but it afterwards diminished in quantity. It is chiefly consumed in the manufacture of malt and spirituous liquors, while some is fed to hogs and other stock.

Six species of varieties are cultivated: -

Two-rowed barley; two-rowed naked barley; two-rowed sprat, or battledore barley; six-rowed barley; six-rowed sprat, or battledore barley. Of these, again, there are some thirty sub-varieties, such as the chevalier barley, the Hudson's Bay, etc.

The two-rowed variety is most commonly cultivated. The sub-varieties are distinguished by the quantity of their grain, their period of ripening, and productiveness. In mild climates barley is sown like wheat, in the fall, and is known as winter barley. Occasionally the color of the corolla is black. In the naked barley, the corolla is not attached to the grain, and it thus resembles wheat. It was introduced into England in 1768, and is known in the United States, but in neither country does it appear to be much cultivated. The sprat barley has the spike short and conical, the awns long and spreading, and the seeds more compressed than in the first sort. The straw, also, is very short. It is little cultivated. In six-rowed barley, three rows of flowers on each side of the spike are fertile, and consequently three rows of grains on each side are perfected. The chief sub-variety of this is known as bere or bigg. It is more hardy and productive than the two-rowed, and is used for fall sowing. In Europe it is much cultivated; in the United States but little.

Malt is barley which has been made to germinate by moisture and warmth, and afterwards dried, by which the vitality of the seed is destroyed. By this process, a peculiar nitrogenous principle, called diastase, is produced. This, though it does not constitute more than $\frac{1}{500}$ part of the malt, serves to affect the conversion of the starch of the seed into dextrine and grape sugar. One hundred pounds of barley yield about 80 pounds of malt, part of which difference is the loss of the water previously contained in the barley. Thompson gives the following comparative table of barley and malt from the same grain, showing the change which takes place in the organic constituents:—

									BARLEY.	MALT.
Carbon .	•								41.64	33.95
Hydrogen								٠.	6.02	5.31
Nitrogen									18.1	0.88
Oxygen									37.66	34.46
Ash									3.41	1.34
Water .									9.46	4.06
							×		100.00	80.00

Barley is rarely or never used in America and Great Britain, as bread, but it is eaten in soups and given to the sick as pot and pearl barley, in which condition it is considered very nourishing. This form is produced by rubbing the grains in an appropriate machine, till they are deprived of the husks and outer coats and become spherical. Such barley is generally imported into the United States from Scotland, but there is no reason why it should not be prepared here. A porridge made of barley meal is used in Scotland.

Barley is known to be ripe by the disappearance of the reddish hue on the ear, and by the ears beginning to droop against the stem. Unless intended for seed, it should be cut before it is fully ripe, both on account of the better quality and weight of the grain, and to prevent waste by shelling.

Oats.—The oat is supposed to be a native of Asia. A species is found wild in California.

The northern limits of this grain in Europe appear to be:-

Scotland								Lat.	58° 40′	N.
Norway								66	56°	6 6
Sweden										
Russia										

It is extensively cultivated in the northern, but not in the southern, parts of Europe. It grows well in Bengal, India, latitude 25° N. In America it is cultivated as far as settlements extend northwards. It was introduced into the United States at the same time as rye. In this country it is confined principally to the Middle, Western, and Northern States. Its profitable production would appear to depend much on the frequency of rain during its growth.

Five species are cultivated:—

Bristle-pointed oat; short oat; common oat; Tartarian oat; naked oat.

These again are divided into many varieties.

The first two are of inferior quality, but hardy, being cultivated in the mountainous parts, the one of Scotland, the other of France. The common oat is best known, and has been much improved by careful culture. The Tartarian oat has its panicles shorter than the last, nearly of equal length, all on the same side of the rachis (flower stalk), and bearded. It is so hardy as to thrive in soils and climates where the other grains cannot be raised. It is much cultivated in England, and not at all in Scotland. It is a coarse grain, more fit for horse feed than to make into meal (Stephens). The corolla is frequently black. The naked oat, like wheat and naked barley, has the corolla detached from the seed. It has long been cultivated in Europe, and it is said to be productive and the meal to be fine. The popular varieties, such as the potato, Hopetown, Georgian, Siberian, Dyock oats, etc., belong to the common oat.

From analysis, it appears that the oat is very rich in oily matters and flesh-forming compounds.

Avenin is a substance resembling casein (or cheese when chemically pure), precipitated by acetic acid from the aqueous solution of oat meal. It appears to differ but slightly from albumen in its ultimate composition; and in its utility, as food, it is probably rather more nourishing.

The peculiar form of the *casein* or *avenin* appears to give oats a nourishing power little inferior to that of animal food.

In Ireland, Scotland, and other countries, oat meal constitutes almost the entire food of the majority of the people; and those who live on it are not only physically perfect, but are able to undergo great exertion, and bear up against severe exposure and hardship. Owing to the small proportion of gluten, yeast bread cannot be made with oat meal as with wheat flour, and it is usually eaten boiled, or made into thin cakes, dried in the air. Before grinding, it is necessary to kiln-dry oats; and they are ground in a mill constructed for the purpose, the millstones being different from those used in flouring mills.

Indian Corn (Maize). — The origin of the word "maize" is from the Haytien *mahiz*. This grain is a native of the American continent, and was unknown to the rest of the world till the discoveries of Columbus. It is still found growing wild

from the Rocky Mountains to Paraguay, but in this state, instead of having each grain naked, it is completely covered with glumes or husks. A variety of the wild corn has been cultivated of late years in the Northern States, under the name of "Texas corn." This grain was found by the first European explorers of the continent to be everywhere cultivated by the natives.

Only one species has usually been recognized in this country, but the late M. Bonafous, director of the Royal Agricultural Garden of Turin, describes four distinct species, viz.:—

- I. Zea Mays, With leaves entire.
- 2. Zea caragua, With leaves denticulated.
- 3. Zea hirta, With hairy leaves.
- 4. Zea erythrolepis, With grains compressed and red glumes (husks).

From these, but especially the first, all the varieties at present cultivated have sprung.

It has a wide range of temperature in America, flourishing from about 40° of southern to beyond the 45° of northern latitude. In Mexico its highest limits vary from 2000 to 8000 feet above the level of the sea; and the time necessary for it to ripen differs from six weeks to seven months, according to the mean temperature. In Europe, it is grown from the shores of the Mediterranean as far north as the Netherlands. The region of cultivation appears to be gradually extending north; probably by the origin of new and hardy varieties. It is also grown in Northern, Southern, and Western Africa, India, China, Japan, Australia, the Sandwich Islands, the Azores, the Madeiras, the Canaries, and numerous other ocean islands. With the exception of rice, it is the food of a larger number of human beings than any other grain.

In the United States, it was largely cultivated by the English on James River, Virginia, 1608, the Indian mode being closely followed. Since then it has been everywhere a favorite crop, and annually a large quantity is produced.

The varieties are very numerous, depending upon the character of the soil and climate, from the small shrubby corn of Northern Canada to the gigantic stalks of the Southern States; and the composition and nutritive qualities of the grain vary in

like proportion. In practice this is a very important fact, as the nutritive value of corn is constantly varying according to circumstances.

The varieties of corn are generally distinguished by the number of rows of grain in the ear, as eight, twelve, fourteen, and sixteen rowed; or by the color, as white, yellow, brown, etc.; but none of the common divisions are either accurate or scientific. It were useless to recite the names of the many varieties, the more especially as they are constantly changing by hybridizing. It may be noticed that northern corn will improve, if removed southwards, in size and productiveness, but southern corn taken to the North will either not ripen at all, or soon degenerate.

The origin of sweet corn is unknown, but it appears to have been used by the Indians of New England before the arrival of the Pilgrims. It appears like an unripe grain, and contains an unusually large proportion of the phosphates, and a large quantity of sugar and gum, with but little starch; while the stalks, being small, take up a less proportion of the saline matters of the soil.

There is a difference also in the mode of distribution of the oily and glutinous parts of corn; the southern and Dent varieties having the oil and gluten on the sides of the elongated seed, while the starch projects quite through the grain to its summit, and by its contraction in drying, produces the peculiar pit or depression in this variety of grain. Popping-corn contains the oil in little six-sided cells in the horny portions of the grain, in the form of minute drops. When heated, the oil is decomposed into carburetted hydrogen gas, and every cell is ruptured, the grain being completely voluted.

From these facts it will be perceived how important it is that the farmer should study the adaptation of variety to the purpose intended in consumption. If he wishes to give young animals large bones, let him feed them on sweet corn; but at the same time manure the soil with dissolved bones or other phosphate-bearing manures. He would endeavor in vain to fatten animals with the Tuscarora, as it contains no oil, while it makes the best bread, and is peculiarly adapted for the manufacture of corn starch. Again, the hard northern gluten-bearing corns are better for working animals than the southern starch-bearing vari-

eties, though the latter, independent of the oil, will make most fat, the former most flesh. An accurate analysis of all varieties grown in the United States would be of great pecuniary value to the country.

Buckwheat (derived from the German *Buchweitzen* "beech wheat," from the resemblance of the seeds to the beechmast), is not properly a *grain*, but belongs to the family of *knotweeds*, of which there are twenty species in the Northern United States. It is probably a native of China. There are three cultivated species: common buckwheat, Tartarian buckwheat, notch-seeded buckwheat. There do not appear to be any varieties.

The first is chiefly cultivated in America, the second in Italy, the last in China. In Europe it is grown for food from Russia to Italy, Great Britain excepted, and being a very short time in the ground, can be adapted to great differences of climate. In the United States it can be grown in every section, but is chiefly cultivated north of North Carolina and Tennessee.

Buckwheat is used as food for man and animals, and is decidedly nutritious. Its fattening qualities are found in practice to be higher than could be supposed from analysis; and the meat formed by it is of peculiarly fine quality. The outer husk being hard, this grain should always be ground or cooked before feeding.

The uncrushed grain and the fresh straw produce a remarkable and hitherto unexplained effect upon swine. If allowed to feed in a newly harvested buckwheat field, the head and ears are attacked by an eruption, with apparently intense itching, while the animal presents all the symptoms of intoxication. In severe cases death ensues. So, likewise, the fresh grain, fed whole in large quantities, disorders the bowels; but if ground or cooked, these symptoms are not observed. In the latter case, the husk is passed by the animal entirely undigested. Further investigation is necessary to explain these phenomena.

The straw is harsh, and not relished by horned cattle; but horses will eat all except the coarsest parts, and keep in good condition upon this alone. Buckwheat straw, unthreshed, and cut up, is excellent fodder for working horses. It must be kept in a dry place, as it readily absorbs moisture, ferments, and spoils. If boiled, the straw will form a thick jelly.

Millet. — Under this name five plants of differing genera, which are cultivated for their seeds, are comprehended. They are all true grasses.

They are the common millet, Indian or grand millet, Guinea corn, Bengal grass, or Italian millet, German millet.

The first is most generally grown in the United States, the others being rarely met with. The second and third belong to the same family as broom corn (Sorghum saccaratum). In other countries they are used as food for men and animals, and the straw or stalks as fodder.

The Indian millet furnishes the bread of the Arabians and other people of the East, as well as those of Africa. It is also eaten in Italy, Spain, South of Germany, and the West Indies. It matures perfectly in the neighborhood of Detroit. In its mode of growth it resembles Indian corn, but the seeds are different. In this country it is scarcely worth cultivating except as a curiosity, as it requires the same labor as corn, while its produce is smaller and of an inferior quality.

Potato. — This well-known and most useful esculent belongs to the botanical family of *Solaneæ*, or the nightshade tribe, of which many of the species are poisonous. The potato itself, in an uncooked state, is, to a certain extent, injurious to human beings; and if kept till spring, in a dark place, a new chemical alkaline principle called *Solanine* is formed in the shoots, which is a powerful poison. It is a native of South America, and is still found wild in Chili.

In 1545, a slave merchant, John Hawkins, introduced the potato from New Grenada into Ireland. From Ireland the plant passed to Belgium, in 1590. It was neglected in England till introduced by Sir Walter Raleigh, in the beginning of the seventeenth century; and was not in general cultivation in Scotland till near the end of the eighteenth century. When the potato came from Virginia into England for the second time, it was already disseminated over Spain and Italy. It has been ascertained that this root has been cultivated on a great scale in Lancashire, England, since 1684; in Saxony, since 1717; in Prussia, in 1738. In 1710, it began to spread in Germany, but the famines of 1771 and 1772 seemed necessary to lead the Germans to cultivate it upon the great scale. In less than two cen-

turies it has literally overspread the earth, and at the present day is found growing from the Cape of Good Hope to Iceland and Lapland.

The egg-plant, the tomato, and the red pepper are esculents; and deadly nightshade, a well-known medicine, belongs to the same family. The bittersweet of our own woods and fences may be mentioned as the type in the Northern United States.

The plant may be propagated by *seed*, in which case a vast number of new varieties is originated; or by the *tubers*, which contain buds or germs from each of which a stem will arise, and the variety continue constant. The germ will grow equally well if severed from the tuber, retaining merely a small fragment of the skin and substance; and it submits to desiccation by a hot stove without losing vitality.

It has long been a disputed point whether it were better to plant the entire tuber, or to cut it up into fragments, but no accurate decision seems to have been arrived at. In consequence, we may conclude that the practical difference is very small. General custom leans towards the latter plan. It has been observed that "eyes" or "germs" taken from the tubers that have not been fully ripened, are more vigorous than those that have been taken from such as have been very fully ripened. This leads to a rule in practice, that the tubers to be planted shall be those which were taken up before the stems had begun to decay in autumn.

The number of varieties is very great, and always increasing. The chief distinction is that of early and late kinds.

The peculiar characteristic of this root is the quantity of starch that it contains, in combination with much water and potash in its ash. The quantity of dry solid matter depends much upon the state of ripeness to which it has attained. The ripest leave 30 to 32 per cent of dry matter, the least ripe only 24 per cent. The quantity of starch varies according to variety, from $10\frac{3}{4}$ to 32 per cent; and, according to Liebig, in the wild state, this root is almost destitute of nourishing constituents. Since the rot has prevailed, potatoes appear to have lost much of the starch they previously possessed. The crop, also, other things being equal, varies in the weight per acre, according to variety, more than perhaps any other cultivated plant. The

quantity of starch is at its maximum in the winter. In the spring, vegetation becomes active, and the buds begin to grow at the expense of the starch contained in the tuber. Hence, at this season, potatoes are less mealy, and, in consequence, less esteemed for eating. The tissue of the potato consists of a mass of cells, and in these the starch is stored up in the form of grains, of the ordinary shape, and these congregate principally in a zone near the skin, and are less abundant toward the centre: the remaining space, in and between the cells, is occupied by a thin albuminous liquor, constituting three-fourths of the total weight of the tubers. All the nitrogenous matter is dissolved in the juice, and consists almost entirely of albumen, with a very small quantity of asparagin and free acids. substance of which the cells consist is essentially different from that found in other plants. It possesses the property of swelling in water into a translucent jelly, and of being transformed into sugar and gum by the actions of acids, and consequently occupies a position intermediate between starch and woody fibre. Potatoes are readily frozen at a few degrees below freezing-point, and when again thawed are soft and sodden, and allow the greater part of the juice to flow out - in fact, the cells are burst by the ice formed within them, the organic structure is destroyed and vitality lost, while decay speedily succeeds.

Cotton. — Cotton is an indigenous product of all inter-tropical regions. It consists of the down, or fine cellular hair, attached to the seeds of plants belonging to the genus Gossypium, natural order, Malvaceæ—the plants which supply the raw material for one of our greatest industries, and for the clothing of all nations. Some authorities enumerate ten different species, divided into two classes, those of the old and new worlds, known as the Indian or Oriental, the American or Occidental. While the difference is not great, it is sufficiently pronounced to admit of no mistake. The seed of the eastern plant is never black or naked, and the curvature at the base of the leaf lobes is compounded of two opposite curves, and not purely heart-shaped, as in the case of the western plant.

Sea Island cotton is a distinct variety, and is grown almost exclusively upon the islands and a portion of the mainland of Georgia, South Carolina, and Florida, the saline ingredients of the soil and atmosphere being indispensable elements in its growth. When planted back from the salt water, the staple becomes shorter and less valuable.

The plant is a very delicate organism, and requires a peculiar soil and climate for its proper development. The soil needs to be prepared with extreme care, and the most perfect cultivation is necessary to bring profitable results. The plant is an annual, and is renewed from the seed each year. Seeding begins in March, but continues until May, April being the most favored month. The seed is sown in drills, in ridges from three to six feet apart. When the plant appears above ground, it is usually thinned out to one plant each 12 or 18 inches, more or less. Continued cultivation follows, as long as the condition of the plant will admit. Blowing begins sometime in July, but the regular picking season begins in the month of August. The plant does not bloom all at once, and consequently the field is picked over many times before the crop is all gathered.

The cotton, as taken from the plant, contains in weight about one-third lint cotton and two-thirds seed. The seed is now used for many purposes, such as oil, feed, fertilizer, etc. It is said that cotton was introduced into the United States in 1536, but the export trade did not begin until two and a half centuries later. It is related that, in the year 1764, William Rathbone, an American merchant in Liverpool, received from one of his correspondents in the Southern States a consignment of eight bags of cotton, which, on its arrival in Liverpool, was seized by the custom-house keepers, on the grounds that it could not have been grown in the United States, and was liable to seizure under the Shipping Acts, as not being imported in a vessel belonging to the country of its growth. When finally released, it lay for months unsold, because the spinners doubted whether it could be profitably used.

The seed used to be picked from the lint by hand, which was a tedious process, as one hand could clean only a pound or so in a day; but in 1793, Eli Whitney invented the saw-gin, which separated the seed from the cotton rapidly by machinery. Since this invention, the growing of cotton has assumed vast proportions. After ginning, the cotton is taken to the press, where it is made into bales of about 500 pounds. When sent abroad,

these bales are put in a powerful compress, which reduces the bulk to about one-third the original size. These bales are covered with some kind of wrapping, usually, until of late, being jute. Since the effort made by the Alliance to break down the jute trust, many other substances have been used, and it is quite likely that some change will be made in both the size of the bale and its covering. One bale to the acre is considered above the average crop.

At the present time America produces over three-fourths of the entire amount of cotton grown.

United States cotton crops. [From reports of Latham, Alexander & Co.]

Season.	Acres Planted.	Crop Pounds Net.	NET LBS. PER ACRE.	Bales in Crop.	NET WEIGHT PER BALE.	BALE PER ACRE.
1871-72	8,911,000	1,317,000,000	148	2,974,000	443	0.33.33
1872-73	9,560,000	1,746,000,000	182.5	3,931,000	444	0.41
1873-74	10,816,000	1,850,000,000	171	4,170,000	444	0.38.5
1874-75	10,982,000	1,686,000,000	153.5	3,833,000	440	0.35
1875–76	11,635,000	2,059,000,000	177	4,632,000	444	0.39.88
1876–77	11,500,000	1,972,000,000	171.5	4,474,000	440	0.39
1877–78	11,825,000	2,148,000,000	181.75	4,773,865	450	0.40.63
1878-79	12,240,000	2,268,000,000	185.25	5,074,155	447	0.41.5
1879–80	12,680,000	2,615,600,000	206.25	5,761,252	454	0.45.5
18-0881	16,123,000	3,038,645,000	188.5	6,605,750	460	0.41
1881-82	16,851,000	2,455,221,600	145.63	5,456,048	450	0.32.37
1882-83	16,276,000	3,266,075,290	200.63	6,949,756	470	0.42.63
1883-84	16,780,000	2,639,498,400	157.33	5,713,200	462	0.34
1884–85	17,426,000	2,624,835,900	150.5	5,706,165	460	0.33
1885–86	18,379,444	3,044,544,933	165.5	6,575,691	463	0.36
1886–87	18,581,012	3,018,360,368	162.5	6,505,087	464	0.35
1887–88	18,961,897	3,290,871,011	173.5	7,046,833	467	0.37
1888-89	19,362,073	3,309,564,330	170.88	6,938,290	477	0.35.75
1889–90	19,979,040	3,492,880,318	174.5	7,307,281	478	0.36.5

Tobacco. — Tobacco consists of the leaves of several species of the plant *Nicotinia*, variously prepared for use as a narcotic. While it is principally prepared for smoking, a very large and increasing amount is prepared for chewing, and considerable is made into snuff. Under these forms, the use of tobacco is more widely spread than any other narcotic or stimulant.

It is a native of America. In November, 1492, Columbus sent out a party to explore the island of Cuba. On their return they reported having seen people carrying lighted firebrands to kindle fire, and that they perfumed themselves with certain herbs, which they carried along with them, — meaning tobacco. The habit of using snuff was ascertained on the second voyage of Columbus, in 1494. The tobacco plant itself was first carried to Europe in 1558, by a physician who had been sent to Mexico, by Philip II. of Spain. It was introduced into Portugal by Jean Nicot, from whom it receives its scientific name, *Nicotinia*.

Ralph Lane, the first governor of Virginia, carried with him, in 1586, to England, the implements and materials for tobacco using, and presented them to Sir Walter Raleigh. Lane is said to have been the first English smoker. In the seventeenth century its use spread rapidly, notwithstanding the stringent laws made to prevent it. The Church declared smoking a crime. The Sultan of Turkey punished smokers with death. The pipes of the smokers were thrust through their noses, in that country, while in Russia their noses were cut off. It continued to grow in use, and is now found in almost all parts of the world.

The cultivation of the plant is comparatively easy, though a warm climate suits it best. It is grown in many of the Northern States. It requires skill in handling and curing, and takes a longer time to grow and prepare for market than any other crop. It demands the best of land, and the strongest fertilizers, and is very uncertain in its results. The influence of soil, climate, and fertilizers on the quality of the product is very great, beyond that of any other cultivated plant. The seed is usually sown in hot-beds, or carefully prepared beds out of doors. When the plants are large enough, they are transplanted to the field, in rows from two to three feet apart. It requires clean cultivation and a watchful care, picking worms, cutting off flower shoots, etc. About the 15th of September, varying somewhat as to locality, the crop begins to be gathered. It requires about four months to mature in the field.

The amount of tobacco grown and manufactured in the United States is very great, and still on the increase. The

following statistics will show the vast amount of production in that line:—

Estimated area and value of the tobacco crop of the United States.

YEAR.	Pounds.	Acres.	Value.	VALUE PER POUND.	YIELD PER ACRE.	AVERAGE VALUE OF VIELD PERACRE
				Cents.	Pounds.	
1876	535,000,000	733,000	\$39,590,000	7.4	730	\$54.01
1877	580,000,000	745,000	40,600,000	7.0	778	54.49
1878	429,200,000	580,000	34,336,000	8.0	740	59.20
1879	472,000,000	638,000	49,560,000	10.5	740	77.68
1880	460,000,000	610,000	50,600,000	11.0	754	82.95
1881	449,880,014	646,239	43,372,336	9.6	696	67.11
1882	513,077,558	671,522	43,189,951	8.4	764	64.32
1883	451,545,641	638,739	40,455,362	9.0	707	63.34
1884	541,504,000	724,668	44,160,151	8.2	747	60.94
1885	562,736,000	752,520	43,265,598	7.7	747.8	57.49
1886	529,026,949	743,460	39,082,118	7.4	711.6	52.43
1887	386,240,000	5 90,620	40,977,259	10.6	645.2	68.45
1888	565,795,000	747,326	43,666,665	7.7	757.1	58.43

Rice. — Rice is the most useful and extensively cultivated of all the grains, and furnishes the principal food for fully onethird of the human race. It seems to be originally a native of the East Indies, but it is now cultivated in all quarters of the globe. It is an annual, and grows from one to six feet in height. It requires a rich, moist soil, that is subject to overflow. The fields must be situated so that they can be overflowed at certain seasons, when necessary. It is sown either broadcast or in drills, and then covered with water to the depth of several inches, till the seeds germinate. The water is then drawn off, and afterwards the fields are again flooded for a time, in order to kill the weeds. It is again flooded when opening. Rice is an annual, and sown in April or May, and harvested in August and September. The yield is from 40 to 60 bushels to the acre. About 225,000 acres of rice are produced annually in this country.

Sugar-Cane. — Sugar-cane is cultivated, at the present day, in all the warm regions of the globe. It is said to have been

first grown in Southern Asia, whence it spread into Africa, and later into America.

The Arabs, in the Middle Ages, introduced it into Egypt, Sicily, and Spain. It was taken to the Canaries in 1503; was introduced into Brazil in the beginning of the sixteenth century; brought to San Domingo in 1520, and afterwards to Mexico, about 1530; was first planted in the United States in 1751.

Its cultivation, in this country, has not kept pace with the demand, and sugar at the present time is an important article of importation. The cultivation of the sugar-cane requires the utmost care, and is very expensive. It is not raised from the seed, but from the cane, buried in rows, which send up shoots from the joints. The cane is renewed every two years. It is planted in September or October, and is gathered the following year in October to December. It requires clean cultivation, and yields about one ton of sugar to the acre.

Quantities of cane sugar and molasses produced in the United States, during the years from 1881 to 1889, inclusive.

						Suc	AR.	Molasses.		
YEAR.						Louisiana.	OTHER SOUTH- ERN STATES.	Louisiana.	OTHER SOUTH ERN STATES.	
1881–82						159,874,950	11,200,000	9,691,104	2,308,896	
1882–83					٠.	303,066,258	15,680,000	15,716,755	3,250,000	
1883-84						287,712,230	15,232,000	15,277,316	3,118,000	
1884-85						211,402,963	14,560,000	11,761,608	2,892,000	
1885–86						286,626,486	16,128,000	17,863,732	3,645,000	
1886–87						181,123,872	10,158,400	10,254,894	2,114,100	
1887–88						353,855,877	22,048,320	21,980,241	4,651,200	
1888-89						377,933,124	20,229,440	15,228,580	3,255,882	

CHAPTER X.

HOW PLANTS GROW.

MUCH of the following is taken from a pamphlet by W. S. Powell, of Baltimore, Md., and will no doubt be read with interest.

The Air. — The air we breathe is a compound of gases. We cannot see the air, but we can feel it when we move our hand swiftly about, and we can observe its power when it is in motion and is called wind.

The air is a fluid which surrounds us on every hand, and it has a very important part in the growth of crops and the life of all plants and animals. Air is found to be made up of the union of two invisible gases, called oxygen and nitrogen. It has also, at times, other things mixed with it, but not a part of it, such as water, in an invisible vapor, and other gases. Without air no animal or plant can live. Growing plants take from the air poisonous gases which animals throw off from their bodies, and give back to the air what animals need for their good. So we see that the air is the means of keeping both animal and vegetable life on the earth. Animals in breathing the air use up the oxygen gas, and throw off a poisonous gas, called carbonic acid, while plants take up this carbonic acid, which is carbon and oxygen, use the carbon and reject the oxygen.

Water. — Water is composed of two gases, oxygen and hydrogen, in the proportion of one part of the former to two of the latter; it composes four-fifths of the flesh and blood of man, and he uses three-fourths of a ton of it annually. Rain, which is an essential of all crops and of all vegetables, is produced by the evaporation of water in whatever form it may exist, from the land, animals, and plants; in this form it constitutes an invisible vapor that is taken up by the atoms in the atmosphere. The property of all air is to rise when heated; hence, whenever air at any place becomes heated by decomposition of any substances, whether in the soil or on its surface, or from the heat

of the sun, it ascends; as it ascends and meets with cooler currents, the invisible particles contained in it will condense into larger particles; after they become larger particles and saturated, the force of the ascending currents fails to support them, and they fall in the form of rain.

The air, however, has in it more or less of other gases, or other invisible constituents; strange to say, all the other elements or substances do not have the same affinity for each other, and will not unite or enter combinations. Copper and iron cannot be welded together, unless a solder is used that possesses an affinity for both. Water, however, has a great love for other substances, or they for it; among these substances may be mentioned ammonia and carbonic acid, which promote the growth and enter into the composition of all plants. careful observation and analysis of the rain, both in this country and in Europe, shows that these substances are brought down in very considerable quantities by it. In France, about eight gallons of carbonic acid are brought down each year, per acre, and ammonia in varying amounts. In Kansas, where this subject has received attention, it appears that three and one-half pounds was the average amount of nitrogen brought down per acre, when the rainfall averaged 29 inches. If we suppose an average dressing of saltpetre, to about 200 pounds per acre, then this rainfall is about equivalent to one-ninth of this amount. As we go south, the amount of nitrogen in the rain increases, as is also proven in Kansas, at Manhattan, where the amount of nitrogen brought down by the rain was only about one pound, whereas 20° south of that point it was found to be over six pounds; in Maryland, the annual rainfall is about 42 inches, therefore we can safely calculate that about five pounds per acre of ammonia are conveyed to the soil through the rains

The Soil. — We have seen that air and water are each composed of two gases, chemically combined. The soil, or earth, is a much more complicated substance, and varies greatly in its nature in different situations. While air is a fluid, and water a liquid, the earth is a solid. That is, it is solid in a cold state, for all solid things can be made liquid if they are subjected to a sufficiently high degree of heat. All the metals can be made

to flow like water, if made hot enough, and the dry sand, mixed with other things, and heated to a high degree, flows off as glass, and gets still harder in cooling. The soils which cover the hard, rocky framework of the earth have been formed in many ways. The hard rocks have been ground up by ice, frost, and snow, dissolved by water, and carried by it from place to place, until nearly the whole earth is covered with this softer covering, in which plants and trees can grow. The decay of these trees added other substances, which did not before exist in the soil, and thus a larger growth was made, the decay of which still further added to the soil. It is this soil, made up of this mixture of mineral substances from the rocks, and vegetable decay drawn from the air, which we have to do with in farming. The soil, then, is a great mixture of many substances, and is very different in one locality from that which is found in another.

Plants. — The many kinds of plants which the farmer grows for the purpose of harvesting from them his crops, are the most important things connected with his work. Let us see, then, what we can learn of the ways in which plants get their food, make their growth, and mature their seeds.

Plants, like animals, are living beings. We do not know exactly what this thing we call life is, but we can easily tell a dead animal or a dead plant; that is, we know when life is there and when it is gone. If we take a powerful microscope, we will find that the water of our ponds and ditches is full of living things, which we cannot see with our naked eye. Many of these we can see are animals, and many others we can see plainly are plants. And then we find some that we cannot be positive as to whether they are animals or plants. But we see that they are living and growing, and we find, in these very minute forms, some which are so small that 150 of them, placed end to end, would only make a line the thickness of the paper this is printed on. We find, then, that there is, in these small things, all of which have life, no distinct line between animal life and vegetable life. We conclude, then, that life in plants and life in animals is the same thing, only it shows itself in different ways, as the plants and animals get larger and better developed. great oak tree of the forest has life just as our bodies have, but it manifests itself in a different way. The plant, then, is a living thing, taking food, digesting it, and making growth. It is destitute of the power of moving about like animals, and in many ways a fully developed plant is very unlike a fully developed animal. But this vegetable life is the means by which animals are enabled to get food from the soil, for the plants can use matters in the soil and air to live and grow upon, which animals cannot get until the plants have made them into a shape they can eat. We see, then, that, without this plant life, there could be no animal life upon the earth.

It is very important, then, to understand just how plants get their food, what they eat, how they digest their food, and how they build up their structure, and mature the crops we use for food.

Where Plants get Food. — We all know our common Indian corn, and what a great lot of food for man and beast it furnishes. Take a large plant of corn, fully mature; chop it up into a compact shape and weigh it. Then put it into an oven and get it thoroughly dry, as a chemist would in his drying-oven. When completely dry, weigh it again, and we find how much water it contained, and you will be surprised to find how much water this ripe corn had in it, though it will be hard for you to drive it all out, as a chemist would. Now take the dried corn plant and burn it slowly, so that no part of the ashes can be blown away. Then gather the ashes and put them into a crucible, and heat it until all the black particles are consumed, and nothing remains but white ashes. We will then find that these white ashes weigh very little, when compared with the weight of the good stalk and its heavy ear that we began with.

What has gone with all the rest, now that we have but a handful of ashes? The fire has destroyed it, you say. No, we cannot destroy anything. The burning only changed the form of the plant. The things which made up the greater part of the corn still exist, but they have gone back where the plant got them from, into the air. The little pile of ashes we hold in our hand, and which did not burn, is all that the plant got from the soil; the rest, and much the larger part, came from the air, in the shape of a gas, and has now gone back to the air. We see, then, that about nine-tenths of all our plants come from the air. All the food which plants get from the soil is left in the ashes,

and it got into the plant by being dissolved in the soil, by the water we dried off.

How Plants get Food from the Air. — Take a large seed, like a Lima bean; press it, eye downwards, into a box of moist soil, in a sunny window, and watch it sprout and grow. You will notice that this bean is in two parts, inside of an outer skin. In a short time it swells, a little stem starts from the eye, and makes little roots in the soil. Then the two thick halves burst the skin and rise on the stem, and gradually spread out into two broad leaves. They are thinner now than when they merely formed the two parts of the bean, for they have given part of their material to form the little stem and roots, before they turned green. This turning green is a very important matter.

Suppose, instead of planting one bean in a sunny window, we had simply stuck it in moist sand in a warm place, and covered it over so that no light could reach it. It will swell and germinate, but the two halves will not turn green. Now take it and dry it, and you will find that it has not gotten any heavier, though apparently larger than when put in the moist, warm place; but take the bean which has been in the sunlight, and dry it, and you will find that it has already increased in weight. The bean in the dark did not grow, but only changed some of the food stored up in its thick halves into a little stem of rootlets. The one in the sunlight added something else. Now let us see how this was done. We have seen that, when the halves of the bean spread out into broad leaves, they became green. This green is caused by a substance formed in the leaves of plants which are in sunlight, and not in those that are kept in the dark. substance is called leaf-green. It is found in little boxes in the leaf, which are called cells. These cells are placed side by side, somewhat like a honeycomb, and are so small that we cannot see them without a microscope, but between them there are little vacant places, still smaller than the cells. Opening into these spaces there are little holes in the leaf, particularly on the under side, which open and shut like little mouths with a pair of lips. These are really the mouths of the leaves, and through them the plant takes in all the food it gets from the air, and through them it also puts out some things it does not want, especially what water it does not need. These little mouths are so small

that the under side of one leaf will often have many thousands of them, and to show how fast they let out moisture from the plant, cut a branch off full of green leaves, and see how quickly they wilt and dry. But the most important thing these mouths do, in common with other sorts of mouths, is to get food for the plant from the air. The air, we have seen, is a fluid, made of two gases, oxygen and nitrogen. Mixed with this pure air we often find other gases, one of which, called carbon dioxide, is made of two parts of oxygen gas, combined with one part of carbon. This gas is heavier than pure air, and always settles to the ground, and is often found in deep wells, when it is called bad air, and suffocates those who go into the well. But this gas, so poisonous to animals, is food for plants. So, while the sun is shining, and at no other time, the little mouths in the leaves open and suck in, as it were, this carbon dioxide from the air. It passes through the vacant spaces between the little cells, where the leaf-green is, and is brought in contact with it. The leaf-green has the power of selecting the carbon, which the plant wants, from the oxygen, and holds on to it, but leaving most of the oxygen free to return to the air, thus rendering it more pure for animals to breathe. Thus, with part of the oxygen, the carbon, and the water taken up by the roots, the leaf-green makes starch. After the sun has quit shining, and night has come on, the plant takes the starch made during the day, and changes it into other things, to build up new cells, and make more stems, leaves, and roots. The little honeycomb cells are made of stuff just like white paper, and it is called cellulose. This cellulose is made of just the same thing that starch is made of, but arranged by the plant so as to seem very different. Then, with things the roots get from the soil, and other things made from the starch, the little cells are gradually filled up, and solid hard wood is made. We see, then, how the warm sunshine helps the leaf-green make the starch from which wood is made, and we can then realize that, when we warm ourselves by burning wood, we are only getting back the sunshine which helped to make the wood long years before, and are making new carbon di-oxide in the smoke, to go out into the air and help to make new trees; and when we see the small pile of ashes left from the largest stick of wood, we realize how much

more the sunshine, air, and gases had to do with making it, than the soil.

How Plants get Food from the Soil .- Plants get food from the soil by means of their roots, you will say. Of course they do; but just how they do it has only been somewhat definitely ascertained of late years. Formerly it was thought that the tips of the roots were like sponges, and soaked the water in just as a sponge does. But since we have gotten better microscopes, we have found that the extreme tip of each rootlet is a pointed cap of rather older material than that just behind it, and that the new growth of the root is made just behind this root-cap, in both directions, so that the outside of the cap is of older and harder material, which is continually being renewed as it wears in pressing through the soil. We can see how important this arrangement is, in enabling a root to make its way into the soil. If we get a young rootlet out of the soil, without injury, and examine with a magnifying-glass of good power, we will see, just behind the cap at the tip, that the whole surface of the rootlet is covered with fine white hairs. These are so fine that, in most plants, we cannot distinguish them at all with the naked eye; but these little root hairs are the only means the plant has for getting the mineral matters from the soil. We see, then, how important it is that the food of the plant be completely dissolved in the water, for these extremely fine hairs cannot take up anything of a solid nature. The root hairs are only found on the youngest part of the fine rootlets, and they soon dry off, while new ones are produced as the root grows further, and they have fresh food presented to them. The water taken up into the plant, charged with various mineral foods, is brought in contact with the substances taken by the leaves from the air, and thus all the combinations found in plants are made.

How Plants construct their Stems, Roots, and Branches.—The water taken up by the roots from the soil is simply crude, undistinguished sap-water. This is taken rapidly up through the sap-wood and pith, and taken where the wonderful laboratory of the leaves is in operation. The taking of the carbon from the air, by the leaves, is called assimilation, and from this assimilated food, made into starch by the action of the water in

the plant, the plant makes its woody growth in every direction. The active principle or substance which has life in a tree is called by botanists the protoplasm. This substance goes through all the young growing cells, and carries with it all the substances which the leaves have made. It takes them to every point where new material is needed, and may be called the hodcarrier of the plant. Even the roots owe their growth to the substances which the leaves have made, and which this active agent of life brings to them. The new shoots get their part at the growing tips, and new leaves are made to carry on the work. All down between the bark and the wood of our trees, this agent of life passes and makes new rows of cells, to the young wood on one side, and to the young bark on the other. And then, after these rows of cells are made, year after year, around a tree trunk, it fills them up and adds other materials, until they are finished and made into heart wood, as we call it. Heart wood, then, is finished wood from which the life principle has gone, and which is really dead wood. Life in a tree exists only in the sap-wood, and more actively, in our ordinary trees, in the young part between the wood and bark. All parts of a plant, then, roots, stems, branches, and leaves, are made in the great laboratory carried on by the leaves and green parts of the plants, and the material formed by the leaves is transported up, down, or in any direction, when new growth is going on.

This shows how important it is that we have a full development of foliage and green tops on our plants, in order that the work may be well done. This also shows that a full foliage indicates that the plant or tree is in health, receiving and assimilating food in such quantities as are either promoting growth or preserving life unimpared.

What Food Plants get from the Soil. — We have seen that the chief thing, if not the only one, that plants get from the air, and with which they make the greater part of their bulk, is an element called carbon, which they get by decomposing the compound called carbon dioxide. Let us now see what they got from the soil. These things we have found are left in the ashes, when we found the wood or organic matter, and returned the carbon dioxide to the air. The substances we find in the ashes of a plant are called the ash elements. Now an element is a

simple body, out of which we can get nothing different. Elements are seldom found in this simple state in nature, but are generally mixed with other things, making compound bodies. Thus we have seen that air is a compound of two elements, oxygen and nitrogen, which are both gases. Water also is a compound body, made of two gases, hydrogen and oxygen. There are, however, many other elements that are not gases, but solid substances. Some of these solid elements we know as metals; such as iron, silver, gold, copper, etc. Others are solid, but not metals; as sulphur, carbon, phosphorus, chlorine, silicon, etc.

Chemists have so far discovered in the air, and water, and soil, 63 single elements. Of these, 48 are metals, and 15 are either gases or solid elements other than metals.

Many elements are very common; other metallic elements are rare. When these elements unite and form compounds, we find that those which are most unlike as free elements unite more readily than those which in general resemble each other.

Of all the metallic elements, iron is the most plentiful and important. It is found in various combinations in all our cultivated soils. In fact, without iron in the soil, no plant could grow, because the formation of leaf-green in plants is dependent upon iron in the soil. We always find some form of iron in the ashes of plants, and all cultivatable soils have it in inexhaustible quantities.

The various things we find in the ashes of a plant exist in certain combinations, called *Acids*, *Alkalies*, and *Salts*.

An Acid is a compound which is sour and corrosive.

An Alkali is a compound which is the opposite of an acid, and which, by uniting with an acid, destroys it and forms a neutral body.

A Salt is this neutral body, formed by the combination of an acid with an alkali.

Acids and alkalies are very unlike, but we find that they readily unite to form a very different thing from either.

Thus carbon dioxide, an acid gas, unites with lime, a caustic alkali, and forms limestone or chalk. We find, everywhere in nature, that acids and alkalies tend to combine with each other.

We find four alkalies in the ashes of plants, — magnesia, soda, lime, and potash.

We also find phosphoric acid, sulphuric acid, and silicic acid.

The elements chlorine, iron, manganese, and lime, are also found.

We do not find these things separate, but in combination. We find phosphate of lime, oxide of iron, silicates of potash and soda, carbonate of lime and potash, chloride of soda, or common salt, sulphate of lime and potash, and oxide of manganese.

Potash is one of the alkalies found in the ashes of plants. This is essential to all plant growth. It must be found in some soluble combination within reach of the roots of plants, if any growth is expected. It exists, to some extent, in all cultivated soil, but in some sandy soils, particularly those near the sea coast, it is deficient. Potash compounds are most abundant in clay soils near the mountains, where granite rocks are found, whose decay and crumbling furnish it to the soil. Rocks containing feldspar have a larger percentage of potash than any other. The potash in wood ashes is the most valuable thing they contain, for the farmers use it as a manure. We will say more of this when we come to manures.

Magnesium is another element found in compounds, in the ashes of plants, and like potash seems essential to their growth. Compounds of magnesium are usually found in plenty in all our cultivated soils. Some kinds of limestone, called magnesian limestone, are very rich in this element.

Lime, the carbonate of calcium, is very plentiful in the ashes of plants, and is one of the substances absolutely necessary to plant life. Only a small part of the lime, however, that is found in the ashes, has been used as food by the plant. A large part of it exists in plants, just as lime is found on the sides of a kettle in which water containing lime has been boiled, and gets there because abundant in the soil water. Lime is, however, of great value to the farmer in other ways, which we will explain further on.

Sodium is another element found in ashes, generally in combination with chlorine, making chloride of sodium, or common salt. Its use as a manure will be treated hereafter.

One of the most valuable ash elements is phosphorus. Phosphoric acid rapidly unites with lime, and forms phosphate of lime. The bones of animals contain about 65 per cent of phosphorus.

phate of lime. They must get all this from the plants they eat. We see, then, how important this compound is. Our cultivated soils are usually more in need of this than any other plant food, as it is less generally common; and its importance in any manure can readily be seen. Another important element is sulphur. This, in the form of sulphuric acid (sulphur and oxygen), readily unites with lime, and forms in nature large beds of sulphate of lime, or plaster, as it is commonly called. Plaster is largely used, and found profitable on such soils as are supplied naturally with potash combined with silica. The plaster "pushes out," as some one has said, the potash, so that plants can get it.

Silica (silicon and oxygen) is common sharp sand in its pure state, and in this shape only serves to loosen and lighten the soil, but in combination with potash forms silicate of potash, which dissolves slowly in rain water. Silica is needed in plants to stiffen the straw of wheat and other grains. It is always in plenty, but sometimes needs to be made soluble by lime, etc.

Nitrogen is one of the most essential elements needed by plants. Nitrogen is found free in the air, and exists in soils in the form of nitrates of potash, lime, soda, and ammonia.

Nitrogen in some form is absolutely essential to well developed growth in plants. Nitrates continually form in cultivated soil, but, being very soluble in water, are more rapidly washed away and lost than any other plant food. We find that an ordinary mellow soil will take and hold on to all the various elements of plant food, except the nitrates, which are rapidly washed away. Some plants, such as peas and clover, have in their roots a "ferment"; that is, a microscopic organism, which rapidly promotes the formation of nitrates in the soil. Hence the great value of this class of plants in improving land for other crops.

But the plants get nitrogen, also, in the shape of various compounds of ammonia, which is hydrogen and nitrogen. We are all familiar with the sharp odor which rises from a pile of horse manure heating. This is from the carbonate of ammonia, which is rapidly flying off into the air, and being lost by the farmer. But if we mix with this manure a supply of plaster, which is sulphate of lime, the carbonic acid unites with the lime, and the sulphuric acid parts with it and unites with the ammonia, and

makes sulphate of ammonia, which does not fly off so fast, and the valuable ammonia is kept in our manure pile.

What is Manure?—In our common language, manure is made to mean the droppings of our domestic animals, which all careful farmers save and apply to the land for the growth of crops.

Let us inquire why these animal droppings are of so much value to our crops. When we burn a plant, we have left in the ashes the plant food which came from the soil. The same thing happens to a less extent when the crops are eaten by animals. The animals use up, or burn, that is, oxidize, the parts which the plant got from the air. In burning these things in a fire, we make heat, and in burning them by the aid of the oxygen taken into the lungs of animals, we also make heat, the animal heat which is necessary to animal life. The droppings of animals, then, contain the ash elements of the plant, with a lot of woody fibre, and other indigestible things, with a quantity of nitrogen in the shape of ammonia. We see, then, that the droppings of our domestic animals contain all the plant food which plants got from the soil, and also a large amount of carbonaceous matter, which originally came from the air, but which is always useful in the soil in aiding in the decomposition of other matters, and the holding of substances which plants get from the soil. We see, then, that the droppings of domestic animals make the cheapest form of plant food we can supply to the soil, and we should not allow any of these to be wasted.

We find however, that, although all the elements of plant food are found in animal droppings, our animals use a large part of these things for other purposes. They use phosphoric acid in the shape of phosphate of lime, to make their bones, and they use nitrogen in making flesh. The milk of cows carries off other elements of plant food. Animals thus, in consuming crops, do not return to the soil all that came from it, even if all their droppings are saved and returned to the land. So that animals, fed entirely on the crops that grow on a farm, will gradually reduce the plant food in the soil, though not so rapidly as when the crops are sold off the farm. We then see why it is necessary for farmers, on most of our soils, to seek this plant food elsewhere, because of the impossibility of returning,

in the shape of animal manure, all the crops take away from the soil.

FERTILIZERS, AND WHERE THEY COME FROM.

We have seen that the elements most generally wanting in old, worn soils are potash, phosphorus, and nitrogen. Now let us learn more about these, and where we get them from.

Potash. — Potash is found largely in the ashes of plants, and constitutes one of the chief sources of food, supplied by wood ashes from our fires, when spread on the land. Potash, as it exists in ashes, is very easily dissolved in water, and if the ashes have been leached with water for the purpose of getting lye to make soap, very little potash will be left in them, and they are then mainly valuable for the lime that may be left in them. Potash also is found in other combinations, mixed with common salt dug out of the earth; mostly in Germany. It is largely imported in these potash salts, which are sold under the names of kainit, sulphate of potash, muriate of potash, sylvanit, etc. In red-clay soil, on granite formations, there are usually plentiful supplies of potash, combined with silica in the shape of silicate of potash, and we get hold of this potash by adding sulphate of lime or plaster, as it is called. By this means a new combination, sulphate of potash, is made, which is more easily dissolved by water than the silicate, and plants get it. All rocks containing feldspar and mica have a great deal of potash in them, and as these become decomposed the potash is washed down into the soil. Potash is necessary to all plants, and particularly favors the growth of clover and other plants of the pea family, which help the soil in other ways.

One of the most valuable sources of potash, in the South, is the ashes of cotton-seed hulls, made at the oil mills.

Phosphorus.—We get this element in our fertilizers from various sources. It exists in large quantities in the bones of all animals, in the shape of phosphate of lime, which gives ground bones a high value as a manure. It is also found in bone charcoal, used by sugar refiners. The chief source of phosphate of lime is the phosphate rock, which is found in large beds in the coast region of North Carolina, South Carolina, Florida, and Alabama. The largest supply of this material is dug in

South Carolina. Large deposits of phosphatic guano are also found in Navassa, and other islands in the Caribbean Sea.

The South Carolina rock is now largely pulverized, or beaten into a very fine powder, and sold under the name of floats. This becomes more quickly of use to crops than coarse ground bones, but a still greater solubility is attained by making the rock into superphosphate, by dissolving it in sulphuric acid. This is known as acid phosphate in the markets. Superphosphate was formerly largely made from bones, but now it is almost altogether made from phosphate rock and phosphatic guano. All cultivated soils contain more or less phosphoric acid, but it is more generally deficient than most other forms of plant food. Hence the great importance attached to phosphatic fertilizers.

Nitrogen. — Nitrogen is found largely in Chili, in the shape of nitrate of soda, which is now largely used as a top-dressing during the growing season. Nitrate of soda dissolves very rapidly when scattered on the soil, and is quickly taken up by growing plants. It absorbs water so rapidly that it is hard to keep without losing value, and is little used in mixing with other fertilizing substances that are to be kept for any length of time.

Nitrate of potash (saltpetre), so largely used in making gunpowder, is found in the soil and is artificially formed by suitable materials. It is too costly to use as a farm fertilizer.

Nitrogen is also used in various forms of ammonia compounds. Ammonia (hydrogen and nitrogen) has been found of more benefit to some plants than nitrogen in the shape of nitrates. It has been found, however, that salts of ammonia in the soil rapidly change to nitrates. It has been found that, with the potato crop especially, while ammonia did no good, nitrates of soda had a powerful effect on the crop, showing that there is a great difference in the liking of plants for different forms of nitrogen. Some suppose that plants will absorb ammonia from the air by their leaves, but this is by no means certain. The best and cheapest form in which ammonia is to be had is as sulphate of ammonia. This is prepared from the ammonia water, or gas liquor, produced in making gas for lighting cities and dwellings. Years ago the best shape in which nitrogen could be had was in Peruvian guano from the Chincha Islands,

but the deposits there have long been exhausted, and Peruvian guano, as now sold from other islands, is much inferior, though still valuable. These natural guanos, in addition to the nitrogen, have large percentages of phosphate and some potash.

Dried fish scraps, left from the manufacture of fish oil, can be had cheaply at many places near the coast, and are a cheap source of nitrogen. When it can be had cheaply, it is good to apply to the soil, but farmers sometimes pay a high price for it in mixed fertilizers, — much more than it is worth. Another source of nitrogen is dried blood and flesh from the large slaughter-houses. This is also a valuable article for composting. Tankage is another source of nitrogen. It is made from the refuse entrails and offal of slaughter-houses, steamed to remove the oil, and then dried and reduced to powder.

But the great source of nitrogen, for the Southern farmer, is the meal made from the cotton-seed cake, after the oil is pressed out. This is one of the best and cheapest forms of nitrogenous compounds, and is of the greatest importance to the Southern farmer in preparing fertilizers at home. It will always pay a cotton planter to exchange his cotton seed for an equal weight of meal and hulls, in proper proportion. The oil is of no use as a manure, and can be profitably sold, if the meal and hulls of same weight are returned to the land.



DEPARTMENT OF AGRICULTURE, WASHINGTON, D.C.

CHAPTER XI.

THE DEPARTMENT OF AGRICULTURE.

In giving the origin of this department, recourse is had to a little work published in 1872, by James M. Swank. He writes as follows:—

To Hon. Henry L. Ellsworth, of Connecticut, son of Hon. Oliver Ellsworth, third Chief Justice of the United States, is the country more indebted than to any other person for the recognition by Congress of the claims of agriculture. His services date from 1836, in which year he was appointed by President Jackson the first Commissioner of Patents. The Patent Office had been just then reorganized. Owing to its subsequent intimate association with the interests of agriculture, the origin of that office requires a brief notice, before reference is made to Mr. Ellsworth's administration of its duties.

The first article of the Constitution provides for promoting the progress of science and the useful arts, by securing to authors and inventors the exclusive right to their respective writings and discoveries. This clause is the foundation of our laws regulating copyrights and patents. Up to 1793 the granting of letterspatent was confided, by act of Congress, to the Secretary of War, the Secretary of State, and the Attorney-General, the records of patents being kept in the office of the Secretary of State, and all models and drawings being deposited there. the 21st of February of that year, the duty of acting upon applications for patents was assigned exclusively to the Secretary of State. The examinations of these applications was performed by a single clerk in the office of the Secretary, who, in 1821, received the title of Superintendent of the Patent Office. 1830 this office was further recognized by law, and made the subject of a special appropriation. On the 4th of July, 1836, it was made a separate Bureau of the Government, and the office of Commissioner of Patents was created. In December of the same year Blodgett's Hotel, a three-story brick building, used

for government offices, which stood where the Post-Office building now stands, and fronted on E street, was burned to the ground. In one or two of the upper rooms was located the Patent Office, and its contents were entirely consumed. Afterwards, until 1840, the business of the bureau was transacted in rooms appropriated to its use in the City Hall. In 1840 the Patent Office was removed to the building erected expressly for its accommodation, and now occupied by it.

Mr. Ellsworth was Commissioner of Patents from 1836 to 1845, and one of the first subjects which engaged his attention, after assuming the duties of the office, was the impulse which had been given, at that day, to improvements in the implements of agriculture, and the "aid which agriculture might derive from the establishment of a regular system for the selection and distribution of grain and seeds of the choicest varieties, for agricultural purposes." During the administration of John Quincy Adams, the consuls of the United States were instructed to forward to the State Department rare plants and seeds, for distribution, and a botanical garden was established in Washington. Little was done in the collection and distribution of seeds thus authorized, but to the association of this enterprise with the Patent Office in the State Department Mr. Ellsworth was doubtless indebted for the hint of a more comprehensive system of seed distribution. In 1836 and 1837, the first two years of his incumbency, the commissioner, without legal authorization, received and distributed many seeds and plants which had been gratuitously transmitted to him. In his first annual report, dated January 1, 1838, he called the attention of Congress to the subject, and strongly recommended that provision be made for the establishment, at the National Capital, of a depository of new and valuable varieties of seeds and plants, for distribution to every part of the United States. He further recommended that this depository be made a part of the Patent Office. No immediate action was taken by Congress upon the recommendations, but this neglect did not discourage the commissioner from continuing his self-imposed task of distributing, under the frank of friendly members of Congress, improved varieties of wheat, corn, etc., the beneficial effects of which distribution were fully shown in testimonials from all parts of the country.

On the 21st of January, 1839, Hon. Isaac Fletcher, of Vermont, chairman of the Committee on Patents of the House of Representatives, addressed a letter to Commissioner Ellsworth, requesting the communication of information relative to the collection and distribution of seeds and plants; also, relative to the practicability of obtaining agricultural statistics. To this letter of inquiry the commissioner responded on the following day, reciting the action already taken by him to further the cause of agriculture, and assigning many reasons why his previous recommendations should be adopted. In this communication the commissioner suggested that "arrangements could be made for the exhibition of different kinds of grain, exotic and indigenous, in the new Patent Office." In the closing hours of the Twenty-fifth Congress (act of 3d March, 1839), the commissioner was gratified by the passage of an appropriation of \$1000, to be taken from the Patent-Office fund, for the purpose of collecting and distributing seeds, prosecuting agricultural investigations, and procuring agricultural statistics. originated the agricultural division of the Patent Office.

In his annual report of the following year, dated January I, 1840, Commissioner Ellsworth stated that the diplomatic corps of the United States had been solicited to aid in procuring valuable seeds, and that the officers of the navy had been requested to convey to the Patent Office such seeds as might be offered. As the sixth census was then about to be taken, agricultural statistics were deferred until its completion. In the next report (January 1, 1841), it was stated that 30,000 packages of seeds had been distributed during the preceding year, and that the agricultural statistics, based upon the returns of the census, were being compiled. "The importance of an annual report of the state of the crops in different sections, as a preventive against monopoly, and a good criterion to calculate the state of exchange," was commended to the consideration of Congress, and from this suggestion were evolved, in time, the annual agricultural reports.

In the report for 1841 were given tabular estimates of the products of agriculture in the United States in that year. These estimates filled two pages, and were based upon the census returns of 1840, supplemented by such additional infor-

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mation as could be derived from agricultural reports, newspapers, and official correspondence with leading citizens in all parts of the country. The correspondence was mainly conducted by means of printed circulars, containing inquiries by the commissioner, to which replies were returned on the same The same general plan of obtaining information is observed by the Department of Agriculture to-day. pages of comment followed the tabular statement, embracing a survey of the agricultural condition and prospects of the country. Special subjects of comment were the manufacture of sugar from Indian corn, and of lard oil as a substitute for whale oil, as an illuminator. In this year Congress appropriated another \$1000 from the Patent-Office fund, for agricultural purposes. There was no appropriation in 1840 and 1841. From 1842 to 1846, the annual appropriation from the fund was continued, but in the latter year it was again omitted. In 1847 it was revived, and afterwards annually renewed up to 1854, when the policy of appropriating money from the fund was abandoned; the whole amount (\$39,000) drawn from it was reimbursed in 1855. After 1853 appropriations for agriculture were made every year, directly from the treasury. In no one year, up to 1854, did the annual appropriation exceed \$5500, and it was generally below that sum.

In his report for 1842, the commissioner recommended "the constitution of an agricultural bureau, or at least an agricultural clerkship, at a moderate expense." He further recommended "a sufficient appropriation to allow a personal examination of the various parts of the country, by some one well qualified for such duty." Accompanying the report was an elaborate essay by the commissioner, sixty pages in length, on the condition and prospects of American agriculture; also, a tabular estimate of the crops of 1842, occupying two pages, the data for which were obtained from the sources previously relied upon. preparation of the table was stated to have been "no easy task." Several communications from farmers and others, on practical questions relating to agriculture, were printed in an appendix, and some of them were illustrated by cuts. From them may be dated the practice of publishing details of individual experience and elaborate essays, in the annual agricultural report.

The report for 1843 was still more voluminous than that for 1842. The tabular estimates, letters from correspondents, and remarks by the commissioner were continued. The statement was made that the labor of the commissioner, in compiling agricultural information, was chiefly performed out of office hours. The remarks on the condition of the crops and the growth of agriculture challenge admiration by their comprehensiveness (120 pages), their minuteness of detail, and the thorough acquaintance with the agricultural resources of the country manifested by the writer. A more extended system of investigation was recommended. The distribution of foreign seeds had been continued during the year, and 12,000 packages would be distributed during the following year.

The report for 1844 showed increased industry and enthusiasm by the commissioner. It was more voluminous than any preceding report. The potato rot, which began in 1843, the ravages of the Hessian fly and other insects, and the various diseases to which wheat and other grains are subject, were referred to at length in the general review, and in the papers contained in the appendix, and remedies were suggested. Some of the most valuable papers in the appendix were reproduced from the agricultural and news journals of the day.

On the 30th of April, 1845, Mr. Ellsworth resigned the office of Commissioner of Patents. The facts in his official career have been given in some detail, because he was really the founder of that branch of the government now embraced in the Department of Agriculture, and as such entitled to honorable mention in these pages, and because the first successful steps in the work of securing government recognition of agriculture deserve to be recorded.

Hon. Edmund Burke, of New Hampshire, succeeded Mr. Ellsworth as Commissioner of Patents. The report of the commissioner for 1845 was the largest that had yet appeared, filling 1184 pages, less than 100 of which related to patents, the remainder being devoted to agricultural topics. The annual reports of the Department of Agriculture have seldom exceeded 700 pages, and have not averaged above 650 pages. Mr. Burke introduced into the report many new features, prominent among which were tables of British and United States imports and

exports, and English cotton quotations. The papers in the appendix embraced a wide range of subjects. The potato disease was exhaustively discussed. The commissioner stated that the number of packages of seeds distributed in 1846 would exceed 50,000. Additional facilities for obtaining information and purchasing seeds were declared to be necessary to the successful prosecution of the agricultural work of the office, a declaration which did not prevent Congress from withholding, in 1846, the appropriation of a single dollar for agricultural purposes for the ensuing year. When the Patent-Office report for 1846 appeared, agricultural statistics, essays, correspondence, and newspaper articles were entirely omitted.

Congress saw and acknowledged its error, and the appropriation (\$3000) from the Patent-Office fund was restored in 1847. The report for that year was especially rich in statistics relating to the products of labor and capital in the United States, the movements of these and foreign products on interior lines of transportation, the consumption and surplus for exportation of food products, the demands of foreign countries for these, and tables of population, property, prices, etc. The volume was more profusely and expensively illustrated than any that had preceded it. In the report for the following year (1848), an increased amount of space was occupied by miscellaneous statistics, chiefly industrial. The quantity of seeds distributed in 1848 had increased to 75,000 packages, and it was announced that nearly as many had been obtained for distribution in 1849. In this report mention is made of foreign seeds having been submitted to the test of experiment, by an intelligent gardener.

On the 30th of April, 1849, Mr. Burke retired from the Patent Office, and was succeeded by Hon. Thomas Ewbank, of New York. By direction of the Secretary of the Interior, the task of collating and arranging the materials for the agricultural portion of the annual report was committed to a "practical and scientific agriculturist." Another change consisted in the publication of the agricultural portion of the report in a separate volume. The first of these volumes (for 1849) was edited, in accordance with the Secretary's views, by a scientific gentleman, Daniel Lee, M.D. It contained many elaborate scientific and practical papers by Mr. Lee and others, and numerous commer-

cial and miscellaneous statistics, but no statistics of the agricultural productions of the year. In the report for 1850 occurs the same important omission as in that for 1849; but in that for 1851 appeared the agricultural statistics of the seventh census, unaccompanied, however, by any analysis, comparison, or other comment. In November, 1852, Mr. Ewbank retired, and was succeeded by Hon. Silas H. Hodges, of Vermont, Mr. Lee remaining. In the report for 1852 no attempt was made to add to the value of the census figures, and the reader was left in ignorance whether the agricultural productions of that year were greater or less than those of the census year. In the report for 1849 Mr. Lee introduced meteorological statistics, and the space accorded to this specialty annually increased during his editorship of the reports.

On the 25th of March, 1853, Mr. Hodges was succeeded as commissioner by Hon. Charles Mason, of Iowa, and soon after Mr. Lee, as editor of the reports, was succeeded by D. J. Browne. In Mr. Mason's four reports, for the years 1853, '54, '55, '56, agricultural statistics have no place, the editor entertaining the same views as his predecessor concerning the value of statistics not collected by the States, or through an annual visit by the census marshal.

The annual appropriation, which, up to and including 1853, had never exceeded \$5500, was, in 1854, increased to \$35,000, and it has never since been less than that sum.

In the list of plants ordered to be imported, in 1854, and which were imported in that and the following year, were two plants of Chinese origin—the Chinese yam, and the Chinese sugarcane. In 1856 a portion of the government grounds in Washington, lying between Four-and-a-half and Sixth Streets, and Missouri Avenue and the canal, embracing five acres, was set apart for the propagation of the seed of Chinese sugar-cane, otherwise known as sorghum. Large quantities of the seed produced on this ground were distributed in 1856 and 1857.

The subject of entomology, as related to agriculture, had received some attention from the Commissioner of Patents, prior to 1854. In that year Commissioner Mason employed Townsend Glover to investigate and report upon the habits of insects injurious and beneficial to vegetation, especially those

infesting the cotton plant. Mr. Glover's first report was published in the commissioner's report for 1854; another in that for 1855, and another in 1858. From his engagement, which was temporarily interrupted in 1858, may be dated the origin of the entomological branch of the department. In 1855 an arrangement was made with the Smithsonian Institution for procuring and publishing meteorological statistics. In the same year a chemist and a botanist were employed. Their engagements were not permanent; nevertheless, the chemical and botanical branches of the Department of Agriculture may properly be said to have had their origin in this year. The report which appeared for 1856 was more profusely illustrated than any of its predecessors.

Mr. Mason resigned in August, 1857, and in the following month was succeeded by Hon. Joseph Holt, of Kentucky, who served until March 14, 1859. During his administration two annual reports were issued — for 1857 and 1858.

In the report of Commissioner Mason for the year 1855, much space had been devoted to the history and peculiarities of the Chinese tea plant, and the belief had been expressed that it could be successfully cultivated in most if not all of the Southern States of this country. Commissioner Holt determined to practically test the adaptability of the plant to our soil and climate, and in his report, dated May 11, 1858, he announced that an agent had been sent to China to procure seeds of this and other plants. In the same year the plot of ground, previously appropriated to the culture of the Chinese sugar-cane, was thoroughly improved for the purpose of planting in it the seeds of the tea plant when they should arrive, together with cuttings of native and foreign grape vines, which it had been determined to propagate, with the view of stimulating and improving grape culture. The tea seeds arrived in April, 1859, and subsequent efforts to germinate them and grow the young plants to maturity were crowned with the most gratifying success.

In 1858 Commissioner Holt extended invitations to a number of intelligent farmers, residing in different sections of the country, to meet at Washington for the purpose of considering the general interests of agriculture, and especially to inquire how these might be promoted through the instrumentality of

the Patent Office. These gentlemen met at the Patent Office on the 3d of January, 1859, and continued in session eight days. The general plan of operations which had been pursued by the agricultural division of the office was unanimously approved.

Hon. William D. Bishop, of Connecticut, succeeded Mr. Holt, May 23, 1859, and he in turn was succeeded, February 16, 1860, by Hon. Philip F. Thomas, of Maryland. With the retirement of Mr. Holt, Mr. Browne ceased to edit the reports. The leading features of Mr. Bishop's report for the year 1859 corresponded substantially with those of the reports for the preceding ten years. It was announced that there had been propagated, and were ready for distribution, 30,000 well-rooted tea plants, 12,000 foreign and domestic grape vines, and many other valuable exotic plants. Mr. Thomas resigned December 13, 1860, and issued no report. The report for 1860 was edited by Hon. Thomas G. Clemson, superintendent of the agricultural division.

From December 14, 1860, to March 28, 1861, S. T. Shugert, Esq., was acting commissioner. He was succeeded, on the date last named, by Hon. David P. Holloway, of Indiana, whose annual report, appearing in the following year (1862), was the most complete agricultural manual the Patent Office had yet issued.

During Mr. Holloway's administration the Department of Agriculture was organized.

On the 15th of May, 1862, the act establishing the "Department of Agriculture" became a law, and on the 1st day of July the department was formally organized, in the rooms of the Patent Office previously occupied by the agricultural division of that bureau. The first section of the act defined the "general designs and duties" of the department, and the succeeding sections provided for the appointment, by the President, of a chief executive officer, to be styled the "Commissioner of Agriculture." It was not, however, provided that the commissioner, although the head of an independent department of the government, should be a member of the Cabinet.

Hon. Isaac Newton, of Pennsylvania, who had been, since early in 1861, the superintendent of the agricultural division of the Patent Office, was appointed by President Lincoln the first Commissioner of Agriculture.

The eighth census furnished the data for the tables of agricultural production. The important feature thus revived was specially required by the terms of the act creating the department, and it has never since been omitted. A statistical branch was organized early in 1863, and to it was committed the collection and analysis of all statistics. Lewis Bollman, of Indiana, was appointed statistician.

The first monthly report was issued July 10, 1863. The publication in the monthly reports of monthly and bi-monthly meteorological tables furnished by the Smithsonian Institution, was commenced at the same time. These tables were reproduced in the ensuing annual report. Up to 1872 the same arrangement concerning these tables continued in force, when their further publication was suspended.

In the second year of Mr. Newton's administration (1863), the number of packages of seeds distributed was 1,200,000, and of bulbs, vines, cuttings, and plants, 25,750. The annual report for 1863 contained the first attempt that had been made, since the days of Ellsworth and Burke, to ingraft upon the census returns the statistics of the yearly progress of agricultural production. The tables given in its pages, compiled from the monthly reports, showed the average yield per acre of the several crops of 1863, and the average prices obtained for them in the month of November of that year.

The annual report of the operations of the department for 1864 contained a paper on "Pennsylvania barns," from the pen of Hon. Frederick Watts, third Commissioner of Agriculture. In this and the following year Henri Erni acted as chemist. In 1864 government reservation No. 2, lying between Twelfth and Fourteenth Streets, and the canal and B Street south, embracing 35 acres, was assigned to the department for experimental purposes. During 1865, 1866, and 1867, a large force of laborers was engaged on this reservation, in testing the merits of many varieties of cereals, grasses, potatoes, tomatoes, and other agricultural products. At one time, 70 varieties of potatoes were in cultivation; at another, 67 varieties of spring wheat, and 55 varieties of fall wheat. In 1865 a geological and mineralogical cabinet was commenced, and extensive additions were made to the chemical laboratory and the museum of fibres, cere-

als, specimens in natural history, etc. The annual report for this year was prepared in 1866, and edited by J. R. Dodge, who had been engaged on the statistical work of the department since its organization. In 1866 Mr. Dodge was appointed statistician of the department, and has since edited all its reports.

Owing to the large increase in the business of the department, it was found that the rooms appropriated to its use in the Patent-Office building were entirely inadequate. Congress, therefore, in 1867, upon the earnest recommendation of Commissioner Newton, appropriated \$100,000 for the erection of a department building, on a portion of the government reservation above described. The erection of the building, an ornamental brick structure, was commenced late in the summer of that year. Congress also appropriated \$10,000 for the purchase of the private museum of natural history and other objects owned by Mr. Glover, the entomologist, and the collection was accordingly transferred to the department.

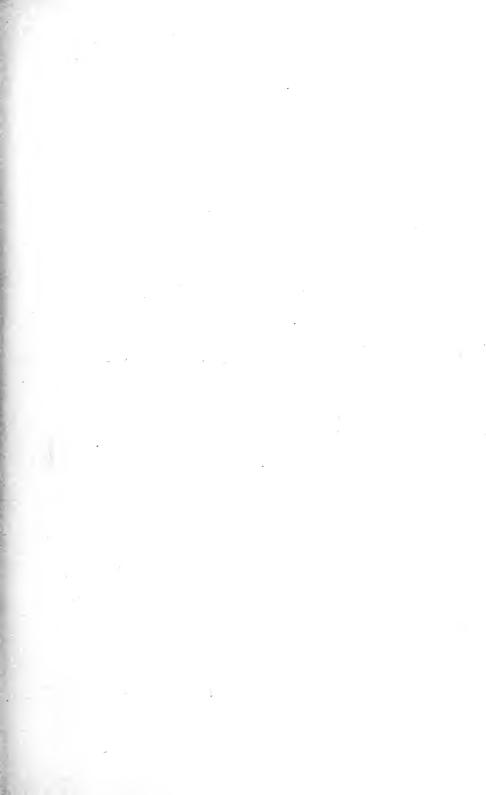
On the 19th of June, 1867, Commissioner Newton died in Washington. John W. Stokes, Esq., the chief clerk of the department, acted as commissioner until November 29, 1867, when Hon. Horace Capron, of Illinois, was appointed commissioner.

One of the first of Commissioner Capron's official acts was the abolishment of the experimental farm, previously determined upon, by which the expenses of the department were at once greatly decreased. Attention was also promptly given to the execution of the plans previously prepared by Mr. Saunders, the superintendent of the experimental garden, for the improvement of the grounds of the farm, with a view to producing a pleasing and artistic landscape effect. Embraced in these plans was the planting of an arboretum, comprising a complete collection of all hardy trees and shrubs, arranged in their natural orders. As a result of the joint efforts of the commissioner and Mr. Saunders, the grounds surrounding the department building are now among the most attractive in Washington.

In 1868 the department building was finished, and in August the records and other property of the department, with the exception of the museum, were moved from the Patent-Office building. The museum was moved a month or two later. In 1869 the small botanical collection of the department was greatly enlarged by the transfer of the extensive and valuable collection of the Smithsonian Institution, which had been contributed by various government surveying and exploring expeditions. Dr. C. C. Parry, botanist, was placed in charge of the herbarium thus created, and the botanical work of the department remained in his hands until the fall of 1871. In 1870 the large conservatory of the department was commenced, and in 1871 it was completed.

On the 27th of June, 1871, Commissioner Capron tendered to the President his resignation, to take effect August 1st.

Hon. Frederick Watts, of Carlisle, Pennsylvania, was appointed successor to General Capron, as Commissioner of Agriculture, and entered upon his duties on the 1st of August, 1871. Under Mr. Watts' management, the department increased in importance, and the idea became firmly fixed in the minds of the farmers that this department deserved further recognition. In 1877 W. G. La Duc took the place of Mr. Watts, as Commissioner of Agriculture, and proved eminently qualified for the position. Under his guidance, the department spread out in several directions, embracing many new features that added to its usefulness, and showed still more the necessity of such a department. Congress recognized that fact by making more liberal appropriations. In 1881 George B. Loring was appointed commissioner, and again a happy selection was made. Loring proved himself an efficient officer, and did much toward bringing the department up to the high standard it now occupies. Under his administration, many changes were made and many new ideas put into practical operation. Mr. Loring gave way, in 1885, to Mr. Norman J. Coleman, one of the ablest of all those who have stood at the head of that department. Coleman entered upon the duties of his office determined to bring it up as near to the point of perfection as possible. He labored hard, and his efforts were crowned with success. Coleman proved to be the last Commissioner of Agriculture, as Congress passed an act, in 1889, making the Chief of the Agricultural Department a cabinet officer. Hon. J. M. Rusk, of Wisconsin, was nominated and confirmed to that position, and is now (1801) Secretary of the Department of Agriculture.



A SCENE IN YELLOWSTONE PARK.

DIVISION IV.

HOME AND HOUSEHOLD.

By Mrs. Jennie E. Dunning, Washington, D.C.

CHAPTER I.

THE HOME AND FLOWER GARDEN.

"'Mid pleasures and palaces though we may roam,
Be it ever so humble, there's no place like home:
A charm from the skies seems to hallow us there,
Which, seek through the world, is ne'er met with elsewhere.
Home, home, sweet home,
Be it ever so humble, there's no place like home."

Shelterless, homeless, and hungry, amid the cold and sleet of a winter night in London, it is said, John Howard Payne conceived and gave to the world "Home, Sweet Home." Now philanthropic hearts and loving hands have borne his bones from sunny Italy to Oak Hill Cemetery, where a lofty monument towers above, and evergreen myrtle creeps over his dust. There is an unseen monument, whose foundations are broader and firmer, and there is evergreen that is fadeless, in the undying devotion to the sentiment contained in those words. His song encircled the world, and will live on in the hearts of the children of men, until the angel of the Lord, with his right foot on the sea, and his left foot on the land, shall declare that time shall be no more.

Some one has said that the best words in the English language are *Mother*, *Home*, and *Heaven*. In the broadest and truest sense, they are inseparable. Standing alone they are like beautiful melodies that are quiet and restful; but blend them together in concord, with a just adaptation to one another, and they become one grand, harmonious whole, whose music reaches into future years and is unending.

A true, pure home is the "sacred refuge of our life." With silent influence, the strong and tender cord of affection draws the wanderer and wayfarer back into the paths of rectitude and virtue. When these memories and affections are sanctified by a mother's unselfishness and prayers, they reach beyond the things of time and sense, even to the "house not made with hands, eternal in the heavens." While home life is educational in things seen and unseen, it is also eminently practical. should be a co-operative institution, each member having his allotted task, and performing it with promptness and regularity, thus enabling the wheels of domestic machinery to run easily and without friction. The text, "Order is Heaven's first law," should have secure lodgement in the mind of each, and by faithfully applying it to every duty, much annoyance, perhaps many "family jars," will be avoided. But, after all, home is pre-eminently woman's kingdom. If riches are hers, so that, like the lilies of the field, she need neither toil nor spin, she should still be able to direct. But when she is both mistress and maid, she needs to be clothed with the armor of industry, patience, perseverance, tact, gentleness, firmness, and all the other cardinal virtues. Let her ever remember that a true home is emblematic of a heavenly home. Into such a dwelling the twin sisters, comfort and happiness, never wait to be invited, but enter and take up their abode. She may not be the breadwinner, but such a home-maker's "Price is far above rubies. Her children arise up and call her blessed; her husband also, and he praiseth her."

THE FLOWER GARDEN.

"God might have made the earth bring forth Enough for great and small,
The oak tree and the cherry tree,
Without a flower at all:
We might have had enough, enough,
For every want of ours,
For luxury, medicine, and toil,
And yet have had no flowers.

"Our outward life requires them not; Then wherefore had they birth? To minister to man's delight,

To beautify the earth;

To comfort man, to whisper hope,

Whene'er his faith is dim;

For whoso careth for the flowers

Will care much more for him."

There is no better index of refinement in the home than flowers. Books speak of cultivation of mind, of acquired knowledge; but the love of flowers is the natural indication of a refined nature; and the cultivation of these "Thoughts of God" lends a delightful companionship to those who faithfully care for them. An ancient writer has said: "To have a flower garden is to have many friends continually near." In large cities the cultivation of flowers is attended with many difficulties, for want of room; but even there much satisfaction may be gained from a few varieties and climbing vines. In villages and the country, no excuse can be offered for their neglect. The pleasure gained from their care generally repays the possessor for all the time bestowed upon them, and the few moments spent each day bring a pleasant change from the monotony of daily cares.

Do not begin the cultivation of flowers with the common mistake of choosing too many varieties, but use judicious care in selecting. Commence with ten or a dozen hardy varieties, and, when success is assured, increase your plants and bulbs, if desired. Soil is a very important consideration. That best adapted to flowering plants is a light loam mixed with sand. Many varieties will live in any soil, if well watered; but much better results are obtained when the ground is prepared by deep digging, a thorough pulverizing, and a liberal enriching with large quantities of well-rotted manure. The progress of germination varies in different kinds of seed, and the patience of the cultivator is often greatly taxed with seeds that germinate slowly. But patient waiting is at length rewarded by the tiny sprouts of green, which contain promise of the future flower.

Since many failures come from improper treatment of seeds and young plants, a careful study of the following rules is recommended. Do not plant seeds in a wet soil, but in a damp soil, making it fine and smooth. Cover the finest seeds a quarter of

an inch deep; those the size of a pin head, half an inch; those as large as a pea, one inch. After making the soil as fine as possible with a rake, press it firmly over the seed. For the smaller seed, make the soil still finer, by crushing the lumps with the hands. Obtain a piece of planed lath, about two feet long; press the edge down into the soil evenly, so as to make a groove as deep as the seed is to be planted. Scatter the seed along this, allowing four or five of the larger, or fifteen or twenty of the smaller, seed to the space which one plant is to occupy when grown. Take care not to spill any of the seed between the rows. Cover the seed by filling the earth over it; then turn the lath flatwise and press the soil down firmly and evenly. Put a little stick at the end of the row to mark it, and do not pull plants out of the row unless sure that they are weeds. Cultivate flowers that are hardy; such as peonies, petunias, phlox, asters, zinnias, etc., putting one kind in each of the small oval beds cut out here and there on the lawn; or else use some high-growing plant in the centre, and low ones around the borders of the beds, which should be raised a few inches toward the centre.

Select such colors as blend nicely, and give them good care. Where possible, flower gardens should be located so as to be shaded from the afternoon sun. Large beds should be avoided, unless abundant time and care can be bestowed upon them. For borders, use bricks set edgewise, large, smooth pebbles, or narrow plank. Strips of turf, if well clipped, make a pretty border. Spade the beds very deep and mix manure, sand, and rotted leaves with the soil, raising the dressing a little above the surface.

All flowers raised from seed are classified as annuals, biennials, and perennials. Annuals are those plants that last but one season. After blossoming they perish, their kind being reproduced from seed. This class of plants is again divided into the hardy and half-hardy, or tender, kinds. Hardy annuals require no artificial heat, every stage of their development being passed in the open ground. They are easily cultivated. There are many varieties, and their flowers are attractive and beautiful. The seeds may be sown from the first of April to the middle of June. Care should be taken to arrange the different

varieties in such a manner as to produce a pleasing effect. Half-hardy annuals are those species that flower and ripen their seed in the open air, but need the assistance of artificial heat in the earlier stages of their growth. They should be sown in a hot-bed, or in pots in a greenhouse, or else placed in a sunny window. Keep them shaded, which will prevent absorption by rays of the sun and the necessity of frequent watering, which bakes the soil and is very injurious to seeds of slow growth. By the middle or end of May, many of the seedlings will be ready for transplanting; but, previous to this, expose them to the open air, both night and day, that they may become accustomed to their new life.

Biennials are those plants which do not generally flower the first year, and are only perfect one season. Perennials flower several years in succession. Seed should be sown when the soil is moist, but not wet, from the first of April till August. The hardy kind may be raised in the open ground, like hardy annuals, but the tender kind should be sown in a hot-house, as directed for half-hardy annuals. They do not bloom the first year, and may be removed or thinned out from the seed-bed, as soon as well rooted, and planted in different parts of the garden, or in nursery beds, in rows one foot apart. The tender biennials must be kept during the winter in a greenhouse or dry cellar, and the tender perennials must be protected by a covering fastened around them, and afterwards spread over with leaves.

A hot-bed is a necessity, without the aid of which many of our choicest and most beautiful flowers cannot be successfully grown and brought to perfection. It is a work that requires experience, and no doubt disappointments will occur. But with care in transplanting, sheltering, and selecting the young plants, very desirable results will follow in time. An inexpensive hot-bed may be made in the following manner: Select the south side of a shed or board fence, as this location will increase the heat and protect from winds. Make a box or frame of boards two feet high on the side that is to face the south, and one and one-half feet higher on the opposite side. Fill the frame with nearly fresh manure from a horse stable, to the depth of one and one-half feet. Fit sashes to the top, with

panes of glass lapping like shingles, and let it stand two or three days, or longer if the weather is cold. Now fill on top of the manure from four to six inches of good, rich, finely pulverized garden soil, which, if of stiff clay, should be mixed with sand, and cover the bed as before. Leave it for a few days, taking the precaution to raise a bank of earth around the outside of the frame, to further protect it. In a short time stir the soil and sow the seed in drills, marked with flat sticks. Label the sticks with each variety. Give the bed fresh air each day, and sprinkle with warm water as often as may be required. Use great care in attending the bed. When the day is warm, the sash should be taken off and replaced at night; and, unless it is cold enough to chill the plants, fresh air should be admitted at all times. Sometimes the bed heats, and then it is necessary to watch it closely. Examine it by putting the hand down several inches. If it is hot, remove the sash, use tepid water, and make deep holes in the bed with sticks, for the escape of heat, and then fill up when the heat is reduced. the nights are very cold, cover with mats or blankets. If such a frame is large enough, garden vegetables can be had several weeks earlier than when grown in the ordinary manner. Flowers may also be raised by planting the seeds in the pots intended for them, and sinking them in the hot-beds.

HOUSE PLANTS.

Much enjoyment may be obtained from window gardening, and most plants will live indoors under proper conditions of light and temperature. Select a window which admits a plenty of light; and, as plants have periods of rest and sleep, shut off the bright glare of the lamp at night. A few plants carefully cultivated look much better and give more satisfaction than an over-crowded windowful left to themselves. The pots for window plants should be filled one or two inches with charcoal, to keep the soil sweet, and to assist in the drainage. It is an excellent plan to place plants out of doors during a warm and gentle rain, but great care should be used in watering them, as they are easily injured. Water should never be poured upon them, but they should be watered once a day from a watering-

pot. It should never be done when the sun shines upon plants, and morning is probably the best time. The water should be about the temperature of the room. Geraniums, fuchsias, heliotropes, monthly roses, callas, begonias; in climbing vines, the cypress, nasturtium, and ivy; are hardy plants that require the least trouble and succeed the best.

A window box for supporting the pots can be lined with zinc and filled in with moss; or a box without lining can be used, if care is exercised in watering. A strong wire stand, set on casters, is perhaps preferable, as it is handy to move, and is quite ornamental. One of the principal reasons why flowers bought on the streets or market-places prove so unsatisfactory, is because they are placed in small pots to save room, and when brought into the sitting-room the earth bakes, and the flower-buds fall off without opening. If common flower-pots, in which the plants are growing, be placed in ornamental pots a few sizes larger, and the intervening space filled with wet moss, the closing up and fading can generally be prevented. A better way is to arrange a window box to receive the pots. This should be from seven to ten inches deep, filled with earth or moss.

The arrangement of the plants in the window must depend upon the taste of the owner to a great extent. An excellent effect can be produced almost anywhere with small-leaved ivy, Madeira vine, smilax, intermingled with showy geraniums and other hardy flowers. Among the fall flowers we have the beautiful aster, which runs well into October. Another autumn flower is the Anemone Japonica, with its saucer-shaped flower of milky white, with yellow stamens. It grows about two feet high and blooms profusely. Carnations, ever lovely, continue to bloom even into winter, when protected. The pure white carnations are beautiful and sweet-scented, and are great favorites for winter bouquets. But the queen of autumn flowers is the chrysanthemum, or "Christmas flower." Its rich, regal blossoms of white are especially beautiful, while the small kinds are pretty and dainty, both in form and coloring. The plant of either the large or the small variety is hardy and easily cultivated in rich, light soil. A single plant will bloom profusely indoors; and, when the pure white variety is combined with the delicate shade of rose, and the brilliant yellow variety, they form an attractive and pleasing combination.

Many of the bloomers of summer and autumn can be carried through and made to do service all winter, but the most effective results are from the cultivation of hardy bulbs. Some florist has wittily said: "A Dutch bulb can snap its fingers at the stupidest amateur alive, and grow and bloom in spite of him or her, whether the house be light or dark, hot or cold." The most prominent of these bulbs are the hyacinth, tulip, narcissus, jonquils, daffodils, crocus, and lily-of-the-valley; all of which can be easily grown in winter. A whole window box can be filled with them, producing a pretty effect, by planting the large bulbs of hyacinths, tulips, and narcissus at equal distances apart, and then filling in with small bulbs, like crocus, scillas, and snowdrops. The white Roman hyacinth, which is earlier and has several small spikes of flowers, instead of one large one, is worthy of cultivation. In cultivating the lily-of-the-valley in winter, an individual treatment is necessary. After planting, it should be in a sheltered position, where it can freeze; then brought into the cellar, where it can thaw out gradually; and afterward placed in a cool room. Plenty of water must then be given it, and it will grow and bloom beautifully.

Of the narcissus there is a great variety. The handsomest is perhaps the Oriental narcissus, or Chinese sacred lily, which bears a profusion of silvery white flowers, with golden yellow cups. It is called the Chinese sacred lily, because the Chinese use it to herald the coming of their new year. One of the bulbs lately brought to this country is the freesia, the leaves of which are long and narrow, and the flower pure white, tube-shaped, with a yellow blotch. The flowers are strung along the stem like a row of beads; the bulbs are small, and half a dozen plants can be grown in a five-inch pot. After blooming they should remain in the pot until another season, when they may be taken out and put into fresh earth. They increase rapidly, and the flowers are delightfully fragrant.

Cyclamen Persicum is a beautiful plant for the window, the leaves having beautiful markings on them, and the flowers varying from white to rose and purplish crimson. It likes a cool window, and will bloom from January on till spring. If one has

room, a calla makes a nice window plant. It likes the warmest and sunniest place, and plenty of warm water. The Chinese primrose is a good plant for western exposure, and likes to be kept cool. It can be had in many pretty shades. Daphne odora is an old-fashioned plant, not often seen now, but a fine one for a cool window. It has a glossy evergreen foliage, and the sweet-scented, small, waxy, pink flowers will perfume the whole room. Among the geraniums, which are especially adapted to winter growing, there is a great variety to choose from. A good selection is Queen of the Fairies, Asa Gray, Emile de Geradin, and Jean Sisley. These flowering varieties will do as well at east or west windows as in a southern exposure.

A curious and pretty plant is the small pink, Oxalis floribunda. It will bloom ten months in the year. Just after sunset it will seemingly go to sleep; the leaves will close like an umbrella, and the rosy flower will fold itself together for slumber. In the morning, unless it is cloudy, the leaves and flowers will quietly unfold and again enjoy daylight life. Sweet potato vines are very pretty, and easily grown. Take rather small, long potatoes, that are perfect. Put them into tin cans that fruit comes in, or into glass jars. Fill the cans with water, and let them stand in a dark cellar until well rooted. Then remove to a sunny room, and soon the pretty vines will grow rapidly. Date stones, if planted in flower-pots, with rich, peaty soil, will grow fast and make nice window plants for winter. Nasturtiums can be grown in the house with good success, and will blossom well. Phlox seed makes the finest, prettiest green for button-hole or small bouquets. Sow it in sand and earth; cover lightly and water well.

A few good plants and vines will brighten a house very much during the long, cold winter, and with a little care will do well and fully repay all trouble. Winter is not omnipotent in its warfare against things of living green; and the lover of flowers, who protects and preserves them, may by perseverance and culture succeed in transferring the flower garden in its beauty and fragrance from without to within doors, holding a summer picture up into the very face of winter, as it creeps on with its cold and chilling blasts, riding triumphantly over fields where flowers held carnival all the summer long. Window gardening

is a beautiful, attractive, and compensating affair. A pretty flower in a window never fails to attract attention, and gladdens the eyes of many besides its owners.

List and description of hardy varieties of Annuals, Climbers, and Bulbs:—

ANNUALS.

Asters. — This family of plants bears distinct marks of progress, with many varieties that are always hardy. They are great favorites. The kinds commonly seen are of French or German origin, and, under favorable circumstances, bloom continually until frosts come. The seed should be sown early in spring, and the young plants transplanted from one to two feet apart, and the taller varieties should be supported by stakes or trellises.

Begonia. — This plant, with its ornamental foliage of brilliant coloring, is sought for parlor decorations, ferneries, and greenhouses. Some varieties produce magnificent flowers: some are propagated from seed; others from cuttings; and all require rich soil.

Chrysanthemum. — The old-fashioned varieties, which produce flowers, white, yellow, and variegated, both single and double, are always reliable and desirable. This flower has become very fashionable and popular. In some of the new and beautiful varieties seen in florists' windows, it is difficult to recognize the chrysanthemum of our childhood. This is a most desirable autumn flower.

Candytuft. — This is a hardy annual, one foot high. Seed sown in the autumn produces flowers early in spring. When sown in April, it flowers from July to September, and some kinds until frost comes. This flower is prettiest in beds or masses, and is indispensable for cuttings and bouquets. All varieties are hardy and easy to cultivate, and bloom profusely.

Carnation. — This is a half-hardy perennial, one and a half feet high. The seed will not produce all double flowers, though some will be double, with all the shades, coloring, and fragrance of the original flower. Sow under glass, in greenhouse or hotbed, and transplant to bed, two feet apart. This is one of the most esteemed flowers in the florist's collection, and cannot be

surpassed in delicacy of coloring or delicious fragrance. New and choice varieties are obtained from seed.

Calceolaria. — This flower is admired for its large, beautifully spotted blossoms, which are very showy and profuse. They are grown in pots, in conservatory, greenhouse, and garden. They require a turfy loam, a mixture of peat and sand, or a rich, open, garden mould, and are propagated from seed or cuttings. They are perennial.

Camellia. — Camellias are a hardy, greenhouse shrub, of easy culture, requiring to be protected from frost. The best soil for them is an equal quantity of good sandy loam and peat. They are propagated by cuttings, grafting, and from seed, the latter being the only method of obtaining new varieties. When the plants are growing, they can scarcely receive too much water; at other times use water sparingly. If attention is given to removing the potted and growing plants from a warm to a cooler atmosphere, a constant blossoming of flowers may be obtained from autumn till July. When the bud is formed, a cool, sheltered situation is best, for they will not bear the rays of the sun. This beautiful flower is universally admired, not only for its rose-like blossom, with waxy petals, but also for its dark green, shiny leaves.

Ageratum. — This plant blooms all summer in the garden, and in the greenhouse all winter. Colors, light blue and pure white. Very desirable for bouquets, as it gives a pretty contrast of colors with more brilliant varieties. Start the seeds under glass, and transplant. It grows one and one-half feet high, and plants should stand two feet apart. It is a hardy annual.

Abutilon. — A greenhouse shrub adapted to house culture, and used for bedding out in summer. There are several varieties, whose bell-shaped, drooping flowers blossom abundantly nearly all the year, varying in color from pure white and yellow to deep orange, and crimson streaked with yellow. If seeds are sown under glass before April, the plant will bloom the first season. It can be propagated by cuttings, in sand, under glass, during summer. It is a perennial.

Pansy. — Perhaps more satisfaction can be derived from these ever-blooming flowers, with their brilliancy and durability,

than from any other seedling. Young plants produce the largest and best flowers. Coolness and moisture are essential, and the ground cannot be too rich. Transplant, when an inch high, to a cool and partially shaded situation. Seed may be sown in open ground, in spring or summer, or in hot-bed early in spring. If seed is sown in July, the plant will blossom late in autumn; or if sown in October, will bloom the following spring. It is a hardy biennial, four inches high.

Violet. — This is well adapted for border or rock work; succeeds best in a shady, sheltered spot; can be increased by dividing the root. This blossom should be cherished for its early appearance and its sweet perfume. It is a hardy perennial, four inches high.

Petunia. — This is indeed the queen of flowers for massing together in beds. Their easy culture, richness and variety of color, together with the duration of bloom, will always insure their popularity. They succeed well sown in open border in spring, or earlier in hot-beds, and transplanted eighteen inches apart. Do not cover the tiny seed too deep. They like sandy loam. The petunia is a tender perennial, one and a half feet high.

Dahlia. — This showy, beautiful flower may be found in endless variety, late in autumn, when most other flowers have faded. The seed should be sown in shallow pans, in March, and the seedlings transplanted to small pots. As soon as danger of frosts is over, plant out, one foot apart. They are easy of cultivation, growing freely in almost any soil. These plants will make tubers, which should be taken up in the fall and kept through the winter in a cool, dry place, away from frost, and planted out in the spring. They will bloom the following autumn. New varieties, of exquisite beauty, are constantly being produced from seed.

Heliotrope. — A half-hardy perennial, one foot high. It has a dainty, purple flower, highly valued for its fragrance and duration of bloom. It succeeds in any light, rich soil. Cuttings taken while young root readily.

Mignonette. — A hardy annual, producing exceedingly fragrant flowers, on spikes from three to six inches long. It is in bloom nearly the whole season. It is cultivated chiefly for its

fragrance. If sown at intervals, during the spring and early summer, it will bloom till killed by frosts. It grows to a height of one foot, and is a perennial, if protected.

Fuchsia. — A half-hardy perennial, easily cultivated in warm climates. There are many varieties, and some are exceedingly beautiful. It is easily grown from seed and cuttings, and many improved varieties are obtained from seed. Sow in March, in shallow pots; transplant to four-inch pots, where they will continue to grow till they bloom. As soon as they blossom, select such as have good points, and change into larger pots. When frosts appear, protect the plants.

Oleander. — In moist, warm climates, the oleander needs no protection, and arives to the dignity of a good-sized tree. It is a native of India, is of easy culture, and blossoms freely. The flowers are a beautiful shade of pinkish red. They can be raised in the house, if the temperature is moist and warm. Sow seed in February or March, in light, rich soil, which must be kept moist. When young plants are three or four inches high, repot in rich soil. Young shoots are successfully rooted in water. The temperature in which the plants are grown should not fall below 35°.

Geranium. — Whatever discouragements and failures the amateur gardener may encounter in other directions, when attention is turned to the cultivation of the geranium success is assured. It is probably better known and more admired than any other plant. The brilliancy of coloring, the exquisite marking of the leaves in some varieties, together with the profusion of blossoms, render them well adapted for bedding. They easily root from cuttings, but propagation from seed is the only sure way of obtaining superior varieties. Sow in March, in well-drained pots. Water moderately, and as soon as the third leaf appears pot singly, in two-inch crocks, exchanging for larger ones as the plants increase in size. As soon as the weather will permit, sink the pots in earth, removing to some sheltered place on approach of frosts. They will bloom the coming spring.

Snapdragon. — This old-fashioned flower has been much improved by cultivation, and makes an excellent border plant. It has a curiously shaped flower, with dark, glossy leaves. It will bloom the first season, but the blossom is much finer the second

season. It succeeds best in loamy, dry soil. It is a tender perennial, two feet high.

Phlox.—This plant produces remarkably brilliant flowers, completely hiding the foliage. The blossoms are of many colors, from pure white to deepest purple. In many varieties the flower is striped curiously. For bouquets and masses of different colors, they are unexcelled. Plants may be started in hot-bed, or seed may be planted in open ground, in autumn or spring. Give good, rich ground, and set plants six inches apart, both ways. It is a hardy annual, one foot high.

Verbena. — A genus of plants, of which several species are extensively cultivated, sometimes for their lemon-scented, fragrant foliage, but more frequently for the grand beauty of their flowers, which are found in all the various tints of the rainbow. Sow seed in hot-bed or greenhouse, early in the season. Transplant to flower-bed in May, giving considerable space, as a healthy plant spreads over a large area of ground. It is a hardy annual.

Roses. — In the cultivation of roses, the ground should be well drained and well enriched. Prune before the buds start in the spring, cutting back last season's growth moderately, and casting away all old and feeble shoots. Protect in winter by covering with leaves, straw, and evergreen boughs. With care, the choicest roses may be successfully wintered. The slug, and other insects so injurious to the rose, may be destroyed by a plentiful supply of tobacco water.

Zinnia.—A large, showy plant, with double flowers, somewhat resembling dahlias; found in all the brilliant colors. Single blossoms should be destroyed. It is very hardy, continuing to bloom till frosts come. Sow seed early in the spring, in open ground, and transplant to one and a half feet apart, in rich soil. It is a hardy annual, one and one-half feet high.

Primrose. — Sow new seed every year, as new plants bloom more abundantly. Give them plenty of time for growth before flowering, always protecting them from frosts and cold winds. Sow the seed in shallow boxes filled with rich earth. Do not cover too deeply, or they will not germinate. Transplant into pots, and they will blossom freely all winter; and, if transferred to a flower-bed, will continue to blossom nearly all summer. It is a tender perennial, six to nine feet high.

Water Lily.—These beautiful, white, waxy blossoms, which seem to float on the surface of the water, grow easily in ponds of shallow water, having muddy bottoms, and can be cultivated in tubs or aquariums, if there is sufficient mud at the bottom, and the seeds or roots are constantly covered with water. Fill a strong tub one-third full with fine, rich, black soil. Plant the seed in this mixture, covering it one inch deep. Add water gently, so as not to disturb the seed, until the tub is full, and see that it is always full of water. Place in any convenient spot, and remove to cellar in winter or upon approach of frost. Do not allow the water to entirely dry up. It is a hardy aquatic plant. For an aquarium, put in five inches of fine black loam, cover the seed one inch deep in this, and sift on enough fine white sand to cover the loam.

Balsam, or Lady-Slipper. — This is an old-fashioned flower, much improved by cultivation. The flowers are improved by planting in hot-beds, and transplanting when two leaves have formed. By pinching off a portion of the shoots, the size of the flower and the vigor of the plant will be increased. Provide a rich soil and good cultivation, always removing such plants as produce single blossoms. Much satisfaction and enjoyment will be derived from the beautiful flowers in white, red, purple, spotted, striped, and variegated. It is a tender annual.

Ice Plant.—The leaves have a fleshy appearance, and seem to be covered with ice crystals. This plant is very brilliant in the sunshine, and produces a dainty white flower. It succeeds best in a dry, sandy loam, and warm situation, and is adapted for hanging-baskets, vases, rock-work, and border, but succeeds best in pots. It is a tender annual trailer, six inches high.

CLIMBERS.

Smilax.—This vine can be preserved several days after it is cut, without wilting, and is most desirable for wreaths and cut flowers. There is no prettier vine for decorating pictures, vases, statuettes, mantels, etc., than the smilax, with its graceful, clinging tendrils, and delicate beauty of foliage. After soaking the seed in warm water for twelve hours, plant in pots,

in the greenhouse or hot-bed, in February, and keep in a warm, moist place. One plant in a two-inch pot is enough. When the foliage begins to turn yellow, turn the pots on their side and do not water till August, when a little bulb that has formed can be repotted in rich earth, watered freely, and will grow all winter. It is a tender perennial climber, growing ten feet high.

Manrandya. — The seed should be started in hot-beds or greenhouses, as they will not flower the first season without artificial heat. They must be removed to a warm place in the early autumn. This graceful climber is adapted to conservatory, hanging-basket, or out-door purposes. It should be set in a bed, with a little frame to which the tendrils may attach themselves. It has rich purple, white, and rose, foxglove-shaped blossoms. It is a tender perennial climber, six feet high.

Ipomea. — This climber combines very prettily with other climbers. The flowers are of a variety of shapes and sizes, and of wondrously brilliant color and graceful form. Some varieties will not succeed out of the greenhouse, and require heat in starting. Some varieties, however, are well adapted for trellises, stumps, arbors, etc. It is a tender annual, five to ten feet high.

Clematis. — This climber is much admired, some of the varieties being remarkably beautiful and fragrant. An excellent vine for verandas, arbors, etc., as it clings readily to any object. It will succeed in any garden soil, if given slight protection in northern climates, during winter. Most varieties are hardy perennials.

Gourds.—Rapid-growing climbers, with curiously shaped fruit, in many colors. The marking of some of the fruit is extraordinary, and the foliage is quite ornamental. Makes an excellent covering for old fences, stumps, etc. Plant in rich, mellow soil, after all danger of frost is over. It is a tender annual climber, ten to twenty feet high.

Cypress Vine. — This beautiful climber sends out dark green, delicate, feathery foliage, and an abundance of star-shaped blossoms in scarlet, rose, and white. If planted by the side of a veranda, tree, or arbor, and properly trained and cared for, it will be a mass of loveliness all through the long, bright summer days. The seeds germinate more readily if warm water is

poured upon the ground after planting. It is a tender annual, fifteen feet high.

BULBS.

Tuberose. — Of all the summer flowering bulbous plants, the tuberose is most desirable. The flowers are waxy, white, double, and very fragrant. They are useful in making button-hole bouquets, large bouquets, or as a single specimen. Each bulb flowers only once, but the smaller bulbs can be set out for future flowering, when their growth is completed. The best way to grow tuberoses is to fill five-inch pots half full of cow manure, and the remainder with good, rich earth, mixed with sand. Plant the bulbs in April, water moderately, and hasten growth by putting in a warm, light place. When the weather has become warm, plunge the pots into the earth out of doors. They will usually bloom before cold weather; if they do not, they can be brought in, and will blossom in the house.

Cyclamen.—A well-known and much admired bulbous plant, producing exceedingly handsome red and white flowers. The seed should be sown in spring, and by autumn it will produce a bulb, which, if potted and placed in a conservatory, will bloom the following spring. It is propagated only from seed.

Cyclamen Persicum, mixed, is a greenhouse variety, of great beauty and many colors.

Lily.—With ordinary care in the culture of the lily, failure is impossible. Select deep, rich soil; enrich it well with thoroughly decomposed manure, and set the bulbs from three to six inches deep, according to size. In the autumn the beds should be protected by a liberal supply of leaves, and care should be taken that the bulbs have proper drainage, no water being allowed to stand around the roots. The bulbs can be transplanted, either in spring or autumn, but should be kept out of the ground the shortest time possible. Once firmly established, they should not be disturbed oftener than once in five years. Many varieties force well in the greenhouse, but are suitable for parlor culture.

Crocus. — One of the earliest of bulbous plants. Even in a cold climate, it makes its appearance in March, peeping up sometimes before the snow is gone. It grows low on the earth,

only the blossom appearing at first, the foliage maturing after the decay of the flower. One bulb produces a single large flower, which comes in all the shades of yellow and purple, striped and variegated; also pure white.

Tulip.—So named from its resemblance to a turban. It produces flowers of great beauty and brilliancy. It is a Dutch bulb, which a century ago was extensively cultivated in Germany, and sold at a high price. It blossoms in early spring, and comes in all the brilliant shades of yellow and red. Bulbs should be removed in from three to four years.

Hyacinth.—A beautiful bulbous plant, which sends up a thick, fleshy spike, containing numberless bell-like, waxy flowers, in all the various tints and colors of the rainbow. There is an ancient legend that this flower derived its name from a beautiful youth who was beloved by Apollo, who killed him by an unlucky cast of his quoit, from whose blood the flower is said to have sprung up. The hyacinth is successfully cultivated in vases, where they are grown in water. Start in September, and they will produce a beautiful parlor flower for Christmas. Bulbs that have never blossomed must be used for this purpose. They multiply quite freely, and they, as well as crocuses*and tulips, should be transplanted every three or four years, as each successive year they sink deeper into the earth.

Gladiolus. — A magnificent plant, with sword-like leaves and long spikes of flowers of every shade and color. Each year brings new and choice selections, which have been produced from seed, this being the only way of obtaining new varieties. The bulb which is produced from seed requires three years' growth before flowering. They should be removed in winter, and in the warm spring weather planted in groups and borders.

Calla Lily.—A very desirable plant for drawing-room and conservatory, and for general house blooming. It will grow in any light, rich soil, when plentifully watered. The seed should be sown in greenhouse in early spring. They produce small bulbs in the fall, which should be repotted in rich soil. The production of large plants from seed takes some time, but the beautiful, creamy white blossoms are ample reward for the time and care bestowed upon them.

Bleeding Heart. — This tuberous-rooted plant is generally

known and admired. It requires only the ordinary culture of border plants. The roots should be divided every third year. If planted in the autumn, it will blossom the following spring, producing a very delicate, reddish pink flower, blossoming from May to July.

Madeira-vine. — A tuberous-rooted climber, sometimes called "Mignonette-vine." It produces beautiful, glossy green leaves, with a fragrant white blossom. It is a rapid grower, and from a few tubers vines will be produced sufficient to cover one side of a cottage. The tubers are tender, and must be protected from frost.

PRESERVING NATURAL FLOWERS.

This is an art that has long been known, and the process has been recently revived by the people of Germany, and is known as the sand and the sulphur process. Procure a very fine quality of sand, and wash it clean; dry well and bake thoroughly. it is warm, take an ounce of mutton tallow to twelve pounds of sand; scrape the tallow and scatter it over the sand, stirring it as it melts. The tallow prevents the sand from sticking to the flowers. Cut several holes through the bottom of a small box, over which paste paper to prevent the sand from escaping. Sift sand into the bottom of the box until it is about half an inch deep, using a fine sieve. Upon this carefully place a layer of flowers, and sift in sand enough to cover them. Jar the box a little, to settle the sand into and around the flowers. Add another layer of flowers, and cover them with sand as before; continuing this operation till the box is full. Place the cover on tight, and put the box in a place where it will be kept at a steady temperature of about 80°. In about four days, if kept at a steady temperature, the flowers will be dry, and can be removed by puncturing the paper placed over the holes cut through the bottom of the box, and allowing the sand to run out. At first the flowers will be too brittle to be handled, and the box should be left in a damp place for a few hours; then they will be ready for use.

Secure a box that can be made air-tight. Then fasten small strips of wood inside the box, on opposite sides, near the top, and place rods across upon which to hang the bunches of flowers. For ventilation, bore a hole on one side near the bottom, into

which fit a plug closely. Arrange the flowers in loose clusters of from three to ten, according to size, placing a variety of flowers in each cluster. Hang the bunches on the rods, so that they will not touch one another, and in the bottom of the box put a metal pan containing a few live coals. Spread out the coals, and sprinkle upon them about three ounces of pulverized sulphur. Then put the lid on securely. Open the hole in the side for a few minutes, until you see the fumes rising, but no flame. Then close the opening, throw a piece of heavy carpet over the box, and leave it for a day. Upon examination, the flowers will be found perfect in form, but bleached almost white. Expose them to the air in a dry place, and they will soon regain their color, but will be of a lighter shade than before bleaching. The box must be kept perfectly air-tight after the fumes begin to rise, and it is better to paste cloth over the edges and corners, to make certain that no air can pass through.

Preserving Bridal and Funeral Flowers. — Let the flowers be fresh and firm, and the color light. Green leaves cannot be treated, hence they must be stripped off. Take the finest quality of paraffin and melt it by placing it in a cup set in boiling water. Keep the paraffin in a liquid state by means of the warm water, and dip the flowers into it, being careful that the paraffin is not hot enough to cook them. Do the work as quickly as possible, so as to make a very thin coating on the To preserve green leaves, coat them with green wax, or add green powder paint to the paraffin. In preserving flowers, it should be observed that those with a thick, full corolla, such as tulips, lilies, etc., are not well adapted to this purpose. When the preserving process is completed, the flowers should be tastefully arranged and placed where they will be free from dust. Glass globes or bell glasses are excellent, and if a few bleached ferns form the background, the effect will be excellent.

Preserving Autumn Leaves. — As the leaves are gathered, place them in a large book, with a weight upon them. When the leaves have become perfectly dry, dip them into white melted wax, to which have been added a few drops of turpentine. Then lay them on clean papers to dry. Care should be used to have the wax the right temperature. If the wax is too hot, the leaf will shrivel; if too cool, it will adhere to the leaf in lumps.

Crystallizing Grass. — One pound of alum, dissolved in one quart of rain-water. Tie bunches of feathery grasses, wild rye, oats, bearded wheat, etc., loosely, and suspend them over a tub. Heat the alum-water, and pour it over them very slowly, until every cluster is thoroughly saturated. Do not let them get too heavy, or the stems will not support them. Leave the bunches to dry over night, and every point will sparkle with crystals. Should the process fail, add more alum and the next application will succeed. By adding a little coloring-matter, it will give pleasing variety. These grasses make ornamental winter bouquets.

Skeletonized Leaves. — To one pound of soda-ash add two quarts of soft water. After it is all dissolved by boiling, add as many leaves as your dish will hold. Lay them in flat, and boil until the epidermis will come off easily. Try a leaf in cold water, and if only the veins remain, they are done sufficiently. Clean them with an old tooth-brush, and supply the missing stems with fine wire. After they are well cleaned, put them into a solution of chloride of lime to bleach. Ten cents' worth of lime is enough for leaves and ferns too. Maple leaves, of a pretty shape, are best for skeletonizing. Place young ferns, when first gathered, in the solution of lime, - not in the sodaash, only in the bleaching solution. Float them on stiff paper, and put them in books to dry. After washing thoroughly in clean water, to prevent them from turning yellow, add more water to the leaves, as it boils away. Use with grasses, in making ornamental winter bouquets.

THE PARLOR.

"Into her dainty parlor my lady gayly skips,
And all things grow illumined with beauty, as she flits
From chair to vase and flower; she gently pats and tips
Each cushion in her bower, and then away she trips
To readjust a curtain, that the bright sun may peep
Into this bit of Eden, where love is strong and deep."

A parlor or living-room should bear a decided resemblance to its mistress. Endow it with a marked personality; let her choicest flowers, her favorite poem and song, be found upon the table. The very bric-a-brac and furniture should speak of her refinement and tastes, instead of the depth of the family pocket-book. Furniture may be substantial and inexpensive, and at the same time possess those home-like attractions which are so captivating to average humanity.

It is said that furniture is the story of the race, from sumptuous Egypt down through the Dark Ages; and it may be interesting to note the result of some research in this direction. The Greeks perfected Egyptian suggestions and ideas, but seem to have produced nothing new. They lived largely in public temples, theatres, groves, and porticos. Holding their women in slight esteem, and having little home life, they expended their wealth and energies on public sculpture, paintings, architecture, caring little for home arts and comforts. With their artistic ideas, their articles of domestic furniture were perfect, but few in number. The Romans paid more attention to household arts, and the position of woman was somewhat advanced; but they borrowed their ideas of household articles from the Greeks, as they, before them, borrowed from the Egyptians. The first chair was a thing of state, and doubtless was developed from the Egyptian throne. At the downfall of Rome, whatever household art had accomplished went with it. The barbarians destroyed nearly everything, and the industrial arts no longer existed in the Western Empire. All there was of convenience, comfort, or splendor came from the East. Silks, spices, gems, ivory, and smaller articles of furniture, reached the West and Middle Europe, at first through Egypt, and afterward through a commerce established between the pilgrims who visited Jerusalem, and the Arabs who visited Mecca. Some writers have intimated that this trade, and the profits from it, had much to do with the zeal with which pilgrims sometimes undertook this long and perilous journey. Down through the Dark Ages, every lord of a castle was a sovereign, liable at any time to be obliged to yield to stronger forces. If he went abroad, he was uncertain of his ability to return, and his home was a kind of fortress. At this period, his furniture consisted of little else than chests, which, in the castle, served as seat, bed, table, and treasury; and if he was overpowered by an enemy, his valuables were hastily packed in the chest and easily moved.

The curule stool (camp or folding-chair) was handy for camp life, was used between the Roman and modern sway, and probably never went quite out of use. In the Dark Ages, the home was doubtless adapted to the conditions of life in the strong, rough houses, which were intended as safeguards against attack. The family lived in one great hall. It was sleepingroom, dining-room, living-room. If a guest came, his bed was screened off for him. There was but one chair, a mere box, with a six-inch railing around three sides. It belonged to the master, and was a seat of honor. If a superior visited the castle, it was relinquished to him; if an inferior, the master retained his seat, and the guest seated himself upon a bench, which was only a plank supported by side pieces. The table which succeeded the bench appears to have been a number of boards bound together and laid upon folding trestles; and this is perhaps the reason why the word board is used as synonymous with table. The horseshoe form of table had been preserved from the conquered southern race, and was spread upon occasions of great ceremony. As times grew more quiet, the lord of an estate could afford to increase the evidences of his wealth; so the chest grew into the cabinet, the bench into the chair, and was enriched with carvings and expensive coverings and cushions, until, in the fifteenth century, we find the beautiful and useful combined in a pleasing and artistic manner.

Woman's influence was powerful in effecting these changes. The priests prevailed upon the men of the northern countries to practise monogamy, and celebrated the marriage with the most sacred ceremony. They honored woman, and made her honorable in the husband's estimation; and through her obtained an influence over her husband which they would not otherwise have had. Under the feudal system the husband was compelled to make his wife a partner; because, while away from the castle, subduing the enemy, he must necessarily leave all his interests in her hands, and make her thoroughly acquainted with his business. History gives many accounts of the bravery of woman in defending her husband's possessions in those perilous times. Her lord, realizing her ability to manage affairs, allowed her to remain in command while she whispered in his ear the rumor of some fortunate dame who possessed a square of carpet, which

had come all the way from Persia, or of the flowered leather and carved chair; and she gently intimated that his own wife was as deserving and noble a helpmate. Lovely woman and patient perseverance were as successful in past ages as in the present generation; and as early as the thirteenth century, we begin to find a change in the home life. Gentle pleasures, wealth, and elegance are often met with, and woman makes herself and her home lovely, with lovely surroundings.

The word parlor is obtained from the Norman word parloir. In primitive times the Normans entertained their friends in bed-rooms; but, as time and civilization advanced, the receptionroom or parloir, which means talking-room, was added to the house, and it now seems a necessity to every housewife's happiness. Here it is that we find the choicest treasures, the dainty bric-a-brac, the pretty tidies, scarfs, etc.; and if one has time for embroidery, or is even in a small way an artist, many pretty devices will be continually suggested to the mind. Many persons entertain the mistaken idea that beauty can only be obtained by a profuse outlay of money. On the contrary, beauty is largely independent of expense. When one is possessed of a moderate amount of what is called taste or aptitude, very satisfactory results can be obtained with a small outlay of money. Select furniture best designed and best made that can be afforded, all of it being intended for use. These wants being provided for, then admit the ornaments of life. A piano or organ adds greatly to the attractiveness of a parlor, and much to the enjoyment of the household. A few pictures, engravings, and books are a necessity. They need not be many or expensive; but use the greatest care in making a selection, and choose only those that contain true worth.

There is some danger of depending too much upon furniture and bric-a-brac for ornament, and not enough upon things permanent and interesting. Seek individual expression of one's own way of living, thinking, acting, more than doing as other people are doing, and having what other people are having. Harmony should prevail in colors; also in the entire furnishing. The decorations of the walls, or papering, the furniture, the entire room, should blend together in a way that is pleasing, and

will give a feeling of rest and happiness to the home circle, and whoever is fortunate enough to be entertained within its walls.

THE LIVING-ROOM.

When there is an abundant supply of money, a dining-room and a library should be distinct and separate features of the home, and this same abundance will furnish these rooms in the approved manner. While these are desirable, do not entertain the idea that they are necessary for comfort or happiness. Expend money carefully, with a view of obtaining service and durability from your investment, and avoid debt. A lady who left a father's elegant home for one of her own, whose first furniture bill was only fifty dollars, and whose parlor, sitting, and living-room in one was covered with a rag carpet, while from the windows hung curtains made from an old white dress, has been heard to say that, while the home soon outgrew its modest surroundings, and better and more expensive furniture entered it, there never entered with it more of comfort or real happiness than came with the unpretending rag carpet.

When economy is an object, and it becomes necessary to combine the dining-room, library, and living-room in one, it should be the largest, sunniest room the house contains. The furniture should be solid, substantial, and serviceable. A window of growing plants is a great attraction. A broad shelf, from which is suspended a pretty lambrequin, answers admirably for a sideboard, and here can be placed the choice and dainty pieces of silver or china. A bookcase, which can be constructed of a narrow dry-goods box, with curtains hung from a pole, to hide its roughness, will do very well. At all events, begin the foundation of the home and library simultaneously. The livingroom is an important agent in the education of life, and it is no trifling matter that worthless books occupy the tables and shelves, and that poor pictures and engravings are hung on the walls. As well say that it makes no difference what friends you select. Interest the children in newspaper clippings and scrap-books. Much useful information can be preserved in this inexpensive way. If not very inconvenient, allow them space for a cabinet, which may consist of a few drawers or shelves,

where they can, in time, collect many curiosities, which will be an unfailing source of entertainment. Whatever retrenchment is necessary, make it an infallible rule to add a few good books to the home each year, for it is a wise economy. An early cultivation and love of good reading have saved many a boy from the enticing snares of the saloon, many a girl from a light, frivolous life.

Through the medium of books, vast chasms of ages may be spanned, and an acquaintance becomes possible with the mighty intellects who lived, moved, and had their being when the world was young. Socrates, Plato, Demosthenes, Solon and his wisdom, Pericles and the brilliancy of his age, may all be ours, even though that wondrous thing, the spirit, has vanished like the morning dew.

BEDROOMS.

"Blessings," said Sancho, "on the man who first invented sleep. It wraps a man all about like a blanket."

In this day of books upon anatomy, physiology, and hygiene, it is unnecessary to repeat to the intelligent reader the trite saying, "Bedrooms should have plenty of fresh air and sunshine." Even the Greeks and Romans were conversant with this truth; and although we know but little of their sleepingapartments, in their devotion to physical beauty they understood that pure air was an important agent, and it was the groundwork upon which they built the models which are still. a source of admiration and delight. The Egyptians slept on their day-couches, which were long and straight, made of bronze, gold, and ivory, and inlaid wood, richly cushioned. When these were not used, mats took their place, or a low couch made of palm boughs, and a wooden pillow with a hollowed-out place for the head to lie in. The Greeks and Romans borrowed their ideas from the Egyptians, and we have slight knowledge of their manner of sleeping. Among Roman remains have been found beds that were mere slabs of stone, with a hollowedout place for a pillow.

During barbaric life in western and middle Europe, all former convenience and elegance perished; and it was an advance in civilization when benches became beds, and when people began

to feel above sleeping on bundles of straw, or heaps of skins. In the thirteenth century we find the bed standing low on four feet, with a balustrade, and a narrow gateway opening on one side. The bed and cushions were stuffed with straw, husks, and feathers. At this time sheets came into use, -at first, a single sheet rolled about the body; afterward, two were laid flat upon the bed and hung to the floor. The bed stood in the great hall where the family assembled. At first it was quite narrow, but increased in width until it reached four yards. In these, parents, children, and sometimes dogs, took their night's rest, and it was considered a proper courtesy to invite an honored guest to share it. Bedsteads were occasionally made of bronze and other metals, but oftener of carved wood. Curtains were suspended from the ceilings, or carried over them. At this period there were comfortable pillows and bolsters. the fifteenth century beds assume their most exaggerated proportions. As the Dark Ages came to an end, chimneys were introduced, and life in the castle became more permanent.

Small bedrooms should always have light paper on the walls, as this adds to the apparent size of the room. Avoid large figures in the carpet. A dry-goods box, furnished with wooden casters, and neatly covered with some harmonizing color in cretonne, the top being stuffed to form a cushion, will make a comfortable seat, and also prove a great convenience should the room be without wardrobe or closet. A smaller box, covered to match, makes a pretty footstool, also a receptacle for shoes, slippers, etc. See that a pin-cushion is supplied with pins, a match-safe with matches, that the soap-dish contains a cake of nice toilet soap. Let there be clean towels in abundance. A wall bracket is a great convenience for holding toilet articles; and if the room does not contain a table, it would be well to substitute several shelves in place of the bracket, that there may be room for a few books, a basket, a vase, or any little article that might happen to find its way thither.

The bed is the principal feature of the room, and attention should be paid to the springs and mattress. The best mattresses are made of hair, but a common husk mattress covered with wool combines both comfort and cheapness. A pretty covering, or spread, can be made of cretonne, with an antique lace inser-

tion and edge; also coverings or shams for the pillows, to match, which are to be removed at night.

Curtains for the windows may be made of this same material, when durability is an object; but there is nothing daintier, fresher, or more attractive than pure white bed-coverings and The useful dry-goods box may again be window-hangings. made to do service, by converting it into a bedroom table. Obtain a box three feet high, four feet wide, and two and onehalf feet deep. Blocks of wood one inch thick and four inches square may be nailed beneath the corners, and casters fitted into them; or this may be omitted, as it is only a convenience in moving it. The box should be placed open side out, and fitted with a shelf or two. The whole inside should be neatly papered. On the top, at the back, one or two small boxes may be fastened, and the whole covered with oil-cloth, cretonne, or some suitable material. Fasten curtains in front, to conceal the inside shelves.

A still simpler table may be made of half a barrel, sawed into lengthwise, so as to make half a circle. This should be fitted firmly to the wall, and covered with some stout material. An old quilt makes a good foundation. Ingenuity will suggest numberless pretty coverings for this. Thin muslin, lined with some bright color, is very effective. In a room where the prevailing color is blue, —a dash of it in the wall-paper and carpet, —it would be pretty with muslin, lined with blue cambric, for curtains, bed-covering, and all the dry-goods boxes herein suggested, — would be very pretty, but would necessitate much washing and ironing, if used in any way but occasionally as a guest-chamber.

When furnishing the guest-room, there are many little things which would greatly add to the comfort and "at homeativeness" of any guest: these little things should not be forgotten, nor considered of little importance. On the pin-cushion should be a goodly supply of pins of several sizes, in both black and white. If the cushion be too fine to be useful, a smaller cushion should surely be reckoned in with the bureau furnishings, to be used as a pin-cushion, and not merely for looks. An extra paper or two should be placed in reserve in the upper drawer, for we all know how pins do take unto themselves wings and fly away. Another

important item is a hair-pin box or basket, well filled. A comb, brush, a fine comb, clothes-brush, hat-brush, hand-mirror, buttonhook, and glove-buttoner are among the must-haves. A dainty work-basket, well fitted up, with a needle-book, a pair of sharp scissors, thread, both white and black, a spool of black silk, and one of black linen for sewing on shoe-buttons; a few buttons pearl for underwear, shoe-buttons, glove-buttons, and a few pantsbuttons — should also be added, and a thimble. Provide, also, for the use of your guest, letter-paper, envelopes, a few postals and stamps, a calendar and a blotter, with pens and ink. A scrapbasket is also a necessity as well as an ornament to the room. A tray for burnt matches will be of much use, and certainly has very saving qualities concerning the pretty bureau-covers and fresh paint, so many people throw burnt matches around anywhere, leaving an abominable black mark on the dainty furnishings.

A match-safe, well filled, may be fastened up on the wall near the head of the bed, convenient to reach. A soft dozer made of cheese-cloth, lightly wadded, and laid rolled up at the foot of the bed, or a knitted afghan, may be a cause for gratitude; also an extra quilt conveniently placed, in case of need. Plenty of towels, good soap, and hot and cold water should be daily attended to. Do not let your guest suffer from cold or from too much heat either day or night, if possible to keep the temperature of the room comfortable according to your friend's feelings.

If convenient, a lounge, on which are placed two or three soft cushions, may be placed near one of the windows, where your guest may enjoy a quiet resting or reading hour before dressing for the afternoon or evening, or returning fatigued from some pleasant outing, or when the hostess may be busily engaged with domestic duties. A few small bottles containing camphor, cologne, and ammonia may be provided, and prove refreshing. Two or three of the latest magazines may be placed upon the table, with perhaps a couple of the best late novels; and should you know your friend's taste, add one or two of good standard works, with perhaps a choice book of poems. Of course you will also place your library at the service of your friend, as you may not have divined her preferences; neither would you wish

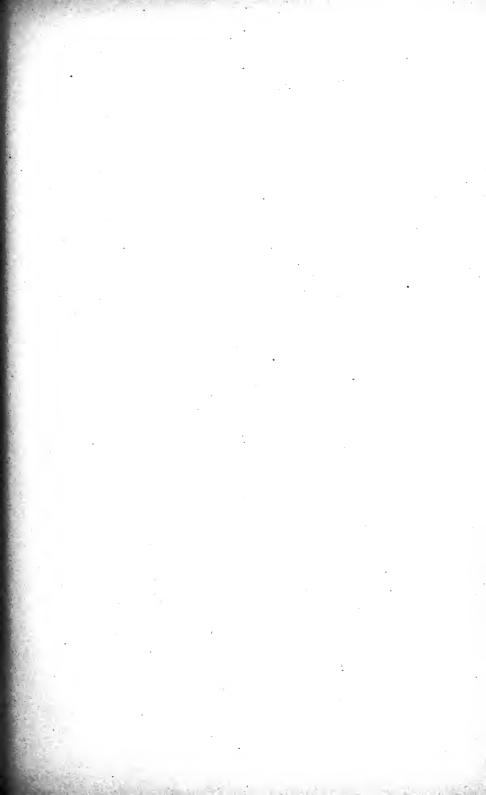
to give her the idea that all reading should be done in her own room.

Always provide your guest with a pitcher of cold drinkingwater, morning and evening.

Among the articles we have mentioned there will be several that our friend will bring with her; yet sometimes, in the hurry of packing, even the most necessary small articles may be overlooked and forgotten; so that when she finds them already provided for her use by the kindly forethought of her hostess, how she will bless that dear woman in her heart for saving her the discomfort of having to ask for them, which, unless she may be an intimate friend, she would hardly like to do.

Don't imagine that the extra conveniences, in shape of work-basket, etc., should be supplied for ladies only. Our young or old gentleman guest may require them as well; for we wives do sadly realize how buttons will snap off from some of man's apparel, at the most inconvenient times. And surely every man should know how to sew on a button, as such an accomplishment would stand him in good stead many times.

Every mother should teach her boys how to use a needle and thread, to sew on buttons, mend rips, and also to darn stockings, even though he may never need to do it for himself. Most of the articles mentioned above can be ornamental as well as useful, and in looks alone will add much to the attractiveness of "the guest-room."



MOUNT VERNON, THE HOME OF WASHINGTON.

CHAPTER II.

THE HOME - concluded.

THE SICK-ROOM.

"Oh, Woman! in our hours of ease,
Uncertain, coy, and hard to please,
And variable as the shade
By the light-quivering aspen made;
When pain and anguish wring the brow,
A ministering angel thou."

In this enlightened age women rank high as physicians and nurses, and it is conceded that, as a class, they are peculiarly adapted to this work. Every woman should consider it not only a privilege, but a duty, to instruct and train herself for the office of nurse. Our Lord, when upon earth, spent more of his time in the cure of men's bodies than in preaching; and when he ascended into heaven, he charged his disciples to "lay hands on the sick," that they might recover. We are abundantly taught that it is a Christian duty to intelligently care for the sick and helpless.

The indispensable qualities of a good nurse are, common sense, conscientiousness, and sympathetic benevolence; and yet one may possess these virtues, combined with good judgment, and still be a miserable nurse, for want of knowledge and training. Therefore it is essential that every woman should cultivate every opportunity for gaining knowledge in this direction, so that, in time of an emergency, she may be possessed of the right knowledge, which always gives assurance and presence of mind. This is not only important in the sick-room, but also in every home.

Cheerfulness and self-forgetfulness are prime requisites in the character of the nurse. Illness makes people selfish; therefore it is all the more necessary that there should be unselfishness to counteract this weakness. One who cares for the sick should

cultivate self-possession, calmness, quiet cheerfulness, patience, a tender hand, a gentle voice,—that "excellent thing in a woman,"—at all times. She should have the faculty of being "handy"; that is, always doing the right thing at the right time; never being guilty of such awkwardness as dropping or knocking over things. Even patients who, when in health, are careless and noisy, when ill, are very sensitive to the disturbance of disorder, while quietness and neatness have a soothing effect upon them.

In order to secure neatness, order, and quiet, in case of long illness, the following arrangements should be made: Keep a large box for fuel, which will need to be filled only twice in twenty-four hours. Provide also and keep in the room, or an adjacent closet, a small tea-kettle, a saucepan, a pail of water for drinks and ablutions, a pitcher, a covered porringer, two pint bowls, two tumblers, two cups and saucers, two wine-glasses, two large and two small spoons; also a dish in which to wash these articles; a good supply of towels and a broom. Keep a slop-bucket near by to receive the wash of the room. Procuring all these articles at once will save much noise and confusion.

Nothing contributes more to the restoration of health than pure air; therefore it should be a primary object to keep a sick-room well ventilated. At least twice in the twenty-four hours, the patient should be well covered, and fresh air freely admitted from out-of-doors. After this, if need be, the room should be restored to a proper temperature by the aid of an open fire. Bedding and clothing should also be well aired and frequently changed, as the exhalations from the body, in sickness, are peculiarly deleterious. Frequent ablutions of the whole body, if possible, are very useful; and for these, warm water may be employed when cold water is disagreeable.

Whenever medicine or food is given, spread a clean towel over the person or bed-clothing, and get a clean handkerchief, as nothing is more annoying to a weak stomach than the stickiness and soiling produced by medicine and food.

Keep the fire-place neat, and always wash all articles and put them in order as soon as they are out of use. A sick person has nothing to do but look about the room; and when everything is neat and in order, a feeling of comfort is induced, while disorder, filth, and neglect are constant objects of annoyance which, if not complained of, are yet felt.

Have a sick-room as large as possible, as crowding, closeness, and rustling against things distract a patient. Have this room thoroughly cleaned. Whitewashed walls are better for it than paper-hangings, and a matting with rugs than a carpet. A fireplace is a rare treat in a sick-room, — ventilating it, removing dampness, and making good cheer. Even in summer a little wood fire in a fire-place, morning and evening, would be pleasant and useful in a sick-room. Provide an easy chair for the patient's sitting up, and, with this chair, an extra blanket or quilt that does not belong to the bed-furniture, to wrap over the feet and knees of the invalid while in the chair. Also have a footstool or heavy foot-cushion. This can be made from a box, padded and covered with carpet; or two circles of wool patchwork may be made, united with a strip of cloth six inches wide, and filled with hay, chaff, or feathers. Do not let the sick-room be dull; put a picture or two, a fancy bracket, or some other pretty thing on the walls. Have within sight of the bed a stand neatly covered and furnished with a book or two, an ornament, a vase of flowers, or, in winter, of evergreen, or holly, with bright red berries, or even dried grasses - something graceful and restful to the eve of the invalid.

An indispensable quality in a nurse is a good memory. Even the life of her patient may hang on her always remembering to do the right thing at the right time, and it is certainly necessary to his comfort and rapid recovery. A good nurse must know how to air a room without chilling her patient. She must be skilful to make a bed with the invalid in it, if the invalid cannot be moved; ingenious in airing bed-clothes in a short time without exposing them to dampness; thoughtful to screen her patient's eyes from the light; quick in bathing, combing, and changing a patient's clothes; careful to avoid using damp bedding, ill-aired towels, or getting the garments of the sick one wet. She should know how to sweep a sick-room without raising a dust, and to build a fire without making a noise. A matting can be easily cleaned by pinning a damp cloth over the broom before sweeping. Coal can be noiselessly put on a fire by having a handful or so tied up in little paper bags. This is a very valuable precaution when an invalid is very low or exceedingly sensitive to noise.

A nurse should always dress neatly and in good taste, avoiding glaring colors in a sick-room. She should not be grim and silent, neither should she talk too much, but use wise discretion. Her authority should be unassuming and assured, and she should not admit many visitors. She should be sympathetic, readily excusing fretfulness and crossness, and should study to gratify a patient's whims when they are not harmful. Medicine should be given neatly and in as palatable a way as possible, and the patient should not be irritated by seeing it stand about. All things disagreeable should be kept out of sight. Have a closet for medicines. If there is no closet in the room, and there are no convenient drawers or shelves, have a box neatly covered and nailed against the wall, out of the patient's sight. Shade it with a little white curtain, and use it as a closet for bottles and spoons.

A nurse should possess an unfailing supply of ingenuity in creating comfortable surroundings, together with appetizing dishes of food for invalids who are convalescent. What greater luxury to the sick, especially if the illness be accompanied with fever, than to always have ready cool water? To secure this without ice, melt a handful of coarse salt and a tablespoonful of saltpetre in a quart of water poured into a shallow pan. Fill a stone jar with fresh, clear water; cover its mouth with a plate; set it in the pan; thoroughly saturate a heavy cloth in water, and with it cover the jar, tucking the ends of the cloth into the pan. Set the whole arrangement, if possible, in a draught. Renew the water in the pan and jar each day, but the salt and saltpetre need not be added more than once a month. Firm, sweet butter, if needed, can be served in the same manner.

Nothing secures a quiet night's rest, after the fatigue of lying in bed all day, better than to rub the body gently all over with a Turkish towel. As recovery becomes assured, the individual will be too delicate for some weeks to bathe freely in cold water, and this dry rubbing should be a part of the daily toilet. An invalid's food should always be prepared and presented with the utmost neatness. A sick person is more fastidious than a well person. He eats with his eyes as much as his mouth. He will take his gruel

out of a china bowl, when he would reject it if presented in a tin cup. Do not set before a patient too much food at once. A large quantity will disgust when a small quantity will attract. Let the food present an attractive appearance. Use the daintiest, prettiest china and silver you can command. After spreading the choicest napery over the tray, add a tiny bouquet, if possible; for the invalid, many times, while he is in the utmost need of food, is indifferent to it; but he may be induced to eat what is brought to him, solely because of its attractiveness.

THE CULINARY DEPARTMENT.

- "We may live without poetry, music, and art; We may live without conscience, and live without heart; We may live without friends; we may live without books; But civilized man cannot live without cooks.
- "He may live without books what is knowledge but grieving? He may live without hope — what is hope but deceiving? He may live without love — what is passion but pining? But where is the man that can live without dining?"

It is fortunate that some women are natural cooks, whose dinners are always excellent, and their kitchens always models of neatness. Such a woman commands and deserves the respect and admiration of mankind, while her less fortunate sister turns green with envy as she beholds, with wonder and amazement, what this "kitchen divinity's" brain can plan, and what her hand can create. It becomes necessary that this unfortunate class of women, to whom kitchen work is a dull routine of drudgery, should fortify themselves with unfailing good nature, and a philosophical determination to conquer all obstacles, remembering that

"Cheerful looks make every dish a feast, And 'tis *that* crowns a welcome."

Be liberal in providing furniture for a room most used, and do not deprive the kitchen of necessary kettles, pots, and pans, in order to decorate the parlor. A housewife spends much of her time in the kitchen, and let it be neat, convenient, and tastefully arranged. Young housekeepers should remember that they can-

not practise truer economy than by investing a little money in that which saves them severe labor. Provide for use articles that are light and easy to handle, and avoid lifting enormous pots and water buckets, when lighter ones would be more suitable for a small family. Learn, early in housekeeping, to practise economy in strength and labor; plan and calculate with brain, husbanding strength to put into that service which shall bring best results. In order to accomplish this, study convenience and labor-saving methods in the kitchen.

Systematize the work, having a time for everything. See that the stove is thoroughly cleaned out in the morning, before a fire is started, for in such trifling things are assured both a house-wife's amiability, and dinner at the *dinner hour*; thus preserving temper, time, and the high regard of the husband, who, at this auspicious season, is pliable and yielding, willing to grant any reasonable request. Remember the old adage: "The way to a man's heart is through his stomach." Provide the head of the family with good dinners, and he will undoubtedly provide a large and pleasant kitchen, and interest himself in its convenience for work.

Make the kitchen a bright, attractive spot, and beautify the work as much as possible by considering it a valued accomplishment to be able, by intelligent and efficient management, to convert a kitchen into a cheerful and comfortable place to work in. The ceilings and walls should be tinted, in some light and cheerful shade; and two or three coats of oil or paint on a good kitchen floor are a saving of labor, as a weekly mopping with tepid water is sufficient to keep it clean. If this room must do duty as dining-room, a screen made by tacking cretonne upon a light wooden frame, five feet high and six feet wide, will not only temper the heat from the cook-stove, but hide the unsightly disorder that results from the process of getting dinner. A square of carpet under the table, together with comfortable little rugs before the ironing-table and sink, will make the kitchen a really attractive place.

Cooking is fatiguing enough at its best estate, but doubly so when performed under the discouragements and inconveniences that abound in so many kitchens. The needless steps that are taken from pantry shelves to closet shelves, and from closet

shelves to firkins, boxes, and paper bags, would in a year's time count up to an alarming number of miles. Much of this waste of time and strength can be saved by gathering every conceivable thing, in the shape of ingredients and utensils, into one spot, convenient to the cook's hands. A means of doing this may be found in a combination of closets and kitchen table. There may be small drawers above for such materials as rice, tapioca, oatmeal, the small packages or boxes of spices, salt, etc., the name of the contents being marked on the outside of each. There may be a closet above for kitchen crockery, which should be provided with shelves, which will also accommodate some other articles if desired. There may also be smaller closets below for tin dishes, and another for those of iron. One large drawer will accommodate a great many things that will suggest themselves to the housekeeper, such as knives, forks, spoons, egg-beaters, potato-mashers, cake-cutters, and a host of small articles. This drawer should be partitioned off into a number of compartments, to keep these articles from becoming indiscriminately mixed. A large closet below may be used for such bulky articles as molasses, sugar, and others. A barrel of flour can be placed under one of the end shelves, which can be hinged to turn up. It will be found a great convenience if a marble slab is obtained for the other shelf, for use in kneading bread, and such other operations as require a perfectly clean, hard, polished surface. Hard wood can be made to answer very well. If one of the patent flour holders and sifters combined is used, it can be placed on the back part of the kneading-shelf. These shelves ought to set out an inch from the main table, to avoid a crack that is not readily kept clean. They should be supported by stout iron brackets.

If parents wish their daughters to grow up with good domestic habits, they should have, as one means of securing this result, a neat and cheerful kitchen. A kitchen should always, if possible, be entirely above ground and well lighted. It should have a large sink, with a drain running underground, so that all the premises may be kept sweet and clean. If flowers and shrubs be cultivated around the doors and windows, and the yard near them be kept well turfed, it will add very much to their agreeable appearance. The walls should often be cleaned and

whitewashed, to promote a neat look and pure air. The floor of a kitchen should be painted or, which is better, covered with an oil-cloth. To procure a kitchen oil-cloth as cheaply as possible, buy cheap tow-cloth and fit it to the size and shape of the kitchen. Then have it stretched and nailed to the south side of the barn, and with a brush cover it with a coat of thin rye paste. When this is dry, put on a coat of yellow paint and let it dry for a fortnight. It is safest to first try the paint and see if it dries well, as some paint never will dry. Then put on a second coat, and, at the end of another fortnight, a third coat. Then let it hang two months, and it will last, uninjured, for many years. The longer the paint is left to dry, the better. If varnished, it will last much longer.

A sink should be scalded out every day, and occasionally with hot lye. On nails, over the sink, should be hung three good dish-cloths, hemmed and furnished with loops,—one for dishes not greasy, one for greasy dishes, and one for washing pots and kettles. These should be put in the wash every week. The lady who insists upon this will not be annoyed by having her dishes washed with dark, musty, and greasy rags, as is too frequently the case. Under the sink should be kept a slop-pail, and, on a shelf by it, a soap-dish and two water-pails. A large boiler of warm soft water should always be kept over the fire, well covered, and a hearth-broom and bellows be hung near the fire. A clock is a very important article in the kitchen, in order to secure regularity at meals.

Every kitchen needs a box containing balls of brown thread and twine, a large and small darning-needle, rolls of waste paper and old linen and cotton, and a supply of common holders. There should also be another box, containing a hammer, carpettacks, and nails of all sizes, a carpet-claw, screws, and a screwdriver, pincers, gimlets of several sizes, a bed-screw, a small saw, two chisels (one to use for button-holes in broadcloth), two awls, and two files.

In a drawer or cupboard should be placed cotton table-cloths for kitchen use; nice crash towels for tumblers, marked T T; coarser towels for dishes, marked T; six large roller-towels; a dozen hand-towels, marked H T; and a dozen hemmed dish-cloths with loops; also two thick linen pudding or dump-

ling cloths, a jelly-bag made of white flannel, to strain jelly, a starch-strainer, and a bag for boiling clothes.

In a closet should be kept, arranged in order, the following articles: the dust-pan, dust-brush, and dusting-cloths; old flannel and cotton for scouring and rubbing; large sponges for washing windows and looking-glasses; a long brush for cobwebs, and another for washing the outside of windows; whisk-brooms, common brooms, a coat-broom or brush; a whitewash-brush, a stove-brush, shoe-brushes and blacking; articles for cleaning tin and silver, leather for cleaning metals, bottles containing stain-mixtures and other articles used in cleansing.

A cellar should often be whitewashed, to keep it sweet. It should have a drain to keep it perfectly dry, as standing water in a cellar is a sure cause of disease in a family. It is very dangerous to leave decayed vegetables in a cellar. Many a fever has been caused by the poisonous miasm thus generated. The following articles are desirable in a cellar: a safe, or movable closet, with sides of wire or perforated tin, in which cold meats, cream, and other articles should be kept (if ants be troublesome, set the legs in tin cups of water); a refrigerator, or a large wooden box on feet, with a lining of tin or zinc, and a space between the tin and wood filled with powdered charcoal, having at the bottom a place for ice, a drain to carry off the water, and also movable shelves and partitions. In this articles are kept cool. It should be cleaned once a week.

Every house needs a store-room, in which to keep tea, coffee, sugar, rice, candles, etc. It should be furnished with jars having labels, a large spoon, a fork, sugar and flour scoops, a towel, and a dish-cloth.

CHAPTER III.

RECIPES FOR THE KITCHEN.

An Ideal Cup of Coffee. — "Grind moderately fine a large cup or small bowl of coffee. Break into it one egg with shell. Mix well, adding enough cold water to thoroughly wet the grounds. Upon this pour one pint of boiling water. Let it boil slowly for ten or fifteen minutes, according to the variety of coffee used and the fineness to which it is ground. Let it stand three minutes to settle, then pour through a fine wire sieve into a warm coffee-pot. This will make enough for four persons. At table first put the sugar into the cup, then fill half full of boiling water, add your coffee, and you have a delicious beverage that will be a revelation to many poor mortals that have an indistinct remembrance of, and an intense longing for, an ideal cup of coffee," says an importer of the coffee berry, who has tested the recipes of many lands. If cream can be procured, so much the better; and in that case boiling water can be added, either in the pot or cup, to make up for the space occupied by the milk, as above.

Cocoa. — The cracked is best. Put two tablespoonfuls of it into three pints of cold water. Boil an hour for first use. Save the remnants and boil it again, as it is very strong. Do this several times. For ground cocoa use two tablespoonfuls to a quart, and boil half an hour. Boil the milk by itself, and add it liberally when taken up. For the shells of cocoa, use a heaping teacupful for a quart of water. Put them in over night and boil a long time.

Chocolate. — Scrape two sticks of chocolate and boil it in half a cup of water. Stir to a smooth paste. Sweeten a pint of milk with loaf-sugar, and, when boiling, pour onto the chocolate, and let it boil together a few seconds, stirring it well. Serve immediately. Some persons prefer a little water instead of all milk. Sweeten a little cream and whip to a froth, and place on the top of each cup.

Tea. — When the water in the tea-kettle begins to boil, have ready a tin tea-steeper. Pour into the tea-steeper just a very little of the boiling water, and then put in tea, allowing one teaspoonful of tea to each person. Pour boiling water over this, until the steeper is a little more than half full. Cover tightly and let it stand where it will keep hot, but not boil. Let the tea infuse for ten or fifteen minutes and then pour into the tea-urn, adding more boiling water, in the proportion of one cup of water for every teaspoonful of dry tea which has been infused. Have boiling water in a water-pot, and weaken each cup of tea as desired. Do not use water that has boiled long. Spring water is best for tea, and filtered water next best

Cream for Coffee and Tea. — Heat new milk, and let it stand till cool and all the cream rises. This is the best way for common use. To every pint of this add a pound and a quarter of loaf-sugar, and it will keep good a month or more, if corked tight in glass.

Egg with Tea, Coffee, Cocoa, or Milk. — Break the egg into a teacup. Beat with a fork till well mixed. Pour in the tea, coffee, cocoa, or milk, gradually stirring

all the time. This is very nourishing, and good in cases of exhaustion from overwork or strain.

Cream Nectar. — Two and one-half pounds of white sugar, one-eighth pound of tartaric acid, both dissolved in one quart of hot water. When cold add the beaten whites of three eggs, stirring well. Bottle for use. Put two large spoonfuls of this syrup in a glass of cold water, and stir into it one-fourth of a spoonful of bicarbonate of soda. Any flavor can be put into the syrup. An excellent drink for summer.

Raspberry Acid. — Dissolve five ounces of tartaric acid in two quarts of water. Pour it upon twelve pounds of red raspberries in a large bowl. Let it stand twenty-four hours. Strain it without pressing. To one pint of this liquor add one and one-half pounds of white sugar. Stir until dissolved. Bottle, but do not cork for several days, when it is ready for use. Two or three tablespoonfuls in a glass of ice water will make a delicious beverage.

Strawberry and Raspberry Vinegar. — Mix four pounds of the fruit with three quarts of cider or wine vinegar, and let them stand three days. Drain the vinegar through a jelly-bag and add four more pounds of fruit, and in three days do the same. Then strain out the vinegar for summer drinks, effervescing with soda or only with water.

Koumiss made with Buttermilk.—One quart buttermilk, two quarts sweet milk, four teaspoonfuls sugar. Mix the buttermilk and sweet milk together, add the sugar, and stir till melted. Let it stand near the kitchen fire for twelve hours, covered with a cloth; then bottle. As it is an effervescing drink, the cork must be tied down and the bottles kept on their sides. When the koumiss is opened, it should be used.

Koumiss made with Sweet Milk. — This is a pleasant drink. To make it, take eight cups of sweet milk, two cups of warm water, two tablespoonfuls of white sugar, one half-inch-square dried yeast cake. Let stand three hours in a warm place, and stir often. Put into quart bottles. Fill two-thirds full, cork with new corks, and wire them down. Lay the bottles on the cellar bottom, on their sides. Let lie thirty hours or more. Before using, shake well.

SOUPS.

Plain Beef Soup. — Put three pounds of beef and one chopped onion, tied in a bag, to three quarts of cold water. Simmer till the meat is very soft, — say four hours; then add three teaspoonfuls of salt, as much sugar, and half a teaspoonful of pepper. Any other flavors may be added, to suit the taste. Strain the soup, and save the meat for mince-meat or hash. Half a dozen sliced tomatoes will much improve this. Some would thicken with three or four teaspoonfuls of potato-starch or flour.

Rich Beef Soup.—The following is a specimen of soups that are most stylish, rich, and demand most care in preparation: Simmer six pounds of beef for six hours, in six quarts of water, using the bones, broken in small pieces. Cool it and take off the fat. Next day, an hour before dinner, take out the meat to use for hash or mince-meat, heat the liquor, throw in some salt to raise the scum, and skim it well. Then slice small, and boil, in a very little water, these vegetables: two turnips, two carrots, one head of celery, one quart of tomatoes, half a head of small white cabbage, one pint of green corn or Shaker corn, soaked over night. Cook the cabbage in two waters, throwing away the first. Boil the soup half an hour after these are put in. Season with salt, pepper, and mace, to suit the taste.

Mutton Soup. — Boil a leg of mutton three hours. Season to your taste with salt and pepper, and add one teaspoonful of summer savory. Make a batter of one egg, two tablespoonfuls of milk, two tablespoonfuls of flour, all well beaten together; drop this batter into the soup with a spoon, and boil for three minutes.

Ox-Tail Soup. — Take two ox-tails, two whole onions, two carrots, one small turnip, two tablespoonfuls of flour, and a little white pepper. Add one gallon water. Let all boil for two hours; then take out the tails, and cut the meat into small pieces. Return the bones to the pot for a short time; boil another hour; then strain the soup, and rinse two spoonfuls of arrowroot to add to it, with the meat cut from the bones, and let all boil for a quarter of an hour.

Clam Soup. — Wash and boil the clams till they come out of their shells easily; then chop them, and put them back into the liquor, which should first be strained. Add a teacup of milk for each quart of soup. Thicken with a little flour, into which has been worked as much butter as it will hold, and season with salt and pepper to suit the taste.

Oyster Soup. — Take one quart of water, one teacupful of butter, one pint of milk, two teaspoonfuls of salt, four crackers rolled fine, and one teaspoonful of pepper. Bring to full boiling heat as soon as possible, then add one quart of oysters. Let the whole come to a boiling heat quickly, and remove from the fire.

Another. — Pour one quart of boiling water into a skillet; then add one quart of good, rich milk. Stir in one teacupful of rolled cracker crumbs. Season with pepper and salt, to taste. When all come to a boil, add one quart of good, fresh oysters. Stir well, so as to keep from scorching. Then add a piece of good, sweet butter about the size of an egg. Let it boil up once, then remove from the fire immediately. Dish up and send to table.

Fish Soup. — Cod-head; vegetables: carrot, onion, and parsley; one-half pound rice; seven pounds potatoes. Get a large cod-head, wash it well; put it on with cold water (one gallon), and boil for an hour; then put it through a sieve or clean, coarse cloth. Wash the rice well, and add; cut the onions very fine, and add; grate the carrot, and boil very slowly, with lid closed, for one hour; then add chopped parsley and all the fish taken from the head, with pepper and salt to taste. Serve hot, with potatoes. A little milk will improve the soup. It is very like oyster soup.

Mock Kidney Soup and Potatoes. — Two pounds of liver; vegetables: carrot, turnip, onion; seven pounds potatoes. Put on half of the liver, with one gallon of water; boil very slowly for an hour; then take it out and grate it. Have the other half cut in nice, small pieces, and add. Grate the carrot and turnip, and one potato, but do not add the potato until fifteen minutes before you take the soup off the fire. Cut the onion very fine, and add it with the liver, carrot, and turnip. Boil very slowly for one and one-half hours, with lid closed. Pepper and salt to taste, and serve hot, with potatoes.

Mock Turtle Soup. — Calf's head, and a small piece of the lights, small piece of the liver, and one-fourth pound of fat pork; one teaspoonful of cinnamon, one of allspice, one-half of cloves, one-half of cayenne pepper; one lemon; one-half pound flour; three potatoes; three eggs. Wash and soak the head, lights, and liver for some hours. Boil them very carefully, keeping the lid closed. Cut the meat up into small strips; fry the pork, cut it up into small pieces; and add all to the soup. You should have one gallon. When it boils, put in the cinnamon, allspice, cloves, and cayenne pepper. Grate the rind of the lemon; add it, with the juice, to the soup. Grate the three potatoes, and add. Brown the flour before the fire, mix it smooth,

and add. Let all boil for ten minutes. Have three hard-boiled eggs, slice them up into the tureen, and pour the soup on the top of them. This recipe is equal to real turtle soup. It can be made with force-meat balls, which are an improvement.

Haricot Bean Soup and Potatoes. — Three and one-half pounds potatoes; one pound beans; vegetables; onion. Wash the beans, and leave them to soak for sixteen hours. Put into a clean pot, with a gallon of water, and the onion cut fine. Boil very carefully and slowly for two hours; then add carrot, turnip, and two potatoes, all grated, and boil for half an hour. Just before serving add a teaspoonful of powdered sage; salt and pepper to taste. Serve hot. To be taken with potatoes.

A Vegetable Soup.—Take three quarts of stock that is duly seasoned with sugar, salt, and pepper. Add two small onions chopped fine, three small carrots, three small turnips, one stalk of celery, and a pint of green peas—all chopped fine. Let it simmer two hours, and then serve it.

Potato Soup. — Take six large, mealy potatoes, sliced, and soaked an hour. Add one onion, sliced and tied in a bag, a quart of milk, and a quarter of a pound of salt pork, cut in slices. Boil three-quarters of an hour, and then add a tablespoonful of melted butter and a well-beaten egg, mixed in a cup of milk. This is a favorite soup with many, and easily made. Some omit the pork, and use salt and pepper to flavor it, and add one well-beaten egg.

Green Pea Soup. — Boil the pods an hour in a gallon of water. Strain the liquor, and put into it four pounds of beef or mutton, and simmer one hour; then add half the peas contained in half a peck of pods, and boil half an hour; then thicken with two great spoonfuls of flour, and season with salt and pepper. Three tomatoes, sliced, improve this.

Scotch Broth. — Take half teacup barley, four quarts cold water; bring to a boil, and skim. Put in now a neck of mutton, and boil again for half an hour. Skim well the sides, also the pot. Have ready two carrots, one large onion, one small head cabbage, one bunch parsley, one sprig celery tops; chop all these fine. Add your chopped vegetables; pepper and salt to taste. Take two hours to cook.

Celery Soup. — Scrape and cut into small pieces two bunches of celery, using the best parts only. Add two quarts of good soup stock, with an onion cut into slices, and stew gently until the celery is tender. Put through a colander, season with pepper and salt, and return to the fire; boil up; add a coffeecupful of boiling milk, thickened with a little cornstarch or flour, and turn at once into the tureen. A trifle of sugar is thought by many an improvement; while a few bits of fried bread, put into the tureen before pouring in the soup, are a nice addition.

Turkey Soup. — People who like the old-fashioned, rich soups will find the following recipe for using the carcass of a turkey delicious: Cut off the meat from the bones, and break the carcass into several pieces. Add two or three quarts of water, proportioned to the quantity of meat, two slices of carrot, two of turnip, two large onions, two stalks of celery, three tablespoonfuls of butter, and three of flour. Set on the fire and cook three hours; then add the vegetables and cook another hour. Strain and put back on the stove. Brown the flour and butter together, add it to the soup, season with salt and pepper, and simmer for half an hour. If any fat rises, skim it off. Small squares of toasted bread may be added, just as the soup is sent to the table.

Noodles for Soup. — Rub into two eggs as much sifted flour as they will absorb; then roll out until thin as a wafer. Dust over a little flour, and then roll over and over into a roll. Cut off thin slices from the edge of the roll, and shake out into long

strips. Put them into the soup lightly, and boil. Remove the scum when it first begins to boil. The more gently meat boils, the more tender it will become. Allow twenty minutes for boiling each pound of fresh meat.

Soup Stock is broth of any kind of meat, prepared in large quantity, to keep on hand for gravies and soups. Beef and veal make the best stock. One hind shin of beef makes five quarts of stock, and one hind shin of veal makes three quarts. Wash and put into twice as much water as you wish to, to have soup, and simmer five or six hours. All kinds of bones should be mashed and boiled five or six hours, to take out all the nutriment, the liquor then strained, and kept in earthenware or stone, not in Take off the fat when cool. Cool broth quickly and it keeps longer. Use a flat-bottomed kettle, as less likely to scorch. Soft water is best for soups; a little soda improves hard water. Stock will keep three or four days in cool weather; not so long in warm. Keep it in a cool place. When used, heat to boiling-point, and then take up and flavor. Put in the salt and pepper when the meat is thoroughly done. Meat soups are best the second day, if warmed slowly and taken up as soon as heated. If heated too long, they become insipid. Thin soups must be strained. If to be made very clear, stir in one or two well-beaten eggs with the shells, and let it boil half an hour. Use the meat of the soup for a hash, warmed together with a little fat, and well seasoned. Be very careful in using bones and cold meats for soups, that none is tainted, for the soup may be ruined by a single bit of tainted meat or bone.

MEATS.

Roast Beef. — Prepare for the oven by dredging lightly with flour, and seasoning with salt and pepper. Place in the oven, and baste frequently while roasting. Allow a quarter of an hour for a pound of meat if you like it rare; longer, if you like it well done. Serve with a sauce, made from the drippings in the pan, to which have been added one tablespoonful of Halford or Worcestershire sauce, and one tablespoonful of tomato catsup.

Spiced Beef or Beef Loaf. — Four pounds of beef chopped fine, all fat being removed. Add three dozen small crackers rolled fine, two tablespoonfuls black pepper, one tablespoonful melted butter, one tablespoonful ground mace, a little salt, four eggs, one cup of milk. Mix well, and put into any tin pan it will fill. Baste with butter and water, and bake two hours.

Stuffed Corned Beef. — A very nice way of preparing corned beef, and of making a change in this oft-repeated dish, is to take a piece of well-corned rump or round, nine or ten pounds; make several deep cuts in it; fill with a stuffing of a handful of soaked bread squeezed dry, a little fat or butter, a good pinch of cloves, allspice, pepper, a little finely chopped onion, and a little marjoram or thyme; then tie it up tightly in a cloth, and saturate it with vinegar. Boil about three hours.

Beefsteak a la Parisienne. — Take a piece of steak about three-quarters of an inch thick. Trim it neatly, sprinkle it with pepper, dip it in oil, and broil it over a clear fire. Turn it after it has been on the fire a minute or two, and keep turning it until done. Eight or ten minutes will do it. Sprinkle with salt, and serve with a small quantity of finely minced parsley and a piece of butter mixed together, and placed over or under the steak. Garnish with fried potatoes.

Beef Hash. — Chop raw beef very fine. Add butter, pepper, salt, and chopped parsley. Cover with water, stew it (well covered) for fifteen minutes. Pour it over slices of toasted bread.

Baked Ham. — Most persons boil ham. It is much better baked, if baked right. Soak it for an hour in clean water, and wipe it dry. Next spread it all over with thin batter, and then put it into a deep dish, with sticks under it, to keep it out of the gravy. When it is fully done, and the batter crusted on the flesh side, take off the skin and set it away to cool.

To boil Ham. — Wash and scrape the ham clean; put it on in enough cold water to cover it. Put into the water two onions, two carrots, a head of celery, a dozen cloves, and a handful of timothy hay. Boil without stopping, until the skin will readily peel from the ham. Cover the ham with rolled crackers, or bread crumbs that have been browned and rolled, and bake in a slow oven for two hours.

Boiled Fowl. — Take a young fowl and fill the inside with oysters. Place in a jar and plunge into a kettle of water. Boil one and a half hours. There will be a quantity of gravy in the jar, from the juice of the fowl and the oysters. Make this into a white sauce, with the addition of egg, cream, or a little flour and butter. Add oysters, or serve up plain with the fowl. This is very nice with the addition of a little parsley to the sauce.

Roast Turkey or Chicken. — Having picked and drawn the fowls, wash them well in two or three waters. Wipe them dry. Dredge them with a little flour inside and out, and a little pepper and salt. Prepare a dressing of bread and cracker crumbs, fill the bodies and crops of the fowls, and then bake them from two to three hours. Baste them frequently while roasting. Stew the giblets in a saucepan. Just before serving, chop the giblets fine. After taking up the chicken and the water in which the giblets were boiled, add the chopped giblets to the gravy of the roast fowl. Thicken with a little flour which has been previously wet with the water. Boil up, and serve in a gravy-dish. Roast chicken and turkey should be accompanied with celery and jellies.

To boil a Turkey. — Make a stuffing for the craw of chopped bread and butter, cream, oysters, and the yolks of eggs. Sew it in, and dredge flour over the turkey, and put it to boil in cold water, with a spoonful of salt in it, and enough water to cover it well. Let it simmer for two and a half hours, or, if small, less time. Skim it while boiling. It looks nicer if wrapped in a cloth dredged with flour. Serve it with drawn butter, in which put some oysters.

Roast Chickens. — Wash them clean outside and inside. Stuff as directed for turkeys, and baste with butter, lard, or drippings, and roast them about an hour. Chickens should be cooked thoroughly. Stew the inwards till tender, and till there is but little water. Chop them and mix in gravy from the dripping-pan. Thicken with brown flour. Season with salt, pepper, and butter. Cranberry, or new-made apple sauce, is good with them.

Baked Chicken. — Cut the fowl open and lay it flat in a pan, breaking down the breast and the back bones. Dredge with flour, and season well with salt and pepper, and bits of butter. Put in a very hot oven until done, basting frequently with melted butter, or when half done, take out the chicken and finish by broiling it upon a gridiron, over bright coals. Pour over it melted butter and the juices in the pan in which it was baked.

Dressing for Chicken or Turkey.—Chop bread crumbs quite fine. Season well with pepper, salt, and plenty of butter. Moisten with a very little water and add a few oysters, with a little of the liquor, if you please. The best authorities say that the dressing is the finest when it crumbles as the fowl is cut.

Chicken dressed as Terrapin. - Boil a fine, large, tender chicken. When

done, and while yet warm, cut it from the bones into small pieces, as for chicken salad. Put it into a stew-pan, with one gill of boiling water. Then stir together, until perfectly smooth, one-fourth pound butter, one teaspoon flour, and the yolk of one egg, which add to the chicken half at a time, stirring all well together. Then season with salt and pepper. After letting it simmer about ten minutes, add one spoon of vinegar, and send to table hot.

Chicken Pie. — Joint and boil two chickens in salted water, just enough to cover them, and simmer slowly for half an hour. Line a dish with potato crust, as directed in the recipe for pot-pie. Then, when cold, put the chicken in layers, with thin slices of broiled pork, butter the size of a goose egg, cut in small pieces. Put in enough of liquor, in which the meat was boiled, to reach the surface. Salt and pepper each layer. Dredge in a little flour, and cover all with a light, thick crust. Ornament the top with the crust, and bake about one hour in a hot oven. Make a small slit in the centre of the crust. If it begins to scorch, lay a paper over a short time.

Ducks. — When roasted, use dressing as for turkey, with the addition of a few slices of onion. Many cooks lay over the game slices of onion, which take away the fishy flavor, removing the onion before serving. Make a sauce with the drippings in the pan in which the game is roasted, and into which are put the chopped giblets, being previously well cooked. Thicken the gravy with brown flour moistened with water. Serve with currant jelly.

Prairie Chickens, Partridges, and Quails.—Clean nicely, using a little soda in the water in which they are washed. Rinse them and dry, and then fill them with dressing, sewing them up nicely, binding down the legs and wings with cords. Put them in a steamer over hot water, and let them cook until just done. Then place them in a pan with a little butter, set them in the oven, and baste them frequently with melted butter, until of a nice brown. They ought to brown nicely in about fifteen minutes. Serve them on a platter, with sprigs of parsley alternating with currant jelly.

Stewed Rabbit.—Cut the rabbit into eight pieces, and fry till brown. Add a teaspoonful of curry powder, quarter teaspoonful pepper, half a teaspoonful powdered thyme, some carrot and turnip cut in slices, two gills of water. Simmer (with closed lid) for one and a half hours. Mix one tablespoonful flour with water till smooth, one small tablespoonful burnt sugar, one of vinegar, a little salt to taste. Add this to the stew, and boil all another minute or two. Serve hot.

Curried Rabbit. — One rabbit, two onions, one apple, one teaspoonful curry powder, one ounce dripping, and a little salt. Wash and dry rabbit. Cut it up in small pieces. Put the dripping in a stew-pan. Let it get quite hot. Peel and chop up the onions; also the apple. Fry them till a pale brown. Add the pieces of rabbit, and fry them on all sides. Stir in a teaspoonful of curry powder, a pinch of salt, and mix well with the meat. Add a teacupful of water, and stew very gently, with lid closed, for an hour and a half. Serve with dry boiled rice for a border round it.

Baked Black Bass. — Eight good-sized onions chopped fine, half that quantity of bread crumbs, butter size of hen's egg, plenty of pepper and salt. Mix thoroughly with anchovy sauce, until quite red. Stuff your fish with this compound and pour the rest over it, previously sprinkling it with a little red pepper. Shad, pickerel, and trout are good cooked in the same way. Tomatoes can be used instead of anchovies, and are more economical. If using them, take pork in place of butter, and chop fine.

Broiled White-Fish. — Wash and drain the fish. Sprinkle with pepper, and lay with the inside down upon the gridiron, and broil over fresh, bright coals. When a nice brown, turn for a moment on the other side, then take up and spread with butter. This is a very nice way of broiling all kinds of fish, fresh or salted. A little smoke under the fish adds to its flavor. This may be made by putting two or three cobs under the gridiron.

Eels. — Skin and parboil them. Cleanse the backbone of all coagulations. Cut them in pieces about three inches in length. Dip in flour, and cook in pork fat, brown.

Salt Mackerel. — Soak the fish for a few hours in lukewarm water, changing the water several times. Then put into cold water, loosely tied in cloths, and let the fish come to a boil, turning off the water once, and pouring over the fish hot water from the tea-kettle. Let this just come to a boil. Then take them out and drain them. Lay them on a platter, butter and pepper them, and place them for a few moments in the oven. Serve with sliced lemons, or with any nice fish sauce.

Baked Halibut or Salmon. — Let the fish remain in cold water, slightly salted, for an hour before it is time to cook it. Place the gridiron on a dripping-pan, with a little hot water in it, and bake in a hot oven. Just before it is done, butter it well on the top, and brown it nicely. The time of baking depends upon the size of the fish. A small fish will bake in about half an hour, and a large one in an hour. They are very nice when cooked as above, and served with a sauce which is made from the gravy in the dripping-pan, to which is added a tablespoonful of catsup, and another of some pungent sauce, and the juice of a lemon. Thicken with brown flour, moistened with a little cold water. Garnish handsomely with sprigs of parsley and currant jelly.

Roasted Codfish. - For roasting, take a small, fresh cod. Clean it well. Cut off the head and tail. Split the fish, clean it well, and spread it open. Sprinkle with some cavenne and a little fine salt. Have ready a thick oaken plank, large enough, or a little larger, than will hold the fish spread out open. Stand up the board before a clear, hot fire till the whole piece of plank is well heated and almost charred; but take care not to allow it to catch fire. Then spread out the fish evenly and tack it to the board with four spike nails, driven in so as to be easily drawn out again. Place the inside of the cod next the fire, and the back next the board, which, if it has been well heated, will cook it through. Stand up the plank before the fire, setting a dish at the bottom to catch the drippings, and when you see that it is thoroughly done, take it up, but do not move it from the board. Send it to the table on the board, the ends of which may be rested upon muffin-rings, or something of that sort, to prevent injury to the cloth. Eat it with any sort of fish sauce, or with a little butter and cayenne only. This is now the most approved manner of cooking a fresh shad in the spring, and nothing can be better. Fishboards can be obtained at the furnishing stores.

Boiled Trout. — Put two tablespoonfuls of vinegar into enough boiling water to cover the fish. Add a teaspoonful of salt, and boil for twenty-five minutes. Serve with a drawn-butter gravy, made by thickening milk with a little flour, and boiling it by placing the basin in a pan of water. Add a large piece of butter just before you serve it. Capers can be added to this sauce, or parsley, and the latter should be placed about the fish.

Oyster Patties. — Make some rich puff paste, and bake it in very small tin pattypans. When cool, turn them out upon a large dish. Stew some large, fresh oysters with a few cloves, a little mace, and nutmeg. Then add the yolk of one egg, boiled hard and grated. Add a little butter, and as much of the oyster liquor as will cover them. When they have stewed a little while, take them out of the pan and set them to cool. When quite cold, lay two or three oysters in each shell of puff paste.

Stewed Oysters. — Drain the liquor from two quarts of firm, plump oysters. Mix with one small teacupful of hot water. Add a little salt and pepper, and set over a fire in a saucepan. When it boils, add one large cupful of rich milk. Let it boil up once, add the oysters, and let it boil five minutes. When they ruffle, add two table-spoonfuls of butter, and the instant it is melted and well stirred in, take off the fire.

Broiled Oysters. — Drain the oysters well, and dry them with a napkin. Have ready a griddle, hot and well buttered. Season the oysters, lay them on the griddle, and brown them on both sides. Serve them on a hot plate, with plenty of butter.

Escalloped Oysters. — Roll crackers very fine. Strew the bottom of a baking-tin with the crackers; then cover with oysters. Season this layer with salt and pepper, and a plentiful supply of butter. Repeat this process until the dish is full, having the last layer crackers; then cover with milk and oyster juice. The richness of this dish depends upon the generosity with which the oysters and butter are used. Bake slowly, from one and one-half to two hours.

Fried Oysters. — Dip the oyster into beaten egg, then cover with rolled crackers. Have ready drippings of hot fat, into which drop the prepared oyster. Salt and pepper to taste; and when fried to a rich brown, turn to the other side with care. The largest oysters should be selected for this purpose; the smaller ones should be reserved for stews, etc. Serve from a hot dish.

Scrambled Eggs. — Beat the eggs light. Turn into a pan with bacon fried in dice, and with fine chopped ham, and stir rapidly until cooked.

Scrambled Eggs. — Beat up six eggs with two ounces of butter, one teaspoonful of cream or new milk, a little chopped parsley, and salt. Put all in a saucepan, and keep stirring over the fire until it begins to thicken, when it should be served in a hot dish.

Baked Eggs. — Have hot meat gravy in a pie-dish; break in the eggs. Bake fifteen minutes.

Steamed Eggs. — Break into a round dish that will fit into a steamer. Turn over them a little new milk or cream; salt, and steam five minutes, or until they have taken a pinkish hue. They present a pretty appearance on the table, when served in this manner; but care must be taken that they are cooked to just the right consistency.

Omelet. — Six eggs, whites and yolks beaten separately; one-half pint of milk; six teaspoonfuls of cornstarch; one teaspoonful baking-powder and a little salt. Add the whites, beaten to a stiff froth. Cook in a little butter. Delicious.

Small Omelet.— Beat the yolks of four eggs. Into one cup of milk beat two slices of bread (after removing the crust), or eight small crackers; do not allow any lumps to remain. Add a pinch of salt, and beat the whites to a stiff froth. Add last, stirring in lightly. Cook in butter, on a round skillet, and quarter as they are turned. With a little care, the quarters can be turned without breaking.

Omelet (plain). — In making an omelet, care should be taken to have the pan quite hot and perfectly dry. Put into the frying-pan one ounce of lard, heat very gently (the lard must not get brown). The eggs are to be very lightly beaten, only long enough to mix them and no more. Break four eggs into a basin, half a teaspoonful of salt, and a quarter of a teaspoonful of pepper. Mix, pour into a hot pan,

and keep mixing quickly, till they are delicately set. Turn in the edges, let it rest a moment to set, turn it over on a dish, and serve.

Eggs stewed with Cheese. — One egg for each person. Let them set in a frying-pan; remove them to a plate. Cut some cheese very thin. Put it on the top of the eggs, with salt and pepper to taste. Set before the fire or in the oven to swell, and serve hot.

Ham and Eggs. — Put your sliced ham on in a cold frying-pan. Turn it two or three times, taking care not to let it burn. When sufficiently done, lay the ham on a nice hot plate. Break the eggs into a cup, taking care not to break the yolks. Slip one at a time into the frying-pan, and baste with the ham fat. Keep the eggs as round as possible, lift with a slice, and lay on the ham.

How to boil Eggs. — Put one pint of water in a small pan. Let it boil. Put in the egg. If small, three minutes will set it; if large, four minutes. When boiling several eggs, see that they are as nearly as possible the same size. Ten minutes are required to boil an egg hard.

Poached Eggs.—Put one pint of water in a small pan, with half a teaspoonful of salt and a tablespoonful of vinegar. Let it boil. Break the egg carefully into the pan, and simmer for four minutes. Take it out carefully, and serve on toast.

PIES.

Fine Puff Pastry. — One pound of flour, a little more for rolling-pin and board, half a pound of butter, and half a pound of lard. Cut the butter and lard through the flour (which should be sifted) into small, thin shells, and mix with sufficient icewater to roll easily. Avoid kneading it, and use the hands as little as possible in mixing.

Plainer Pastry. — One cup of butter, one cup of lard, a little salt. Cut through the flour, and mix lightly together. Some cooks mix the lard through the flour first, and then mix with water and roll out. Cut the batter into thin sheets, fold over and lay aside, cutting off from the roll what is used for the bottom or top crust, as wanted.

Lemon Pie. — The juice and grated rind of one lemon, one cup of water, one tablespoonful cornstarch, one cup sugar, one egg, and a piece of butter the size of a small egg. Boil the water, wet the cornstarch with a little cold water, and stir it in. When it boils up, pour it on the sugar and butter. After it cools add the egg and lemon. Bake with upper and under crust.

Lemon Pie. — Grate the yellow rind of two lemons. Beat together the rind, juice, ten tablespoonfuls of loaf-sugar, and the yolks of four eggs, until very light, then add two tablespoonfuls of water. Line a large plate and fill with the mixture. Bake until the paste is done. Beat the whites stiff, and stir into them two tablespoonfuls of white sugar. Spread it over the top, and bake a bright brown.

Squash Pie. — Take a winter squash; cut in pieces, take off the rind and remove the seeds, and boil it until tender, then rub it through a sieve. When cold, add to it milk to thin it, and to each quart of milk five well-beaten eggs. Sugar, cinnamon, and ginger to your taste. The quantity of milk must depend upon the size and quality of the squash. These pies require a moderate heat, and must be baked until the centre is firm.

Pumpkin Pie. — One quart of strained pumpkins, two quarts rich milk, one teaspoonful of salt and two of ginger, cooked with the pumpkins, six well-beaten eggs, and one and one-half teacups of sugar.

Mince Pie. — Three cups chopped cooked meat, six cups of apples chopped fine. Make moist with boiled cider, and sweeten with molasses or dark sugar. Spice to your taste, using cloves, cinnamon, allspice, and a very little black pepper. Put currants and raisins into the pies when ready to bake.

Ripe Fruit Pies—Peach, Cherry, Plum, Currant, and Strawberry.—Line your dish with paste. After picking over and washing the fruit carefully (peaches must be pared, and the rest picked from the stem), place a layer of fruit and a layer of sugar in your dish, until it is well filled, then cover it with paste, and trim the edge neatly, and prick the cover. Fruit pies require about an hour to bake in a thoroughly heated oven.

Raisin Pie. — Take one pound of raisins. Turn over them one quart of boiling water. Keep adding, so there will be a quart when done. Grate the rind of one lemon into a cup of sugar, three teaspoonfuls of flour, and one egg. Mix well together. Turn the raisins over the mixture, stirring the while. This makes three pies. Bake as other pies.

Crumb Pie. — Line a plate with nice paste. Rub together one-half cup flour, three-quarters cup brown sugar, one large tablespoon butter, until it grains. Fill the pie, and bake fifteen minutes. This is excellent.

Apple Pot-Pie. — Make a crust. With half of it line the sides of a stewpan having a close-fitting cover (a porcelain or granite one is the best). Fill the centre with peeled and sliced apples, and add to them a cupful of syrup, a pinch of ground cinnamon, another of salt, and a little butter, or use sugar and a little water instead of the syrup. Wet the edges of the crust, and fit the balance of it over the top of the apples, being careful to have the saucepan only two-thirds full, in order to give room for rising. Put the cover on, and boil for an hour without once lifting it, but be careful it does not stand in a place so hot as to burn. Cut the top crust into four equal parts. Dish the apples and lay the crust from the sides. Cut into even pieces around the outer edge, and then the top crust over all, and serve hot.

Christmas Pies. — One-half pound apples, one-fourth pound figs, one-fourth pound currants, one-fourth pound raisins, one-fourth pound sugar, one-half ounce cinnamon, one-half ounce ginger, one pound flour, one-fourth pound lard, one teaspoonful baking-powder. Peel and core the apples, and cut them into small dice. Put them in a basin with the sugar. Mince the figs fine. Stone and mince the raisins (or use sultana raisins). Pick, and rub the currants very carefully with a cloth. Put all into a basin with the apples and sugar. Add the cinnamon and ginger, and any other flavoring that is liked. Mix all well together. The mince is all the better of being prepared some time before it is wanted. For the crust, mix the flour, lard, a teaspoonful of baking-powder, and a pinch of salt, well together, then add enough cold water to make a stiff paste. Roll out to about a quarter of an inch thick. The pies can either be made in small tins or soup plates. Rub the tins or plates well with lard, cut the pastes to the right size, put the mince-meat in carefully, wet round the edges, and cover the top with paste, and bake in a not too quick oven.

Custard Pie. — Make a custard of the yolks of three eggs with milk. Season to taste. Bake it in an ordinary crust. Put it in a brick oven, that the crust may not be heavy, and as soon as that is heated, remove it to a place in an oven of a more moderate heat, that the custard may bake slowly and not curdle. When done, beat the whites to a froth. Add sugar, and spread over the top, and return to the oven to brown slightly. A small pinch of salt added to a custard heightens the flavor. A little soda in the crust prevents it from being heavy. Very nice.

Cream Pie. — Boil nearly one pint of new milk. Take two small tablespoonfuls of cornstarch, beaten with a little milk. To this add two eggs. When the milk has boiled, stir this in slowly, with one scant teacup of sugar, one-half cup of butter, and two teaspoonfuls of lemon. Cakes: Three eggs, one cup of white sugar, one and one-half cups of flour, one teaspoonful of baking-powder. Mix it in flour. Three tablespoonfuls of cold water. Bake in two pie-pans in a quick oven. Split the cake while hot, and spread in the cream.

Strawberry Shortcake. — Make good biscuit crust. Bake in two tins of same shape and size. Mix berries with plenty of sugar. Open the shortcake, butter well, and place the berries in layers, alternated with the crust. Have the top layer of berries, and over all put charlotte russe or whipped cream.

Orange Shortcake. — Make a nice shortcake. Spread in layers of sliced oranges, with sugar and a little cream. To be eaten with sweetened cream.

Open Tarts. - The ingredients are ten ounces flour, five ounces butter, one and one-half gills cold water, half a teaspoonful yeast powder, a few teaspoonfuls of preserves of any kind, and a pinch of salt. First, weigh out the butter and flour and put them in a bowl, adding a pinch of salt. Mix the butter and flour together lightly, and put in the yeast powder. These must be mixed well together, making a nice dough, with a gill and a half of cold water. Use as little water as possible, the quantity of water to be determined by the quality of the flour. A fine grade of flour absorbs the greatest quantity of water. Roll out the dough, and cut it into circular pieces with a cake-cutter. The remainder of the dough is rolled out again, and smaller circular pieces cut out, and with a part of dough that is still left make small, narrow strips. There is still sufficient dough to make a thin covering for a plate or flute-dish. The dish should first be wet with cold water, and the dough lining pressed closely to the edges of the dish. Then put in the centre the jam, and take the white of an egg and wet the edges, after which lay on the narrow strips over the top. Now put on the smaller pieces of dough, and bake them in a quick oven for twenty-five minutes.

Cranberry Tart. — Take cranberries, pick, and wash them in several waters, and put them into a dish with the juice of half a lemon, one-quarter of a pound of moist sugar or pounded loaf-sugar to one quart of cranberries. Cover it with puff paste or short crust, and bake it three-quarters of an hour. If short crust is used, draw it from the oven five minutes before it is done, and ice it. Return it to the oven, and send it to the table cold.

MISCELLANEOUS DISHES.

Cream Griddle-Cakes. — One pint of thick cream, one teaspoonful of salt, one tablespoonful of sugar, three well-beaten eggs. Make a thin batter of graham flour, and bake on a griddle.

Buckwheat Cakes. — One quart of buckwheat, one teaspoonful of salt, two table-spoonfuls of good yeast, two tablespoonfuls of molasses. Wet the flour with warm water, and then add the other articles. Keep this warm through the night. If it sours, add half a teaspoonful of soda, in warm water. These cakes have a handsomer brown if wet with milk, or part milk.

Buckwheat Cakes, made with Baking-Powder.—One quart of buckwheat flour, one-half a teacupful of corn meal, wheat, or graham flour, a little salt, and two tablespoonfuls of syrup; wet these with cold or warm water to a thin batter. Mix four good tablespoonfuls of baking-powder with the flour. If soda and buttermilk

are desired to be used instead of baking-powder, use it in proportion of an even teaspoonful to a cup of buttermilk, if the milk is rich and sour.

Rolls. — To the quantity of light bread dough that would be used for twelve persons, add the white of one egg, well beaten, two tablespoonfuls of white sugar, and two tablespoonfuls of butter; work these thoroughly together; roll out about one-half inch thick; cut the size desired, and spread one with melted butter, and lay the other upon it. Bake delicately when they have risen.

French Rolls. — One quart of flour, two eggs, one-half pint of milk, one table-spoonful yeast; knead well, and let it rise till morning. Work in one ounce of butter, and mould into rolls; let them rise half an hour, and bake in a hot oven.

Cream, Tea, or Breakfast Cakes. — Six eggs, beaten separately, one-half pint of sour cream, one pint of sweet milk, one and one-half teaspoonful baking-powder, flour enough to make a thin batter. Bake in cups or hot gem-tins.

Apple Fritters. — One teacupful of sweet milk, one tablespoonful of sweet, light dough, dissolved in milk; beat with a fork till milk and dough are one. Three eggs beaten separately, one teaspoonful of salt, one and one-half teacupfuls of flour, one tablespoonful of sugar, the grated peel of a lemon, and peeled apples sliced without the core. Drop into hot lard with a piece of apple in each one, and sprinkle with powdered or spiced sugar. Let them stand after making, and they will be lighter.

Indian Meal and Flour Scones. — One pound Indian meal, one pound flour, one tablespoonful treacle, one teaspoonful baking-soda, one teaspoonful cream of tartar, half a teaspoonful salt, and buttermilk. Mix all together, and then add enough buttermilk to make a nice, soft dough; divide it, and roll out each piece into about a fourth of an inch thick. Cut in four, and bake on not too hot a griddle.

Rice Scones. —One pound rice, one-fourth pound flour, one teaspoonful sugar, and half teaspoonful salt. Put the rice, sugar, and salt into a saucepan, with one quart water, and let it come to the boil. Then set it to the side of the fire and let it steam for two hours with the lid close, till all the water has been absorbed and the rice has become soft; then sprinkle the flour on the baking-board, and turn the rice out on it. Let it stand till cool; then divide into six parts, and roll out very thin. Cut each part in three, and bake on not too hot a griddle.

Potato Scones. — Potatoes, flour, and salt. Take any boiled potatoes left from dinner; bruise them nice and smooth on the table or baking-board; add salt to season; then shake some flour over them, or work it in; roll out very thin, prick with a fork, and cut in three. Bake on not too hot a griddle.

Pancakes. — Rub one pound of flour, two ounces dripping, teaspoonful carbonate of soda, teaspoonful cream of tartar, one-fourth pound sugar, all well together. Add buttermilk to make a soft batter. Rub the griddle over with dripping, and put a spoonful on for each pancake. When one side is done, turn. Can be flavored with anything that is liked, or currants may be added.

The Most Economical Breakfast Dish. — Keep a jar for remnants of bread, both coarse and fine, for potatoes, remnants of hominy, rice, grits, cracked wheat, oat-meal, and all other articles used on table. Add all remnants of milk, whether sour or sweet, and water enough to soak all, so as to be soft, but not thin. When enough is collected, add enough water to make a batter for griddle-cakes, and put in enough soda to sweeten it. Add two spoonfuls of sugar, and half a teaspoonful of salt, and two eggs for each quart, and you make an excellent dish of material, most of it usually wasted. Thicken it a little with fine flour, and it makes fine waffles.

Corn-Meal. — Take four large cups of corn-meal and scald it. In all cases, scald

corn-meal before using it. Add half a cup of fine flour, three tablespoonfuls of sugar or molasses, one teaspoonful of soda, and one of salt. Make a batter, and boil an hour or more, stirring often; or, better, cook in a tin pail set in boiling water. Use it as mush, with butter, sugar, and milk for supper. Next morning, thin it with hot water; add two or three eggs, and bake either as muffins or griddle-cakes.

Hominy. — Soak and then boil a quart of hominy, with two heaping teaspoonfuls of salt. Use it for dinner as a vegetable, or for supper with sugar and milk or cream. Next morning use the remainder, soaked in water or milk, with two eggs and a salt-spoonful of salt. Bake as muffins or griddle-cakes, or cut in slices, dipped in flour, and fried. Farina may be used in the same way.

Rice. — Pick over one pint of rice; add two teaspoonfuls of salt and three quarts of boiling water. Then boil fifteen minutes; then uncover; let it steam fifteen minutes. This to be used for a vegetable at dinner, or for a tea-dish, with butter and sugar. At night, soak the remainder in as much milk or water, and next morning add as much fine or unbolted flour as there was rice, three eggs, a teaspoonful of salt, and half a teaspoonful of soda. Thin with water or milk, and bake as muffins or griddle-cakes.

BREAD.

Hop and Potato Yeast. — Pare and slice five large potatoes, and boil them in one quart of water, with a large handful of common hops (or a square inch of pressed hops), tied in a muslin rag. When soft, take out the hops and press the potatoes through a colander, and add a small cup of white sugar, a teaspoonful of ginger, two teaspoonfuls of salt, and two teacups of common yeast, or half as much distillery. Add the yeast when the rest is only blood-warm. White sugar keeps better than brown, and the salt and ginger help to preserve the yeast. Do not boil in iron or use an iron spoon, as it colors the yeast. Keep yeast in a stone or earthenware jar, with a plate fitting well to the rim. This is better than a jug, as easier to fill and to cleanse. Scald the jar before making new yeast. The rule for quantity is, one tablespoonful of brewers' or distillery yeast to every quart of flour; or twice as much home-made yeast.

Potato Yeast is made by the above rule, omitting the hops. It can be used in large quantities without giving a bitter taste, and so raises bread sooner. But it has to be renewed much oftener than hop yeast, and the bread loses the flavor of hop yeast.

Hard Yeast is made with home-brewed yeast (not brewers' or distillery), thickened with Indian meal and fine flour in equal parts, and then made into cakes an inch thick, and three inches by two in size, dried in the wind, but not in the sun. Keep them tied in a bag in a dry, cool place, where they will not freeze. One cake soaked in a pint of warm water (not hot) is enough for four quarts of flour. It is a good plan to work in mashed potatoes into this yeast, and let it rise well before using it. This makes the nicest bread. Some housekeepers say pour boiling water on one-third of the flour, and then mix the rest in immediately, and it has the same effect as using potatoes. When yeast ceases to look foamy, and becomes watery, with sediment at the bottom, it must be renewed. When good, the smell is pungent, but not sour. If sour, nothing can restore it.

Milk Yeast or Salt Rising. — Take a cup of fresh milk, bring it to a boil, then add enough cold water to make it lukewarm. Put in one tablespoonful of cornmeal, and one of sugar, enough flour to make a tolerably stiff batter. Keep in a

warm place, and stir about every half-hour for six hours. Then let it stand till it rises. Then make your bread, adding a little more sugar and warm water, if the yeast is not sufficient for as large a loaf as you wish. Keep the bread in a warm place till it rises, then bake. Put in the stove as soon as the fire is made.

Bread of Fine Flour. - Take four quarts of sifted flour, one quart of lukewarm water, in which are dissolved two teaspoonfuls of salt, two teaspoonfuls of sugar, a tablespoonful of melted butter, and one cup of yeast. Mix and knead very thoroughly, and have it as soft as can be moulded, using as little flour as possible. Make it into small loaves, put it in buttered pans, prick it with a fork, and when light enough to crack on the top, bake it. Nothing but experience will show when bread is just at the right point of lightness. If bread rises too long, it becomes sour. This is discovered by making a sudden opening and applying the nose, and the sourness will be noticed as different from the odor of proper lightness. Practice is needed in this. If bread is light too soon for the oven, knead it awhile, and set it in a cool place. Sour bread can be remedied somewhat by working in soda dissolved in water about half a teaspoonful for each quart of flour. Many spoil bread by too much flour, others by not kneading enough, and others by allowing it to rise too much. The goodness of bread depends on the quality of the flour. Some flour will not make good bread in any way. New and good flour has a yellowish tinge, and when pressed in the hand is adhesive. Poor flour is dry, and will not retain form when pressed. Poor flour is bad economy, for it does not make as nutritious bread as does good flour. Bread made with milk sometimes causes indigestion to invalids, and to children with weak digestion. Take loaves out of the pans, and set them sidewise, and not flat, on a table. Wrapping in a cloth makes the bread clammy. Bread is better in small loaves. 'Let your pans be of tin (or better, of iron), eight inches long, three inches high, three inches wide at the bottom, and flaring so as to be four inches wide at the top. This size makes more tender crust, and cuts more neatly than larger loaves. Oil the pans with a swab, and sweet butter or lard. They should be well washed and dried, or black and rancid oil will gather. All these kinds of bread oan be baked in biscuit-form; and, by adding water and eggs, made into griddle-cakes. Bread having potatoes in it keeps moist longest, but turns sour soonest.

Bread of Middlings or Unbolted Flour.—Take four quarts of coarse flour, one quart of warm water, one cup of yeast, two teaspoonfuls of salt, one spoonful of melted lard or butter, two cups of sugar or molasses, and half a teaspoonful of soda. Mix thoroughly, and bake in pans the same as the bread of fine flour. It is better to be kneaded rather than made soft with a spoon.

Brown Bread.—One quart brown flour, one quart Indian meal, one coffeecup of molasses, one heaping spoonful of soda in one quart of buttermilk, one egg. If too thin, add a little rye or wheat flour. Bake in one big loaf, three hours.

"Entire Wheat" Bread is very nutritious and easily made, as it does not require any kneading. Take three pints of the flour, mixed with one quart of water and half a cake of compressed yeast. Let this stand over night, and in the morning add another pint of flour, two tablespoonfuls of salt, two of sugar, and one of melted butter. Stir the whole well and set it to rise again in the baking-tins. They should be two-thirds full, allowing it to rise until even with the top, when they should be put in the oven.

Steamed Brown Bread. — One pint Indian meal, half a cup of treacle, salt, one teaspoonful baking-soda, and one teaspoonful cream of tartar. Mix meal, treacle, a

pinch of salt, baking-soda, and cream of tartar well together. Then add enough buttermilk to make a firm dough. Mix quickly and put into steamer or basin, and steam in fast boiling water for four hours.

Baked Brown Bread. — One pint wheat-meal, one pint Indian corn-meal, half a cup of treacle, salt, one egg, two teaspoonfuls of baking-soda, two teaspoonfuls of cream of tartar, milk or water. Mix wheat-meal, Indian meal, half teaspoonful salt, baking-soda, cream of tartar, well together. Warm the treacle and add it, with the milk (or water), to the dry ingredients. Put in floured tin, and bake five hours in a moderate oven. A small quantity of good raisins will add much to the flavor of brown bread. After they have once eaten it, children invariably ask for a "plum loaf."

Boston Brown Bread made with Sour Milk.—Rye-meal, one-half pint; Indian meal, one pint; sour milk, one pint; molasses, half a gill; teaspoonful salt; one teaspoonful soda, dissolved in little hot water. Let rise one hour, and steam four hours.

Rye and Indian Bread.—The Boston or Eastern brown bread is made thus: One quart of rye, one quart of corn-meal, one cup of molasses, half a cup of distillery yeast, or twice as much home-brewed; one teaspoonful of soda, and one teaspoonful of salt. Wet with hot water till it is stiff as can be stirred with a spoon. This is put in a large brown pan and baked four or five hours. It is good toasted, and improved by adding boiled squash.

Third Bread. —This is made with equal parts of rye, corn-meal, and unbolted flour. To one quart of warm water add one teaspoonful of salt, half a cup of distillery, or twice as much home-brewed yeast, and half a cup of molasses, and thicken with equal parts of these three kinds of flour. It is very good for a variety, and some people prefer it to white bread, for milk toast.

Rye Bread.—Take a quart of warm water, a teaspoonful of salt, half a cup of molasses, and a cup of home-brewed yeast, or half as much of distillery. Add flour till you can knead it, and do it very thoroughly.

Oat-Meal Bread. — Oat-meal is sometimes bitter from want of care in preparing. When good, it makes excellent and healthful bread. Take one pint of boiling water, one great-spoonful of sweet lard or butter, two great-spoonfuls of sugar; melt them together, and thicken with two-thirds oat-meal and one-third fine flour. When blood-warm, add half a cup of home-brewed yeast and two well-beaten eggs. Mould into small cakes, and bake on buttered tins, or make two loaves.

Pumpkin Bread and Apple Bread. — These are very good for a variety. Stew and strain pumpkins or apples, and then work in either corn-meal or unbolted flour, or both. To each quart of the fruit add two tablespoonfuls of sugar, a pinch of salt, and a cup of home-brewed yeast. If the apples are quite sour, add more sugar. Make it as stiff as can be stirred with a spoon, and bake in patties or small loaves. Children like it for a change.

Corn-Meal Bread. — Always scald corn-meal. Melt two tablespoonfuls of butter or sweet lard, in one quart of hot water; add a teaspoonful of salt, and a teacup of sugar. Thicken with corn-meal and one-third as much fine flour, or unbolted flour, or middlings. Two well-beaten eggs improve it. Make it as stiff as can be easily stirred with a spoon, or, as some would advise, knead it like bread of white flour. If raised with yeast, put in a teacup of home-brewed yeast, or half as much of distillery. If raised with powders, mix two teaspoonfuls of cream tartar thoroughly with the meal, and one teaspoonful of soda in the water.

PUDDINGS.

Tapioca Pudding, with Fruit. — Soak a teacup of tapioca and a teaspoonful of salt in three tumblerfuls of warm, not hot, water for an hour or two, till softened. Take away the skins and cores of apples without dividing them; put them in the dish, with sugar in the holes, and spice if the apples are without flavor, not otherwise. Add a cup of water and bake till the apples are softened, turning them to prevent drying, and then pour over the tapioca and bake a long time, till all looks A BROWN-ISH YELLOW. Eat with a hard sauce. Do not fail to bake a long time. This can be extensively varied by mixing chopped apples, or quinces, or oranges, or peaches, or any kind of berries with the tapioca; and then sugar must be added according to the acid of the fruit, though some would prefer it omitted when the sauce is used. The beauty may be increased by a cover of sugar beaten into the whites of eggs, and then turned to a yellow in the oven. Several such puddings can be made at once, kept in a cool place, and, when wanted, warmed over; many relish it better when very cold. Sago can be used instead of tapioca.

Cream Tapioca Pudding. — Soak three tablespoonfuls of tapioca in water, over night; put the tapioca into a quart of boiling milk, and boil half an hour. Beat the yolks of four eggs, with a cup of sugar. Add three tablespoonfuls of prepared cocoanut; stir in, and boil ten minutes longer. Pour into a pudding-dish. Beat the whites of the four eggs to a stiff froth, stir in three teaspoonfuls of sugar, and put this over the top. Sprinkle cocoanut over it, and brown for five minutes.

Apple Tapioca Pudding. — This is a very healthful pudding, and may be freely indulged in by invalids. Soak one cupful of tapioca in six cupfuls of water, over night. The next morning, pare, core, and chop about six nice, tart apples, and stir in the tapioca, with one cupful of sugar. Bake this pudding in a moderate oven about three hours, and serve either warm or cold, with cream or sugar if desired.

Queen of Puddings. — Into one quart of milk put one pint of bread crumbs, butter the size of an egg, the yolks of four eggs. Sweeten and flavor as for a custard, and bake. Make frosting of the whites of the eggs and one cup of sugar. Put on a layer of jelly when pudding is hot, and then the frosting. Brown slightly in oven.

Sponge Blueberry Pudding. — Fill a dish with slices of sponge cake. Prepare a pudding-sauce by cooking, until clear, one cup sugar, one teaspoon flour, a small piece of butter, and one pint of boiling water. When partly cooled, pour in one pint of canned berries (fresh ones in their season), and turn this over the cake. It is good hot or cold.

Snow Pudding.—Soak one ounce of gelatine in a pint of cold water for ten minutes; place the same over the fire, stir, and remove as soon as it is dissolved, and, when nearly cold, beat to a stiff froth with an egg-beater. Second, beat the whites of three eggs to a stiff froth; add it to the gelatine froth, together with the juice of three lemons, and pulverized sugar to suit the taste, and mix the whole. Next, pour into a mould and set aside to cool. Serve on a dish, with soft custard made from the yolks of the eggs.

Bread and Butter Pudding. — Make a custard of half a pint of milk and one egg, with sugar, in which soak your sliced and buttered bread for an hour or two; then lay them in a dish, with fruit or jelly sprinkled with sugar between each two layers; then pour over another half-pint of milk, with two eggs, and bake.

Rice Pudding. — A teacupful of rice, the yolks of four eggs, the whites of three beaten separately, two ounces pounded sugar, two ounces raisins, one-quarter pound

suet chopped very fine, flavoring of ratafia or vanilla. Put these ingredients into a mould, and boil one and one-half hours. Serve with brandy or sweet sauce.

Another. — One teacup of rice, one teacup of sugar, one cup of raisins, one-half teacup of butter, one quart of milk; nutmeg, cinnamon, and salt to the taste. Put the butter in melted. Mix all in a pudding-dish and bake it two hours, stirring it frequently until the rice is swollen. It is good made without butter.

Banana Pudding.—Lay in a pudding-dish slices of sponge cake. Pour over boiled custard, with sliced bananas. Cover with soft frosting, which may be made of the whites of the eggs used in custard.

Steamed Pudding. — One and one-half cup of molasses, one cup each of finely chopped suet and dried currants, or any kind of berries, two well-beaten eggs, and four cups of flour. Spice to taste. Steam for two hours.

An Excellent Indian Pudding without Eggs. — Take severt heaping spoonfuls of scalded Indian meal, half a teaspoonful of salt, two spoonfuls of butter or sweet lard, a teacup of molasses, and two teaspoonfuls of ginger, or cinnamon to the taste. Pour into these a quart of milk while boiling hot. Mix well, and put in a buttered dish. Just as you set in the oven, stir in a teacup of cold water, which will produce the same effect as eggs. Bake three-quarters of an hour in a dish that will not spread it out thin.

Plum Pudding. — Chop and rub to a cream one-half pound of suet. Add a scant half pound of sugar. Mix well. Add three well-beaten eggs, one nutmeg grated, one-half teaspoonful of clove, one-half teaspoonful of mace, one-half teaspoonful of salt, one-fourth cup of brandy or one cup of milk, one-half pound of flour, one-half pound of raisins, one-half pound of currants, and three-eighths of a pound of citron. Steam from seven to eight hours. The raisins should be chopped. When the mixture is ready for steaming, it should be quite thin. The longer it is steamed, the better.

Rennet Custard. — Put three tablespoonfuls of rennet wine to a quart of milk, and add four or five great spoonfuls of white sugar and a saltspoonful of salt. Flavor it with wine, or lemon, or rose-water. It must be eaten in an hour, or it will turn to curds.

Bird's-nest Pudding. — Pare tart, well-flavored apples; scoop out the cores without dividing the apple; put them in a deep dish, with a small bit of mace and a spoonful of sugar in the opening of each apple. Pour in water enough to cook them. When soft, pour over them an unbaked custard, so as just to cover them, and bake till the custard is done.

A Minute Pudding of Cornstarch. — Take four heaped tablespoonfuls of cornstarch, three eggs, a teaspoonful of salt, and one quart of milk. Boil the milk, reserving a little to moisten the flour. Stir the flour to a paste, perfectly smooth, with the reserved milk, and put it into the boiling milk. Add the eggs well-beaten; let it boil till very thick, which will be in two or three minutes, then pour into a dish and serve with liquid sauce. After the milk boils, the pudding must be stirred every moment till done.

Cocoanut Pudding (plain). — Take one quart of milk, five eggs, and one cocoanut, grated. The eggs and sugar are beaten together, and stirred into the milk when hot. Strain the milk and eggs and add the cocoanut, with nutmeg to the taste. Bake about twenty minutes, like puddings.

Carrot Pudding. — Half a pound each of grated carrots and sweet potatoes, half a pound chopped beef-suet, half a pound each of raisins and currants, seeded and

chopped fine, half a pound stale bread crumbs, one-quarter of a pound sugar, teaspoon salt, grated lemon peel and spice to taste. Boil in a mould or bag four hours. Serve hot with rich sauce. This is a winter dessert, and a nice, inexpensive pudding.

Plain Macaroni or Vermicelli Puddings. — Put two ounces of macaroni or vermicelli into a pint of milk, and simmer until tender. Flavor it by putting in two or three sticks of cinnamon, while boiling, or some other spice when done. Then beat up three eggs; mix in an ounce of sugar, half a pint of milk, a teaspoonful of salt, and a glass of wine. Add these to the broken macaroni or vermicelli, and bake in a slow oven.

Green Corn Pudding. — Twelve ears of corn, grated. Sweet corn is best. One pint and a half of milk. Four well-beaten eggs. One teacup and a half of sugar. Mix the above, and bake it three hours in a buttered dish. More sugar is needed if common corn is used.

English Fruit Pudding.—One pound currants, one pound stoned raisins, one pound sugar, one pound suet, two pounds grated or soaked bread, six eggs, one-half teaspoonful saleratus, one teaspoonful salt, and one grated nutmeg. Crumb the soft part of the bread fine; soak the crust with boiling milk, or water will do; beat up the eggs and put all together. Mix thoroughly with the hands. Take a square piece of cotton cloth and lay it in a tin pan; put the pudding into the cloth and tie down close; put into a pot of boiling water and boil five hours. As the water boils away, add more boiling water.

Chocolate Pudding. — One quart of milk, three tablespoonfuls sugar, four tablespoonfuls cornstarch, two and one-half tablespoonfuls chocolate. Scald the milk over hot water. Dissolve the cornstarch in a little scalded milk, and before it thickens, add the chocolate, which has been dissolved by placing in a small basin, which is set in a still larger one of boiling water. Stir until sufficiently cooked. Use with cream, or sauce of butter and cream, stirred to a cream.

Rice and Apple Pudding. — One cup of rice, boiled very soft; stir well to keep from burning. Eight large apples, stewed; pass the pulp through a sieve. Mix it thoroughly with the rice. Add one-half teaspoonful of butter and the yolks of two eggs, well-beaten; sweeten to the taste; bake. Beat the whites of the eggs and put on top, and return to the oven a few moments to set the frosting. It is better almost cold.

Orange Pudding. — Peel and cut five good oranges into thin slices, taking out all the seed. Put over them a coffee-cup of fine white sugar. Let a pint of milk get boiling hot by setting it in hot water. Add the yolks of three eggs, well-beaten, one tablespoonful of cornstarch, made smooth in a little milk. Stir all the time, and as soon as it thickens, pour over the fruit. Beat the whites to a stiff froth and spread over the top for frosting, and set in the oven to harden. Best eaten cold.

Boiled Scrap Bread Pudding.—Any odd pieces of bread. Put into a bowl and pour boiling milk over them. Let them stand till well soaked, then beat up with a fork. Add a small piece of dripping, a few currants or raisins, a little moist sugar. Mix well up, put into a greased bowl, tie a floured cloth over the top, and boil for an hour. Good either hot or cold.

Plum Pudding for the Million. — One-half pound chopped suet, one-half pound flour, one-half pound bread crumbs, one pound grated carrots, one pound potatoes, one pound currants, one pound raisins, one pound apples, one teaspoonful of ginger, one teaspoonful of cinnamon, one teaspoonful of allspice, one teaspoonful of baking-powder, half a nutmeg (grated), one pound sugar, a good pinch of salt. Mix the

flour, bread crumbs, suet, carrots, potatoes, ginger, cinnamon, allspice, nutmeg, baking-powder, salt, and sugar well; then add currants, raisins (stoned and cleaned), and apples. Mix with water or milk into a soft paste. Boil in floured cloth for four hours, or in a basin or mould for five hours. Good.

Brown Suet Pudding.— One pound flour, one-fourth pound suet, one-half pound treacle, one-half pound raisins, salt, half nutmeg (grated), one teaspoonful cinnamon, one teaspoonful soda, one teaspoonful cream of tartar, milk. Warm the treacle, chop the suet very fine, mix the flour with a pinch of salt, soda, cream of tartar, nutmeg, cinnamon, all well together; add treacle, suet, raisins, and put in a well-floured cloth, and boil quickly for three hours.

Fig Pudding. — One pound figs, one-half pound flour, one-half pound bread crumbs, one-fourth pound suet, two ounces sugar, half a teaspoonful nutmeg, one teaspoonful cinnamon, one small teaspoonful baking-powder, milk or water. Chop the suet and figs fine. Mix flour, bread crumbs, sugar, cinnamon, nutmeg, and baking-powder well together. Add suet and figs, with enough milk or water to make into dough. Roll it into a floured cloth, leaving room for it to swell, and boil very fast for three hours.

Indian Pudding. — One quart milk, one-half pound Indian meal, one small cup treacle, one tablespoonful dripping, one teaspoonful ginger, one egg, one teaspoonful baking-powder, a pinch of salt. When the milk is nearly boiling, wet the meal with some of the cold milk and let it boil; then add the treacle, dripping, ginger, pinch of salt, and egg well beaten; lastly, the baking-powder. Turn it into a pie-dish and bake for two hours.

Cottage Pudding. — One cup milk, one teaspoonful (large) butter, one teaspoonful sugar, three-fourths pound flour, one teaspoonful soda, one teaspoonful cream of tartar, yolks of two eggs. Mix sugar, yolks of eggs, and butter to a cream; then add the milk and flour by degrees. Beat very light; then add soda and cream of tartar, and bake for one hour.

A Few Hints on Pudding Making. — When a pudding is to be boiled, see that the cloth to be used is very clean, and that it is dipped in boiling water, dredged with flour, and shaken well before the pudding is put into it.

If a bread pudding, it must be tied loose. If a batter one, it must be tied tight.

When a shape or basin is to be used, it must be well greased before the pudding is put in. When it is ready, care must be taken in lifting it out. Allow it to stand for a few minutes before unloosing the cloth.

All puddings must be boiled in plenty of water, turned frequently, kept closely covered, and never allowed to go off the boil.

If the pudding is to be baked, the dish or pan must be also greased before it is put in. Bread and custard puddings require time and a moderate oven, to raise them.

As a rule, steamed puddings are put in an earthenware dish, covered with a tight cover or greased paper, which is placed in a pan of boiling water, which must not come more than three parts up the sides of the pudding-dish. If the water boils away, more boiling water must be added, and it must be kept always boiling. Be careful in removing the lid that no drops fall on the pudding. Puddings, etc., when steamed, do not require so much liquid in them as when baked. The dry air of the oven dries them; steaming keeps them moist.

CHAPTER IV.

RECIPES FOR HORSES, CATTLE, SHEEP, ETC.

HORSES.

Sure Remedy for Bots. — When a horse is attacked with bots, it may be known by the occasional nipping at his own sides, and by red pimples, or projections, on the inner surface of the upper lip, which may be seen plainly by turning up the lip. First, then, take two quarts of new milk, with one quart of molasses, and give the horse the whole amount. Second, fifteen minutes afterwards, give two quarts of very strong, warm sage tea. Lastly, thirty minutes after the tea, you will give three pints (or enough to operate as physic) of courier's oil. The cure will be complete, as the milk and molasses cause the bots to let go their hold, the tea puckers them up, and the oil carries them entirely away. If you have any doubt, one trial will satisfy you perfectly. In places where the courier's oil cannot be obtained, substitute for it a double handful of salt, dissolved in just what warm water will dissolve it.

Cure for Colic in Horses. — Spirits of turpentine, three ounces; laudanum, one ounce; mix, and give all for a dose, by putting it into a bottle with one-half pint of warm water, which prevents injury to the throat. If relief is not obtained in one hour, repeat the dose, adding one-half ounce of the best powdered aloes well dissolved together, and have no uneasiness about the result.

Symptoms.—The horse often lies down and suddenly rises again with a spring; strikes his belly with his hind feet, stamps with his fore feet, and refuses every kind of food, etc. I suppose there is no other medicine in use, for colic, either in man or horse, equal to this mixture.

Dose.—For persons, a dose would be from one to two teaspoonfuls; children or weak persons, less, according to the urgency of the symptoms; to be taken in warm water or warm tea.

Positive Cure for Poll Evil and Fistula. — Take common potash, one-quarter ounce; extract of belladonna, one-half drachm; gum-arabic, one-quarter ounce. Dissolve the gum in as little water as practicable; then, having pulverized the potash, unless it is moist, mix the gum water with it, and the potash will soon dissolve; then mix in the extract and it is ready to use; and it can be used without the belladonna, but it is more painful without it, and does not have quite as good an effect.

Directions.—The best plan to get this into the pipes is by means of a small syringe, after having cleansed the sore with soapsuds; repeated once in two days, until all the callous pipes and hard fibrous base around the poll evil or fistula are completely destroyed.

Grease-Heel and Common Scratches. — Take lye made from wood ashes, and boil white oak bark in it until it is quite strong, both in lye and dark ooze; when it is cold it is ready for use. First, wash off the horse's legs with dishwater or castile soap, and when dry, apply the ooze with a swab upon a stick which is sufficiently long to keep you out of his reach, as he will tear around like a wild horse; but you must wet all well once a day, until you see the places are drying up. The grease-heel

may be known from the common scratches by the deep crack, which does not appear in the common kind. Of course, this will fetch off the hair, but the disease has been known to fetch off the hoof; then, to bring on the hair again, use salve made by stewing sweet elder bark in old bacon. Then form the salve, by adding a little resin, according to the amount of oil when stewed, about one-quarter pound to each pound of oil.

Contracted Hoof, or Sore Feet. No. 1.—Take equal parts of soft fat, yellow wax, linseed oil, Venice turpentine, and Norway tar; first, melt the wax, then add the others, mixing thoroughly. Apply to the edge of the hair once a day.

No. 2.— Benzine, one ounce; salts of nitre, one ounce; alcohol, three ounces; aqua ammonia, two ounces; Venice turpentine, eight ounces. Mix. Apply to the edge of the hair and all over the hoof once a day for ten days; then twice a week for a short time.

No. 3.—Resin, four ounces; lard, eight ounces. Heat them over a slow fire. Then take off and add powdered verdigris, one ounce, and stir well to prevent its running over. When partly cool, add two ounces spirits of turpentine. Apply to the hoof about one inch down from the hair.

Favorite Recipes for Heaves.—No. 1. Assafœtida pulverized, one ounce; camphor gum pulverized, one-half ounce. Mix, and divide into four powders. Feed one every other night for a week.

No. 2.—Resin, two ounces; tartar emetic, two ounces; Spanish brown, two ounces; cayenne, two ounces. Mix, and give two teaspoonfuls twice a day, in the feed.

No. 3. — A horseman with whom I am acquainted says he has cured several cases of heaves with oil tar. He gives the ordinary case a teaspoonful every night, or every other night, by pouring it onto the tongue, and then giving some grain, which carries it into the stomach. He says he has given very bad cases two or three table-spoonfuls at a dose, with grand results.

Distemper. — Hops, two ounces; carbolic acid, thirty drops; boiling water, two gallons. Mix the hops and carbolic acid with the boiling water, and compel the animal to inhale the steam for fifteen or twenty minutes at a time. Repeat three times a day. Apply a strong mustard paste to the throat, and place a warm poultice over the paste. Feed warm mashes and boiled vegetables. Keep the stable comfortably warm and the air pure. Give the following powders once a day: Powdered Peruvian bark, two ounces; powdered gentian, one ounce; powdered copperas, one ounce. Mix, and divide into eight powders.

Founder cured in Twenty-four Hours. —Boil or steam stout oat-straw for half an hour. Then wrap it around the horse's leg, quite hot. Cover up with wet woollen rags, to keep in the steam. In six hours renew the application. Take one gallon of blood from the neck vein, and give one quart of linseed oil. He may be worked next day.

Cure for Staggers. — Give a mess twice a week, composed of bran, one gallon; sulphur, one tablespoonful; saltpetre, one teaspoonful; boiling sassafras tea, one quart; assafœtida, one and one-eighth ounces. Keep the horse from cold water for half a day afterwards.

Cracked Heels.—Tar, eight ounces; beeswax, one ounce; resin, one ounce; alum, one ounce; tallow, one ounce; sulphate of iron, one ounce; carbolic acid, one drachm; mix and boil over a slow fire. Skim off the filth and add two ounces of the scraping of sweet elder.

Ring-Bone and Spavin Cure. — Venice turpentine and Spanish flies, of each two ounces; euphorbium and aqua ammonia, of each one ounce; red precipitate, one-half ounce; corrosive sublimate, one-quarter ounce; lard, one and one-half pounds. Pulverize all, and put into the lard. Simmer slowly over coals, not scorching or burning, and pour off free of sediment. For ring-bones, cut off the hair and rub the ointment well into the lumps, once in forty-eight hours. For spavins, once in twenty-four hours for three mornings. Wash well with suds previous to each application, rubbing over the place with a smooth stick, to squeeze out a yellow matter. This has removed very large ring-bones.

Cure for Mange. — Oil of tar, one ounce; lac sulphur, one and one-half ounces; whale oil, two ounces. Mix. Rub a little on the skin wherever the disease appears, and continue, daily, for a week, and then wash off with castile soap and warm water.

To grow Hair. — Mix sweet oil, one pint; sulphur, three ounces. Shake well, and rub well into the dock twice a week.

For Worms. — Calomel, one drachm; tartar emetic, one-half drachm; linseed meal, one ounce; fenugreek, one ounce. Mix and give in feed at night, and repeat the dose for two or three times, and follow with one and one-half pints of raw linseed oil, about six hours after the last powder has been given.

Physic Balls for Horses. — Barbadoes aloes, from four to five or six drachms (according to the size and strength of the horse); tartrate of potassa, one drachm; ginger and castile soap, each two drachms; oil of anise or peppermint, twenty drops. Pulverize and make all into one ball, with thick gum solution. Feed by giving scalded bran, instead of oats, for two days before giving the physic, and during its operation.

Sweeney Liniment. — Take alcohol and spirits of turpentine, of each eight ounces; camphor gum, pulverized cantharides, and capsicum, of each one ounce; oil of spike, three ounces. Mix all; or perhaps the best plan is to tincture the capsicum first, and use the tincture instead of the powder, by which means you are free of sediment. Bathe this liniment in with a hot iron. The first case has yet to be found where it has not cured this disease, when faithfully followed.

Sprint and Spavin Liniment. — Take a large-mouthed bottle and put into it oil of origanum, six ounces; gum camphor, two ounces; mercurial ointment, two ounces; iodine ointment, one ounce. Melt by putting the bottle into a kettle of hot water. Apply it to bone spavins or splints twice daily, for four or five days. The lameness will trouble you no more.

Bog-Spavin and Wind-Gall Ointment; also Good for Curbs, Splints, Ring-Bone, and Spavin. — Take pulverized cantharides, one ounce; mercurial ointment, two ounces; tincture of iodine, one and one-half ounces; spirits of turpentine, two ounces; corresive sublimate, one and one-half drachms; lard, one pound. Mix well, and when desired to apply, first cut off the hair, wash well and anoint, rubbing it in well with the hand, or glove if preferred. Two days after, grease the part with lard, and in two days more wash off and apply the ointment again. Repeat the process every week, as long as necessary.

Unhealthy Ulcers. — Nitric acid, one ounce; blue vitriol, three ounces; soft water, fifteen ounces.

Water Farcy. No. 1.—Saltpetre, two ounces; copperas, two ounces; ginger, one ounce; fenugreek, two ounces; anise, one-half ounce; gentian, one ounce. Mix, and divide into eight powders; give two or three each day.

No. 2. — Gentian, one ounce; ginger, one-half ounce; anise, one ounce; ele-

campane, two ounces; blue vitriol, one ounce; flasseed meal, two ounces; saltpetre, two ounces. Mix, and divide into eight powders. Moderate daily exercise and rubbing the limbs are useful.

For Looseness or Scouring in Horses or Cattle. — Tormentil root, powdered; dose, for a horse or cow, one to one and one-half ounces. It may be stirred into one pint of milk and given; or it may be steeped in one and one-half pints of milk, then given from three to six times daily, until cured.

Cough. — Quit feeding musty hay, and feed roots and laxative food. Sprinkle human urine on his fodder; or cut up cedar boughs and mix with his grain; or boil a small quantity of flaxseed and mix it in a mash of scalded bran, adding a few ounces of sugar, molasses, or honey. Administer lukewarm. If there should be any appearance of heaves, put a spoonful of ground ginger once per day in his provender, and allow him to drink freely of lime water.

Ointment for Horses. — Beeswax, two ounces; resin, two ounces; lard, four ounces; carbolic acid, one drachm; honey, one-half ounce. Melt all together and bring slowly to a boil; then remove from the fire, and add slowly one gill of spirits of turpentine, stirring all the time until cool. Used with good success for galls, cracked heels, flesh wounds, or bruises.

Eye Water. — Sugar of lead, one drachm; tincture of opium, two drachms; soft water, one pint. Mix, and wash the eye two or three times a day.

Splint, or Broken Hoof. — Let the blacksmith bore two holes on each side of the crack or split; pass along nails through the holes, and clinch tight. After anointing with the hoof-bound liquid, it will soon grow together.

For Sprains, etc. — Hog's lard and spirits of turpentine. Mix, and place in the hot sunshine for four or five days. Apply four or five times a week.

CATTLE.

Garget.—Treatment.—This is an inflammation of the internal substance of the udder. One or more of the teats, or whole sections of the udder, become enlarged and thickened, hot, tender, and painful. The simplest remedy, in mild cases, is to put the calf to its mother several times a day. This will remove the flow of milk, and often dispel the congestion. Sometimes the udder is so much swollen that the cow will not permit the calf to suck; then a dose of purging medicine and frequent washing of the udder, in mild cases, are usually successful. The physic should consist of epsom salts, one pound; ginger, half an ounce; nitrate of potassa, half an ounce; dissolved in a quart of boiling water; then add a gill of molasses, and give to the cow lukewarm. Diet moderate; that is, on bran, or, if in summer, green food. Rub thoroughly with camphorated spirits, three times a day, and milk several times a day.

Puerperal, or Milk Fever. — Treatment. — A pound to one and a half pounds of epsom or Glauber's salts, according to the size and condition of the animal, should be given, dissolved in a quart of boiling water; and, when dissolved, add pulverized red pepper, a quarter of an ounce; caraway, ditto; ginger, ditto. Mix, and add a gill of molasses, and give lukewarm. If this medicine does not act on the bowels, the quantity of ginger, capsicum, and caraway must be doubled. The insensible stomach must be aroused. When purging is begun in an early stage, the fever will more readily subside. After the operation of the medicine, sedatives may be given, if necessary.

Sore Teats. — Treatment. — First, wash with warm water and castile soap; then lubricate the parts with equal portions of lime-water and linseed oil.

Sore Teats and Chafed Udder. — Treatment. — Foment the parts daily with an infusion of camomile flowers, for at least fifteen minutes at a time; then wipe dry and use the lime liniment. These temporary, or what might, with more propriety, be termed local maladies, will, if the system be free from morbid matter, generally yield to local remedies. If, however, no change for the better can be observed, a good aperient should be given.

Cow-pox. — Two varieties of sore teats occur in the cow, in the form of pustular eruption. They first appear as small vesicles, containing a purulent matter, and subsequently assume a scabby appearance; or small ulcers remain, which often prove troublesome to heal. This latter is the cow-pox, from which Jenner derived the vaccine matter.

Treatment. —Foment the teats well with warm water and castile soap; after which wipe the bag dry, and dress with citrine ointment. The preparations of iodine have also been recommended, and they are very serviceable.

Coryza. — In the spring, and late in the fall, catarrhal affections are quite common, occurring frequently in an epizootic form. Coryza, or nasal catarrh, commonly called a cold in the head, is not very common among cows. As its name implies, it is a local disease, confined to the lining membrane of the nose; and, consequently, the general system is not usually disturbed.

Treatment. — The animal should be kept on a low diet for a few days, the nostrils occasionally steamed, and one of the following powders given night and morning, which, in most cases, will be all the medicine required. Nitrate of potassa, one ounce; digitalis leaves pulverized, and tartrate of antimony, of each one drachm; sulphate of copper, two drachms. Mix, and divide into eight powders. Should the disease prove obstinate, give, for two or three days, two ounces of epsom salts at a dose, dissolved in water, three times a day.

Diarrhœa. — Cattle are frequently subject to this disease, particularly in the spring of the year, when the grass is young and soft. Occasionally it assumes a very obstinate form, in consequence of the imperfect secretion of gastric juice; the fæces are thin, watery, and fetid, followed by very great prostration of the animal.

Treatment. — If in a mild form, the diet should be low; give two ounces of epsom salts twice a day. In a more obstinate form, give two drachms of carbonate of soda in the food. Oak-bark tea will be found very useful in these cases; or one of the following powders, twice a day, will be found very advantageous: Pulverized opium and catechu, each one and a half ounces; prepared chalk, one drachm; to be given in the feed. Calves are particularly subject to this disease, and it often proves fatal to them. It sometimes assumes an epizootic form, when it is generally of a mild character. So long as the calf is lively and feeds well, the farmer should entertain no fear for him; but if he mopes about, refuses his food, ceases to ruminate, wastes in flesh, passes mucous and blood with the fæces, and exhibits symptoms of pain, the case is a dangerous one. In such an emergency lose no time, but give two or three ounces of castor oil, with flour gruel, or two ounces of salts at a dose, followed with small draughts of oak-bark tea; or give, twice a day, one of the following powders: Pulverized catechu, opium, and Jamaica ginger, of each, half an ounce; prepared chalk, one ounce. Mix, and divide into twelve powders. Bran mashes, green food, and flour gruel should be given, with plenty of salt.

Foul in the Foot.—Cows and other stock, when fed in low, wet pastures, will often suffer from ulcers or sores, generally appearing first between the claws. This is commonly called foul in the foot, and is analagous to foot-rot in sheep. It is often very painful, causing severe lameness and loss of flesh, and discharges a putrid matter or pus. Sometimes it first appears in the form of a swelling near the top of the hoof, which breaks and discharges foul matter.

Treatment. — If the case has been neglected till the pasterns become swollen and tender, the sore may be thoroughly cleansed out, and dressed with an ointment of sulphate of iron, one ounce; molasses, four ounces; simmered over a slow fire till well mixed. Apply on a piece of cotton batting, and secure upon the parts. If any morbid growth or fungus appear, use equal parts of powdered bloodroot and alum, sprinkled on the sore, and this will usually effect a cure. Some also give a dose of flowers of sulphur, half an ounce; powdered sassafras bark, one ounce; and burdock, two ounces; the whole steeped in a quart of boiling water, and strained when cool; and if the matter still continues to flow from the sore, wash it morning and night with chloride of soda, one ounce; or a tablespoonful of common salt dissolved in a pint of water.

Flatulent Colic. — This disease is generally occasioned by some derangement of the digestive organs, whereby the food, instead of being properly digested, undergoes fermentation, and thus carbolic acid gas, or sulphuretted hydrogen, is evolved.

Treatment. — This species of colic can generally be relieved as follows: Take one ounce of hyposulphite of soda. Dissolve the same in a quart of water. Then add tincture of ginger and tincture of golden seal, of each one ounce. Drench the animal with the same. Clysters of soapsuds, to which a little salt may be added, should be thrown into the rectum occasionally. The belly should be well rubbed with coarse straw; and, in severe cases, rub some mustard, moistened with vinegar, on the lower part of the abdomen. After a lapse of two hours, should the patient appear unrelieved, a second dose of the colic drench may be given. Generally, however, one dose is sufficient.

To kill Lice on Cattle. — Treatment. — Take one ounce of carbolic acid, one quart soft soap, one and a half gallons water. Mix, and apply.

Yoke Galls. — Treatment. — The exciting cause is local irritation, occasioned by the yoke. As soon as an abrasion is discovered on the neck, the animal should be excused from duty for a few days. The abraded part should be lubricated, two or three times daily, with a small quantity of glycerine. In most cases, however, a few applications of tincture of aloes and myrrh will produce a healthy action, and thus restore the parts to soundness. Should there be no abrasion, yet some tumefaction, heat, and tenderness, a cold-water bandage, renewed as occasion seems to require, will, in most cases, have the desired effect. Occasionally the integuments are so bruised as to induce induration (hardening). Local induration in the neck is a morbid condition of parts, known to the farriers of old as "sit-fast." The treatment consists in smearing the part with a portion of the following: One-half drachm of iodine, seven drachms of simple ointment, one-half drachm of powdered bloodroot. Mix. A few applications of a portion of the above will have the effect of removing the sit-fast or eschar, when a healthy granulating surface will appear.

For Hollow Horn. — Treatment. — Give once a week, in dry feed, sulphate of iron, two drachms; powdered nux vomica, one drachm; powdered gentian, one ounce.

SHEEP.

Administering Medicine. — The stomach into which medicines are to be administered is the fourth or digesting stomach. The comparatively insensible walls of the rumen, or paunch, are but slightly acted upon, except by doses of very improper magnitude. Medicine, to reach the fourth stomach, should be given in a state as nearly approaching fluidity as may be. Even then it may be given in such a manner as to defeat the object in view. If the animal forcibly gulps fluids down, or if they are given hastily and bodily, they will follow the caul at the base of the gullet with considerable momentum, force asunder the pillars, and enter the rumen; if they are drank more slowly, or administered gently, they will trickle down the throat, glide over these pillars, and pass on through the maniplus to the true stomach.

Foot Rot. — Causes. — General debility, exposure in wet pastures, contagion, foul habit of the body.

Treatment. — Endeavor to ascertain the exciting cause, and, if possible, remove it. If the disease has assumed a putrid type, the superfluous horn may be removed. The parts are then to be washed with four ounces of pyroligneous acid, three ounces of water. Mix. A piece of lint is afterward to be saturated with the above and applied as a dressing, and changed as occasion may require. The local remedy will avail but little unless we sustain the living powers, and thus improve the secretions. The usual remedies are: One ounce of powdered golden seal, one-half ounce of powdered sulphur, one ounce of powdered charcoal, one ounce of powdered sassafras, two drachms of powdered assafcetida, two pounds of flaxseed. Mix, and give a table-spoonful twice a day, in the food. Supposing a number of animals to be affected, it would occupy too much time to treat them singly; hence, let them be made to walk slowly, or linger for some time, in a wooden trough, the floor of which may be covered to the depth of one inch with the following: Two pints of linseed oil, four pints of pyroligneous acid, one pint of kerosene.

Common Catarrh. — This affection prevails most extensively among sheep that have been exposed to rains and unpleasant weather. The disease manifests itself in the form of a defluxion from the nostrils of a muco-serous discharge, accompanied by frequent sneezing and occasional cough. As soon as the disease is discovered, the affected animals should be placed in comfortable quarters. Then prepare the following drench: Two ounces of composition powder and one quart of boiling water. Pour the boiling water on the powder. Let the mixture stand in a warm place for an hour. Pour off the clear liquor, and add two ounces of sugar of milk.

Dose. — A wine-glassful once or twice daily. Malignant epizootic catarrh may be treated in the same manner, with the addition of one ounce of chlorate of potash per day, which can be dissolved in the above drench.

Diarrhœa and Dysentery. — Curable cases of the above character are brought to a favorable termination by using the following drench: One ounce of finely pulverized animal charcoal, one gill of scalded cow's milk, one drachm of hyposulphite of soda. Mix. The above constitutes a dose. It may be repeated as often as the emergency seems to require; but, should the subject be a young lamb, one-half of the quantity will suffice.

Constipation of the Bowels. — Constipation is almost always the result of a deranged condition of the digestive organs. A deranged condition of the liver, for example, will result in costiveness, for which the following drench is recommended: Two ounces of Glauber's salts, one teaspoonful of fluid extract of leptandra, one-half

pint of thin gruel. Dissolve the salts in the gruel, and drench the animal with the same.

Tympanites. — This disease is very easily recognized by the bloated appearance of the animal. It is occasioned by the food running into fermentation and generating gas. The following remedy is a sure cure for tympanites, administered as a drench: Four drachms of hyposulphite of soda, one drachm of fluid extract of golden seal, two drachms of fluid extract of ginger, one wine-glassful of water.

SWINE.

Measles. — This is one of the most common diseases to which pigs are liable.

Treatment. — Suffer the animal to fast, in the first instance, for twenty-four hours, and then administer a warm drink, containing a drachm of carbonate of soda and an ounce of bole Armenian. Wash the animal, cleanse the sty, and change the bedding. Give at every feeding, say thrice a day, thirty grains of flowers of sulphur, and ten of nitre. It is to dirt, combined with a common fault, too little thought of, viz.: giving the steamed food or wash to the pigs at too high a temperature, that this disease is generally to be attributed. It is a troublesome malady to eradicate, but usually yields to such treatment as described, and is rarely fatal.

Jaundice. — Symptoms. — Yellowness of the conjunctiva, or "white of the eye," a similar hue extending to the lips, with sometimes, but not invariably, swelling of the under part of the jaw. Bleed behind the ear, diminish the quantity of food, and give a smart aperient every second day. Aloes are, perhaps, the best, combined with colocynth; the dose will vary with the size of the animal. A decoction of woodbine leaves and shoots has been recommended by the French veterinarians.

Foul Skin.—A simple irritability or foulness of skin will usually yield to cleanliness, and a washing with solution of chloride of lime; but if it has been neglected for any length of time, it assumes a malignant character; scabs and blotches, or red and fiery eruptions, appear, and the disease rapidly passes off.

Staggers. — Caused by excess of blood to the head. Bleed freely from behind the ears, and purge.

Epilepsy. — This is a disease quite common, and often arises from the ringing of the mother during the period of gestation. It will manifest itself by trembling and staggering of the litter when young, and sometimes show its effects on the grown-up pigs. It is far best to pork the animals at once. If it manifests itself in store animals, full grown, anoint the backbone with turpentine and tallow, in equal proportions, melted together.

Tumors. — These hard swellings make their appearance on different parts of the animal's body. It would not be easy to state the causes which gave rise to the tumors, for they vary with circumstances. They are not formidable, and require only to be suffered to progress until they soften; then make a free incision, and press out the matter. Sulphur and nitre should be given in the food, as the appearance of these swellings, whatever be the cause, indicates the necessity of alterative medicines.

Colic.—This is not an uncommon disease, resulting from too much soured food. It is manifested by great and violent, but intermittent pains. The pig will roll about and kick its belly, then rise up and walk about for a few minutes, and again have a recurrence of the paroxysm. Administer, during the interval, one gill of peppermint water, forty drops of tincture of opium. The animal is to be kept warm, and supplied with food (new milk, warm), until entirely better.

Cholera. — The term "cholera" is employed to designate a disease which has been very fatal among swine in different parts of the United States, and for the reason that its symptoms, as well as the indications accompanying its termination, are very nearly allied to what is manifested in the disease of that name which visits man.

Treatment. — As a preventive, the following will be found valuable: Flowers of sulphur, six pounds; animal charcoal, one pound; sulphate of iron, six ounces; cinchona, pulverized, one pound. Mix well together in a large mortar; afterwards give a tablespoonful to each animal, mixed with a few potato-peelings and corn-meal, three times a day. Continue this for one week, keeping the animal at the same time in a clean, dry place, and not allowing too many together.

Lice. — These are sometimes troublesome in store pigs. Let them be well washed with soft soap and water; or, if this fails, with a decoction of tobacco.

POULTRY.

Asthma. — This common disease seems to differ sufficiently in its characteristics to warrant a distinction into two species.

Treatment. — Confirmed asthma is difficult to cure. For the disease in its incipient state, the fowl should be kept warm, and treated with repeated doses of hippopowder and sulphur, mixed with butter, with the addition of a small quantity of cayenne pepper.

Diarrhœa. — There are times when fowls dung more loosely than at others, especially when they have been fed on green or soft food; but this may occur without the presence of disease. Should this state, however, deteriorate into a confirmed and continued laxity, immediate attention is required to guard against fatal effects. The causes of diarrhœa are dampness, undue acidity in the bowels, or the presence of irritating matter there.

Treatment. — This, of course, depends upon the cause. If the disease is brought on by a diet of green or soft food, the food must be changed, and water sparingly given; if it arises from undue acidity, chalk mixed with meal is advantageous, but rice-flour boluses are most reliable. Alum water, of moderate strength, is also beneficial. In cases of bloody flux, boiled rice and milk, given warm, with a little magnesia or chalk, may be successfully used.

Roup. — This disease is caused mainly by cold and moisture, but it is often ascribed to improper feeding and want of cleanliness and exercise. It affects fowls of all ages, and is either acute or chronic, sometimes commencing suddenly, on exposure, at others gradually, as the consequence of neglected colds, or damp weather or lodging. Chronic roup has been known to extend through two years.

Treatment. — The fowls should be kept warm, and have plenty of water and scalded bran, or other light food. When chronic, change of food and air is advisable. The ordinary remedies, such as salt dissolved in water, are inefficacious. A solution of sulphate of zinc, as an eye water, is a valuable cleansing application. Rue pills, and a decoction of rue, as a tonic, have been administered with apparent benefit. Perhaps, however, the best mode of dealing with roup and all putrid affections, is as follows: Take of finely pulverized, fresh-burnt charcoal, and of new yeast, each three parts; of pulverized sulphur, two parts; of flour a sufficient quantity. Mix well, and make into two doses, of the size of a hazel nut, and give one three times a day. Cleanliness is no less necessary than warmth, and it will sometimes be desirable to bathe the eyes and nostrils with warm milk and water or suds, as convenient.

Costiveness.—The existence of this disorder will become apparent by observing the unsuccessful attempts of the fowl to relieve itself. It frequently results from continued feeding on dry diet, without access to green vegetables; indeed, without the use of these, or some substitute,—such as mashed potatoes,—costiveness is certain to ensue. The want of a sufficient supply of good water will also occasion the disease, on account of that peculiar structure of the fowl, which renders them unable to void their urine, except in connection with the fæces of solid food, and through the same channel.

Treatment. — Soaked bread, with warm skimmed milk, is a mild remedial agent, and will usually suffice. Boiled carrots or cabbage are more efficient. A meal of earth-worms is sometimes advisable; and hot potatoes, mixed with bacon fat, are said to be excellent. Castor oil and burned butter will remove the most obstinate cases; though a clyster of oil, in addition, may sometimes be required, in order to effect a cure.

Lice. — Treatment. — To attain this, whitewash frequently all the parts adjacent to the roosting-pole; take the poles down, and run them slowly through a fire made of wood shavings, dry weeds, or other light combustibles. Flowers of sulphur placed in a vessel, and set on fire in a close poultry house, will penetrate every crevice and effectually exterminate the vermin. When a hen comes off with her brood, the old nest should be cleaned out and a new one placed; and dry tobacco leaves, rubbed to a powder between the hands, and mixed with the hay of the nest, will add much to the health of the poultry. Flowers of sulphur may also be mixed with Indian meal and water, and fed in the proportion of one pound of sulphur to two dozen fowls, in two parcels, two days apart. Almost any kind of grease, or unctuous matter, is also certain death to the vermin of domestic poultry. In the case of very young chickens, it should only be used in a warm, sunny day, when they should be put into a coop with their mother, the coop darkened for an hour or two, and everything made quiet, that they may secure a good rest and nap after the fatigue occasioned by greasing them. They should be handled with great care, and greased thoroughly; the hen, also. After resting, they may be permitted to come out and bask in the sun; and in a few days they will look sprightly enough. To guard against vermin, however, it should not be forgotten that cleanliness is of vital importance, and there must always be plenty of slacked lime, dry ashes, and sand, easy of access to the fowls, in which they can roll and dust themselves.

MISCELLANEOUS RECIPES.

Wound Balsam, for Horse or Human Flesh. — Take gum benzoin, in powder, six ounces; balsam of tolu, in powder, three ounces; gum storax, two ounces; frankincense, in powder, two ounces; gum myrrh, in powder, two ounces; Socotorine aloes, in powder, three ounces; alcohol, one gallon. Mix them all together and put them in a digester, and give them a gentle heat for three or four days; then strain.

Nerve and Bone Liniment. — Take beef's gall, one quart; alcohol, one pint; volatile liniment, one pound; spirits of turpentine, one pound; oil of origanum, four ounces; aqua ammonia, four ounces; tincture of cayenne, one-half pint; oil of amber, three ounces; tincture of Spanish flies, six ounces. Mix. Uses too well known to need description. This is more particularly applicable to horse flesh.

St. John's Condition Powders. — Take fenugreek, cream of tartar, gentian, sulphur, saltpetre, resin, black antimony, and ginger; equal quantities of each, say

one ounce; all to be finely pulverized; cayenne, also fine, half the quantity of any one of the others, say one-half ounce. Mix thoroughly. It is used in yellow water, hide-bound, coughs, colds, distemper, and all other diseases where condition powders are generally administered. They carry off gross humors and purify the blood.

Dose. — In ordinary cases, give two teaspoonfuls once a day, in feed. In extreme cases, give it twice daily.

Imperial Drops for Gravel and Kidney Complaints. — Oil of origanum, one ounce; oil of hemlock, one-quarter ounce; oil of sassafras, one-quarter ounce; oil of anise, one-half ounce; alcohol, one pint. Mix.

Dose. — From one-half to one teaspoonful, three times a day, in sweetened water, will soon give relief when constant weakness is felt across the small of the back, as well as gravelly affections causing pain about the kidneys.

Barrell's Indian Ointment. — Alcohol, one quart; tincture of capsicum, one ounce; oils of origanum, sassafras, pennyroyal, and hemlock, of each, one-half ounce. Mix. More than seventy thousand dollars have been cleared by the sale of this medicine, during the last twelve years, in the Western States.

Tooth Wash. — To remove Blackness. — Pure muriatic acid, one ounce; water, one ounce; honey, two ounces. Mix. Take a toothbrush and wet it freely with the preparation, and briskly rub the black teeth, and in a moment's time they will be perfectly white; then immediately wash out the mouth with water, that the acid may not act upon the enamel of the teeth.

Yankee Shaving Soap. — Take three pounds of white bar soap, one pound of Castile soap, one quart of rain-water, one-half pint of beef's gall, one gill of spirits of turpentine. Cut the soap into thin slices, and boil five minutes after the soap is dissolved. Stir while boiling. Scent with oil of rose or almonds. If wished to color it, use one-half ounce vermilion.

Neuralgia. — Internal Remedy. — Sal-ammoniac, one-half drachm; dissolve in water, one ounce.

Dose. — One tablespoonful every three minutes for twenty minutes, at the end of which time, if not before, the pain will have disappeared.

Egyptian Cure for Cholera.—Best Jamaica ginger root, bruised, one ounce; cayenne, two teaspoonfuls. Boil all in one quart of water, to one-half pint, and add loaf-sugar to form a thick syrup.

Dose. — One tablespoonful every fifteen minutes, until vomiting and purging cease; then follow up with a blackberry tea.

King of Oils, for Neuralgia and Rheumatism. — Burning fluid, one pint; oils of cedar, hemlock, sassafras, and origanum, of each two ounces; carbonate of ammonia, pulverized, one ounce. Mix.

Directions. — Apply freely to the nerve and gums around the tooth, and to the face, in neuralgic pains, by wetting brown paper and laying on the parts; not too long, for fear of blistering. To the nerves of teeth, by lint.

Mead's Salt-Rheum Ointment. — Aqua-fortis, one ounce; quicksilver, one ounce; good, hard soap, dissolved so as to mix readily, one ounce; prepared chalk, one ounce; mix with one pound of lard. Incorporate the above by putting the aqua-fortis and quicksilver into an earthen vessel, and, when done effervescing, mix with the other ingredients, putting the chalk in last; add a little spirits of turpentine, say one-half teaspoonful.

Good Samaritan Liniment. — Take ninety-eight per cent alcohol, two quarts, and add to it the following articles: Oils of sassafras, hemlock, spirits of turpentine,

tincture of cayenne, catechu, guaiacum (guac), and laudanum, of each one ounce; tincture of myrrh, four ounces; oil of origanum, two ounces; oil of wintergreen, one-half ounce; gum camphor, two ounces; and chloroform, one and one-half ounces. This is one of the best applications for internal pains known; it is superior to any other enumerated in this work.

Shampooing Mixture, for Five Cents a Quart. — Will be found just the thing desired. Take purified carbonate of potash, commonly called salts of tartar, one ounce; rain-water, one quart; mix, and it is ready for use. Apply a few spoonfuls to the head, rubbing and working it thoroughly; then rinse out with clean, soft water, and dry the hair well with a coarse, dry towel, applying a little oil or pomatum to supply the natural oil which has been saponified and washed out by the operation of the mixture.

Hair Restorative Equal to Wood's, for a Trifling Cost. — Preparation. — Take sugar of lead, borax, and lac sulphur, of each one ounce; aqua ammonia, one-half ounce; alcohol, one gill. These articles to stand mixed for fourteen hours; then add bay rum, one gill, and one tablespoonful of fine table salt, with three pints of soft water, and flavor with one ounce of essence of bergamot. This preparation not only gives a beautiful gloss to the hair, but will cause hair to grow on bald heads, arising from all common causes, and turn gray hair to a dark color.

Manner of Application. — Where the hair is thin or bald, make two applications daily, until this amount is used up, unless the hair has come out sufficiently to satisfy you before that time. Work it well to the roots of the hair with a soft brush, or the ends of the fingers, rubbing well each time. For gray hair, one application daily is sufficient. It is harmless, and will do all that is claimed for it, and will cost only a trifle in comparison with the advertised restoratives of the day, and will be found as good as, or better than, most of them.

Erasive Soap. — For six pounds common bar soap, one ounce sal-soda, one ounce borax; soap shaved fine; two quarts soft water. Boil all together twenty minutes; let it cool a little; add two tablespoonfuls of hartshorn, one ounce spirits of turpentine.

British Oil. — Fearing that British oil is not now generally kept, as it should be, I give its composition. Take oils of turpentine and linseed, each eight ounces; oils of amber and juniper, each four ounces; Barbadoes tar, three ounces; Seneca oil, one ounce. Mix. This of itself is an excellent application to cuts, bruises, swellings, and sores of almost any description, and this recipe alone is worth treble the price paid for this book, to those who have not got it.

Green Mountain Liniment. — Take ninety-five per cent alcohol, two quarts, and add to it the following articles: Oils of sassafras, hemlock, spirits of turpentine, balsam of fir, chloroform, and tinctures of catechu and guaiacum (guac), of each one ounce; oil of origanum, two ounces; oil of wintergreen, one-half ounce; gum camphor, one-half ounce.

Oil of Gladness. — Oils of marjoram, peppermint, horsemint (monarda), each one drachm; ether, two drachms; tincture capsicum, four drachms; tincture opium, rubri (red saunders), each one drachm; alcohol, sufficient to make eight ounces. Mix. Used externally for rheumatism, neuralgia, stiffness, etc.; internally for colic, cramps, and diarrhœa.

Bill Wright's Cure for Inflammatory Rheumatism. — Take one ounce each of sulphur and nitrate of potassa; gum guaiacum, one-half ounce; colchicum root and nutmegs, one-quarter ounce; all to be pulverized and mixed with simple syrup or molasses, two ounces.

Dose. - One teaspoonful three times daily.

Dr. Thompson's Celebrated Composition Powder. — Take bayberry bark, two pounds; hemlock bark, one pound; ginger root, one pound; cayenne pepper, two ounces; cloves, two ounces; all finely pulverized and well mixed.

Dose. — Take one-half of a teaspoonful of it, and a spoonful of sugar, and put them into a teacup, and pour it half full of boiling water; let it stand a few minutes and fill the cup with milk, and drink freely. If no milk is to be obtained, fill up the cup with hot water. This, in the first stages, and less violent attacks of disease, is a valuable medicine, and may be safely employed in all cases. It is good in relax, pain in the stomach and bowels, and to remove all obstructions caused by cold. A few doses of this, the patient being in bed with a steaming stone at the feet, or having soaked the feet fifteen or twenty minutes in hot water, drinking freely of the tea at the same time, will cure a bad cold, and often throws off disease in its first stages.

Asthma Remedy. — Grindelia, fine powder, eight ounces; jaborandi, fine powder, eight ounces; eucalyptus, fine powder, four ounces; digitalis, fine powder, four ounces; cubeb, fine powder, four ounces; stramonium, fine powder, sixteen ounces; nitrate of potassium, fine powder, twelve ounces; cascarilla bark, fine powder, one ounce. Mix, and dry thoroughly. Used by burning one-quarter to a teaspoonful or more, and inhaling the smoke.

Horse Liniment. — Alcohol, ninety-five per cent, eight ounces; spirits turpentine, eight ounces; oil sassafras, one ounce; oil pennyroyal, one ounce; oil origanum, one ounce; British oil, one ounce; tincture arnica, one ounce; tincture cantharides, one ounce; spirits of camphor, one ounce; water of ammonia, one ounce. Mix.

Magic Liniment.—Alcohol, one quart; gum camphor, four ounces; turpentine, two ounces; oil origanum, two ounces; sweet oil, one ounce. For cuts or calks in winter, must be applied often.

Radway's Ready Relief. — Tincture of capsicum, sixty-four grams; liquid ammonia caustic, four grams; castile soap, one-quarter gram; camphor, four grams; oil of rosemary, two grams.

Dr. R. W. Hutchings' Indian Healing, formerly Peckham's, Cough Balsam. — Take rosin, five pounds, and melt it, adding spirits of turpentine, one quart; balsam of tolu, one ounce; balsam of fir, four ounces; oil of hemlock, origanum, with Venice turpentine, of each, one ounce; strained honey, four ounces; mix well and bottle. It is a valuable preparation for coughs, internal pains or strains, and works benignly upon the kidneys.

Dose. — Six to ten drops; for a child of six, three to five drops, on a little sugar or molasses. The dose can be varied according to ability to bear it upon the stomach. It is highly recommended also for burns and bruises, as an external application.

For Baldness. — White liquid vaseline, one hundred grams; pilocarpine, fifty grams. Mix, and dissolve with light heat.

Note. — This solution makes the finest kind of a cosmetic. No "brilliantine" can be compared to it; it glosses the hair. The idea of its use is derived from the fact that pilocarpine acts on the glands of the skin.

Sage's Catarrh Remedy. — Hydrastis Canadensis, grs. v.; indigo, grs. ss.; camphoræ pulverized, acidum carbolicum, aa grs. ij.; sodii chloridum, grs. I. Powder the camphor by means of a drop of alcohol, and mix with the salt previously reduced to a moderately fine powder; rub the indigo and carbolic acid together, and lastly add the powdered hydrastis, and intimately mix, without much pressure, in a mortar.

Camphor Ice, for Chapped Hands or Lips. - Take Spermaceti tallow, one and

one-half ounces; oil of sweet almonds, four teaspoonfuls; gum camphor, three-quarter ounce, made fine. Set on the stove until dissolved, constantly stirring. Use only just sufficient heat to melt them together. While warm, pour into moulds, if desired to sell; then paper and put up in tinfoil. If for your own use, put up in a tight box. Apply to the chaps or cracks two or three times daily, especially at bed-time. It is also good for salt-rheum and piles.

Burns, Salve to Cure Without Pain; also Sore or Cracked Nipples. — Take equal parts of turpentine, sweet oil, and beeswax; melt the oil and wax together, and when a little cool add the turpentine and stir until cold, which keeps them evenly mixed. Apply by spreading upon thin cloth (linen is best), and only apply a thin cloth over the one on which the salve is spread, unless the burn is very extensive, and more covering is needed to keep the patient warm.

Felon, if Recent, to Cure in Six Hours. — Take Venice turpentine, one ounce; and put into it half a teaspoonful of water, and stir them with a rough stick until the mass looks like candied honey; then spread a good coat on a cloth and wrap around the finger. If the case is only recent, it will remove the pain in six hours; but if of long standing, it will require a longer time.

Frost Bites and Itching Feet, a Liniment to Cure. — Take alcohol, one quart; Thompson's No. 6, one quart; and camphor gum, one ounce; this cures frost bites, itching feet, etc. Use it freely and often; it makes a good liniment also for common purposes.

Cure for Corns. — If a cripple will take a lemon, cut off a piece, then nick it so as to let in the toe with the corn, the pulp next the corn, tie this on at night so that it cannot move, he will find next morning that, with a blunt knife, the corn will come away to a great extent. Two or three applications of this will make "a poor cripple happy for life."

Syrup for Consumptives. — Take a peck of tamarack bark; spikenard root, one-half pound; dandelion root, one-quarter pound; hops, two ounces. Boil these sufficiently to get the strength, in two or three gallons of water; strain and boil down to one gallon. When blood warm, add three pounds of honey and three pints of best brandy; bottle and keep in a cool place.

Dose. — Drink freely of it three times a day before meals, at least a gill or more, according to the strength and age of the patient.

Ointment for Old Sores. — Take red precipitate, one-half ounce; sugar of lead, one-half ounce; burnt alum, one ounce; white vitriol, one-quarter ounce, or a little less; all to be very finely pulverized; have mutton tallow made warm, one-half pound; stir all in, and stir until cool.

Dr. Peabody's Cure for Jaundice, in its Worst Forms.— Take red iodide of mercury, seven grains; iodide of potassium, nine grains; aqua dis. (distilled water), one ounce. Mix. Commence by giving six drops three or four times a day, increasing one drop a day, until twelve or fifteen are taken at a dose. Give in a little water, immediately after meals. If it gives a griping sensation in the bowels, and fullness in the head when you get up to twelve or fifteen drops, go back to six drops, and up again as before.

Pinusine Corn Killer. — Tincture of pine needles, four hundred parts; liquid ammonia caustic, four hundred parts; tincture of iodine, two hundred parts. This fluid may also be employed for frost bites.

Mexican Oil. — Petroleum, two ounces, fluid; aqua ammonia, one ounce, fluid; brandy, one drachm, fluid. Mix. This is also known as Mexican Mustang Liniment.

Lyon's Kathairon. — Alcohol, ninety-five per cent, twelve fluid ounces; oil ricinis, four fluid ounces; tincture cantharis, one-half fluid ounce; acid, tannic, thirty grains; oils, citronnella, bergamot, and cloves, one-half fluid drachm each; oils lavender, flo., and rosemary, one fluid drachm. M. Sec. art. Filter.

Diphtheria. — For treatment of this terrible disease, the following recipes are said to be excellent: —

No. I. — Take of sulphuric acid, four drops; water, three-quarter tumblerful. Mix, and stir well, and give at one dose to an adult; children in proportion to age. Repeat as occasion requires. It is said to coagulate the diptheritic membrane, and cause its ready removal by coughing; and is considered by some almost as a specific.

No. 2. — Take one teaspoonful of sulphur and two ounces of water, and stir with the finger, instead of a spoon, until it is well mixed; then use it as a gargle; also have the patient take a teaspoonful of the sulphur in two ounces of water, and repeat the dose four or five times during the day, and repeat the gargle every hour until improvement takes place. If the patient is so badly off that he cannot use the gargle, put a teaspoonful of the sulphur on a live coal, and let the patient stand over it and inhale the smoke made by its burning; or, in some bad cases, where the throat is nearly closed, it might be well to blow a little of the sulphur through a quill into the throat. It is said that Dr. Field of England has treated many cases in this way, and all recovered.

Earache. — Take equal parts of tincture of opium and glycerine. Mix, and from a warm teaspoon drop two or three drops into the ear, and stop the ear tight with cotton, and repeat every hour or two. If matter should form in the ear, make a suds with Castile soap and warm water, about one hundred degrees F., or a little more than milk warm, and have some person inject it into the ear, while you hold that side of the head the lowest. If it does not heal in due time, inject a little carbolic acid and water, in the proportion of one drachm of the acid to one pint of warm water, each time after using the suds.



UNITED STATES CRUISER "BALTIMORE."

DIVISION V.

MISCELLANEOUS INFORMATION.

CHAPTER I.

COMMERCIAL FORMS AND USEFUL TABLES.

Law Points for Formers. — If a note is lost or stolen, it does not release the maker. He must pay it, if the consideration for which it was given and the account can be proven.

Notes bear interest only when so stated.

Principals are responsible for the acts of their agents.

Each individual in partnership is responsible for the whole amount of debt of the firm, except in cases of special partnership.

Ignorance of the law excuses no one.

The law compels no one to do impossibilities.

An agreement without consideration is void; a note made on Sunday is void; contracts made on Sunday cannot be enforced.

A note made by a minor is void; contracts made with a minor are void; a contract made with a lunatic is void.

A note obtained by fraud, or from a person in a state of intoxication, cannot be collected.

It is fraud to conceal a fraud.

Signatures made with a pencil are good in law.

A receipt of money is not always conclusive.

"Value received" is usually written in a note, and should be, but it is not necessary. If not written, it is presumed by the law, or may be supplied by proof.

The maker of an "accommodation" bill or note—one for which he has received no consideration, having lent his name or credit for the accommodation of the holder—is bound to all other parties precisely as if there was a good consideration.

No consideration is sufficient in law, if it be illegal in its nature.

If the drawer of a check or draft has changed his residence, the holder must use all reasonable diligence to find him.

If one holding a check, as payee or otherwise, transfers it to another, he has a right to insist that the check be presented that day, or the next day following.

A note indorsed in blank—the name of the indorser only written—is transferable by delivery, the same as if made payable to bearer.

The time of payment of a note must not depend upon a contingency: the promise must be absolute.

A bill may be written upon any paper or substitute for it, either with ink or pencil.

The payee should be distinctly named in the note, unless payable to bearer. An indorsee has a right of action against all whose names were on the bill when he received it.

If the letter containing a protest of non-payment be put in the post-office, any miscarriage does not affect the party giving notice.

Notice of protest may be sent either to the place of business or of residence of the party notified.

Any oral agreement must be proved by evidence. A written agreement proves itself. The law prefers written to oral evidence, because of its precision.

Articles of Agreement. — An agreement is a contract, by which a certain person, or persons, agrees or contracts to perform certain duties within a specified time. It is of much importance, in all matters, upon which may arise a difference of opinion, or misunderstanding, that contracts be reduced very explicitly to writing. Agreements should show that they are made for a reasonable consideration; otherwise they are void in law. The contract expires at the end of a year, unless it is expressly stipulated that the agreement is binding for a longer time. A signature should always be written with pen and ink, for safety, although a pencil signature is legal. Misrepresentation, or discovery of fraud, or changing of date by one party to the agreement, renders the contract void. Agreements should state explicitly within what time their conditions are to be complied with. Always duplicate copies of an agreement, that each party may retain a copy.

Bills of Sale.—A written agreement, by which one party transfers to another, for a consideration on delivery, all his right, title, and interest in personal property, is a bill of sale. The ownership of personal property, in law, is not changed until the delivery, and the purchaser takes actual possession of such property; though in some States a bill of sale is *prima facie* evidence of ownership, even against creditors, unless the sale was fraudulently made for the purpose of avoiding the payment of debts.

Deeds.—A deed is an instrument in writing, by which lands and appurtenances thereon are conveyed from one person to another, signed, sealed, and properly subscribed. A deed may be written or printed on parchment or paper, and must be executed by parties competent to contract. One witness is required in New York, and two in Vermont, New Hampshire, Rhode Island, Connecticut, Ohio, Pennsylvania, Georgia, and Indiana. Should the deed be proven by witnesses, two are also required in Tennessee, Delaware, and South Carolina. In the other States, no witnesses are necessary, the deed being acknowledged by a person duly authorized by law. There must be a realty to grant, and a sufficient consideration, to render a deed valid.

The following requisites are necessary to enable a person to legally convey property to another: First, he or she must be of sane mind; second, of age; and third, he or she must be the rightful owner of the property. The grantor is the person who makes the deed, and the grantee the person who receives the deed. The wife of the grantor, in the absence of any statute regulating the same, must acknowledge the deed, or else, after the death of her husband, she will be entitled to one-third interest in the property, as dower during her life. Her acknowledgment of the deed must be of her own free will and accord, and the officer before whom the acknowledgment is taken must sign his name as a witness to the fact that her consent was without compulsion. Special care should be taken to have the deed properly acknowledged and witnessed, and the proper seal attached. The deed takes effect upon its delivery to the properly authorized person. Any alterations or interlineations in the deed should be noted at the bottom of the instrument, and properly witnessed. After the acknowledgment of a deed, the parties have no right to make the slightest alteration. An alteration after the acknowledgment, in favor of the grantee, vitiates the deed. By a general warrantee deed, the grantor agrees to warrant and defend the property conveyed, against all persons whatsoever. A quitclaim deed releases what interest the grantor may have in the land, but does not warrant and defend against others. Deeds, upon their delivery, should be recorded in the Recorder's office without delay.

Chattel Mortgages. — A mortgage on personal property, given by a debtor to a creditor, as security for the payment of a sum that may be due, is a chattel mortgage. The property mortgaged may remain in the possession of either party while the mortgage is in force. In order to hold the property secure against other creditors, the mortgagee, or person holding the mortgage, must have a true copy filed in the Clerk's or Recorder's office of the place where the mortgagor, or person giving the mortgage, resides, and where the property is when mortgaged. A justice of the peace, according to the laws of some States, in the voting precinct where such property mortgaged is located, must acknowledge and sign the mortgage, taking a transcript of the same upon his docket, while the mortgage itself should be recorded, the same as real estate transfers. When the person giving the mortgage retains possession of the property, he may empower the party holding the mortgage with authority to take the goods and chattels mortgaged into his possession at any time he may deem the same insufficient security for his claims; or if he shall be convinced that an effort is being made to remove such property, whereby he would be defrauded of his claim; or for other reasons, when he may deem it necessary to secure his claim, he can proceed to take possession of it; and said property, after legal notice of sale has been given, according to the law of the State governing the same, he is allowed to sell at public sale, to the highest bidder. Out of the money obtained therefrom he can retain sufficient to liquidate his demand and defray the necessary expenses, turning over any moneys remaining to the mortgagor.

Landlord and Tenant. — No particular form of wording a lease is necessary. It is important, however, that the lease state, in a plain, straightfor-

ward manner, the terms and conditions of the agreement, so that there may be no misunderstanding between the landlord and tenant. The lease must state all the conditions, as additional, verbal promises avail nothing in law. It is held, generally, that a written instrument contains the details, and states the bargain entire, as the contracting parties intended. The tenant can sublet a part, or all, of his premises, unless prohibited by the terms of the lease. A lease by a married woman, even if it be upon her own property, is not valid at common law; but, by recent statutes, in many States, she may lease her own property and have full control of the same; neither can the husband effect a lease that will bind her after his death. His control over her property continues only so long as he lives. Neither a guardian nor a minor can give a lease extending beyond the ward's majority, which can be enforced by the lessee; yet the latter is bound unless the lease is annulled. If no time is specified in a lease, it is generally held that the lessee can retain possession of the real estate for one year. A tenancy at will, however, may be terminated in the Eastern States by giving three months' notice in writing; in the Middle and Southern States, six months; and in the Western States, one month; though recent statutes, in some States, have modified the above somewhat. The lease that specifies a term of years, without giving the definite number, is without effect at the expiration of two years. A lease for three or four years, being signed by the Commissioner of Deeds and recorded in the Recorder's office, is an effectual bar to the secret or fraudulent conveyance of such leased property; and it further obviates the necessity of procuring witnesses to authenticate the validity of the lease. Duplicate copies of a lease should always be made, and each party retain a copy of the same. A new lease invalidates an old one. A landlord misrepresenting property that is leased, thereby subjecting the tenant to inconvenience and loss, such damages can be recovered from the landlord by deduction from the rent. A lease on property that is mortgaged ceases to exist when the person holding such mortgage forecloses the same. A landlord consenting to take a substitute, releases the first tenant. Where there is nothing but a verbal agreement, the tenancy is understood to commence at the time of taking possession. Where there is no time specified in the lease, tenancy is regarded as commencing at the time of delivering the writing. If it is understood that the tenant is to pay the taxes on the property he occupies, such fact must be distinctly stated in the lease, as a verbal promise is of no effect.

Partnership. —An agreement between two or more persons to invest their labor, time, and means together, sharing in the loss or profit that may arise from such investment, is termed a partnership. This partnership may consist in the contribution of skill, extra labor, or acknowledged reputation upon the part of one partner, while the other, or others, contribute money, each sharing alike equally, or in fixed proportion, in the profit; or an equal amount of time, labor, and money may be invested by the partners, and the profits equally divided, the test of partnership being the joint participation in profit, and joint liability to loss. A partnership formed without limitation is termed a general partnership. An agreement entered into for the performance of only

a particular work, is termed a special partnership; while the partner putting in a limited amount of capital, upon which he receives a corresponding amount of profit, and is held correspondingly responsible for the contracts of the firm, is termed a limited partnership, the conditions of which are regulated by statute in different States. A partner signing his individual name to negotiable paper, which is for the use of the partnership firm, binds all the partners thereby. Negotiable paper of the firm, even though given on private account by one of the partners, will hold all the partners of the firm, when it passes into the hands of holders who are ignorant of the facts attending its creation. Partnership effects may be bought and sold by a partner; he may make contracts; may receive money; indorse, draw, and accept bills and notes; and while this may be for his own private account, if it apparently be for the use of the firm, his partners will be bound by his action, provided the parties dealing with him were ignorant that the transaction was on his private account; and thus representation or misrepresentation of a partner, having relation to business of the firm, will bind the members in the partnership. An individual lending his name to a firm, or allowing the same to be used after he has withdrawn from the same, is still responsible to third persons, as a partner. A partnership is presumed to commence at the time articles of copartnership are drawn, if no stipulation is made to the contrary, and the same can be discontinued at any time, unless a specified period of partnership is designated in the agreement; and even then he may withdraw, by giving previous notice of such withdrawal from the same, being liable, however, in damages, if such are caused by his withdrawal. Should it be desired that the executors and representatives of the partner continue the business in the event of his death, it should be so specified in the articles, otherwise the partnership ceases at Should administrators and executors continue the business under such circumstances, they are personally responsible for the debts contracted by the firm. If it is desired that a majority of the partners in a firm have the privilege of closing the affairs of the company, or in any way regulating the same, such fact should be designated in the agreement; otherwise such right will not be presumed. Partners may mutually agree to dissolve a partnership, or a dissolution may be effected by a decree of a court of equity. Dissolute conduct, dishonesty, habits calculated to imperil the business of a firm, incapacity, or the necessity of partnership no longer continuing, shall be deemed sufficient causes to invoke the law in securing a dissolution of partnership, in case the same cannot be effected by mutual agreement. After dissolution of partnership, immediate notice of the same should be given in the most public newspapers, and a notice likewise should be sent to every person having special dealings with the firm. These precautions not being taken, each partner continues liable for the acts of the others, to all persons who have no knowledge of the dissolution.

Wills. — The legal declaration of what a person determines to have done with his property after death is termed a will. All persons of sufficient age, possessed of sound mind, excepting married women in certain States, are entitled to dispose of their property by will. Children at the age of four-

teen, if males, and females at the age of twelve, can thus dispose of personal property.

No exact form of words is necessary in order to make a will good at law; though much care should be exercised to state the provisions of the will so plainly that its language may not be misunderstood. The person making the will is termed the testator; if a female, a testatrix. A will is of no force until the death of the testator, and can be cancelled or modified by the maker at any date. The last will made annuls the force of all preceding wills.

The law regards marriage, and offspring resulting, as a *prima facie* evidence of revocation of a will made prior to such marriage, unless the wife and children are provided for by the husband in some other way, in which case the will remains in full force.

To convey real estate by will, it must be done in accordance with the law of the State where such land is located; but personal property is conveyed in harmony with the law that obtains at the place of the testator's residence.

There are two kinds of wills, namely, written and verbal, or nuncupative; the latter, or spoken wills, depending upon proof of persons hearing the same, generally relate to personal property only, and are not recognized in all the States, unless made within ten days previous to the death. Verbal or unwritten wills are usually unsafe, and, even when well authenticated, often make expensive litigation; hence the necessity of having the wishes of the testator fully and clearly defined in a written will.

To give or make a devise of property by will, and subsequently dispose of the same, without altering the will to conform to such sale, destroys the validity of the entire will.

A will made by an unmarried woman is legally revoked by marriage; but she can take such legal steps in the settlement of property, before marriage, as will empower her to dispose of the same as she may choose, after marriage.

No husband can make a will that will deprive the wife of her right of dower in the property; but the husband can will the wife a certain amount in lieu of her dower, stating it to be in lieu thereof. Such bequest, however, will not exclude her from her dower, provided she prefers it to the bequest made in the will. Unless the husband states distinctly that the bequest is in lieu of dower, she is entitled to both. Property bequeathed must pay debts and encumbrances upon the same, before its distribution can be made to the legatees of the estate. Though property may be willed to a corporation, the corporation cannot accept such gift unless provision is made for so doing, in its charter. A will may be revoked by marriage, codicil, destruction of the will, disposing of property devised in a will, or by the execution of another will. The person making a will may appoint his executors, but no person can serve as such executor if he or she be an alien at the time of proving the will; if he be under twenty-one years of age, a convict, a drunkard, a lunatic, or an imbecile. No person appointed as an executor is obliged to serve, but may renounce his appointment by legal written notice, signed before two witnesses, which notice must be recorded by the officer before whom the will is proved.

In case a married woman possesses property, and dies without a will, her

husband is entitled to administer upon such property, in preference to any one else, provided he be of sound mind.

Any devise of property made to a subscribing witness is invalid, although the integrity of the will in other respects is not affected.

In all wills, the testator's full name should be made at the end. If he be unable to write, he may have his hand guided in making a mark against the same. If he possesses a sound mind, and is conscious at the time of the import of this action, such mark renders the will valid.

Witnesses should always write their respective places of residence after their names, their signatures being written in the presence of each other and in the presence of the testator.

It should be stated, also, that these names are signed at the request of, and in the presence of, the testator, and in the presence of each other.

The following States require two subscribing witnesses: Missouri, Illinois, Ohio, Kentucky, Arkansas, North Carolina, Tennessee, Iowa, Utah, Texas, California, New Jersey, Delaware, Indiana, Virginia, and New York. Three witnesses are required to authenticate a will in the following States: Florida, Mississippi, Maryland, Louisiana, Georgia, South Carolina, Wisconsin, Oregon, Minnesota, Michigan, Massachusetts, Rhode Island, Connecticut, Maine, New Hampshire, and Vermont. Proof of signature of the testator, by the oath of two reputable witnesses, is sufficient to establish the validity of a will in Pennsylvania, no subscribing witnesses being absolutely necessary.

Witnesses are not required to know the contents of a will. They have simply to know that the document is a will, and witness the signing of the same by the testator.

Codicils. — An addition to a will, which should be in writing, is termed a codicil. A codicil is designed to explain, modify, or change former bequests, made in the body of the will. It should be done with the same care and precision as was exercised in the making of the will itself.

Forms of Notes .-

No. I. - Negotiable Without Indorsement.

\$100.

New York, Sept. 2, 1883.

Ninety days after date, I promise to pay Leonard Smith, or bearer, One Hundred Dollars, value received.

H. B. McIntyre.

No. 2. - Negotiable Only by Indorsement.

\$100.

NEW YORK, Sept. 2, 1883.

Ninety days after date, I promise to pay Leonard Smith, or order, One Hundred Dollars, value received.

H. B. McIntyre.

No. 3. - Not Negotiable.

\$100.

NEW YORK, Sept. 2, 1883.

Ninety days after date, I promise to pay Leonard Smith One Hundred Dollars, value received.

H. B. McIntyre.

No. 4. - Payable on Demand.

\$100.

NEW YORK, Sept. 2, 1883.

On demand, I promise to pay H. C. Spencer, or bearer, One Hundred Dollars, value received.

JOHN THOMAS.

No. 5 .- Principal and Surety.

\$345.40.

FLINT, MICH., Dec. 4, 1883.

Three months after date, I promise to pay L. L. Walker, or order, Three Hundred Forty-five and 1^{40}_{00} Dollars, with interest, value received.

Frank Stone, *Principal*.

JAY C. Worcester, *Surety*.

No. 6 .- Payable at Bank.

\$200.

New York, Oct. 8, 1883.

Ninety days after date, I promise to pay H. W. Fairbanks, or order, at the Park National Bank, Two Hundred Dollars, value received.

WHEAT HOWARD.

No. 7 .- Joint and Several Notes.

\$100.

GRAND RAPIDS, MICH., Dec. 1, 1870.

Three months after date, we jointly and severally promise to pay to the order of James Finn, One Hundred Dollars, at City National Bank, Grand Rapids, Michigan. Value received, with interest at ten per cent per annum.

JOHN DUNN. CHARLES DUNN.

No. 8 .- Joint Notes.

\$100.

GRAND RAPIDS, MICH., Dec. 1, 1870.

Three months after date, we jointly promise to pay to the order of James Finn, One Hundred Dollars, at City National Bank, Grand Rapids, Michigan. Value received, with interest at ten per cent per annum.

John Dunn. Charles Dunn.

In addition to the notes above given, there are two other kinds of notes sometimes used: (1) The chattel note, where the payment is to be made in something besides money; and (2) a note payable in money to a particular person, without the word "order" or "bearer."

No. 9. - Chattel Note.

GRAND RAPIDS, MICH., Dec. 1, 1870.

Three months after date, I promise to pay James Finn, one hundred bushels of white wheat. Value received.

JOHN DUNN.

No. 10. - Money Note - Not Negotiable.

\$100.

GRAND RAPIDS, MICH., Dec. 1, 1870.

Three months after date, I promise to pay James Finn, One Hundred Dollars. Value received, with interest.

JOHN DUNN.

A promissory note is a written promise to pay a certain sum of money, at a future time, unconditionally.

A note may be payable at a particular place, as in numbers 6, 7, and 8; or may be payable to the payee simply, as in 1 and 2.

In a joint and several note, like No. 7, the makers are liable jointly or severally; that is, the holder may sue both the makers in one suit; or, if he choose, may sue one of them alone, each maker being liable to pay the whole amount to the payee; but payment by one satisfies the debt, and it cannot be twice collected. In No. 4, the makers are jointly liable, and cannot be sued separately. A note signed by more than one person, but using the singular number in the body of the note (as, I promise to pay), is a joint and several note; while one using the plural number (as, we promise to pay) is a joint note.

It is always desirable for a farmer to have the notes he gives payable at a place designated, as the holder may not at the time of maturity of the note be known to the maker, and he may be put to the expenses of a suit, as suit may be brought without previous notice.

INDORSEMENT is simply writing the name of the payee, with or without other words, across the back of the note.

There are two kinds: -

First, Blank indorsement, in which the payee writes his name and nothing else; as, "James Finn."

Second, Where the payee indorses it to some person called the indorsee; as, —

Pay to the order of John Lun,

JAMES FINN.

In the first place, the blank indorsement makes the note payable to the holder, and it may, after indorsement, be transferred, like a note payable to bearer.

In the second place, the indorsee must again indorse it, if he desires to transfer it.

Indorsers are liable in the order in which they indorse; the first is liable to the second, the second to the third, etc.

A note given for patent right is as collectible as though given for any other consideration.

The chattel note may be made payable to order, and may call for so much money payable in wheat, at a certain price named, or at current prices, etc.

Neither No. 9 nor No. 10 is negotiable. They may be assigned like any other contract, and made payable at a particular place. If assigned, the purchaser gets no greater right than the assignor, and if there is any fraud or want of consideration, which would render the note void in the hands of the original payee, it is equally void in the hands of the purchaser, even though he purchased in good faith, with no notice of the fraud.

Any material alteration of any note, after it passes out of the hands of the maker, renders it void.

The liability of an indorser is not absolute.

In order to hold an indorser, the holder of the note must present it to the maker on the very day of its maturity (i.e. the third day of grace), demand payment, and before the expiration of the next day notify the indorser that the note has been presented for payment to the maker, and that payment has been refused, and that he, the holder, looks to the indorser for payment. The following form may be used:—

GRAND RAPIDS, March 4, 1871.

Please to take notice that a promissory note of one hundred dollars, dated December 1, 1870, payable three months after date, made by John Dunn and indorsed by you, has been duly presented by me, and payment demanded, which was refused. I therefore look to you for payment of said note.

Yours, etc.,

To James Finn.

JOHN LUN.

A carefully compared copy of the notice served should always be kept, in order to make proof of the notice served, if it should become necessary.

All negotiable notes have three days of grace; that is, three days longer to run than the time mentioned in the note. If a note is made payable January 1st, it is really not due until January 4th; and that is the day for presentation and demand, and the notice should be given the next day, unless the same should be Sunday, when it may be given on Monday.

If the third day of grace falls on Sunday, or a legal holiday, then the note is due on the day before; and if the day before is Sunday or a legal holiday, then the note will mature on the first day of grace.

The indorser may, at the time of making the indorsement, or afterwards, waive demand on the maker and notice.

The following form is sufficient: -

Presentation, demand, and notice of non-payment are hereby waived.

JAMES FINN.

In order to prevent the danger of failure to make the demand on the maker of the note, and of not giving sufficient notice, it is always well to have the indorser waive presentation, demand, and notice.

If a note is payable at a particular place, it must be at such place at maturity; and if payable at a bank, should be left at the bank, where it will be properly attended to.

If an indorser does not wish to render himself liable, he can indorse as follows:—

JAMES FINN,
Without recourse.

Which means that the holder will have no recourse on him for payment. This indorsement is sufficient to transfer the note, but does not render the indorser liable for its payment.

If a party indorses a note payable to bearer, before the delivery of the note to the payee, he is liable the same as the maker.

A person can sign his name below the maker, with the word "surety" after his name, which will make him liable to pay the note.

Guaranty.

There are two kinds of guaranty.

First, Of collection, which may be as follows: -

For value received, I hereby guarantee the collection of the within note.

[AMES FINN.]

Second, Guaranty of payment, which may be as follows: -

For value received, I hereby guarantee the payment of the within note.

[AMES FINN.]

Neither guaranty requires notice to the guarantor. In the first case, the holder cannot look to the guarantor until he has exhausted the remedy against the maker. In the second case, he may bring suit directly against the guarantor, without any notice to the maker or guarantor before suit. This security is preferable to an indorsement, and should be obtained in preference to it, in all cases where practicable.

A guaranty is applicable to mortgages, contracts, etc.

Receipts - On Account.

\$500. CHICAGO, April 25, 1883. Received of H. B. McIntyre, Five Hundred Dollars on account.

FIELD, LEITER & Co.

In Full of All Demands.

\$300. New YORK, April 15, 1883. Received of S. S. Pierce, Three Hundred Dollars, in full of all demands to date.

CHAS. FELLOWS.

For a Note.

\$500. CHARLESTON, S.C., Dec. 31, 18—. Received of Goldwin Hubbard, his note at sixty days for Five Hundred Dollars, in full of account.

Murray Campbell.

For a Note of Another Person.

\$200. PENSACOLA, FLA., May 2, 18—. Received of Herbert Spencer, a note of Robt. Hatfield, for the sum of Two Hundred Dollars, which, when paid, will be in full of all demands to date.

Sampson & Collins.

Form of Due-Bill payable in Money.

\$100. ROCHESTER, N.Y., Oct. 2, 18—.

Due Walter W. Kimball, or order, on demand, One Hundred Dollars, value received.

C. T. MARSH.

Payable in Flour.

\$400. KALAMAZOO, MICH., Feb. 1, 18—.

Due, on demand, to Stanford Burton, Four Hundred Dollars, in flour, at the market value when delivered. Value received.

C. H. WALKER.

Time Draft.

\$50. Memphis, Tenn., April 4, 18—.

Thirty days after date, pay to the order of Cobb & Co., Fifty Dollars, value received, and charge to our account.

To Harmon Mosher & Co., Buffalo, N.Y.

A. B. Moore.

Sight Draft.

\$400. Cincinnati, O., June 10, 18—.

At sight, pay to the order of Higgins & Co., Four Hundred Dollars, value received, and charge the same to our account.

To B. L. SMITH, Milwaukee, Wis.

POLLOK BROS. & CO.

Common Form of Bill of Sale.

Know all Men by these Instruments, That I, Philetus Howe, of Middlebury, Vermont, of the first part, for and in consideration of Four Hundred and Fifty Dollars, to me paid by Charles Rose of the same place, of the second part, the receipt whereof is hereby acknowledged, have sold, and by this instrument do convey unto the said Rose, party of the second part, his executors, administrators, and assigns, my undivided half of twenty acres of grass, now growing on the farm of Lorenzo Pease, in the town above mentioned; one pair of mules, ten swine, and three cows, belonging to me, and in my possession at the farm aforesaid: to have and to hold the same unto the party of the second part, his executors and assigns, forever. And I do, for myself and legal representatives, agree with the said party of the second part, and his legal representatives, to warrant and defend the sale of the afore-mentioned property and chattels unto the said party of the second part, and his legal representatives, against all and every person whatsoever.

In witness whereof I have hereunto affixed my hand, this tenth day of June, one thousand eight hundred and seventy.

PHILETUS Howe.

General Form of Agreement or Contract.

This agreement, made the first day of August, 18—, between Isaac E. Hill, of Irish Grove, County of Atchison, State of Missouri, of the first part, and Vard Blevins, of the same place, of the second part—

Witnesseth, that the said Isaac E. Hill, in consideration of the agreement of the party of the second part, hereinafter contained, contracts and agrees to and with the said Vard Blevins, that he will deliver, in good and marketable condition, at the village of Corning, Missouri, during the month of September, of this year, One Hundred Tons of Prairie Hay, in the following lots, and at the following specified times; namely: twenty-five tons by the seventh of September; twenty-five tons additional by the fourteenth of the month; twenty-

five tons more by the twenty-first; and the entire one hundred tons to be all delivered by the thirtieth of September.

And the said Vard Blevins, in consideration of the prompt fulfilment of this contract, on the part of the party of the first part, contracts to and agrees with the said Isaac E. Hill, to pay for said hay six dollars per ton, for each ton, as soon as delivered.

In case of failure of agreement by either of the parties hereto, it is hereby stipulated and agreed that the party so failing shall pay to the other One Hundred Dollars, as fixed and settled damages.

In witness whereof we have hereunto set our hand, the day and year first above written.

ISAAC E. HILL. VARD BLEVINS.

A bond is a written admission of an obligation on the part of the maker, whereby he pledges himself to pay a certain sum of money to another person or persons, for some *bona fide* consideration.

Common Form of Bond.

KNOW ALL MEN BY THESE PRESENTS, That I, Jonas Clayton, of Wilmington, Hanover County, State of North Carolina, am firmly bound unto Henry Morse, of the place aforesaid, in the sum of One Thousand Dollars, to be paid to the said Henry Morse, or his legal representatives; to which payment, to be made, I bind myself, or my legal representatives, by this instrument.

The condition of this bond is such that, if I, Jonas Clayton, my heirs, administrators, or executors, shall promptly pay the sum of Five Hundred Dollars in three equal annual payments from the date hereof, with annual interest, then the above obligation to be of no effect; otherwise to be in full force and valid.

Dated this first day of July, one thousand eight hundred and seventy-three.

Signed and delivered in presence of GEORGE DOWNING.

JONAS CLAYTON. [L. S.]

Short Form of Lease for a House.

This instrument, made the first day of May, 1872, witnesseth that Theodore Shonts, of Asheville, County of Buncombe, State of North Carolina, hath rented from Tilgham Schnee, of Asheville aforesaid, the dwelling and lot No. 46 Broadway, situated in said town of Asheville, for four years from the above date, at the yearly rental of Two Hundred and Forty Dollars, payable monthly, on the first day of each month, in advance, at the residence of said Tilgham Schnee.

At the expiration of said above-mentioned term, the said Shonts agrees to give the said Schnee peaceable possession of the said dwelling, in as good condition as when taken, ordinary wear and casualties excepted.

In witness whereof, we place our hands and seals the day and year aforesaid.

Signed, sealed, and delivered in presence of John Edminister.

THEODORE SHONTS. [L. s.]

TILGHAM SCHNEE. [L. s.]

Notice to Quit.

TO CHANDLER PECK: -

Sir: Please observe that the term of one year, for which the house and land, situated at No. 14 Elm Street, and now occupied by you, were rented to you, expired on the first day of May, 1873; and, as I desire to repossess said premises, you are hereby requested and required to vacate the same.

Respectfully yours,

DENSLOW MOORE.

NEWTON, MASS., May 4, 1873.

Tenant's Notice of Leaving.

DEAR SIR: -

The premises I now occupy as your tenant, at No. 14 Elm Street, I shall vacate on the first day of May, 1873. You will please take notice accordingly. Dated this first day of February, 1873.

CHANDLER PECK.

To Denslow Moore, Esq.

Chattel Mortgages.

The following form may be used in ordinary cases: -

Know all Men by these Presents, That I, John Dunn, of the township of Greenfield, Wayne County, Michigan, party of the first part, being justly indebted unto James Finn, of the same place, of the second part, in the sum of Three Hundred Dollars, have, for the purpose of securing payments of said debt, and the interest thereof, granted, bargained, sold, and mortgaged, and by these presents do grant, bargain, sell, and mortgage unto the said James Finn, the following goods, chattels, and personal property, to wit: One bay gelding, seven years old, being the same horse this day purchased by me of said James Finn (describe the property fully and particularly), which said above-described goods, chattels, and property, at the date hereof, are situated at my farm in the township of Greenfield, Wayne County, Michigan, and are free and clear from all liens, conveyances, encumbrances, and levies; and for a valuable consideration I hereby warrant the above representations to be true.

To have and to hold the same forever, provided always, and the condition of these presents is such, that if the said John Dunn will pay, or cause to be paid, the said James Finn the debt aforesaid, with the interest at seven per cent, on or before the first day of March, A.D. 1881, then this instrument shall be void and of no effect. And I, the said John Dunn, agree to pay the same accordingly. But if default be made in such payment of the said sum of Three Hundred Dollars, or any part thereof, the second party is hereby authorized

to and shall sell at public auction, after the like notice as is required by law for constables' sales, the goods, chattels, and personal property hereinbefore mentioned, or so much thereof as may be necessary to satisfy the said debt, interest, and reasonable expenses, and to retain the same out of the proceeds of such sale, the overplus or residue, if any, to belong to and be returned to me, the said John Dunn.

In witness whereof, the said party of the first part has hereunto set his hand and seal, the first day of December, in the year of our Lord, one thousand eight hundred and eighty.

JOHN DUNN.

Every chattel mortgage, or a copy, should be filed in the office of the town clerk of the township where mortgagor resides, except in cases where the mortgagor resides out of the State, in which cases it should be filed in the township where the property is situated.

The filing must be renewed every year, by making and attaching to the mortgage or copy on file an affidavit, in substance as follows:—

STATE OF MICHIGAN, COUNTY OF WAYNE.

James Finn, of the township of Greenfield, in said county, being duly sworn, deposes and says he is the mortgagee named in the annexed mortgage; that his interest, by virtue of said mortgage, in the goods and chattels in said mortgage particularly described, is the sum of Three Hundred Dollars, and further saith not.

JAMES FINN.

Subscribed and sworn to before me, this first day of January, A.D. 1881.

THOMAS WRIGHT,

Notary Public, Wayne County, Mich.

The renewal may be at any time within thirty days before the expiration of the year from the filing of the mortgage.

In some States the mortgage is good as between the mortgagor and mortgage without filing, but is void as against a purchaser or subsequent mortgage, who has no knowledge of the unrecorded mortgage.

Power of Attorney, in a Short Form.

KNOW ALL MEN BY THESE PRESENTS, That I (name of principal), have made, constituted, and appointed, and by these presents do make, constitute, and appoint (name of attorney), my true and lawful attorney, for me and in my name, place, and stead to (here describe the thing to be done), giving and granting unto my said attorney full power and authority to do and perform all and every act and thing whatsoever requisite and necessary to be done in and about the premises, as fully, to all intents and purposes, as I might or could do if personally present, with full power of substitution and revocation; hereby ratifying and confirming all that my said attorney or his substitute shall lawfully do, or cause to be done, by virtue hereof.

In witness whereof, I have hereunto set my hand and seal, the day of, in the year one thousand eight hundred and
Executed and delivered in the presence of
Form of a Will.
In the name of God. Amen. I,, of the town of, in the County of, being of sound mind and memory, do make and publish this my last will and testament.
I give and bequeath to my sons,, eight hundred dollars each, if they shall have attained the age of twenty-one years before my decease; but if they shall be under the age of twenty-one at my decease, then I give to them one thousand dollars each, the last mentioned to be in place of the first mentioned.
I give and bequeath to my beloved wife,, all my household furniture and all the rest of my personal property, after paying from the same the several legacies already named, to be hers forever; but if there should not be at my decease sufficient personal property to pay the aforesaid legacies, then so much of my real estate shall be sold as will raise sufficient money to pay the same.
I also give, devise, and bequeath to my beloved wife,, all the rest and residue of my real estate, as long as she will remain unmarried, and my widow; but on her decease or marriage, the remainder thereof I give and devise to my said children and their heirs, respectively, to be divided in equal shares between them.
I do nominate and appoint my beloved wife,, to be the sole executrix of this my last will and testament. In testimony whereof, I hereunto set my hand and seal, and publish and decree this to be my last will and testament, in presence of the witnesses named below, this
Signed, sealed, declared, and published by the said
residing at in county. residing at in county.
Assignment of Wages, with Power of Attorney.
Know all Men by these Presents, that I,, of, in the County of, State of, in consideration of, to me paid by, of, the receipt whereof I do hereby acknowledge, do hereby assign and transfer to said all claims and demands which I now have, and all which, at any time between the day hereof and the day of

next, I may and shall have against
Witness my hand and seal, this of
(Signature.) [Seal.]
Release on Satisfaction of a Mortgage.
I hereby release the above (or within) mortgage. Witness my hand and seal, this

Assignments are sometimes written on the backs of the instruments to be transferred by the assignment.

The forms here given do not include assignments of deeds, of mortgages, or of leases.

Form of Assignment of a Promissory Note, or any Similar Promise or Agreement.

I hereby, for value received, assign and transfer the within written (or the above written), together with all my rights under the same, to (name of the assignee). (Signature.)

General Form of Assignment, with Power of Attorney.

KNOW ALL MEN BY THESE PRESENTS, That I,, for value received, have sold, and by these presents do grant, assign, and convey

(Here insert a description of the thing or things assigned.)

To have and to hold the same unto the said, his executors, administrators, and assigns forever, to and for the use of the said hereby constituting and appointing him my true and lawful attorney irrevocable, in my name, place, and stead, for the purposes aforesaid, to ask, demand, sue for, attach, levy, recover, and receive all such sum and sums of money, which now are, or may hereafter become due, owing and payable for, or on account of, all or any of the accounts, dues, debts, and demands above assigned to him; giving and granting unto the said attorney full power and authority to do and perform all and every act and thing whatsoever requisite and necessary, as fully, to all intents and purposes, as I might or could do, if personally present; with full power of substitution and revocation, hereby ratifying and confirming all that the said attorney or his substitute shall lawfully do, or cause to be done by virtue thereof.

Executed and delivered in presence of

[Seal.]

Short Form of Lease for Farm and Buildings Thereon.

THIS INDENTURE, made this first day of March, one thousand eight hundred and ninety, between N. A. Dunning, of the township of Stafford, County of Tolland, and State of Connecticut, of the first part, and L. C. Hascall, of the said township and county, of the second part;

Witnesseth, That the said N. A. Dunning, for, and in consideration of the yearly rents and covenants hereinafter mentioned, and reserved on the part and behalf of the said L. C. Hascall, his heirs, executors, and administrators, to be paid, kept, and performed, hath demised, set, and to farm let, and by these presents doth demise, set, and to farm let, unto the said L. C. Hascall, his heirs and assigns, all that certain piece, parcel, or tract of land situate, lying, and being in the township of Stafford aforesaid, known as lot No. (here describe land) now in the possession of, containing one hundred acres, together with all and singular the buildings and improvements, to have and to hold the same unto the said L. C. Hascall, his heirs, executors, and assigns, from the day of next, for, and during the term of, five years, thence next ensuing, and fully to be complete, and ended, yielding and paying for the same, unto the said N. A. Dunning, his heirs and assigns, the yearly rent, or sum of dollars, on the first day of in each and every year, during the term aforesaid, and at the expiration of said term, or sooner if determined upon, he, the said L. C. Hascall, his heirs or assigns, shall and will quietly and peaceably surrender and yield up the said demised premises, with the appurtenances, unto the said N. A. Dunning, his heirs and assigns, in as good order and repair as the same now are, reasonable wear, tear, and casualties, which may happen by fire, or otherwise, only excepted.

In witness whereof, we have hereunto set our hands and seals.

Signed, sealed, and delivered in the presence of R. Doe.

N. A. Dunning. [L. s.]
L. C. HASCALL. [L. s.]

Surrender of a Lease.

In consideration of one dollar, to me paid by John Clark, I do hereby surrender to the lessor, the within written lease of the premises therein mentioned, and all my estate yet unexpired, which premises are free from encum-

brances through me: to hold the same to the said lessor and his assigns forever.

Witness my hand and seal, this 1st day of April, A.D. 1881.

Executed in presence of R. Doe.

N. A. Dunning. [L. s.]

Landlord's Agreement.

THIS IS TO CERTIFY, That I have, this first day of April, 1881, let and rented unto Peter Jones my house and lot, known as Number 638 Wabash Ave., in the city of Chicago, Ill., with the appurtenances and sole and uninterrupted use thereof, for one year, to commence on the first day of May next, at the yearly rent of Six Hundred Dollars, payable in equal sums of Fifty Dollars, on the first day of each and every month.

R. Doe.

An Assignment of a Copyright.

Now this deed witnesseth, That for a valuable consideration, viz.
to me in hand paid, the receipt of which is hereby acknowledged, I have assigned, sold, and set over, and by these presents do assign, sell, and set over unto the said (name of assignee) all the right, title, and interest I have in the above book (or design, etc.) as secured to me by said copyright; the same to be held and enjoyed by the said (name of assignee) for his own use and behoof, and for the use and behoof of his legal representatives, to the full end of the term for which said copyright was issued, as fully and entirely as the same would have been held and enjoyed by me, had this assignment and sale not been made.

In testimony whereof, I have hereunto set my hand and affixed my seal, this day of, in the year of our Lord one thousand eight hundred and

..... (Signature.) [Seal.]

Sealed and delivered in presence of

Rule to Find the Horse Power of a Stationary Engine. — Multiply the area of the piston by the average pressure in pounds per square inch. Multiply this product by the travel of the piston in feet per minute; divide by 33,000. This will give the horse power.

Example. — Diameter of the cylinder, 12 inches; squared = 144 square inches; multiplied by 7854 = 1,130,976, as the area of the piston. The pressure is 70; the average pressure is 50 pounds to the square inch. Multiply last product by 50, gives 5,654,880; and that multiplied by the travel of the piston per minute, which is 300 inches, gives 1,696,454; and that divided by 33,000, gives 51 as the number of horse power.

Power of Engines. — Horse power in steam engines is calculated as the power which would raise 33,000 pounds a foot high in a minute, or 90 pounds

at the rate of 4 miles an hour. One-horse power is equal to the lifting, by a pump, of 250 hogsheads of water 10 feet in an hour; or it would drive 100 spindles of cotton yarn twist, or 500 spindles of No. 48 mule yarn, or 1000 of No. 110, or 12 power looms. One-horse power is produced by 19 pounds of Newcastle coal, 50 pounds of wood, or 34 pounds of culm. Coal 1, wood 3, and culm 2, give equal heats in the production of steam.

The Law of Friction. — As an exponent of the laws of friction, it may be stated that a square stone, weighing 1080 pounds, which required a force of 758 pounds to drag it along the floor of a quarry, roughly chiselled, required only a force of 22 pounds to move it when mounted on a platform and rollers, over a plank floor. A power of 250 tons is necessary to start a vessel weighing 3000 tons, over greased slides, on a marine railway. When in motion, 150 tons only is required.

Coal and Water Used. — Good practice requires combustion of the carbon and hydrogen available in the fuel. Insufficient air causes a dense, black smoke to issue from the chimney, and the loss of heating effect and too much air lower the temperature of the flame and dissipate the heat. Of good coal, 62.2 per cent goes to form steam, and I pound will, in good practice, evaporate $7\frac{1}{2}$ pounds of water.

Shrinkage of Grain. — Farmers rarely gain by holding on to their grain after it is fit for market, when the shrinkage is taken into account. Wheat, from the time it is threshed, will shrink 2 quarts to the bushel, or 6 per cent, in 6 months, in the most favorable circumstances. Hence it follows that 94 cents a bushel for wheat, when first threshed in August, is as good, taking into account the shrinkage alone, as \$1 in the following February.

Corn shrinks much more from the time it is husked. One hundred bushels of ears, as they come from the fields in November, will be reduced to not far from 80. So that 40 cents a bushel for corn in the ear, as it comes from the field, is as good as 50 in March, shrinkage only being taken into account.

In the case of potatoes, taking those that rot and are otherwise lost, together with the shrinkage, there is but little doubt that, between October and June, the loss to the owner who holds them is not less than 33 per cent.

This estimate is taken on the basis of interest at 7 per cent, and takes no account of loss by vermin.

Measuring Grain. — By the United States standard, 2150 cubic inches make a bushel. Now, as a cubic foot contains 1728 cubic inches, a bushel is to a cubic foot as 2150 to 1728; or, for practical purposes, as 4 to 5. Therefore, to convert cubic feet to bushels, it is necessary only to multiply by $\frac{4}{5}$ or .8.

To measure the bushels of grain in a granary:

Rule. — Multiply the length in feet by the breadth in feet, and that again by the depth in feet, and that again by $\frac{4}{5}$. The last product will be the number of bushels the granary contains.

In Pennsylvania, 80 pounds coarse, 70 pounds ground, or 62 pounds fine salt, make one bushel; and in Illinois, 50 pounds common, or 55 pounds fine salt, make one bushel. In Tennessee, 100 ears of corn are a bushel. A heaping bushel contains 2815 cubic inches. In Maine, 64 pounds of rutabaga turnips or beets make 1 bushel.

A cask of lime is 240 pounds. Lime in slacking absorbs 2½ times its volume, and 2½ times its weight, in water.

To Measure Corn on the Cobs, in Cribs. — Corn is generally put up in cribs made of rails; but the rule will apply to a crib of any size or kind, whether equilateral or flared at the sides.

When the crib is equilateral:

Rule. — Multiply the length in feet by the breadth in feet, and that again by the height in feet; which last product multiply by 0.63 (the fractional part of a heaped bushel in a cubic foot), and the result will be the heaped bushels of ears. For the number of bushels of shelled corn, multiply by 0.42 (two-thirds of 0.63), instead of 0.63.

In measuring the height, of course the height of the corn is intended. And there will be found to be a difference in measuring corn in this mode, between fall and spring, because it shrinks very much in the winter and spring, and settles down.

When the crib is flared at the sides:

Rule. — Multiply half the sum of the top and bottom widths in feet by the perpendicular height in feet, and that again by the length in feet, which last product multiply by 0.63 for heaped bushels of ears, and by 0.42 for the number of bushels of shelled corn.

Note. — The above rule assumes that 3 heaping half-bushels of ears make I struck half-bushel of shelled corn. This proportion has been adopted upon the authority of the major part of our best agricultural journals.

Measurement of Hay. — The only correct way of measuring hay is to weigh it. This, on account of its bulk and character, is very difficult, unless it is baled or otherwise compacted. This difficulty has led farmers to estimate the weight by the bulk or cubic contents, — a mode which is only approximately correct. Some kinds of hay are light, while others are heavy, their equal bulks varying in weight. But for all ordinary farming purposes of estimating the amount of hay in meadows, mows, and stacks, the following rules will be found sufficient: —

As nearly as can be ascertained, 25 cubic yards of average meadow hay, in windrows, make a ton.

When loaded on wagons, or stored in barns, 20 cubic yards make a ton.

When settled in mows or stacks, 15 cubic yards make a ton.

Note. — These estimates are for medium-sized mows or stacks; if the hay is piled to a great height, as it often is where horse hay-forks are used, the mow will be much heavier per cubic yard.

When hay is baled, or closely packed for shipping, 10 cubic yards will weigh a ton.

To find the number of tons in long, square stacks:

Rule. — Multiply the length in yards by the width in yards, and that by half the altitude in yards, and divide the product by 15.

To find the number of tons in circular stacks:

Rule. — Multiply the square of the circumference in yards by 4 times the altitude in yards, and divide by 100; the quotient will be the number of cubic yards in the stack; then divide by 15, for the number of tons,

Produce of One Acre.

One acre will produce 224 pounds mutton, 186 pounds beef, 2900 pounds milk, 300 pounds butter, and 200 pounds cheese; a fair crop of potatoes from 16 bushels of seed is 340 bushels.

Names and Dimensions of Various Sizes of Paper.

PRINT.	Packet Post 11½x 18
Medium 19 x 24	Foolscap 12½x 16
Royal (20 x 24) 20 x 25	FLAT.
Super Royal 22 x 28	Legal Cap 13 x 16
Imperial 22 x 32	Flat Cap 14 x 17
Medium and a half 24 x 30	Crown 15 x 19
Small Double Medium 24 x 36	Double Flat Letter 16 x 20
Double Medium 24 x 38	Demy 16 x 21
Double Royal 26 x 40	Folio Post 17 x 22
Double Super Royal 28 x 42	Check Folio 17 x 24
Double Super Royal 29 x 43	Double Cap 17 x 28
Broad Twelves 23 x 41	Extra Size Folio 19 x 23
Double Imperial 32 x 46	*Medium 18 x 23
FOLDED.	*Royal 19 x 24
Billet Note 6 x 8	*Super Royal 20 x 28
Octavo Note 7 x 9	*Imperial 22 x 30
Commercial Note 8 x 10	Double Demy 21 x 313/4
Packet Note 9 x II	Elephant
Bath Note 81/2x 14	Columbier 23 x 311/4
Letter 10 x 16	Atlas 26 x 33
Commercial Letter 11 x 17	Double Elephant 26 x 40

Amount of Seed Potatoes

Required when cut or uncut, and when set at different distances apart, in drills 28 inches from crown to crown.

Whole,	6 ir	ı, apa	rt, 77 b	ushels	per acre.	Halved,	18 ir	ı, aparı	, 13 b	ushels	per acre.
- "	9	"	50	**	44	Quartered,	6	**	19	**	"
11	12	"	38	"	**	"	9	" .	13	**	**
**	18	"	26	**	44	"	12	44	IO	"	"
**	2.1	46	19	"	"	Five parts,	6	**	15	**	"
Halved,	6	44	48	**	"	"	9	"	10	44	**
44	9	44	24	**	**	Six parts,	6	44	13	"	16
44	12	"	16	44	44				-		

Amount of Butter and Cheese from Milk.

100 p	ound	s of mil	k contain	about	3 por	ınds	pure but	ter	•
100	44	"	"	44	7.8	**	cheese.		
100	**	"	average	abou	t 3.5 p	ound	ls comm	on	butter.
100	**	44	"	**	11.7	"	,11	•	cheese.
100	41	of ski	m-milk yie	eld ab	out 13	3.5 pc	ounds sk	im-	milk cheese.

Ingredients contained in various kinds of milk. In 100 parts there are of

					Cow.	Ass.	Goat.	Ewe.
Water					87.0	91.7	86.7	85.6
Milk Sugar					4.8	6.1	5.3	5.0
Butter					3.1	0.1	3.3	4.2
Casein					4.5	1.8	4.I	4.5

Average Velocity of Various Bodies.

		p	Miles er hour.	Feet per sec.	Miles Feet per hour, per sec.
A man walks			3	4	Rapid rivers flow 7 10
A horse trots			7	IO	Moderate wind blows 7 10
A horse runs			20	29	A storm moves 36 - 52
Steamboat runs			18	26	A hurricane moves 80 117
Sailing vessel runs .			10	14	A rifle ball moves 1,000 1,466
Slow rivers flow			3	4	Sound moves 743 1,142
Light moves 192,	000	mi	iles per	sec.	Electricity moves 288,000 miles per sec.

Evaporative Powers of Fuel, etc.

- 1 pound of coal evaporates 9 pounds of water.
- I pound of coke evaporates $7\frac{1}{2}$ to 9 pounds of water.
- I pound of wood evaporates 41/2 pounds of water.
- 1 pound of turf (peat) evaporates 6 pounds of water.
- Stationary engines use from 3 to 7 pounds coal per horse power an hour.
- Locomotive passenger engines, 26 to 30 pounds of coal per mile.
- Locomotive freight engines, 45 to 55 pounds of coal per mile.

Comparative Table.

100 Pounds of Hay are Equal to

275	pounds	of green Indian corn.	300 pounds of carrots.							
442	**	rye straw.	54	**	rye.					
360	· · · · ·	wheat straw.	46	"	wheat.					
164	44	oat "	59	"	oats.					
180	"	barley "	45	**	beans and peas mixed.					
153	44	pea "	64	**	buckwheat.					
200	**	buckwheat straw.	57	**	Indian corn.					
201	46	raw potatoes.	68	**	acorns.					
175	**	boiled "	105	"	wheat bran.					
339	"	mangel wurtzel.	109	"	rye bran.					
504	"	turnips.	167	**	wheat, pea, and oat chaff.					
179	**	rye and barley mixed.	1		-					

The following table shows the amount of hay, or its equivalent per day, required by each 100 pounds of live weight of various animals:—

Working horses 3.08 pounds.	Dry cows 2.42 pounds.
Working oxen 2.40 "	Young growing cattle 3.08 "
Fatting oxen 5.00 "	Steers 2.84 "
Fatting oxen, when fat 4.00 "	Pigs 3.00 "
Milch cows from 2.25 to 2.40 "	Sheep

Growth and Life of Animals.

					Years Grow.	Years Live.							Years Grow.	Year Live
Man					20	90 to 100	Dog						2	12 to 14
Came	١.				8	40	Cat .						11/2	9 or 10
Horse					5	25	Hare					·	1	8
Ox .					4	15 to 20	Guine	ар	oig				7 mos.	6 or 7
Lion					4	20		_						

12 inches

2 pints

4 quarts

Shrinkage in Drying Fruits.

	The following	table will	show,	pre₩y	nearly,	the	loss	in	drying	some	of th	ie	principal	
fr	uits:—													

Fruit.						G	Pounds reen Fruit.	Per cent of Waste.	Pounds Dried Fruit.
Apples.							100	88	12
Peaches							100	88	12
Pears .							100	88	12
Apricots							100	86	14
Plums .							100	86	14
Blackber	rie	s.					100	84	16
Pitted ch	err	ies					100	84	16
Gooseber	rrie	es					100	80	20
Grapes.							100	80	20

Measures.

12 Menes make 1 100t	WINE MEASURE
3 feet " 1 yard.	Oi
5½ yd., or 16½ ft. " 1 rod, perch, or	4 gills
pole.	2 pints
40 rods " I furlong.	4 quarts
8 furl's, or 320 rods " I mile.	311/2 gallons
3 miles " I league.	42 gallons
60 geographic miles, or 69½ statute miles	63 gallons, or 2 bbl. 2 hogsheads
The entire round of circle, say of the	2 pipes
earth, is 360 degrees.	CLOTH MEASUR
SQUARE MEASURE - For Surfaces.	21/4 inches
·	4 nails, or 9 inches
144 inches make I foot.	. , ,
g feet " I yard.	4 quarters
30% yards, or }	3 quarters, or)
2721/4 feet perch.	3/4 of a yard
40 rous 1 rood.	5 quarters, or 11/4 yd
. 4 100ds, 01 100 10ds 1 acres	6 quarters, or 11/2 yd
640 acres " I mile.	TIME
CUBIC OR SOLID MEASURE - For Solids.	60 seconds
1728 cubic inches make 1 cubic ft.	60 minutes
27 cubic feet " I cubic yd.	24 hours
to ft of round or 1	7 days
50 ft. of hewn timb'r	4 weeks
42 cubic feet " I ton of ship-	12 calendar months,
ping.	365 days, 6 hrs., near
·16 cubic feet " I foot of wood,	13 lunar months, or
or a cord foot.	52 weeks
8 cord feet, or) " roard	100 years
-128 cubic feet " 1 cord.	•
Done Marriagon Fra Al. Productivity	CIRCULA
BEER MEASURE - For Ale, Porter, Milk,	60 seconds (")
etc.	60 minutes ()

make 1 quart.

" I gallon.

LONG MEASURE - For Length and

Distance.

make I foot.

```
36 gallons
                     make 1 barrel.
52 gallons (11/4 bbl.) " I hogshead.
 WINE MEASURE - For Wines, Spirits,
                   ils, etc.
                      make I pint.
                           I quart.
                            ı gallon.
                            I barrel.
                           I tierce.
                            I hogshead.
                            I pipe, or butt.
                            I tun.
                   RE - For Dry Goods.
                      make I nail.
                            I quarter of a
                              yard.
                            I yard.
                            I Flemish ell.
                            I English ell.
                   đ.
                            I French ell.
                   MEASURE.
                      make I minute.
                            I hour.
                            ı day.
                            I week.
                            I lunar month.
                   or ) "
                            ı civil year.
                   rly 🕽
                            ı year.
                            I century.
                   AR MEASURE.
                      make I minute (').
                            I degree (°).
30 degrees (°)
                            I sign (s.).
12 signs (s.)
                            I circle (c.).
```

Measures. - Continued.

	* /	WIILES.				measure by the me	an
	An English	mile contains	1,760 y	ards.	league of 3666 yard	is.	
	Russian	"	1,100	**			
Ĺ	Irish and Scotch	14 11	2,200	44	DRY MEASURE -	-For Grain, Salt, Roo	ots,
	Italian		1,467	44	Fruit	ts, Coal, etc.	
	Polish	" "	4,400	**	2 pints (pt.)	make 1 quart (qt.)	
	Spanish	" "	5,028	"	8 quarts	" r peck (pk.)	
	German	44 44	5,866	44	4 pecks, or 32 qts	. " I bushel (bu	i.).
	Swedish and Danis	sh" "	7,233	**	8 bushels	" I quarter (qu	
	Hungarian	44 44	8,800	"	32 bushels	" r chaldr'n(c	h.)
				Wei	ghts.		
	TROY WEIGH	it — For God	ld, Silve	er,	BREAD	AND FLOUR.	
	Li	quors, etc.			Peck loaf	17 lbs. 6 oz. 1	dr.
	24 grains	make 1 p	ennyw	eight.	Half-peck loaf	8 lbs. 11 oz. 111/2	dr.
	20 pennyweights		ounce.		Ouartern "	4 lbs. 5 oz. 81/4	
	12 ounces	" т	oound.		1/2 " "	2 lbs. 2 oz. 121/8	
	Avoirdupois W	Unique E	C		A peck of flour	14	lbs.
		VEIGHT — FO Heavy Goods,		eries	A bushel of flour	56 1	lbs.
	16 drams	make 1			A sack of flour	290 1	lbs.
	16 ounces		pound.				
	14 pounds		stone.		COAL	BY MEASURE.	
	28 pounds		quarter.		4 pecks	make I bushel.	
	4 quarters		hundre		3 bushels	" 1 sack.	
	20 cwt.		ton.	•••	9 bushels	" I vat.	-
	N.B. — There a			aga in	12 sacks	" I chaldro	on.
•	progress in the U.			_	51/4 chaldrons	" I room.	
	be only 2000 lb				21 chaldrons	" I score,	-
	thus:—	s., mstcau t	JI 2240	105.,			
		make T	anontan			Paper.	
	25 pounds 4 quarters, or 10	make I	quarier. cwt.	•	24 sheets	make 1 quire.	
	20 cwt.		lon.		20 quires	" I ream.	
	20 CW.	1.			2 reams	1 buildi	e.
	APOTHEC	ARIES' WEI	GHT.		5 bundles	" I bale.	
	20 grains		e i scr	uple.		Books,	
	3 scruples	**	1 dra	m.	4 pages make I s	heet folio (fol.).	
	8 drams	**	I our	ice.	8 pages " I	" quarto (4to).	
	12 ounces	**	1 por	ınd.	1	" octavo (8vo).	
	Woo	OL WEIGHT.			10	" duodecimo (12mo).
	7 pounds		e i clo	ve	36 pages " I	" eighteen mo (18mo	
	2 cloves	1114	I sto		J 13	3 (
	2 stones	**	I tod		HAY.	AND STRAW.	
	6½ tods	44	1 wey	-	36 lbs.	make I truss of straw.	
	- /2			•	30 105.	# - # -1-1 b-	

ı sack.

I last. ı pack.

2 weys 12 sacks

12 score

MILES.

In France they measure by the mean

					•		
Peck loaf		17	lbs.	6	oz.	1	dr.
Half-peck loa	f	8	lbs.	11	oz.	111/2	dr.
Quartern "		4	lbs.	5	oz.	81/4	dr.
1/2 " "		2	lbs.	2	oz.	121/8	dr.
A peck of flot	ır					14	lbs.
A bushel of fl	our					56	lbs.
A sack of flou	ır					290	lbs.

AL BY MEASURE.

00112	
4 pecks	make I bushel.
3 bushels	" I sack.
9 bushels	" I vat.
12 sacks	" I chaldron.
51/4 chaldrons	" I room.
21 chaldrons	" I score.

PAPER.

24 sheets	make	1	quire.
20 quires	44	I	ream.
2 reams	**	1	bundle.
5 bundles	**	I	bale.

Books.

4	pages	make	I	shee	t folio (fol.).
8	pages	44	I	41	quarto (4to).
16	pages	44	1	44	octavo (8vo).
24	pages	64	I	"	duodecimo (12mo).
36	pages	44	I	**	eighteen mo (18mo).

AY AND STRAW.

36 lbs.	make	I	truss	of straw.
56 lbs.	**	I	**	old hay.
60 lbs.	44	1	"	new hay.
35 trusses	"	1	load.	

Weights and Measures.

As recognized by the Laws of the United States.

Bushel of		lbs.	Bushel of lbs. Bushel of lbs.	
Wheat		60	Timothy seed 45 Stone coal 80	,
Shelled corn .		56	Flax seed	
Corn in the ear		70	Hemp seed 40 Bran 20	,
Rye		56	Millett seed 50 Plastering hair 8	
Oats		32	Peas 60 Turnips 55	
Barley		48	Blue-grass seed 45 Unslacked lime 30	
White beans .		62	Buckwheat 52 Corn-Meal 48	
Irish potatoes.		60	Dried peaches 33 Fine Salt 55	
Sweet potatoes		55	Dried apples 24 Hungarian grass seed . 54	
Castor beans .		46	Onions 57 Ground peas 20	
Clover seeds		60	Salt 65	

Peanuts, per bushel: African, 32 lbs.; Tennessee, 28 lbs.; Virginia, 22 lbs.

A box 24 by 16 inches, 22 deep, contains 1 barrel.

A box 16 by 161/2 inches, 8 deep, contains I bushel.

A box 8 by 81/2 inches, 8 deep, contains I peck.

A box 8 by 8 inches, 41/4 deep, contains 1/2 peck.

Round Timber.

Round timber, when squared, is estimated to lose one-fifth; hence (50 cubic feet, or) a ton of round timber is said to contain only 40 cubic feet.

Round, sawed, and hewn timber are bought and sold by the cubic foot.

Rule to measure round timber: Take the girth in feet at both the large and small ends; add them, and divide their sum by 2, for the mean girth; then multiply the length in feet by the square of one-fourth of the mean girth, and the quotient will be the contents in cubic feet, according to the common practice.

Rule to measure round timber, as the frustum of a cone; that is, to measure all the timber in a log: Multiply the square of the circumference at the middle of the log, in feet, by 8 times the length, and the product divided by 100 will be the contents. (Very near the truth.)

Interest Tables: Seven Per Cent.

Тіме.	\$1	\$2	\$3	\$4	\$5	\$ 6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day											.02	.19
2 Days											.04	•39
3 Days									.oı	.01	.06	.58
4 Days							.oı	.oı	.01	.oI	.08	.78
5 Days						.oı	.01	.oı	.oı	.01	.IO	.97
6 Days					.oI	.oI	.oı	.oı	10,	.01	,12	1.17
15 Days		.or	.oı	.or	.oı	.02	.02	.02	.03	.03	.29	2.92
I Month	.01	.oı	.02	.02	.03	.04	.04	.05	.05	.06	.58	5.83
3 Months	.02	.04	.05	.07	.09	.ri	.12	.14 .	.16	.18	1.75	17.50
6 Months	.04	.07	.II	.14	.18	.21	.25	.28	.32	•35	3.50	35.00
9 Months	.05	.II	.16	.21	.26	.32	.37	.42	.47	•53	5.25	52,50
ı Year	.07	.14	.21	.28	•35	.42	•49	.56	.63	.70	7.00	70.00

Interest Tables: Ten Per Cent.

Тіме.	\$1	\$2	\$3	\$4	\$5	\$ 6	\$7	\$8	\$9	\$10	\$100	\$1000
1 Day											.03	.28
15 Days	.oı	.01	.03	.02	.02	.03 .05	.03 .06	.03	.04	.04 .08	.83	8.33
2 Months 4 Months	.02	.03	.05	.07	.08 .17	.10	.12	.13	.15	.17 ·33	1.67 3.33	16.67 33.33
6 Months 8 Months	.05 .07	.19	.15	.20	∙55 •33	.30 .40	.25 .47	.40 .53	.60	.50 .67	5.00 6.67	50.00 66.67
r Year	.10	.20	.30	.40	.50	.60	.70	.80	.90	1.00	10.00	100,00

Weights Per Bushel of Grain, etc.

The following table shows the number of pounds per bushel required, by law or custom, in the sale of articles specified, in the several States: —

STATES.	Barley.	Buckwheat.	Corn, Shelled.	Corn-meal.	Onions.	Oats.	Potatoes.	Rye.	Wheat.	Salt,	Turnips.	Beans, White.	Clover seed.	Timothy.
Maine . New Hampshire Vermont . Massachusetts . Connecticut . New York . New Jersey . Pennsylvania . Delaware . Maryland . District of Columbia . Virginia . North Carolina . South Carolina . Georgia . Louisiana . Arkansas . Tennessee . Kentucky . Ohio . Michigan . Indiana . Illinois . Wisconsin . Minnesota . Iowa . Missouri . Kansas . Nebraska . California . Oregon .	48 48 48 48 47 48 48 48 48 48 48 48 48 48 48	48 · · · 8 · · · 8 · · · · · · · · · · ·	55 · 56 8 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	50 50 50 50 48 46 50 48 50 48 50 48 50 48 	52 52 57 57 57 55 6 57 57 57 57 57 57 57 57 57 57 57	30 32 32 32 33 33 32 32 33 33 32 33 34 33 36	60 60 60 60 60 60 60 60 60 60 60 60 60 6	.66666666666666666666666666666666666666	60 60 60 60 60 60 60 60 60 60 60 60 60 6	85 50 56 50 56 50 50 50 50 50 50 50 50 50 50 50 50 50	50 	64 60 62 62 62 60 60 60 60 60 60 60 60 60 60 60 60 60	· · · · · · · · · · · · · · · · · · ·	42 · · · · 44 · · · · · · · · · · · · ·

Various Tables.

CUBIC WEIGHT TABLE. Weight.	Pounds, Carbon.
•	1 cord of pitch pine 1,903 43
13 cubic feet of marble 1 ton.	Canada pine 1,870 42
13½ " granite 1 "	yellow oak 2,920 61
34 " " mahogany 1 "	white oak 1,870 81
29 " " oak "	Lombardy poplar, 1,775 41
30 " " ash "	
51 " " beech 1 "	red oak 3,255 70
60 " " elm	A TABLE OF DAILY SAVINGS, AT COM-
65 " " fir	POUND INTEREST.
	Per Day. Per Year. Ten Yrs. Fifty Yrs.
WEIGHTS OF CORDWOOD.	\$.02} \$10 \$130 \$2,900
Pounds. Carbon.	.051 20 260 5,800
1 cord of hickory 4,468 100	.11 40 520 11,600
hard maple 2,864 58	.271 100 1,300 29,000
beech 3,234 64	.55 200 2,600 58,000
ash 3,449 79	1.10 400 5,290 116,000
birch 2,398 49	1.37 500 6,500 145,000

Power Required for Various Purposes.

То	drive	а	20	to	30-	inch	circular	saw	4	to	6	horse	power.	•
			32	to	40	44	**	44	12			"	**	
			48	to	50	44	44	**	15			**	44	
			50	to	62	44	16	**	25			46	**	

POWER NECESSARY TO GRIND GRAIN WITH PORTABLE MILLS.

Horse P	ower.	Size of Stones.	Revolutions per Minute.	Bu. Corn ground per Hour.	Bu. Wheat ground per Hour.
2 to	4	12-inch	800 to 900	I to 4	r to 3
2 to	6	20-inch	650 to 700 -	5 to 8	4 to 6
6 to	8	30-inch	550 to 600	10 to 15	7 to 10
7 to	12	36-inch	450 to 500	18 to 25	12 to 15
12 to	15	48-inch	350 to 400	25 to 35	15 to 18

CHAPTER II.

POSTAL, INTERNAL REVENUE, AND NATURALIZATION LAWS.

UNITED STATES POSTAL REGULATIONS.

As Revised under Act of March 3, 1885.

First Class Mail Matter. — LETTERS. — This class includes letters, postal cards, and anything sealed or otherwise closed against inspection, or anything containing writing not allowed as an accompaniment to printed matter, under class three.

POSTAGE. — 2 cents each ounce, or additional fraction of an ounce, to all parts of the United States. On local or drop-letters, at free-delivery offices, 2 cents. At offices where there is no delivery by carrier, 1 cent.

Prepayment by stamps invariably required. . Postal cards, 1 cent.

Registered letters, 10 cents in addition to the proper postage. The Post-Office Department, or its revenue, is not by law liable for the loss of registered mail matter.

For immediate delivery, 10 cents additional postage, prepaid by special stamp, only at offices designated by the Post-Office Department.

Second Class. — REGULAR PUBLICATIONS. — This class includes all newspapers, periodicals, or matter exclusively in print, and regularly issued at stated intervals, as frequently as four times a year, from a known office of publication or news agency. Postage, I cent a pound or fraction thereof, prepaid by special stamps. Publications designed primarily for advertising or free circulation, or not having a legitimate list of subscribers, are excluded from the pound rate, and pay third class rates. On newspapers and periodicals, mailed by other than publishers or news agents, I cent for each 4 ounces or fractional part thereof.

Third Class. — Mail matter of the third class includes books, circulars, unsealed publications for advertising purposes, and other matter wholly in print, legal and commercial papers filled out in writing, photographs, proofsheets, corrected proof-sheets, and manuscript copy accompanying the same.

MS., accompanied by proof-sheets, letter rates.

Limit of weight, 4 pounds each package, except single books—weight not limited.

Postage, I cent for each 2 ounces or fractional part thereof, invariably prepaid by stamps.

Fourth Class. — Embraces merchandise, and all matter not included in the first, second, or third class, which is not liable to injure the mail matter. Limit of weight, 4 pounds.

Postage, I cent each ounce or fraction thereof, prepaid.

All packages of matter, of the third or fourth class, must be so wrapped or enveloped that their contents may be examined by postmasters, without destroying the wrappers.

Matter of the second, third, or fourth class, containing any writing, except as here specified, or except bills and receipts for periodicals, or printed commercial papers filled out in writing, as deeds, bills, etc., will be charged with letter postage; but the sender of any book may write names or addresses therein, or on the outside, with the word "from" preceding the same, or may write briefly on any package the number and names of the articles inclosed.

Postal Money Orders. — An order may be issued for any amount, from I cent to \$100 inclusive, but fractional parts of a cent cannot be included.

The fees for orders are: For sums not exceeding \$5, 5 cents; \$5 to \$10, 8 cents; \$10 to \$15, 10 cents; \$15 to \$30, 15 cents; \$30 to \$40, 20 cents; \$40 to \$50, 25 cents; \$50 to \$60, 30 cents; \$60 to \$70, 35 cents; \$70 to \$80, 40 cents; \$80 to \$100, 45 cents.

When a larger sum than \$100 is required, additional orders must be obtained; but no more than three orders will be issued in one day, from the same post-office, to the same remitter, in favor of the same payee.

Postal Notes, for any sum under \$5, are sold at any money-order post-office; price, 3 cents each. These are payable to the bearer at any designated post-office, within three months after their date.

Free Delivery. — The free delivery of mail matter, at the residences of people desiring it, is required by law in every city of 50,000 or more population, and may be established at every place containing not less than 20,000 inhabitants. Number of free-delivery offices, 178.

The franking privilege was abolished July 1, 1873, but the following mail matter may be sent free by legislative saving-clauses, viz.:—

- 1. All public documents printed by order of Congress, the Congressional Record and speeches contained therein, franked by members of Congress, or the Secretary of the Senate, or Clerk of the House.
- 2. Seeds transmitted by the Department of Agriculture, or by any member of Congress, procured from that Department.
 - 3. All periodicals sent to subscribers, within the county where printed.
- 4. Letters and packages relating exclusively to the business of the government of the United States, mailed only by officers of the same; publications required to be mailed to the Librarian of Congress by the copyright law, and letters and parcels mailed by the Smithsonian Institution. All these must be covered by specially printed "penalty" envelopes or labels.

All communications to government officers, and to or from members of Congress, are required to be prepaid by stamps.

UNITED STATES INTERNAL REVENUE TAX.

Banks and bankers, on average amount of circulation, each month, 1-12 of 1 per cent.
Banks, on average amount of circulation, beyond 90 per cent of the capital, an additional tax each month, 1-6 of 1 per cent.
Banks, persons, firms, associations, etc., on amount of notes of any person, firm,
association (other than a national banking association), corporation, State
bank, or State banking association, town, city, or municipal corporation, used
and paid out as circulation
Banks, persons, firms, associations (other than national bank associations), and
every corporation, State bank, or State banking association, on the amount of
their own notes, used for circulation and paid out by them ro per ct
Beer, per barrel of 31 gallons
Brandy, per gallon
Brewers, manufacturing 500 barrels or more annually
— manufacturing less than 500 barrels annually 50 oc
Cigars, manufacturers of, special tax 6 oc
Cigars of all descriptions, made of tobacco or any substitute, per 1000 3 oc
Cigarettes, not weighing more than 3 pounds per thousand, per 1000 50
Cigarettes, weight exceeding 3 pounds per thousand, per 1000 3 or
Cigars or cigarettes, imported, in addition to import duty to pay same as above.
Liquors, fermented, per barrel
Liquors, distilled, per gallon
Liquor dealers (wholesale), special tax 100 or
Malt liquor dealers (wholesale) 50 oc
Liquor dealers (retail), special tax
Malt liquor dealers (retail)
Manufacturers of stills
Manufacturers of stills, for each still or worm made 20 or
Oleomargarine, per pound
Manufacturers of oleomargarine, or other substitutes for butter. Special annual
tax
Wholesale dealers in oleomargarine. Special annual tax
Retail dealers in oleomargarine. Special annual tax
Rectifiers, special tax, less than 500 barrels
above 500 barrels
Snuff, or snuff flour, manufactured of tobacco or any substitute, per pound
Spirits distilled, per proof gallon
Stamps for distilled spirits for export, wholesale liquor dealers, special bonded
warehouse, distillery warehouse, and rectified spirits, each
Stamps, on bank checks, drafts, etc. Tax repealed after July 1, 1883.
Tobacco, all kinds, per pound, after May 1, 1883
Tobacco, dealers in manufactured, after May 1, 1883
Tobacco, manufacturers of, after May 1, 1883
Tobacco, dealers in leaf, wholesale, after May 1, 1883
sales above \$500 per annum. But farmers and producers may sell tobacco of
their own raising to consumers, to an amount not exceeding \$100 annually.
Tobacco peddlers, travelling with more than 2 horses, mules, etc., after May 1, 1883. 30 ox
Tobacco peddlers, travelling with a horses, mules, or other animals, after May I,
Tobacco peddlers, travelling with 1 horse, mule, or other animal, after May 1,
1883
Tobacco peddlers, travelling on foot, or by public conveyance, after May 1, 1883 3 60
Tobacco, snuff, and cigars, for export, stamps for, each, after May 1, 1883 10
-

Whiskey, per proof gallon	90
Wines and champagne (imitation), not made from grapes grown in the United	
States, and liquors not made from grapes, currants, rhubarb, or berries, grown	
in the United States, but rectified or mixed with distilled spirits, or by infusion	
of any matter in spirits, to be sold as wine or substitute for it, per dozen bottles	
of more than a pint, and not more than a quart	2 40
Imitation wines, containing not more than I pint, per dozen bottles	I 20

THE COPYRIGHT LAWS OF THE UNITED STATES.

Every applicant for a copyright must state distinctly the name and residence of the claimant, and whether right is claimed as author, designer, or proprietor. No affidavit or formal application is required.

A printed copy of the title of the book, map, chart, dramatic or musical composition, engraving, cut, print, or photograph, or a description of the painting, drawing, chromo, statue, statuary, or model or design for a work of the fine arts, for which copyright is desired, must be sent by mail or otherwise, prepaid, addressed "Librarian of Congress, Washington, District of Columbia." This must be done before publication of the book or other article.

A fee of 50 cents, for recording the title of each book or other article, must be inclosed with the title as above, and 50 cents in addition (or \$1 in all), for each certificate of copyright under seal of the Librarian of Congress, which will be transmitted by early mail.

Within ten days after publication of each book or other article, two complete copies must be sent, prepaid, or under free labels furnished by the Librarian, to perfect the copyright, with the address, "Librarian of Congress, Washington, District of Columbia."

Without the deposit of copies above required, the copyright is void, and a penalty of \$25 is incurred.

No copyright is valid, unless notice is given by inserting in every copy published:

"Entered according to act of Congress, in the year —, by —, in the office of the Librarian of Congress, at Washington;" or, at the option of the person entering the copyright, the words, "Copyright, 18—, by ——."

The law imposes a penalty of \$100 upon any person who has not obtained copyright, who shall insert the notice, "Entered according to act of Congress," or "Copyright," or words of the same import, in or upon any book or other article.

Each copyright secures the exclusive right of publishing the book or article copyrighted, for the term of twenty-eight years. Six months before the end of that time, the author or designer, or his widow or children, may secure the renewal for the further term of fourteen years, making forty-two years in all.

Any copyright is assignable in law by any instrument of writing, but such assignment must be recorded in the office of the Librarian of Congress, within sixty days from its date. The fee for this record and certificate is one dollar.

A copy of the record (or duplicate certificate) of any copyright entry will be furnished, under seal, at the rate of 50 cents.

Copyrights cannot be granted upon trademarks, nor upon labels intended to be used with any article of manufacture. If protection for such prints or labels is desired, application must be made to the Patent Office, where they are registered, at a fee of \$6 for labels, and \$25 for trademarks.

NATURALIZATION LAWS OF THE UNITED STATES.

The conditions under and the manner in which an alien may be admitted to become a citizen of the United States, are prescribed by section 2, 165–174, of the Revised Statutes of the United States.

Declaration of Intention. — The alien must declare upon oath, before a circuit or district court of the United States, or a district or supreme court of the Territories, or a court of record of any of the States having commonlaw jurisdiction, and a seal and clerk, two years at least prior to his admission, that it is, bona fide, his intention to become a citizen of the United States, and to renounce forever all allegiance and fidelity to any foreign prince or state, and particularly to the one of which he may be at the time a citizen or a subject.

Oath on Application for Admission. — He must, at the time of his application to be admitted, declare on oath, before some one of the courts above specified, that he "will support the Constitution of the United States, and that he absolutely and entirely renounces and abjures all allegiance and fidelity to every foreign prince, potentate, state, or sovereignty, and particularly, by name, to the prince, potentate, state, or sovereignty of which he was before a citizen or subject;" which proceedings must be recorded by the clerk of the court.

Conditions for Citizenship. — If it shall appear to the satisfaction of the court, to which the alien has applied, that he has resided continuously within the United States for at least five years, and within the State or Territory where such court is at the time held, one year at least; and that, during that time, "he has behaved as a man of good moral character, attached to the principles of the Constitution of the United States, and well disposed to the good order and happiness of the same," he will be admitted to citizenship.

Titles of Nobility. — If the applicant has borne any hereditary title or order of nobility, he must make an express renunciation of the same at the time of his application.

Soldiers.—Any alien of the age of twenty-one years and upward, who has been in the armies of the United States, and has been honorably discharged therefrom, may become a citizen on his petition, without any previous declaration of intention; provided that he has resided in the United States at least one year previous to his application, and is of good moral character.

Minors. — Any alien under the age of twenty-one years, who has resided in the United States three years next preceding his arrival at that age, and who has continued to reside therein to the time he may make application to be admitted a citizen thereof, may, after he arrives at the age of twenty-one

years, and after he has resided five years within the United States, including the three years of his minority, be admitted a citizen; but he must make a declaration on oath, and prove to the satisfaction of the court, that for two years next preceding it has been his bona fide intention to become a citizen.

Children of Naturalized Citizens. — The children of persons who have been duly naturalized, being under the age of twenty-one years at the time of the naturalization of their parents, shall, if dwelling in the United States, be considered as citizens thereof.

Citizens' Children who are born Abroad.—The children of persons who are now, or have been, citizens of the United States are, though born out of the limits and jurisdiction of the United States, considered as citizens thereof.

Protection Abroad to Naturalized Citizens.—Section 2000 of the Revised Statutes of the United States declares that "all naturalized citizens of the United States, while in foreign countries, are entitled to and shall receive from this government the same protection of person and property which is accorded to native-born citizens."

Right of Suffrage. — The right to vote comes from the State, and is a State gift. Naturalization is a Federal right, and is a gift of the nation, not of any one State. In nearly one-half the Union, aliens who have declared intentions, vote, and have the right to vote equally with naturalized or nativeborn citizens. In the other half, only actual citizens may vote. The Federal naturalization laws apply to the whole Union alike, and provide that no alien male may be naturalized until after five years' residence. Even after five years' residence and due naturalization, he is not entitled to vote unless the laws of the State confer the privilege upon him, and he may vote in one State (Michigan) six months after landing, if he has immediately declared his intention, under United States law, to become a citizen.

CHAPTER III.

DECLARATION OF INDEPENDENCE, PRESIDENTS, AND SENATORS.

THE DECLARATION OF INDEPENDENCE.

Adopted by Congress, July 4, 1776.

A DECLARATION BY THE REPRESENTATIVES OF THE UNITED STATES OF AMERICA, IN CONGRESS ASSEMBLED.

WHEN, in the course of human events, it becomes necessary for one people to dissolve the political bands which have connected them with another, and to assume among the powers of the earth the separate and equal station to which the laws of nature and of nature's God entitle them, a decent respect to the opinions of mankind requires that they should declare the causes which impel them to the separation.

We hold these truths to be self-evident: that all men are created equal; that they are endowed by their Creator with certain inalienable rights; that among these are life, liberty, and the pursuit of happiness; that, to secure these rights, governments are instituted among men, deriving their just powers from the consent of the governed; that, whenever any form of government becomes destructive of these ends, it is the right of the people to alter or abolish it, and to institute a new government, laying its foundation on such principles, and organizing its powers in such form, as to them shall seem most likely to effect their safety and happiness. Prudence, indeed, will dictate that governments long established should not be changed for light and transient causes; and, accordingly, all experience hath shown that mankind are more disposed to suffer, while evils are sufferable, than to right themselves by abolishing the forms to which they are accustomed. But when a long train of abuses and usurpations, pursuing invariably the same object, evinces a design to reduce them under absolute despotism, it is their right, it is their duty, to throw off such a government, and to provide new guards for their future security. Such has been the patient sufferance of these Colonies; and such is now the necessity which constrains them to alter their former systems of government. The history of the present King of Great Britain is a history of repeated injuries and usurpations, all having in direct object the establishment of an absolute tyranny over these States. To prove this, let facts be submitted to a candid world: -

He has refused his assent to laws the most wholesome and necessary for the public good. He has forbidden his governors to pass laws of immediate and pressing importance, unless suspended in their operations till his assent should be obtained; and, when so suspended, he has utterly neglected to attend to them.

He has refused to pass other laws for the accommodation of large districts of people, unless those people would relinquish the right of representation in the legislature; a right inestimable to them, and formidable to tyrants only.

He has called together legislative bodies at places unusual, uncomfortable, and distant from the repository of their public records, for the sole purpose of fatiguing them into compliance with his measures.

He has dissolved representative houses repeatedly for opposing, with manly firmness, his invasions on the rights of the people.

He has refused, for a long time after such dissolutions, to cause others to be elected; whereby the legislative powers, incapable of annihilation, have returned to the people at large, for their exercise; the State remaining, in the meantime, exposed to all the dangers of invasions from without, and convulsions within.

He has endeavored to prevent the population of these States; for that purpose, obstructing the laws for the naturalization of foreigners; refusing to pass others to encourage their migration hither, and raising the conditions of new appropriations of lands.

He has obstructed the administration of justice, by refusing his assent to laws for establishing judiciary powers.

He has made judges dependent on his will alone, for the tenure of their offices, and the amount and payment of their salaries.

He has erected a multitude of new officers, and sent hither swarms of officers, to harass our people and eat out their substance.

He has kept among us, in times of peace, standing armies, without the consent of our legislatures.

He has affected to render the military independent of, and superior to, the civil power.

He has combined with others to subject us to a jurisdiction foreign to our constitution, and unacknowledged by our laws; giving his assent to their acts of pretended legislation:—

For quartering large bodies of armed troops among us;

For protecting them, by mock trial, from punishment for any murders which they should commit on the inhabitants of these States;

For cutting off our trade with all parts of the world;

For imposing taxes on us, without our consent;

For depriving us, in many cases, of the benefits of trial by jury;

For transporting us beyond seas, to be tried for pretended offences;

For abolishing the free system of English laws in a neighboring province, establishing therein an arbitrary government, and enlarging its boundaries, so as to render it at once an example and fit instrument for introducing the same absolute rule into these Colonies;

For taking away our charters, abolishing our most valuable laws, and altering, fundamentally, the powers of our governments;

For suspending our own legislatures, and declaring themselves invested with power to legislate for us in all cases whatsoever.

He has abdicated government here, by declaring us out of his protection, and waging war against us.

He has plundered our seas, ravaged our coasts, burned our towns, and destroyed the lives of our people.

He is, at this time, transporting large armies of foreign mercenaries to complete the works of death, desolation, and tyranny, already begun with circumstances of cruelty and perfidy scarcely paralleled in the most barbarous ages, and totally unworthy the head of a civilized nation.

He has constrained our fellow-citizens, taken captive on the high seas, to bear arms against their country, to become the executioners of their friends and brethren, or to fall themselves by their hands.

He has excited domestic insurrections amongst us, and has endeavored to bring on the inhabitants of our frontiers, the merciless Indian savages, whose known rule of warfare is an undistinguished destruction of all ages, sexes, and conditions.

In every stage of these oppressions, we have petitioned for redress in the most humble terms; our repeated petitions have been answered by repeated injury. A prince whose character is thus marked by every act which may define a tyrant, is unfit to be the ruler of a free people.

Nor have we been wanting in attentions to our British brethren. We have warned them, from time to time, of attempts by their legislature to extend an unwarrantable jurisdiction over us. We have reminded them of the circumstances of our emigration and settlement here. We have appealed to their native justice and magnanimity, and we have conjured them, by the ties of our common kindred, to disavow these usurpations, which would inevitably interrupt our connections and correspondence. They, too, have been deaf to the voice of justice and of consanguinity. We must, therefore, acquiesce in the necessity which denounces our separation, and hold them, as we hold the rest of mankind, enemies in war; in peace, friends.

We, therefore, the representatives of the UNITED STATES OF AMERICA, in General Congress assembled, appealing to the Supreme Judge of the world for the rectitude of our intentions, do, in the name and by the authority of the good people of these Colonies, solemnly publish and declare, that these United Colonies are, and of right ought to be, Free and Independent States; that they are absolved from all allegiance to the British crown, and that all political connection between them and the State of Great Britain is, and ought to be, totally dissolved; and that, as Free and Independent States, they have full power to levy war, conclude peace, contract alliances, establish commerce, and do all other acts and things which Independent States may of right do. And for the support of this Declaration, with a firm reliance on the protection of DIVINE PROVIDENCE, we mutually pledge to each other our lives, our fortunes, and our sacred honor.

JOHN HANCOCK.

New Hampshire. — Josiah Bartlett, William Whipple, Matthew Thornton.

MASSACHUSETTS BAY. — Samuel Adams, John Adams, Robert Treat Paine, Elbridge Gerry.

RHODE ISLAND, ETC. - Stephen Hopkins, William Ellery.

CONNECTICUT. — Roger Sherman, Samuel Huntington, William Williams, Oliver Wolcott.

NEW YORK. — William Floyd, Philip Livingston, Francis Lewis, Lewis Morris.

New Jersey. — Richard Stockton, John Witherspoon, Francis Hopkinson, John Hart, Abraham Clark.

PENNSYLVANIA. — Robert Morris, Benjamin Rush, Benjamin Franklin, John Morton, George Clymer, James Smith, George Taylor, James Wilson, George Ross.

DELAWARE. — Cæsar Rodney, George Read, Thomas M'Kean.

MARYLAND. — Samuel Chase, William Paca, Thomas Stone, Charles Carroll, of Carrollton.

VIRGINIA. — George Wythe, Richard Henry Lee, Thomas Jefferson, Benjamin Harrison, Thomas Nelson, Jr., Francis Lightfoot Lee, Carter Braxton. NORTH CAROLINA. — William Hooper, Joseph Hewes, John Penn.

SOUTH CAROLINA. — Edward Rutledge, Thomas Hayward, Jr., Thomas Lynch, Jr., Arthur Middleton.

GEORGIA. - Button Gwinnett, Lyman Hall, George Walton.

PRESIDENTS OF THE UNITED STATES.

The following is a list of the Presidents of the United States, with the date of their election, vote of electoral college, name of opposing candidate, and leading features of political differences in each campaign:—

GEORGE WASHINGTON, 1789. Received the unanimous vote of the electoral college for the presidency. Political differences had not as yet crystallized into parties.

GEORGE WASHINGTON, 1792. Received a second time the unanimous vote of the electoral college for the presidency. While there was no opposition to the election of Washington for a second term, yet public opinion had become divided upon questions of policy, and the people had taken sides upon these issues. One party, headed by Mr. Jefferson, was called both Democratic and Republican. The other party, led by Alexander Hamilton, was styled Federalists. The first demanded that the government should confine its action strictly within the specific and limited sphere defined by the Constitution. The second asked for the enlargement of such action by inference and implication.

JOHN ADAMS, 1796. Received in the electoral college 71 votes. His opponent, Thomas Jefferson, received 68. As the rule was at that time, the person receiving the highest number of votes was elected President, while the one receiving the next highest became Vice-President. The doctrine of strict

construction of the Constitution was contended for by the Democratic-Republican party, (this party was commonly known as Republican, until 1812, when it took the name Democratic, which name it has since retained). The Federalists demanded the utmost flexibility consistent with good government.

THOMAS JEFFERSON, 1800. Received in the electoral college 73 votes. His opponent, Aaron Burr, received 73 votes also. There being no choice, the election was thrown into the House of Representatives. On the thirty-sixth ballot, Mr. Jefferson received 10 votes and Mr. Burr 4. This result elected Mr. Jefferson President, and Mr. Burr Vice-President. The political parties were divided upon the "alien and sedition laws." By the one, the President might order any foreigner whom he believed to be dangerous, out of the country; and by the other it was a crime, with heavy penalties, to "write, print, utter, or publish any false, scandalous, or malicious writing against either house of Congress or the President, with intent to defame or bring either of them into contempt or disrepute."

THOMAS JEFFERSON, 1804. Received in the electoral college 162 votes. His opponent, Charles C. Pinckney, received but 14 votes. During Mr. Jefferson's first term, many important measures, touching American institutions, were brought to a successful termination; such as the purchase of Louisiana from France, additional amendments to the Constitution, and the repeal of the odious "alien and sedition laws." His administration was so popular that little opposition was made to his re-election.

James Madison, 1808. Received in the electoral college 122 votes. His opponent, Charles C. Pinckney, received 47 votes. The political differences entering into this contest were over the "embargo act." The war between England and France was followed by decrees which prohibited American trade with either. Also the right to search American vessels was claimed by Great Britain. These demands led to the "embargo act," as a retaliatory measure.

James Madison, 1812. Received in the electoral college 128 votes. His opponent, De Witt Clinton, received 89 votes. The War of 1812 with England, and the cry of "Free trade and sailors' rights," carried Mr. Madison to his second term, although opposed by a portion of the old Federalists and the anti-Administration party.

JAMES MONROE, 1816. Received in the electoral college 183 votes. His opponent, Rufus King, received 34 votes. What was known as the "era of good feeling" began at the close of the war, and but little opposition was made to the election of Mr. Monroe.

JAMES MONROE, 1820. Received every vote in the electoral college but one, which was cast for John Quincy Adams. With such a unanimity of choice, but little party difference was possible.

JOHN QUINCY ADAMS, 1824. The result of the vote in the electoral college was, Andrew Jackson, 99; John Quincy Adams, 84; William H. Crawford, 41; Henry Clay, 37—no choice. For a second time the election of President went to the House of Representatives, where Mr. Adams was chosen. The main issues in this election were the questions of internal improvement, and the American system of protective tariff.

Andrew Jackson, 1828. Received in the electoral college 178 votes. His opponent, John Quincy Adams, received 83 votes. The powers and limitation of government, with the protective tariff, made up the issues during this contest. At this time the parties were divided into the Democratic party, led by Mr. Jackson, and the National-Republican party, headed by Mr. Clay.

ANDREW JACKSON, 1832. Received in the electoral college 209 votes; Henry Clay, 49; and William Wirt (Anti-Masonic), 7. The parties during this campaign divided on questions of the tariff, State rights, internal improvements, and the United States bank.

MARTIN VAN BUREN, 1836. Received in the electoral college 170 votes. His opponents: Daniel Webster, 14; William H. Harrison, 73; Willie P. Mangum, 11; Hugh L. White, 26. Mr. Van Buren was the acknowledged successor of President Jackson, and, with the opposition divided into factions, was easily elected. About the same issues as in the preceding campaign were discussed, but with much less bitterness.

WILLIAM HENRY HARRISON, 1840. Received in the electoral college 234 votes. His opponent, Martin Van Buren, received 60 votes. The questions following the money panic of 1837, and the sub-treasury, together with the military record of General Harrison, formed the issues during this campaign. President Harrison died within a month after his inauguration, and Vice-President John Tyler became President instead,

James K. Polk, 1844. Received in the electoral college 170 votes. His opponent, Henry Clay, received 105 votes. In this election, James G. Birney, Abolition candidate, received about 65,000 votes. During this campaign the issues between the Whigs and Democrats were, the reoccupation of Oregon, the annexation of Texas, currency, and a tariff for revenue.

ZACHARY TAYLOR, 1848. Received in the electoral college 163 votes. His opponent, Lewis Cass, received 127 votes. The Free Soil party nominated Martin Van Buren, who received about 300,000 votes. The war with Mexico, non-interference with slavery, tariff, and the Missouri compromise furnished the political issues for this contest. General Taylor died in July following his inauguration, and Millard Fillmore became President.

FRANKLIN PIERCE, 1852. Received in the electoral college 251 votes. His opponent, General Winfield Scott, received 42 votes. The Anti-Slavery party put in nomination John P. Hale, who received about 155,000 votes. The questions entering into this campaign were those of a strict construction of the Constitution, and the fugitive slave law. State rights and the question of slavery assumed prominence in the discussions before the people.

James Buchanan, 1856. Received in the electoral college 174 votes. His opponent, John C. Fremont, received 114 votes. The American or Know Nothing party nominated Millard Fillmore, and gave him 8 electoral votes. Mr. Buchanan represented the Democratic party, while Mr. Fremont headed the new Republican party. Slavery in the Territories was the all-absorbing issue.

ABRAHAM LINCOLN, 1860. Received in the electoral college 180 votes. His opponents: John C. Breckenridge, 72; Stephen A. Douglas, 12; and John

Bell, 39. The popular vote cast for Mr. Lincoln was 1,857,610, while the aggregate vote cast against him was 2,804,560. The issues in this election are too well known to need recapitulation. Slavery, State rights, and a general distrust between the northern and southern portions of the country, conspired to make the results of the campaign one of great importance, as was subsequently proved.

ABRAHAM LINCOLN, 1864. Received in the electoral college 212 votes. His opponent, George B. McClellan, received 21 votes. The issues in this campaign were principally those arising from the war then in progress. President Lincoln was assassinated April 14, 1865, and Andrew Johnson became President.

ULYSSES S. GRANT, 1868. Received in the electoral college 217 votes. His opponent, Horatio Seymour, received 77 votes. The results of the war, such as reconstruction, public debt, reduction of the army, currency, and universal amnesty, made up the issues in this political contest.

ULYSSES S. GRANT, 1872. Received in the electoral college 286 votes. His opponent, Horace Greeley, would have received 65; but, dying soon after election, no votes in the college were cast for him. The split in the Republican party was caused by a strong dislike to the renomination of President Grant. The dissenters nominated Mr. Greeley, and the Democratic party indorsed his nomination. The public debt, currency, and the condition of the Southern States, formed the basis for the political discussion of this campaign.

RUTHERFORD B. HAYES, 1876. The result of this election was the closest ever held in the United States. The returns from some States were duplicated, and general chaos seemed to prevail. It required 185 electoral votes to elect. Samuel J. Tilden, Democratic candidate, claimed 203 votes. In the controversy which followed, a joint high commission was formed, to whom the question of which candidate was elected was referred. After much investigation, a decision was made March 2, 1877, which gave 185 electoral votes to Mr. Hayes, and 184 to Mr. Tilden. The justice and correctness of this decision have both been questioned. Peter Cooper was a candidate of the Greenback party, and received nearly 100,000 votes. This party demanded radical changes in financial legislation.

James A. Garfield, 1880. Received in the electoral college 214 votes. His opponent, General W. S. Hancock, received 155 votes. General James B. Weaver was nominated by the Greenback party, and received 307,000 votes. While the Democratic and Republican parties discussed, in a mild manner, the tariff and a few minor measures, they ignored, by concerted agreement, the demands of the reform party. That party, however, made a vigorous campaign, and did much to open the eyes of the people to the true financial policy of government. President Garfield was assassinated July 2, 1881, and Chester A. Arthur became President.

GROVER CLEVELAND, 1884. Received in the electoral college 219 votes. His opponent, James G. Blaine, received 182 votes. John P. St. John, Prohibition candidate, received 151,000, and Benjamin F. Butler, Greenback, 133,000. During this canvass, the usual charges and counter-charges were

made by the two old parties; the tariff came in for a share, as usual. Butler, being unpopular with many reformers, failed to materialize much strength, and, as a consequence, the Greenback party practically disbanded with this campaign. But the reform movement continued to grow among the people, and manifested its strength in many ways.

BENJAMIN HARRISON, 1888. Received in the electoral college 233 votes. His opponent, Grover Cleveland, received 168 votes. Clinton B. Fisk, Prohibition candidate, received 250,000 votes, and Alanson J. Streeter, Union Labor candidate, 147,000. The question of tariff again monopolized the entire attention of the people, almost to the exclusion of all other issues. The Union Labor party, headed by Mr. Streeter, did all in their power to awaken an interest among the people to their own welfare, but the task was hopeless. Both the old parties saw in the contest that failure meant political death, and they fought with all the energy of despair. After the campaign was over, the country seemed to realize the trap they had fallen into, and organized labor has been gaining rapidly since that time.

UNITED STATES SENATORS.

One of the demands of the Farmers' Alliance is for the election of senators directly by the people.

It may be interesting to say something as to how the Senate came to have its present form. There was no Senate in the Continental Congress. There was but one house, and each State had a single vote in it. The constitutional convention of 1787, following the model of the British government, then the best form known, was in favor of two houses, but sorely puzzled how to constitute an upper house which would be different from the lower one, and a check upon it. It was a long while before the idea of a Senate was conceived, and it really grew out of the jealousy of the smaller States of the larger ones. But eleven States took part in the earlier proceedings of the convention. Two of the four delegates from New Hampshire came in later, and no delegates were appointed by Rhode Island. The "small States"—five in number—were Connecticut, New York, New Jersey, Delaware, and Maryland. The "large States" were Massachusetts, Pennsylvania, Virginia, North and South Carolina, and Georgia.

The small States feared that they would be overslaughed by the large ones, and so they hung out stubbornly for equal voice in Congress. Several of the plans suggested did not contemplate an upper house, but the Virginia plan, which was eventually made the basis of Congress, did. It, however, gave no name to the upper house, but proposed that its members should be chosen by the House of Representatives, out of a number of persons nominated by the legislatures of the several States. Three ways in all were suggested to constitute the membership:—

1. Appointment by the chief executive, from nominations by the legislatures.

- 2. Election by the people.
- 3. Election by the legislatures.

Alexander Hamilton urged, as an amendment, that the members should be chosen by electors chosen by the people of the States, and that they should serve during good behavior. Pinckney proposed a term of three years. The committee of the whole digested these propositions, and reported in favor of a "second branch"; the members of which were to be elected by the legislatures for seven years, and to be ineligible to any office for a year after the expiration of their term, and the number was to be in proportion to the population.

This was the shape in which it appears in the first draft of the Constitution. June 24-25, 1787, the convention adopted the report of the committee, except that the term was changed from seven to six years, and the ineligibility clause was stricken out. The convention then entered upon a protracted struggle as to the representation of each State, and various propositions were urged. One scheme gave Rhode Island and Delaware each one, and Virginia five, with the other States proportioned between these. Dr. Franklin proposed that each State have an equal representation, with a vote on money bills proportionate to its share of the taxes. Delaware threatened to withdraw from the confederation if the small States were not given an equal representation, and finally, after the debate had gone on for six weeks, the plan of giving each State two members was adopted, and the small States concentrated their efforts upon giving the "second branch" the utmost power and importance. August 6 the name "Senate" was formally given the "second branch." September 6 the office of Vice-President was agreed upon, and he was made the presiding officer of the Senate, in order to give him something to do. The Constitution was finally adopted September 17.

The Farmers' Alliance platform confines itself to a mere demand for the election of senators by the people, and does not specify how this is to be done. Here is opportunity for a wide diversity of opinion. Shall it be by the whole vote of a State, as a governor is elected, or shall each State be divided into two senatorial districts? Shall the present rule of two senators for each State — large or small — continue, or shall each State have a vote in the Senate in proportion to its population?

Before any change can be made it will be necessary to get section 3, article 1, of the Constitution amended. This reads:—

"The Senate of the United States shall be composed of two senators from each State, chosen by the legislature thereof, for six years, and each senator shall have one vote."

To secure this amendment it will be necessary to have it proposed by twothirds of the members of both houses of Congress, and it must then be ratified by the legislatures of three-fourths of the States. That is, assuming that the house will consist of 356 representatives, it will have to receive the votes of 234 representatives and 59 senators, and be ratified by the legislatures of 33 States.

CHAPTER IV.

HISTORY OF THE SUB-TREASURY PLAN.

So much has been said about the origin of the sub-treasury plan, that a brief mention of its history will doubtless be read with interest. The sub-treasury plan originated with Dr. C. W. During the session of the Texas State Alliance, in 1888, Brother Macune delivered an address, in which he advanced the proposition of inaugurating a system of trade currency, one that would "purchase goods and make exchanges." His plan was to establish trading centres where goods were sold at about cost; issue currency payable in such goods, and receive nothing but such currency in payment; refuse all other kinds of currency, and force customers to obtain this trade currency in order to purchase the low-priced goods. The fact that this currency would pay for goods at a much cheaper rate than other currency, would induce people to take it in the ordinary transactions of business, and keep it at or above par. Nothing was done about it, however, and Brother Macune came to Washington during the winter of 1889, and started the National Economist. The idea of supplying a volume of currency to the people, free from the tribute of the money changer, continued to occupy his attention more or less.

Some time during the summer following, in discussing the matter at home, the idea of the sub-treasury plan presented itself. The more he considered it, the more practicable it appeared, and it soon developed into the true theory of a flexible volume of currency. He reasoned from every point that presented itself, and failed to find an error in the principle involved. Some time in the month of November he wrote it out and submitted the main points to Brother Harry Tracy and myself. Then he prepared it in full, and read it to the men connected with the office. It was received with much favor. Others were consulted in regard to it; among them, Brothers Polk and Livingston, and it was agreed to bring it before the national meet-

ing at St. Louis, in December. The country seemed prepared for it, as a similar proposition had been made in California and one or two other localities. It was presented and argued before the meeting, and adopted with but a few dissenting votes.

The propaganda began in earnest, and in less than ninety days from its presentation at St. Louis, petitions began to come in, asking Congress to enact it into law. The next thing in order was to draft a bill that would meet the requirements. This was no small task. Finally recourse was had to Secretary Windom's silver bill, that he had prepared with great care, and which was then before Congress. That bill was made the basis upon which the sub-treasury bill was drawn. If any one will take it and read in the place of silver, corn, and in the place of market value, eighty per cent, and add the warehouse and help, the sub-treasury plan can easily be discerned. The same principle was involved, and about the same provisions required for the enforcement of one that became necessary in the other.

After the bill was drafted, a consultation was held with President Polk, and it was introduced in the House by Brother J. A. Pickler, and, with slight modifications, introduced in the Senate by Senator Vance. Since this time it has become the one economic question, and may truly be said to be the most potent factor at the present time in national politics. It was reaffirmed at the national meeting at Ocala, with but seven dissenting votes, out of a representation of twenty-nine States and Territories. It may be justly considered the leading demand of the Alliance, and the one on which the success or failure of the order depends. It has been thoroughly discussed in another part of this book.

APPENDIX.

TEN USEFUL RULES OF PARLIAMENTARY USAGE.

- 1. No motion is in order unless the person making the motion has the floor, and no person has the floor until recognized by the President. A motion is not before the house for any remarks or discussion until it has been seconded and has been stated by the President.
- 2. A motion to adjourn is always in order, provided the person making it has secured the floor and been recognized by the chair, and provided the body is a convention or any public meeting that closes its sessions by adjournment. If, however, the body is a secret society, the motion to adjourn may not be in order, because there are usually regular closing exercises and forms that the President is under obligations to see carried out. When a motion to adjourn is properly made, and is in order, it is not subject to amendment, discussion, or modification in any way; it must be voted on. However, a qualified motion to adjourn, as to a certain specified time or place, is debatable, and may be amended.
- 3. Questions that are subject to amendment may be modified twice and not more; that is to say, the question may be amended, and the amendment may be amended.
- 4. A motion to lay on the table is not debatable, cannot be amended; if carried, cannot be reconsidered, and requires a simple majority vote. When a motion to table an amendment or a substitute, or any modification of the main question, is carried, the original question goes to the table with it, and is subject to all the restrictions imposed by the vote.
- 5. A motion to limit debate may be amended, and usually requires a two-thirds vote.
- 6. The following motions or calls do not require a second, and are in order even when some other person has the floor: First, a call to order; second, objection to the consideration of a question; motions for orders of the day or regular order of business; third, question whether subject shall be discussed. A motion to appeal from ruling or decision of the President may be in order when some other person has the floor, but it always requires a second.
- 7. A motion for the "previous question" is intended to shut off debate and bring the body at once to a vote on the question. It should not be entertained by the chair unless it has three seconds. Large bodies usually require five. This motion should be avoided as much as possible, because it is not generally advisable to refuse any one the right to discuss a subject. When the motion is properly made and seconded, the President immediately says: "Shall the main question be now put?" If two-thirds of the votes are in the affirmative, he declares it carried, and proceeds to put the main ques-

tion, commencing with the amendments if there be any pending. The effect of the call and vote on the previous question, as it is called, is simply to shut off all debate and have the voting proceeded with in the regular way.

- 8. A motion to reconsider must be made by a person who voted in the affirmative when the question was adopted; is debatable when the main question was, and opens up the whole subject for discussion. The following motions cannot be reconsidered: First, to reconsider; second, to adjourn; third, to refer a question; fourth, that the committee do not rise; fifth, to suspend the rules; sixth, to take up from the table, and probably some others.
- 9. A person claiming a question of privilege may interrupt another who has the floor, by rising to his feet and addressing the President with a "question of privilege." The President will ask him to state his question of privilege. He should then state why the subject he wishes to speak on is a privileged question, and if the President rules that it is, he may keep the floor and speak on the question, and when he has concluded the floor will revert to the person interrupted. A person wishing to make a point of order has a similar right to the floor for that purpose at any time. He should rise and say: "Mr. President," and when recognized say, "a point of order." The President will say: "State the point of order." When stated the President shall rule the point of order "well taken" or "not well taken." If the ruling does not give satisfaction, an appeal may be taken to the house. An appeal on a simple point of order is not debatable, but if it involves a question of law it is usually debatable.
- ro. The person who makes a motion has the right to claim the floor for opening and closing the debate, and may claim the floor even after a call has been made for the "previous question." The rule is that all other persons can only speak once to a question without consent of the house. The President is supposed to protect the audience from having their time consumed by those who would rise and express every new idea that popped into their heads, consequently he will not allow the second speech on the same question without the consent of the house.

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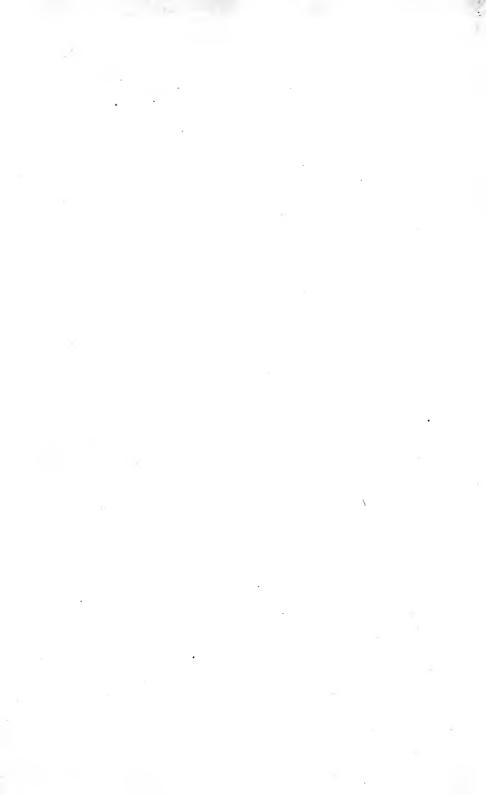
W.

Washington, George, 462. Weights and Measures, 712-718. Wheat, 571. Wills, 695. Window Gardening, 626-635.

WOMEN:

Eligible for membership, 35; influence of, 308-312.
Worlidge's "System of Agriculture," 442.





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