my myman will compensed 6.2 P "The Great American Desert."

AN ADDRESS DELIVERED BY

HON. CHAMPION S. CHASE,

AT THE ANNUAL FAIR OF THE MERRICK COUNTY AGRICUL-TURAL SOCIETY, HELD AT

CENTRAL CITY, NEBRASKA,

September 26, 1878:

Published by order of the Board.

MR. PRESIDENT; Citizens and Friends: We stand to-day in about the centre of the eastern side of the so-called "Great American Desert." What a misnomer! This goodly heritage, this rich, inexhaustible soil, upon the nutritious grasses of which are fattening these vast herds of stock; where these thrifty trees are growing, and whence these bountiful crops-such wonderful specimens of which you display here to-day-are gathered, - this region, with scarcely an acre of waste ground as far as the eye can reach along the Valley of the Platte-the Nile of the West-and for hundreds of miles beyond, thirty years ago, and for several years after, was known, and upon the maps too, designated as the "Great American Desert."

The Pike's Peak and California emigrant, who pursued his journey to the land of gold in those days, along this same valley, reported this land a desert or barren waste -nothing less, and for farming purposes, nothing more. How great the change! Where then, throughout the western portion of this great State, save along, and close by the river banks, appeared the whitened surface, which to the indifferently observing traveller might have looked desertlike, with its tufts of buffalo grass standing here and there, as if scattered for the purpose of better subsistence, it has now, by practical experiment, been discovered that a natural soil, unsurpassed in fertility, depth, and endurance, everywhere exists. Even as late as twelve years ago, when the

S

07

02

Union Pacific Railroad was being built along this valley, and here across the section where your beautiful, prosperous town now stands, the report was currently circulated that right here, and westward for hundreds of miles, and to some distance eastward, the soil for farming purposes was comparatively worthless. True, at that time a few ranches had been started along the Platte in this vicinity, and at a few other points, for the benefit, not so much of their owners as farms, but as resting places for the western bound gold seeker, who across here drove his prairie schooner team, with loud cracking whip, as he took his tedious way upon his one hundred and twenty days' journey overland from the Missouri to that earthly heaven in the Pacific West, whose streets, his dreams assured him, were paved with gold-a journey now made by steam in five days. At those ranches corn and other smaller grains and vegetables were raised, but still it was contended that this could only be done along the immediate banks of the river, where the soil was percolated by river water. And to this day this idea prevails among outsiders to an extent that we do not realize. Let us believe, if we can, that this thought is sincere, and not encouraged unjustly, and to our disadvantage, by those of our neighboring States, who begin to find the emigrating world posted as to where they can find the best lands, viz: in Nebraska.

Twelve years ago I first crossed this place

TA

where we meet to-day. It was in October, 1866, at the time of the great railroad excursion on the Union Pacific, which was given to celebrate its completion to the 100th meridian. At several points in this region I examined the soil, and, having been raised on a farm in the rock-soiled Granite State, I could not see why it should not be productive of all kinds of grain and vegetables, but I was assured that it was composed of fine gravel or coarse sand, and that the land hereabouts could only be used for grazing purposes. This may, at this day, seem a strange statement to you, Merrick County farmers; you who are raising here such abundant crops of corn, wheat. oats, rye, barley and flax, and immense vegetables and luscious fruits, such as no County in the State and no State in the Union can eclipse. Nevertheless it is true. I now wonder that I did not ask my informant the question I have since so often asked the desert believer, viz: How such fine nutritious grasses could grow on a barren soil? Go to-day from one hundred and fifty to two hundred miles west from here, and among the herdsmen you will hear the same story told of that region as was told of this but twelve years ago. 'They will tell you that Western Nebraska cannot be utilized, save as a grazing region. Let them tell that to a Yankee traveller, a shrewd Yankee-and pretty much all of those mountain-raised boys are shrewdand what do you think he would do? Why, he would do what his race are most noted for-he would ask a question, and it would be this: "Whence do these desert grasses draw the nutrition upon which. these thousands upon thousands of cattle feed; and, without a kernel of grain, become as fat and fit for market as the best stall-fed cattle of New England?" But every year the farmer extends his march towards and into the heart of this desert region, and every year his crops, in language more eloquent than the human voice can utter, answer the Yankee's blunt question. In another twelve years, I opine, we shall have to go west beyond the limits of this State to find a man who believes. no matter what he may say, that the land around him is unfit for cultivation.

The question is frequently asked by those

who come to Nebraska in these latter days, how it could have been possible that the early traveller along this country should have made this mistake as to the nature of the soil. The explanation given by those who were here twenty years ago, when the State first began to be settled, is plausible. Among those of whom I have inquired as to this reputed desert appearance, is our present worthy chief Executive, Governor Silas Garber. He settled at an early day in the Republican Valley, in the southwestern part of the State, through which this desert appearance extended. He entertains the opinion, in common with other early settlers, that the millions of buffaloes which, up to a late day, roamed over these prairies, and through these valleys, by their constant tread and feeding, not only kept down vegetation and prevented it's spread by rooting and seeding, but that from the same cause the earth itself became road-like and hard, so that the rains, which, it must be remembered, fell but rarely in this region until late years, were carried off, shed-like, to the streams, without being retained long enough to produce their natural, fertilizing effect. However this may be, one fact is surely observable. Where ten years ago even, this bunch grass and light-colored surface appearance prevailed, now, and since the buffaloes became scarce. grass grows abundantly, forming a complete sward, carpeting the entire surface with green, interweaving its roots and exhibiting a mammoth growth.

Another explanation conjunctive with this last is also given. It is now a well established and conceded fact that, as railroads are built and settlements extended in this region, and the consequent increase of timber culture and vegetable growth appears, rainfalls are more frequent; and that, as water is the prime and great promoter of all vegetable growth, the result is that the grasses, under its influence. extend their roots, mature their growth. ripen their seed, and thereby become every year more complete and perfect. In turn, by these grasses the rain is held where it falls, and thus by this natural and reciprocal concert of action, as it may be called, between the rain and the grass, this soil, made so deep and so rich by Rocky Moun-

ANCIENT FARMING.

tain wash, the overflow of our noble rivers and the consequent deposits, as well as by the abundant excrements produced by roving millions of untamed herds, is being loosened, and its fertile qualities discovered day by day, and yet the soil is the same as for centuries before. That those who really supposed this to be a desert were wofully mistaken, we all know. The light colored surface, produced by the wind-driven magnesian soil, which, like the veil of beauty, conceals untold charms, no longer deceives even the careless observer.

ANCIENT FARMING.

To carry on a farm by any other rule than simply experience, and by the same methods our fathers and grandfathers pursued, was considered a doubtful experiment until comparatively a late period. Farming-the raising from the soil such products as the human race needs for physical sustenance--was the earliest calling of man. At the first, fruits, roots and herbs may have furnished sufficient nutriment for his subsistence. In very early times, however, it appears that man began to turn his attention to grain and stock raising, and fruit growing, and the improvement of the various breeds and kinds which he raised. In fact, he found himself doomed to toil-to "earn his bread by the sweat of his brow." This may have been the result of the increase of the human family, thus reducing in proportion his natural means of subsistence. In any event, we find that in due time the dwellers along the Euphrates. the Tigris, and the Nile, were tillers of the soil, while the people in the hilly country of Syria, and the region east of the Mediterranean Sea, where grazing was more feasible, were shepherds and the owners of flocks and herds. The early Jewish Patriarchs held their wealth in cattle and fruits. while the Chaldeans and Egyptians contented themselves with their fields of corn. They lived along the Nile, that famous river which extended some five hundred miles with its valley less than ten miles in width, but which from the fertile accumulations of its annual overflow during the months of August and September, presented the most productive fields in the Eastern World. Their method of planting was as primitive as can be imagined. After the

overflow, the seed was scattered upon the newly accumulated soil, the swine were turned upon it to tread it in, and then ro more labor was bestowed upon it until the harvest. The cutting and curing of the grain was of no less simple character, and the threshing, as every child who reads history knows, was done by the treading of cattle upon the grain, gathered upon some smooth and hardened spot of ground. As early as one thousand years before Christ the methods of farming had greatly improved. In the palmy days of Greece, agriculture received great attention. It became a popular pursuit, and reached a high degree of perfection. The Greeks had fine cattle, horses, hogs, sheep, goats and poultry. Many of their implements of husbandry were not unlike those of modern times, such as were in use in this country as late as fifty years ago, They plowed with oxen and asses, and subsoiled and fallowed the ground. In fruits they excelled. The apple, that most famous of fruits, they cultivated most successfully, as they did also the pear, the cherry, plum, quince, peach, nectarine, fig and lemon. But the Greeks, as a people, cared less for agriculture than for the fame they secured as a nation of city builders. Their national pride was centered in architecture and the mechanic arts. Rome, on the other hand became famous for its laws and usages which favored agricultural pursuits. The amount of land that a man could own was limited, however, there. The famous Roman orator, Curius, is reported to have said that "he was not to be accounted a good citizen, but rather a dangerous man to the State, who could not content himself with seven acres of land"-a tract about equal to our five acres. Cato, an orator still more learned, says "our ancestors regarded it as a great point of husbandry not to have too much land in one farm, for they considered that more profit came by holding little and tilling it well." Virgil also writes, "The farmer may praise large estates, but let him cultivate a small one." The sayings of these ancient Romans are aptly addressed to our modern farmers. They call their attention to the importance of cultivating in the most perfect manner

4

whatever land they till at all. Around our cities, gardeners off times receive from a few acres, as much in value as farmers generally do from many acres. It is from perfect farming, that profit is derived, and not from the amount of land cultivated.

MODERN FARMING.

The science of agriculture, or field culture, has been developed and advanced more rapidly during the present century, than any other single branch of knowledge. Fifty years ago, the methods of farming, including the preparation of the soil, planting, sowing and gathering in of the crops, in this land, remained about the same as they had been for centuries. It is only during the last half of the current century that agriculture has been so conducted as to deserve to be called a science. The peculiar adaptation of certain soils to certain seeds, is a subject to which the attention of the farmer was not formerly directed. Until of late, it was enough for the husbandman to know that a certain substance called earth or soil, would produce a growth of vegetation under certain circumstances, or when seed was buried in it, and it had received proper moisture and warmth for a sufficient length of time. Agricultural chemistry, or the method of ascertaining the component parts of plants and animals formerly received but very little attention. Of late years this study has called to its aid and development, some of the best and brightest minds of the age. 'The farmer of one hundred years ago would have laughed at the idea of studying the chemical relations of plants to the soil, or the same relations between plants and animals, or animal life and growth. As early as 1761. Wallerius, a Swede, started a series of chemical investigations to discover the nature of soils. He wrote a book upon the subject which showed great and learned research. In 1802 Sir Humphrey Davy began a course of most interesting experiments to test the fertilizing effects of different substances, including ammonia and guano. About the same time. De Saussure commenced his experiments in vegetable physiology. In 1832 Sprengel made still further scientific research into the plant kingdom, but it was left for Liebig, a German, to arrange and classify the discover-

ies in this fruitful field already made, and to add to them much very valuable information in agricultural chemistry. His work on the application of chemistry to agriculture and physiology was widely read and attracted the attention of the most learned of the men of forty years ago. From that period to the present, the number devoted to agricultural chemistry, has largely increased.

AGRICULTURAL COLLEGES.

The establishment of agricultural colleges in this country, and their liberal landed endowment, has led to systematic scholastic methods of tracing the affinities between soils and vegetation and animals and the wonderfully curious and inseparable relation which they sustain to each other. Thus farming in these latter times, has become a theoretical as well as a practical science. 'The farmer of to-day should for this reason be, as he occasionally is, among the most scientific and learned of men; the term learned in this connection being used in its broadest and most comprehensive sense. The idea that he alone is learned who can extract Greek roots and conjugate Latin verbs, who can read the dead languages and demonstrate all the problems of Euclid, who can group the planetary system and name each shining constellation, who can predict an eclipse or measure the starry heavens, is, or should be obsolete. He is more truly learned who has so studied Nature and Nature's works that he can successfully and readily draw from them his life support and make them at his will minister to all his wants and hence to his supremest mental as well as physical pleasures. For all this study and for the purpose of securing all this wisdom the life of him who follows any other calling, does not compare with the life of a farmer. From infancy to old age, the works of nature in all their forms are around him, before him, above him and beneath his feet. Which ever way he turns his eye he beholds those objects, the study of which ennobles, inspires and exalts his mind. Aside from "book learning" so called, what other pursuit presents to the youthful scholar, a field so varied with exalting knowledge. Where else than in the open field is there to be found such

FARMERS' CHILDREN.

useful to him ever after, no matter what limitless food for scientific and art research. The mysteries and the beauties of chemistry, philosophy, astronomy, geology, music and painting, are his constant companions-are ever in his sight, wooing him to their study. The growing plant, the falling apple, the shining star, the flinty rock, the warbling bird, the blooming flower, each and all, illustrate the truth of this proposition. Not an element does the human mind possess, which may not find in the open farm field some object upon which to dwell with pleasure, some illustration of the fact that all nature is but one vast workshop where every faculty of the mind may be pleasantly and profitably employed.

STICK TO FARMING.

How often has the farmer, after years of toil and frugality, by means of which he had accumulated a comfortable fortune, sold out the farm to try city life, and the chances of trade, because they appear to him so much easier and more enchanting than farming. Almost as often, has he, after a few years of his new life,-it may have been but a few months,-found himself, but too late, unskilled in the risks of trade and commerce, and unable to cope with those whose lifelong experience had made them familiar with the ups and downs, the turns and twists of the market. And so he loses his money, loses his friends, loses his self-confidence, and harrassed by his debts, he becomes virtually a pauper, or is compelled to turn to employment as a day laborer to obtain a living for himself and his family. The old rule, "let well enough alone, " is as good as it is homely. Farmers, of all others should mind it well. Financial history shows that there have been comparatively few men who have been so fortunate as to accumulate wealth, who have not ventured it sooner or later in some project or business in which they were not skilled, and hence have lost their money, and often with it too, their credit, if not their honor.

FARMERS' CHILDREN.

No occupation affords to children such constant and useful sources of knowledge as farming. The practical benefit of the information gained by the farmer's boy is useful to him ever after, no matter what

calling he may choose to follow. For instance, if he lives in the city he can tell basswood from hickory at a glance, altho' in outside appearance they are much the same. He knows all the good points of a horse or a cow. He does not mistake the twitter of the chimney swallow for the call of the blue jay; nor does he take the crow for the hawk, simply because the carrion seeker calls himself by nearly the hawk's name. While our city belles are amusing themselves at the awkwardness of their country girl cousins, and feeling not a little embarrssed at their first appearance with them at an evening party, they should remember that these same country cousins can tell all the flowers of the field, all the birds of the air, are usually well read in the literature of the day, and are in many ways fitted to entertain any gentleman of intelligence and cultivation they may meet. True, the country girl may not know the precise angle at which the elbow should be curved, to so carry the parasol as to be taken for one of the "upper ten," nor what particular flirting-smile to get up to catch a beau; but she does know how to cook a beef steak, iron a shirt collar, and make a bed, and is accomplished in every other art which a true woman needs to make the home of her husband and her children happy and prosperous. She, as well as her brother, knows a thousand useful things, which often, the city artist, whose brush and pencil admit him to what is called first-class society, does not understand. One of the most amusing incidents that a farmer's boy enjoys, occurs when he takes up an illustrated almanac, or other pictorial of rustic scenery, and looks over the representations of farm life. He will perchance find a man whom the artist intended to represent as a mower, with his scythe turned the wrong way, the nibs upside down, and the snath reversed. From this it is quite evident that the artist had somewhere seen a scythe, a snath, some nibs and a man, but just how to put them together to make a live mower is the question, and for the simple reason that the artist never studied real life as it is seen in the hay field. In a late number of Harper's Weekly, one of the leading illustrated papers in this country, a picture, supposed

to represent a threshing machine, is so caricatured that the lessons it affords to those who never saw a threshing machine work. are worse than useless. And yet these pietures are intended to instruct those who have never seen the reality.

It is not too much to say that the future welfare of our Union depends to a great extent upon the daughters as well as the sous of those who till our soil. They have many advantages over those girls who are born and raised in our cities. Their habits afford them robust, healthy constitutions. They are not constantly sending for the doctor, do not deem it fashionable to have the head-ache, and their surroundings are such as promote a happy disposition and sentiments of contentment, such as city life does not afford. But few of them are so constantly engaged with household duties as not to find some time for reading and other methods of mental culture. In many ways they can cultivate the finer and more social sentiments, and fit them, selves for eminent usefulness in life. Happy indeed is that girl who can say with truth. "I am content to be a farmer's daughter."

THE FARMER'S ADVANTAGES. The life of the husbandman is truly a laborious one, but it is chiefly labor of the body which he endures and from the weariness of which, a night's rest usually restores. him. He has but to do his duty, and all Nature vies with him in carrying forward his work and promoting his interests. By night while he rests, as well as by day when he labors. Nature is constantly enhancing his sources of wealth. His flocks. and his herds increase, his crops grow, and his trees extend their branches, whether he sleeps or wakes. In time of food scarcity he may have plenty, for the material from which food is made first passes through his hands, and for his own family wants he may first provide. The most delicate dainty for the table which the metropolitan epicure covets, and for which he so freely spends his money, the farmer raises and prepares for market, and can, if he chooses, retain for himself. The farmer in fact, may be the prince of good livers. He has, if he will, the choicest the land af-

the town seeks the country and country life-for what? Not alone for the pure air he there breathes, and the invigorating influences of the field, the meadow, the hill and the dale, but as well because he there finds the freshest milk, the choicest butter, the sweetest cream, the fattest chickens, the tenderest steak, the most delicious fruits, and the best vegetables, as well as those other surroundings, which, clustered with these, are but the synonymn for physical enjoyment. Whence come cholera, plagues, yellow fever, and their kindred terrors? Not from the open farm field. They come from the over-crowded. unclean cities of the land, from the regions where stale fruit and tainted meats are consumed, from scenes of filth such as the farmer never sees, no, not even among his flocks, his herds, or his swine. The health and long life of the farmer is proverbial. He may truly be the happiest of men, if he be but contented with his lot. When he visits the city and sees its social life, its stir and bustle, its busy streets and apparent enjoyment, he longs to be a man of city life. Deluded longing! The greatsecret of life's enjoyments is summed up in two words-"home comforts." There is no bliss like domestic bliss. All else is but the shadow. The strife for happiness elsewhere, in wealth, in place, in power, in political prominence or notoriety, is but a phantom, a will-o'-the-wisp-it eludes the grasp, is always a little ahead of the pursuer, and is seldom, if ever, overtaken,

The world nowhere affords a more desirable portion than that farmer posesses, whose lands are well tilled, whose flocks and whose herds are increasing in his behalf, and whose waving grain bows in token of the reverence it owes him for his fostering care. In commencing to make a farm he may with ease so plan its features that the most lovely city park cannot excel it for beauty. His roads, his hedges, his ditches, his fences, his groves, and especially his house surroundings, may be as ornamental as the most artistic heart could desire. In turn all these charming surroundings pay him a thousand fold by their influence upon his children, enhancing their love of the beautiful, and inspiring them with the fords for his daily meals. The denizen of noblest and purest of sentiments. To this

BREEDS OF STOCK

end he should not omit to cultivate flowering shrubs and plants. Flowers are the music of sight. Raise them in the garden and by the doorway, train them in every nook and corner, and let their entwining vines climb upon the walls, over the entrances and along the fences, until your homes become literally embowered with the fairy-like presence of these floral angels.

BREEDS OF STOCK.

It is fortunate for our State that increased attention is being given to stock raising and the consequent improvement of breeds. It costs just as little to raise a cow which will sell for one hundred dollars, as one which will sell for twenty-five dollars. At first the expense of procuring the breed may be a little more, but this bears no comparison to the benefit arising to the stock raising farmer, consequent upon his securing the best breeds the market affords.

I take it that you will agree with me. that every farm should carry some live stock-horses, cattle, hogs, and, it may be, sheep, and that poultry should not be overlooked. In all countries the changes of the seasons, the climate, the weather, and the chances of storms, are such that what may prove a valuable crop to the farmer one year, may the next be a failure : hence, the raising of stock as well as the cultivation of a variety of crops will be likely to help him out.

The love of fine stock is indicative of a noble nature. He who loves a good horse can be no hater of the human race. It is the generous, open-handed, liberal, wholesouled man, who revels in the breeding of fine animals, and who loves to dwell upon the fine points which he discovers about the various specimens of them which he owns. The ancients loved fine stock and studied their good points. That famous old Roman, Columella, wrote down the points of a good cow as follows: "A tall make, long, with very large belly, very broad head, eyes black and open, horns graceful, smooth and black, ears hairy, jaws straight, dewlap and tail very large, hoofs and legs moderate." This may not suit the style of to-day, but I will venture that it described the best of Roman cows. Stock should never be neglected. It pays as well for care as the crops, and should be kept in fine pastures in summer. and in tidy stables and well housed in winter. Neatness with stock is as natural as neatness with the human race. The hog well cared for, will keep himself as clean as a man. In fact, by nature his habits are wonderfully tidy. as those who carefully breed his race well know.

FRUIT CULTURE.

We all know that Nebraska has five times taken the highest premium at our National Fruit Exhibitions, for quality, including apples, pears, peaches and plums, and that two of these premiums included not only quality, but variety. It is safe to say that no State in the Union can compare with us in the raising of fruits of all the general varieties. Nebraska apples are celebrated already for their size, smoothness of surface and completeness of shape. and for that the trees mature quickly to bearing. Those orchards which were planted but a few years ago are this year loaded with fruit. Most of these are to be found in the eastern portion of the State it is true, but there only because the settlements are older than here. Upon our farms in the middle and western portions of the State, specimens of all these fruits are found in great perfection, and but few of the fields here have been cultivated over seven years. The value of fruit culture with us cannot be overestimated. It is in the direct line of a farmer's occupation, and the planting of fruit trees, and the care bestowed upon them interferes very little with his other work. Once under way, a trifle of attention will keep the trees in the best condition for bearing. When other crops fall, if even but partially, it is a good thing to have a few hundred bushels of apples, such as a score of trees will produce, to sell at your own door, or if you choose, to send to market. The same may be said of the other fruits. Peaches, for instance, sold this year in our home cities, in stingy little baskets holding a very scant peck, of ordinary quality, at a dollar a basket, and there are trees in this State six years old. upon which have grown this year, three bushels of as fine peaches as ever adorned a limb, and seedlings at that. It is now apparent, whenever the seedling peach is

10

THE GREAT AMERICAN DESERT.

found growing upon our soil, that it excels in size, beauty and flavor, the peach from which the pit was taken that produced the seedling. In Omaha six years ago, Mrs. Shaw, the jeweller's wife, received from a friend in Chicago, a basket of peaches. Their flavor was so five that she saved some of the pits. From these she raised, on their homestead lot on the bluffs near St. Mary's College, five trees. This year, those trees bore ten bushels of a variety in every respect superior to the original peaches. They were large, luscious, and of the most beautiful color, the red and yellow blending as only the peach can blend them. Some of them measured ten inches around, while the largest of the peaches from which the planted pits were taken, would not exceed seven inches. The product of these five trees, if for sale in Omaha, would be worth at least \$50. Take another example of the value of fruit culture: John Evans of Omaha, the well known grocer, raised on two city lots this year-the whole piece of land being 132x240 feet squarecherries, raspberries, crab apples, and a few other varieties of fruit, of the value in that market of \$400. Such facts as these speak louder than words, and our farmers can profit by them if they will.

OUR IMMEDIATE NEEDS.

The prevailing custom among farmers of shipping the products of the farm as they come from the field, whether they are ultimately to be used for human consumption, or animal food, is not considered the most beneficial one by producers at this time. Our people can make more money and easier, by preparing what they raise at their own doors for final use, or by feeding it out to stock and selling the stock after it is fed.

Just now our State needs two things. First, additional population. In this we are doing very well with our forty thousand increase per year. Still this number could be doubled by the outlay of a few thousand dollars. Second, we need manufactories. Not manufactories, the prime object of which is to build up the population and increase the wealth of our cities, but maunfactories where the products of our lands can be converted into material ready for consumption or imme-

diate use. Not a pound of beef should leave the State to be slaughtered, or packed or canned, and then returned to us for home purchase. The profit arising from the conversion of the raw material into condition for use is more than equal to that arising from the sale, before such conversion. Take for instance the manufacture of starch. At the starch mills in Oswego, New York, the largest establishment of the kind in the world, the daily consumption of corn is fifteen thousand bushels. Quite a proportion of this is raised in Nebraska, and sold here at about twenty cents per bushel. The transportation costs about as much more, so that at the factory it is worth about forty cents per bushcl. From this corn the daily production of starch is 375,000 pounds, worth seven cents per pound. The residue or refuse, after the starch is extracted, feeds eight hundred head of cattle, and these again are purchased largely from this State, and at about three cents per pound on foot. It is calculated by that company, and they calculate closely, that the residue, so called, pays all running expenses, so that the starch is clear profit. Now whatever is our loss by selling them the corn and cattle-the raw material-is their gain. Let us see how the account stands. The estimate is that one bushel of corn makes twenty-five pounds of starch. This is equal to one dollar and seventy-five cents per bushel for the corn which we sold them at twenty cents; and at this rate we buy our corn back, whenever we buy a parcel of starch. The cattle we sell them can be fattened here on our grasses without expense, and the cost of the beef slaughtered may be estimated at six cents per pound. There they can this beef and send it here, and we buy it at twenty-five cents per pound in cans. Here again we lose largely. As Cap'n Cuttle says, "When found, make a note on't."

STATE PECULIARITIES. Nearly every State in the Union has its peculiar features as a productive State. Most of them combine more than one characteristic. Often they represent agriculture and manufactures, and in some instances, the mineral and lumber interests, one or both, are combined with the others. Is is seldom that one principal line of in-

THE EAST AND THE WEST.

dustry is represented. In Nebraska, however, this is peculiarly so. Agriculture is very decidedly our leading province, and must continue to be so. Its sister, or rather its adjunct, grazing, will long remain also a permanent feature. Want of cheap fuel will for some years to come limit our manufacturing projects, but fine water powers in various parts of the State will in a great measure supply the deficiency in fuel. These will of necessity first be used for the running of grain mills, and such other machinery as may be needed for the preparation of our products for immediate home use. What our State needs is the erection of these establishments wherever waterpower is to be found along our rivers and creek-skirted farms. Not a bushel of corn should be sent abroad in the kernel, except what cannot be used for feeding, and manufacturing purposes at home. Our farmers know full well that a bushel of corn will make ten pounds of pork, worth on an average five cents per pound, yet they continue to sell it at twenty cents per bushel, and often less, rather than cause it to be transposed into better paying material, either by natural or artificial processes. Facts similar to these instanced are brought under the Nebraska farmer's eye every day.

THE EAST AND THE WEST.

We of the West are proud of our country, proud of our people, proud of our State, our soil, our climate, our rapid growth and general make-up, and last, but not least, of our immense grain fields. We seem to ourselves as a Commonwealth, to be gotten up on a large scale, and to have immense facilities for accumulating riches, How is it, then, that we are not at all-in proportion to our cultivated acres-up with rocky, sterile New England in corn raising and other products. If the Yankee can become "forehanded" and "well-to-do," as they call it down East, with our superior natural facilities we should rapidly accumulate wealth-yes, become as rich as Croesus. But no, while the New Englander cultivates carefully, industriously and skillfully, and wastes neither time, labor nor material, that he may thrive, the Western farmer takes it for granted that, with a soil from three to ten feet deep, of inexhaustible fertility—a soil that needs no fertilizers, cannot be improved by manure all he has to do is to plow and sow, and Providence will give the increase. It is, however, true, no doubt, that skill, study and care would prove as great an advantage here as in the East.

ROTATION OF CROPS.

But few experiments have been made here yet in the rotation of crops, and those who have raised grain of the same variety wheat, for example, as it has been done in some instances—on the same land for ten years or more in succession, claim that the idea of rotation of crops in this State is a humbug. This may not be so. The straw may grow rank enough year after year, but whether the perfect and abundant kernel is as sure without rotation as with, is worthy of consideration.

VARIETY OF CROPS.

Akin to this subject is that of variety of crops. The traveller through our State expresses surprise that so many farms are given up to wheat entirely. Others are growing but wheat and corn. These are generally considered the easiest to raise. and the most profitable in proportion to the labor expended on them. Farming. however, is not merely grain growing, nor is it fully comprised in raising all kinds of grain. It includes as well tree planting, fruit raising, stock breeding, poultry raising, and all the varied business of what you understand as defined by the term "model farming." With all these surroundings the farmer will not be left in any year without some product upon which he can realize money, while the chances are equal that everything to which he turns his attention, including all that we have referred to, and more too, will each render him an annual profit.

NEBRASKA PEOPLE.

The people of Nebraska are not excelled in enterprise, public spirit, or industry, by those of any sister State. They come from every direction to find here a genial, healthy climate, and a land of most inviting appearance. The emigrant from the Old Country vies with those from the Eastern States in his efforts to make his acres more productive than theirs. For a time the representatives of the various nations of the Old World, who have sought out our

11

NEBRASKA PRODUCTS.

THE GREAT AMERICAN DESERT.

State for homes—the German, Irish, Norwegian, Swede and D.me — may retain their original identity, ; ultimately, howevcr, as now in the older States of the Union, they will have lost it by inter-marriage, until the various nationalities shall appear as but one people, and that a strong one, intellectually, physically, morally and politically.

MONEY.

Next to the mechanic and day laborer, a uniform and stable currency is of most use to the farmer. True, in times of depression in business, the farmer, provided he is out of debt, or nearly so, is of all the toiling world the most independent, for the actual necessaries of life are his in return for his labor. He can wait awhile for those less needful supplies which actually demand money. Still, it is at all times of the greatest consequence to him as a working man, that such money as finds its way to his pocket should be genuine, that the dollar he handles should be a real dollar, and capable of buying a dollar's worth of goods. and not merely eighty or ninety cents' worth ; that the bright silver coin, displaying the grand National motto, "IN GOD WE TRUST," should equal the delicate little gold piece of the same denomination : that all paper money, whether dependent on the good faith of the Government, or secured by gold or silver deposits in reliable banks, should at all times command its equivalent in specie. No one can better realize the blessings of such an equable, permanent means of exchange than the western man of business of twenty years ago. One chief blessing that came to us as a financial necessity during the late war for the Union, was the issue of paper currency in the similitude of bank notes, which are equally good anywhere in the land where the old flag-the Stars and Stripes-floats; a currency which, amid all the confusion and talk of financial politicians, is as welcome to our pockets to-day as the gold and silver it represents. Give us plenty of this money, secured by the good faith of the Republic, and equal to coin, dollar for dollar, upon its face, and these United States will be cemented together by an interest more permanent, more potent, than the ties of kin, patriot-

ism, or association, and our people will no longer, either from necessity or choice, be permitted to wander through the country asking for bread.

NEWSPAPERS.

The farmer's family should be "read up" in the news of the times. No farmer can hope to surround himself with intelligent children and employees, without furnishing them with means of obtaining intelligence: and the prime source of information at the present day is the newspaper. At least, one should be taken by every agriculturist. On nearly all subjects, save politics, it can be depended upon as furnishing correct information, and the political articles the husbandman can believe or not as he chooses. Formerly the mission of newspapers was supposed to be to reflect, not to create public opinion, but times have changed, and why not they? Of the weeklies there are few now published, which do not contain in every issue valuable hints about farming, and also market reports, which are of too much value to the producer to be neglected. Of all the newspapers taken by the farmer, some one devoted to agriculture and published in his own State. should be his first choice.

FARM MACHINERY.

In these times of improved farm machinerv, it is useless to attempt to get along without it, wherever the farmer is able to buy. Especially is this true concerning machines for harvesting. The harvest season of the small grains comes on at once, and the crop must be secured without delay or left to perish in the field, while more time and more labor is bestowed upon ploughing and sowing, upon planting and cultivating, than upon harvesting, all which, from the circumstances of the time and season, is quite admissible and practicable. Our immense crops in Nebraska could never be harvested without machinery. To people living in a region like this, where so much labor-saving machinery is used-and labor-saving machinery means money-saving machinery to the farmer-it may seem incredible that there are points in the Union where the grain is cultivated, gathered and threshed, in about the way of the ancients two thousand years ago. Yet such is the fact. In southern Colorado, down upon the line of the Denver and Rio Grande railroad, and in New Mexico, large flocks of goats are still kept to thresh out the grain, by being driven over it upon some prepared hard smooth spot of earth in the field. But such is the lightness of the crops there, from want of skillful cultivation, that machinery for harvesting is scarcely needed. The farmer of that region is but little more advanced in his methods of general work. Last fall, while travelling through there, I was credibly told that one of the principal ranche-men, a Mexican-and nearly all the inhabitants who remained on their ranches after that country was annexed to the Union, were Mexicans-had been presented with a cast-steel plow by an agent, who wanted to introduce such plows there, and that he had placed it in his hacienda, as a curiosity to his friends, but never used it and did not believe it would work : and all this in these United States, and in the last quarter of the nineteenth century.

Farmers, too, should supply their wives with the latest conveniences for housework. The best churn is none too good for a house-wife. Farmer's wives live a life of constant care and toil. From morning till night, and in the night often, alone, or nearly so-unless they have young children for company-they toil on, and with but faint hopes of easier times. Such wives are help-meets indeed to their husbands, and deserve every relief which household conveniences can afford. Shall I say that not infrequently the farmer's wife is the better man of the two, and does more to promote the farm interests than he who should in fact bear all its heaviest burdens.

NEBRASKA PRODUCTS.

An address upon the subject of agriculture on this occasion, with no reference to the number of our people or the area of our State, the acreage cultivated, the amount of crops raised, the size of our vegetables or the growth of our trees, and kindred topics, would be like the "play of Hamlet, with Hamlet left out" Nebraska as a State is scarcely twelve years old. Her population when admitted was not over fifty thousand. Now it is Three Hundred and Fifty Thousand. The number of acres in the State is 48,640,000, of which less than 3,000,000 are under cultivation. It is carefully estimated that of our various products, we have raised this year 25,000,000 bushels of wheat, 50,000,000 bushels of corn, and of other grains in proportion. Of hogs we have in round numbers 500,000, of cattle 450,000. of horses 150,000, of sheep 100,000. We have cultivated since we became a State 30,000,000 forest trees, 2,000,000 fruit trees, and 100,000 grape vines, and every year adds greatly to this number. These figures seem large but they are below rather than above the correct estimate. A glance at them shows that the farmer's most anxious day dream, now, is of home manufactures, cheap transportation, and ready market facilities-with these his prosperity is assured. He may consider himself well off. when located in a State which grows corn thirteen feet high, with ears as far above the ground as a six-footer can reach on tiptoe, and producing one hundred bushels to the acre; which raises oats at the rate of eighty, and wheat fifty bushels to the acre; a State where the soil develops beets weighing twenty-five pounds, and squashes weighing 192} pounds like the one this county sent to the Chicago Exposition two years ago, and other vegetables in proportion; a State where the white elm and other trees grow ten feet high in a single season, and where hogs weigh 800 pounds, and four year old steers kick the beam at 4000 pounds. Here is the Farmer's Paradise. In less than ten years Nebraska will lead all the States in the Union in grain raising, as she already does in fruit. To this end, every farmer, yes, every citizen, should encourage County Fairs, District Fairs, and State Fairs, for they in turn encourage the farmer.

12

MERRICK COUNTY.

And what, my friends, of your own county? I suppose it is as good, and only about as good, an agricultural county as any in the State, and that it is a fair exponent of county growth and county progress. You are located but little west of the center of State population, and have been farming about seven years. As your Secretary informs me, you have 370 square miles of land, a population of about 4,000, and fortyfour miles of railroad. You have raised this year over 5,000,000 bushels of smal

12

grain, and 30,000 bushels of corn. Twelve years ago you had no railroad, and not over a dozen dwellings. Now your settlements appear in every direction, and the railroad extends the entire length of your county. Central City, in 1868, had but three houses, except the depot and section house. To-day there are here over one huudred dwelling houses, school houses, a Court House, Town Hall, grain elevators, and other prominent buildings. Within the county, too, are three thriving young cities-Silver Creek, Clarksville and Chapman. Best of all, as evidence of your intelligence and prosperity, you support two live newspapers-the Central City Courier and the Clarksville Messenger.

CONCLUSION.

Returning to our starting point, a few. words more concerning our herding lands and general State prosperity, and I have done. The so-called desert or grazing region, according to a lately published communication from Professor C. D. Wilber. extends from the Gulf of Mexico on the South to the Manitoba of the British possessions on the North, and comprises the best cattle range in the world. The width of this range at the Southern extremity is about eight hundred miles, in this region about four hundred miles, in the North about one thousand miles, and from North to South about fifteen hundred miles. It contains over one million square miles of territory, and feeds and fattens hundreds of thousands of the finest cattle ever marketed. It therefore becomes to the people of our State an important question, whether they relinquish this so-called "desert region" to the herders, or, on the other hand, encourage the emigrant farmer to move in and possess the land-a land bearing everywhere the most nutritious grasses ever cropped, grasses demonstrating that the soil wherever they grow is rich with those fertile properties which produce in abundance all the crops which a farmer raises.

Nebraska stands to-day alongside and well up with the most famous grain raising States in the Union, and leads them all in fruit growing. She will soon outstrip her rivals and rank first-and not as now, fourth-as a wheat producing State. Her

merits as a farming land are fast becoming known, and her superior grazing facilities recognized. Her people are enterprising, thrifty and prosperous. Her cultivated fields are but vast handbills, advertising her advantages to every traveller along our railways or over our wagon roads, the like of which for smoothness and fitness for constant use cannot be found outside the western slope of the Missouri Valley. Her rivers and creeks, extending as they do, everywhere throughout her domain, irrigate her lands abundantly, while at frequent intervals they present the necessary power for turning the manufacturer's wheel. The scarcity of timber experienced by the early settlers twenty years ago, is fast being supplied by natural growth, wherever the plow or the road of the new comer keeps down the prairie fire, as well as by artificial planting, which of late years has been so judiciously encouraged by legislation. Whether coal fields, with veins of sufficient thickness to be worked, are soon to be discovered with us, may be a question, but it is but a question of time. With a soil which has no equal in the world for its . wood growing qualities, all the material required for generating steam to turn machinery where water power is not available will be found as fast as needed.

With such a State and such a people as we all know we possess, we may well be content. If not wholly content, let the little discontent we feel be that which every true patriot here, every lover of this commonwealth, experiences in his desire to see our State rapidly become what it is ultimately bound to be, the leading Agricultural State of the Union, if not the finest grain growing and stock raising land in the world.

While putting forth every effort to hasten the day which shall witness these things, we must remember that to this end our manufacturing and other industrial interests must be developed and be made of sufficient magnitude to work up the raw material upon our farms wherever it is raised, thus furnishing at home a demand for our products equal to the supply, while at the same time we most warmly encourage every other interest which can promote our State as well as our National welfare. So shall

CONCLUSION.

we aid, while we witness the fulfillment SHALL REJOICE AND BLOSSOM AS THE of the Scriptural prophecy, "THE DESERT ROSE"

15

CORRESPONDENCE.

PET

Hon. Champion S. Chase; Omaha, Neb.,

CENTRAL CITY, September 28, 1878.

DEAR SIR: At the annual meeting of the Merrick County Agricultural Board, held in Central City Hall, Sep. 26, 1878, it was unanimously RESOLVED,

1. That the Board tender its thanks to the Hon. Champion S. Chase, for his very able and eloquent address delivered before the Board this day.

2. That it is the desire of this Board, that Mr. Chase be requested to furnish the Secretary a copy of his address for publication.

3. That the Secretary be instructed to forward a copy of these resolutions to Hon. Champion S. Chase.

R. F. STEELE, Sec'v

W. H. WEBSTER, Pres't.

OMAHA, Oct. 3, 1878.

R. F. Steele, Esq., Sec'y, Central City, Neb.

Dear Sir: Yours of the 28th ult enclosing a copy of the resolutions passed by the Merrick County Agricultural Board, thanking me for my address delivered before it at its late Annual Fair, and requesting a copy for publication, is received. In compliance with the request of the Board, I enclose herewith a copy, trusting that the publication of the address may tend in some degree, however small, to promote the interests of Merrick County, as yell as to dispel the idea that there ever was a "desert region" within the limits of the State of Nebraska.

min

Mary

Carter.

Very respectfully yours,

CHAMPION S. CHASE.