

some other varieties, good in every respect, and none of which rotted this season; heretofore, few or none of the Vine Arbor, Weller's Halifax Seedling, Somerville, and some others.

I am, dear sir, with respect, yours,

SIDNEY WELLER.

Brinkleyville, Halifax Co., N. C.

NOTE BY EDITOR.—At a late meeting of the "Cincinnati Horticultural Society," a committee having been entrusted with the subject of Wines, reported, after a variety of trials and experiments, as follows:

"The result of the examination is a conviction that our soil and climate are well adapted to the production of a very fine, delicious wine, and the Catawba is the species which yields the finest quality. The pure juice of the grape, the committee add, when judiciously managed, will furnish the finest quality of wine, without any addition or admixture whatever (thus raising an issue with Dr. Weller), that no saccharine mixture is necessary to give it sufficient body to keep for any length of time in this climate. In confirmation of this opinion, we would state, that two of our German friends, who were present, informed us that they had taken, on different occasions, specimens of the wine of this country to Germany, and submitted them to the judgment of various connoisseurs, by whom they were highly approved, the principal or only objection being that they were too strong to compare with the fine kinds of the lightest German wines. A taste for the wine of this region appears to be well established, since all that can be produced finds a ready market at good prices; and the committee are of opinion that the period is not far distant when the wines of the Ohio will enjoy a celebrity equal to those of the Rhine.

Art. V.—RESOURCES AND PROGRESS OF TEXAS.

HISTORY OF TEXAS—CLIMATE, SOIL, PRODUCTIONS, POPULATION, HEALTH—CULTIVATION OF SUGAR, COTTON, RICE, TOBACCO, ETC.—VALUE AND QUALITY OF LANDS—WEALTH, ETC., OF BRAZORIA COUNTY.

We are indeed delighted with this paper. It is the first successful attempt to procure minute and reliable information upon this interesting region, though we have been trying a long time. Will not our friend continue these papers, as we assure him that they will be read with avidity in every quarter of our Union? Being *on the spot*, he can collect everything. The importance of this will be understood on referring to the circular issued the other day by Mr. Burke, of the Patent Office, to the people of Texas. We would like to hear also from the interior and northern regions of Texas.—EDITOR.

PREVIOUS to the annexation of Texas, the little republic, from its geographical position and other causes, was the theatre of intrigue and foreign negotiation, and played no unimportant part in the history of the times. By its admission into the family of States, it has been shorn of its political importance, but has acquired an increased interest as to its productive resources. The security afforded to person and property by the act of annexation, has given a value to all the elements of prosperity within the new State, and the time is not distant when Texas will contribute her full share to the collective wealth of the Union. The mixed character of her population, uniting Yankee skill and enterprise with German industry and perseverance, is a guaranty to the rapid and complete development of

the resources of the State. It is not my purpose, and far beyond my ability, to allude even to the variety and extent of those resources. A glance at the map showing the limits of Texas, spreading along the sea-coast, and running back into the mountains, embracing almost every variety of climate and production, mineral and vegetable, with broad rivers for the transportation of all that her fertile valleys may yield, must satisfy any one that, with proper direction to her industry, she is destined to a high place among the agricultural States. The soil is of unsurpassed fertility, and so varied in its properties as to be adapted to the growth of any article suited to the climate. A chemical analysis of the soils common in this portion of the State has been published by William P. Hart, M.D., in the June and July numbers of the "Commercial Review." The result of that analysis, though incomplete, places the soils of Texas in favorable contrast with the best in the United States. The three varieties therein analyzed, and known here as the *peach*, the *cane* and the *elm* soils, named from their characteristic and prevailing growth, exhibit different, yet equally valuable compounds. Experience has partially tested their comparative merits; the most successful results in the manufacture of sugar hitherto, have been obtained from the peach land, the cane soil has yielded the heaviest product in corn, and grown the largest sugar-cane, while the elm, if thoroughly drained and put in a high state of cultivation, is considered the best for cotton. But the relative value and production of these soils is still a matter of dispute among our planters, and so much depends upon the previous preparation of the land, the number of years it has been cultivated, its drainage and deep plowing, that the preference of one over another, and their adaptation to the production of corn, sugar-cane or cotton, can only be arrived at by a full and accurate analysis showing the peculiar properties of each.

Of late years chemistry has become the handmaid of agriculture. It cheapens labor and increases production. In the over-populated countries of Europe it has, by a judicious application of means to the end, contributed to the support of millions—its light follows the furrow of the plowman. In France, particularly, the discoveries in chemistry have been happily applied to the increase of agricultural products. The example should not be lost to us; and if the gentleman who has begun an examination of the Texas soils should farther prosecute his inquiries, show our planters what are the constituent principles in the cotton-plant, the sugar-cane, and in Indian corn, as also the relative properties of our soils, and which is best adapted to the growth of either of the above staples, he will render a lasting and not forgotten service to the State.*

In all parts of Texas the disproportion of prairie to the timbered land is an objection very generally urged, and will be a source, eventually, of much inconvenience to the sugar planter. But this evil may be guarded against by a timely resort to ditching, or the use of the Cherokee rose as a hedge. These expedients, apart from the ulti-

* If the planters would assist us we would have all these soils and staples rigidly analyzed and examined. The expense, however, would be too great for us now. Any planter disposed to co-operate in this matter, might easily raise the necessary funds by a contribution among his neighbors and friends, which would be a trifle to them.—Ed.

mate saving of labor, will enable the planter to apply the timber now required for fencing to the making of staves or for building purposes. Economy at the start will do much toward obviating the scarcity of timber.

In Western Texas, and in the interior above the flat country on the seaboard, the prairies are almost exclusively planted, being more easily brought into cultivation, and producing as well as the woodlands. In this region, and near the seaboard generally, the experiments that have been made in prairie culture have not been successful. The property of the soil is impaired by the heavy rains which in winter and early in the spring not unfrequently cover the surface for days and weeks; and as yet no thorough experiment has been made in draining. I am inclined to the opinion, however, that much of the prairie lands near the coast, if well drained and broken up with a subsoil plow, would equal in production the best lands in the State—at least for sugar. Hitherto but little attention has been paid to the proper preparation of our soils. The wretched custom, so prevalent at the South, of seeking to make the most out of land in the shortest time, without a thought to its improvement or durability, has been carried out here to its fullest extent. But since our admission into the Union a better practice is prevailing, and our improvements in agriculture keep pace with our brightening prospects. All new inventions, and the implements of labor of the most approved model, are sought after, and with the facilities afforded through a weekly communication with New Orleans, Texas, in the making of sugar, as in other experiments of agriculture successfully tried, will avail herself of the example of Louisiana and her sister States.

With the lights of such experience brought to bear upon a soil and in a climate eminently adapted to the production of the great Southern staples, the agricultural advancement of Texas must be rapid and remunerative. But let me not be understood as encouraging a rash and thoughtless immigration. There are many inconveniences attending a settlement here. The population is scattered, the water unwholesome, rendering cisterns essential on every well-conducted farm; the roads are bad, in winter time making a land-carriage for produce for three or four miles a matter of more delay and difficulty than a distance of twenty miles on a good road. The mosquitoes, too, besides a host of annoying insects, in number and size, would not suffer by comparison with their kindred found in the everglades of Florida.

But perhaps these are minor ills contrasted, among others, with the profitless and disheartening labor expended upon the worn out lands in many of the old States; and we should bear in mind, that, as every period and station in life has its trials and difficulties, so every clime and country has its advantages and disadvantages. The tillage of the earth is the most ancient, as the most honorable occupation of man; but, at the same time, to be made profitable, it is the most laborious. The varying seasons must be met by a change in the mode of cultivation, and the most systematic and industrious cannot count each year upon a certain and full return for their labor. This is the experience of all countries, and particularly so of this part of Texas. It is liable to extremes of drought or rain; the for-

ner occurring mostly in the spring and summer months, lasting ten and sixteen weeks, and followed by floods of rain for a corresponding period. Should the rainy season set in during the months of June, July or August, the caterpillar is sure to appear, and if later, the difficulty of gathering a cotton crop in a wet fall is known to all who have had any experience in the raising of that article. This uncertainty in production has induced many, or nearly all who can afford the expense, to enter upon, or look ultimately, to the growing of sugar-cane. I do not mean to say, however, that Texas, even this part of it, is not a cotton country. The caterpillar has appeared in this county (Brazoria) for a longer period of years, and earlier in the season, than in any other part of the State; and yet there are planters here who, for twelve and fifteen years past, have averaged seven bales of 500 lbs. to the hand. Some years they have failed almost entirely, but the average has been made up by the over-production of favorable seasons. A bale of 500 lbs. to the acre is considered a fair crop, and the staple is thought equal, and would be, with careful handling, superior to that of Louisiana. The cotton seed is planted in rows from seven to eight feet in width, allowing two and a half to three feet in the drill—the wider distance I think preferable. More attention has been latterly paid to the procuring of good seed, and a fair proportion of the crop is this year planted in Mastodon and Petit Gulf seed, directly brought from Mississippi. The late spring of 1846, and the early appearance of the caterpillar, before the cotton had matured, caused fears as to the seed of last year, and led to a greater importation of that article than usual. The prospects of the present crop are encouraging. The worm appeared early in July, but as that month proved dry and warm they soon disappeared, and up to this date, September 1st, no serious injury has been sustained from them. Since the 1st of August there has been an average of 200 lbs. of seed cotton picked to the hand, and if the fall is dry and favorable, there will be an average of over 2,000 lbs. to the acre.

The experiments made in the cultivation of cane and the manufacture of sugar have been most successful, though no fair trial, testing the full capabilities of our soil and climate, has yet been had. The experiments have been incomplete, both in regard to the mode of culture and the process of manufacturing, the mills used being of the most ordinary kind, and the other machinery of corresponding value. Notwithstanding this, there was a yield last year of over two hogsheads to the acre of sugar of most excellent quality; and those of our planters who have turned their attention to this branch of agriculture are decidedly the most prosperous. This result has stimulated many others to go largely into the growing of cane, and their outfit and labor bids fair at the present time to be well rewarded. In my immediate neighborhood six sugar establishments, costing from 10 to \$15,000 each, independent of brick and home labor, are being erected, and will be completed for the grinding of the present crop. From the experience of past years, no frost may be looked for that would injure the standing cane before or about the 1st of December, though the weather here during the *northers* is sometimes severely cold, the thermometer in December, 1845, and in January of this year, having fallen to 24° Fahr. Uninformed as our planters

were as to the best mode of putting up their seed cane, much of it was injured last winter by the cold, as also the ratoon, from not being covered with the stubble. In a wet winter both the plant cane and the ratoon would be materially preserved by the opening of suitable ditches, as water lying on or near the surface of the ground tends to rot the cane and expose it more to the severity of the temperature. In a level country like this, it cannot be too often reiterated—"drainage is manure." The sugar crop requires less labor, is more certain and profitable, than the raising of cotton, and if the production of the last year is sustained on future trial, most of the land in Texas bordering on the coast, or convenient to navigable rivers, will be planted in cane.

The area of country thus thrown open to the production of sugar, by a timely immigration from the more northern and cotton-growing regions of the South, where slave-labor has ceased to be remunerative, would in a few years supply the demand for that article, not only in the United States, but to a considerable extent abroad. The cheering fact is thus exhibited, that, no matter how rapidly the population of our common country may increase; no matter how far our northern brethren may stretch out and occupy their utmost limits, the annexation of Texas will have made the Union independent of foreign supply in this, one of the great and growing necessities of life. Texas will always be a grazing and agricultural State, and in exchanging her staple productions, sugar and cotton, for the manufactures of the North, she will contribute a strong link to that chain which binds us as one people. Between the manufacturer of Massachusetts and the planter of Texas, there is destined to be an intercourse of mutual interests. Identified in language, in ancestry, in the love of free institutions (as applied at least to white men), they have now, for weal or for wo, a common fate, and an equal claim to the recorded glories of Bunker Hill and San Jacinto. But Massachusetts hitherto has been shy and cold. At every opportunity, fit or unfit, she has had her fling at Texas. At our admission into the Union, and since, she has spurned our offered olive branch. We now hold up to her a lump of sugar—if she rejects that, and throws cold water at us, in mercy let it be in *ice*.

Another leading staple of Texas is Indian Corn; and though the southern portion of the State is not the best adapted to its production, yet the crop is generally abundant, and in fair seasons, on good soil, an average yield of fifty bushels to the acre may be relied on. Seventy-five bushels to the acre have, for several successive years been raised on the cane lands of Oyster Creek, a small stream running parallel with the Brazos. But it can never be made an article of foreign export on account of the weevil, which frequently commences its ravages in the field, and always injures the corn in weight and quality. Various experiments have been made to destroy that insect or prevent its appearance, but as far as I can learn without success. The man who can discover a remedy against it would do almost as much service as one who could point out the means of destroying the caterpillar.

In addition to the great staples enumerated, tobacco, rice, millet, wheat, the vine in its varieties, indigo, hemp, oranges and other trop-

ical fruits—in fact anything that may be grown and cultivated in Louisiana may be made here an equal source of profit and support. Tobacco for cigars has been cultivated in our lighter soils, of a quality equal to any in the United States, though it must be admitted that the genuine *Havana flavor* is proper only to the island of Cuba. It is as utterly impossible to make a *Havana cigar* out of American tobacco, as that a Yankee grocer should counterfeit successfully the delicate wines of La Belle France.

Rice, if the season should be a wet one, or on land susceptible of irrigation, may be cultivated here, if not as an article of export, at least as a table luxury; and I have succeeded several years in making two crops from the same planting. Potatoes, the sweet and Irish, yield an abundant return for the labor bestowed on them; indeed, there is no part of the United States where an industrious man can live so easily, and in such abundance, as in Texas. Apart from the fertility of the soil, the mildness of the climate, and the rapidity with which vegetation matures, a never-failing support is to be found in our beautiful and boundless prairies. If a blight like that which has desolated Ireland should spoil the labor of the husbandman, a resource against famine might always be found in “the cattle upon a thousand hills.”

As an illustration of the ease and abundance with which a laboring man in this country may support himself, I will refer to an instance which has this year come under my observation. The man to whom I allude, in January planted a small piece of ground in Irish potatoes. As soon as the crop matured, he dug the potatoes, and plowing the ground afresh, planted it in Indian corn; when the fodder was gathered, he threw up ridges between the corn rows and set out the sweet potatoe vine, which now promises an abundant crop. After digging his potatoes in the fall he intends sowing turnip seed on the same ground, thus realizing, as I think he will, four crops in the year. This is crowding too much on the land; it is what a jockey would call “riding a free horse to death;” but it proves what I set out to establish, that this is a good country for an industrious man—for a Yankee, a Scotchman, an Englishman, a German—for anybody but a drunkard and an Irishman.

The face of the country bordering on the coast and embracing the bottom lands of the Brazos and neighboring streams, is very flat, and indicates fever and ague, and all malarial diseases. But such is not the fact. The earth is easily and frequently covered with water; but either from the absorbing and porous qualities of the soil, or the rapid evaporation under a summer's sun, is as quickly dried off. It is generally therefore very wet or very dry, neither condition being unfavorable to health. Added to this circumstance, and it is perhaps the more important of the two, an invigorating sea breeze is regularly felt in the summer far into the interior. Whatever be the cause we only state the fact, that Brazoria county, in a low latitude, the richest in soil and with a general appearance fruitful of disease, is decidedly among the most healthy in the State. Instances of similar location and perhaps equal health are found on the bayous near the sea-coast in Louisiana. In May of the present year the highest range of the thermometer was 85° the lowest 66° Fahr. The hottest day I have

felt during the summer was on the sixth day of August, when the mercury rose to 89° in the shade. At the greatest heat I suspended the thermometer on a post exposed to the sun, when the mercury rose to 98° . Fanned by a regular sea breeze in a temperature so even, diseases originating from climate are of rare occurrence and of the mildest type.

The valley of the Brazos for a distance of five hundred miles from the coast, following the windings of the river, is unsurpassed in richness and variety of soil by any equal extent of country in North America. The river at a low stage of water is only navigable for sixty miles, but by the removal of slight obstructions at four points, could be made navigable for steamboats of light draught to Washington, three hundred miles by water from the mouth. Velasco, situated at the outlet of the river, is now a summer retreat for the planters in the interior, exhibiting no trace (except in ship building) of its former enterprise and trade. It was once, until Galveston bore away the palm, the principal shipping port in Texas, and but for the shallowness of water on the bar, would be decidedly the most eligible point on the coast for a large commercial town. It has a safe and excellent harbor, and after crossing the bar twenty feet water may be found for many miles up the river. The bar is narrow about 800 yards from the shore, and varies in depth from six to eight feet. It is thought by those captains who have sailed into this port that the channel might be permanently deepened to twenty feet water. A scientific examination by competent engineers has never been made, and it would be well for the general government to direct a special survey for that object, as there is live oak enough on the Brazos river to supply the wants of the navy for a century. If the deepening of the bar is at all practicable, it would be truly a national object, and it is at least worthy an examination. Texas is very deficient in harbors accessible to the lighter class of war vessels, and if artificial means can be employed to supply that deficiency, there is no point at which the attempt can be made with better prospect of success, or with more general advantages than at the mouth of the Brazos. The trade of this river, covering as it now does and will the heaviest shipment of cotton and sugar made near any other stream in Texas, requires a better outlet than over the bar as it now is; and a company, at the head of which is General Hamilton, of South Carolina, are engaged in cutting a canal from a point on the Brazos river twenty miles above its mouth to Oyster Creek, and thence into Bastrop bay, intending San Luis as the outlet. That section of the canal to Bastrop or San Luis bay will be completed this winter.

But little is known about the head waters of the Brazos. I doubt if its source has ever been explored by a white man. It is a muddy, uninteresting stream, its margin thickly studded with evergreen, and from its precipitous sides presenting rather the appearance of a large ravine during a freshet, than the gushing waters of mountain origin. Its banks will never be like those of the Rhine, the birthplace of poetic inspiration. The water is unfit to drink, and those who from necessity use it, frequently suffer in health. Its main branch is fed high up by innumerable streams contributing their ingredients to form as it would seem a most villainous beverage. Among the many

creeks or small rivers emptying into the Brazos, are the "Limestone fork," "the Salt fork," the "Sulphur fork," and the "Alum fork."

By the way, in the summer of 1844, after a freshet in the river which had partially subsided, the water from being very red and muddy became suddenly clear; the impurities were deposited at the bottom, and fish could be distinctly seen at the depth of over ten feet. The phenomenon created some alarm, and was only explained on the supposition that there was a rise in the "Alum fork" branch; at least we were all content to attribute it to that cause.

But, sir, I am traveling beyond my limits. I set out with the intention of publishing in your valuable periodical the statistics of Brazoria county; I am unable fully to complete my design. The following statement (though correct as far as it goes, and taken from the books of the assessor) is still incomplete, as he has not yet finished his labors.

BRAZORIA COUNTY, TEXAS.

White population.....	1,502
Negro ".....	2,908
Cattle.....	23,276
Horses.....	1,517
Acres in sugar-cane.....	2,600
" in cotton.....	7,054
" in corn.....	4,795
" in sweet potatoes.....	320

The present flattering appearance of the crops warrants the following calculation as to the production; the price, of course, may vary with the fluctuations of trade:

2,600 acres in cane, producing 1,500 lbs. sugar per acre, at 6 cts. per lb.*.	\$234,000
7,054 " in cotton, " 500 lbs. ginned cotton per acre, at 10 cts. . .	352,700
4,795 " in corn " 40 bushels per acre, at 40 cts. per bu.	76,720
320 " in sweet potatoes, pro. 300 bu. per acre, at 25 cts. per bu.	23,000
	\$686,420

This exhibit does not include Irish potatoes, peas, beans, rice, millet, fodder, oats, and tobacco, all of which are cultivated to some extent. These items, with the molasses from the sugar crop, would swell the aggregate production of the county to at least \$750,000. If there is another county in the United States of equal population whose strictly agricultural statistics present so fair a showing, we waive our claim to the *Banner* without a murmur.

* A friend writes us from Texas a few weeks ago: "The crops of cotton, sugar, and grain are No. 1. In the sugar district, that is, the coast country, they will make 3,000 hogsheds of sugar." Hurrah for Texas!