Rural Economy.

THE BLESSED HARVEST—PROVOCATION TO GENERAL THANKSGIVING.

Our national history will not show another period of four years when harvests so justified hope, and gave such abundant cause for thanksgiving. And even now, when the soil to a great extent lies untilled, because of the exhaustive drain of war upon our working population, we find that the loss of breadth is more than made up in the weight of the crops. Here we are in the middle of August, and the earth blooms and grows with all the vigor of June. A harvest of hay absolutely immense has been gathered; the yield of wheat has been generous and even ample, so much so that the annual croak about rust and weevil has fallen upon unheeding ears; oats and other early grains have fulfilled all reasonable expectation; and now corn, the golden-crowned King of the Continent, is striding on in this hot weather with a vigor that promises the most satisfactory results.

We have seen in this State of New York a foot of snow fall in the second week of May. We have seen almost forty days of pitiless drouth, beginning just after the 4th of July; we see almost every year, at this period, more or less of suffering from lack of rain. But this year it would seem that a kind Providence had taken us under especial protection. The earth brings forth abundantly; the early and the latter rain join hands to overwhelm us with fatness; the garden, the field, the vineyard, have already yielded or now teem with promise beyond the most sanguine expectation; the day or two of scorching heat melts into the grateful shower, and the frequent voice of solemn thunder reminds us that we are yet within the watchful care of a Father and a Friend—that we yet live in a world and a land where "all save the spirit of man is divine."

If ever a nation had especial provocation to gratefulness, we are that nation. Precipitated into a civil war of unequalled difficulties, suddenly forced upon circumstances that might have tried and broken the power of the oldest nation on earth, we have had the kind and constant favor of Heaven to an extent so remarkable that it would almost seem like direct interposition in our behalf. Now that the great struggle is over, and the cause of liberty and progress has been justified and advanced by strong arms and true hearts, and at last sits dominant over all the land, let us not forget our great indebtedness to that kind Power whose hand has led us through darkness and deep tribulation to victory and peace.

And if we are unable, in the blindness of self-pride, to appreciate causes for thankfulness, let us imagine the result had it happened that the crops of 1862 or 1863 had failed. With a million and a half of men in the army to feed, to say nothing of the people at large, where would we have been but for the inestimable blessing of a liberal harvest? The complete failure of a single harvest would have been the complete failure of a great nation; the postponement for a century of self-government; the perpetuation for perhaps many centuries of the curse of slavery. But "He doeth all things well;" the hand of the kind Father was stretched forth to our aid; the prime necessities of life never flourished nor yielded so lavishly; the good Providence is not yet withdrawn, but, as if to mark with distinguished favor the course of our loyal people, this year crowns the whole with increased abundance. The fat earth teems with richness; the drouth and the mildew are withheld; the genial shower abates the fervor of the sun, and the fervor of the sun kisses up the tears of the shower. There is a remarkable absence of evil—a wonderful abundance of good; we bask in the smile of approving Heaven, and through the Red Sea of war march even to the rich valleys of Canaan without the long probation in the Desert.—*N. Y. Times.*

PROFITS OF STRAWBERRIES.

To those who are about planting strawberries for the New York market, we present the following facts: The crop of 1865 was a large one, and the proportion of large berries unprecedented: among these the Wilson predominated; indeed it is probable that three-fourths of the large berries sold in New York during the summer of 1865 were of the Wilson variety. Next in order came Triomph de Gand, then Union, Bartlett alias Boston Pine, and several other sorts in very small proportion. But few of the Bartletts were a large size, though well liked by consumers. A good many of the fancy sorts and berries of large size were sold by amateur gardeners directly to the Broadway restaurants, at fancy figures. The earliest strawberries in market came from W. J. Bishop, Norfolk, Virginia, April 11. May 6th a crate of 54 quarts sent by him brought $1 25 per quart. E. Anderson, Frederika, Kent County, Delaware, sent as the picking of one day—May 23—864 quarts, which brought $465 86—378 quarts selling at 70 cents, the balance being in bad order, and bringing only 35 to 60 cents. S. R. Trembley, Bergen Point, New Jersey, sold 250 quarts of Union strawberries at $1 per quart. From 30 to 40 berries of this sort make a quart.

The estimated average price of the ordinary strawberry baskets,* mostly Scarlet Runners, averaged 6 cents throughout the season. Much of the fruit came from Burlington, New Jersey. Bergen County was also very prolific. The freight office of the Erie Railway gives the following as the number of strawberry baskets transported from the following stations in Bergen County: Patterson, 25,000; Goodwinsville, 440,000; Hohokus, 102,000; Aliendale, 634,000; Sufferns, 70,000; Ramsay's, 1,019,000. Total, 2,290,000.

It is believed that nearly one-third as many more were taken by other conveyances from that county, besides 1,500,000 upon the Northern Railway, which would make up a grand total of 4,500,000. Estimating the baskets to average 5 cents, it will make the receipts of Bergen County $225,000 for the strawberry crop of 1865. It is also stated that large quantities of fruit were ungathered in consequence of the difficulty of procuring pickers.

* Very small, say half-a-pint.

J. B. Strawn writes from Salem, Columbia County, Ohio: "I picked from two rows of Wilson's, of seventy-five feet in length, set last season, two bushels and a half of fine berries. I covered the rows with boards when in blossom, to shield them from a severe frost which visited us, and thus saved almost the entire crop. I design to plant about three or four times as many this fall."

A strawberry grower at Hammondton, New Jersey, gives the following as the result of the crop on one-third of an acre of strawberries the past season: "Berries sold for $1 20; fruit canned, 40 quarts; jelly made, 50 quarts; wine made, 60 gallons; vinegar, 45 gallons."—*New York Tribune.*

At the Farmers' Club of the American Institute, Mr. Carpenter stated that a friend of his in Burlington County, New Jersey, during the strawberry season, was having 1,500 quarts per day picked for the Philadelphia market, which sold for 40 cents per quart. A neighbor of his gathered 2500 quarts per day, thus receiving more than $1000 daily for strawberries. In both these cases the variety cultivated was the French seedling, a large, early, and productive kind.—*New York Observer.*

BEEF MONOPOLY.

The high price of meats for the last few months, as asserted by the newspapers of our large cities, where consumers most do congregate, is caused by speculators, and is the result of extortion.

We not believe in anything of the kind. The high prices have been caused by scarcity, or the inadequacy of supply to demand. This latter has been excessive, and, owing to the war, has been accompanied by the usual waste connected with feeding large armies, and also by the waste resulting from irregular and uncertain transportation, added to losses from captures by the rebels.

Another cause of present scarcity is, that in the fall of 1863 an early frost destroyed corn crops in large sections of the West, and much young stock had to be killed off from inability to winter it. For this reason, and the demand for Government uses, much of the regular breeding stock of the country has been butchered. Nothing but *time* is wanted to restore this deficiency. A combination among farmers, drovers and butchers to keep up the price is simply impossible. The probabilities of success in combination to keep up the price of any thing is in the inverse ratio to the number of people engaged in it. Fifty men may combine, for example, to put up the price of gold. It would be more difficult for five hundred men to do it, and still more for five thousand. The laws of supply and demand are inexorable, and, like water finding its level, will come in, in defiance of combination, and restore the balance.

Another difficulty in the supposed combination is, that it would have to extend over three thousand miles of territory, and that the supposed parties to it (the farmers) are the most numerous class of our people. To suppose that any concerted plan to keep up prices is possible between some millions of farmers, drovers, and butchers, is simply absurd. Beef is *high* only because it is *scarce*. Other meats are affected in their values, because beef is the usual standard. Till the live stock of the country increases, it is thought "jerked beef" may be imported from South America with profit This is much more rational than to form clubs of anti-meat eaters, as is suggested. It is probable, however, that Americans as a people eat too much meat, and that abstinence for a time and the substitution of a vegetable diet would be useful.—*Rural Advertiser.*

Scientific.

SUBMARINE CABLES.

The largest of these, of course, is the Malta and Alexandria, which is 1532 miles in length. This cable is the first long one which has proved successful, but it is described by Mr. Giscorne as being too slight, and it certainly has proved liable to interruptions. It is the first cable sent out under water in tanks fitted in the cable ships. The first iron-covered cable, now universally used, was the Dover and Calais, which is twenty-seven miles long, and has been thirteen and a half years in operation. The first application of pure india-rubber to submarine cables—now very seldom used—was with the short cable of three miles between Keyhaven and Hurst Castle. The first cable in which a strand was used for the conductor is the Newfoundland and Cape Breton. That between England and the Isle Man was the first in which the outer iron wires were protected against rust by hemp and bitumen. The greatest depth seems to be reached by the Corfu and Otranto, the fathoms in this case being three hundred to one thousand. Between Dover and Calais, the general depth is from fifty to thirty fathoms. The first submarine cable ever laid was only a gutta percha covered wire, between Dover and Calais, and which worked but for one day. Between England and Holland, four separate cables, laid at different times, have been so frequently broken by anchors, that they have been picked up, and are now being stranded into one solid cable, which is to run between Belfast and Scotland. The Holyhead and Howth cable worked five years, and then failed, in consequence of the iron wires rusting so as to hinder repairs. A cable between Spezzia and Corsica worked without a single interruption, and without costing anything for repairs, for ten years, but early last year it broke down. The cause of failure in the case of several cables is not known. Two or three were "too light for position;" one was laid in a narrow strait instead of in the open sea; another was "laid in a bad direction, continually chafed through by rocks;" with a third, the outer covering of hemp was eaten away by shell-fish at even eight hundred fathoms and upwards. In all, twenty-three cables, which were successful for some time, are not now working, excepting in the case of some which have been relaid with other cables. In nine instances cables failed when being laid down. On the Sardinia and Africa line, the cable ship went out of her course, and the length of cable proved insufficient. In another instance, bad weather came on while the cable vessel was being towed by a steamer, and the cable was cut to save the ship.—*Times.*

LAUNCH OF THE DUNDEBERG.

The great naval event of the age—the launch of the *Dunderberg*—took place on Saturday morning, at nine o'clock, in the presence of at least twenty-five thousand spectators. Nearly ten thousand persons were on board when she was launched. The *Dunderberg* entered the water in a manner surprising to everybody conversant with launches. She cut the water like a knife, and did not raise a swell of a foot in height. This proves how beautiful are her lines, and faultless her form. As the vessel reached the water she was closely followed by five large and powerful tugs, four of which were soon checking her by means of two large hawsers, but before she was "brought too" she was quite close to the Long Island shore. No accident of the most trifling character occurred, and in less than an hour from the time she started from her cradle in New York, she had crossed the East River twice and was at her berth safe and sound as a nut. The *Dunderberg* is a sea-going iron-clad frigate ram of about 5090 tons register, 5000 horse power, and is to carry an armament of four 15-inch Rodman, and fourteen 11-inch Dahlgren guns. With these few facts before us we will be able to comprehend, in some degree, the magnitude of the vessel as well as the enormous power of her heavy armament, which numerically in calibre has no equal in the history of naval architecture and ordnance. Her principal dimensions and features are as follows:—Extreme length, 380 feet; extreme beam, 72 feet 10 inches; depth of hold, 22 feet 7 inches; height of casement, 7 feet 7 inches; length of ram bow, 50 feet; draft, when ready for sea, 21 feet; displacement, 7000 tons; tonage, 5090 tons; weight of iron armor, 1000 tons. It will be serveral months before the *Dunderberg* will be ready for service, now that we have no pressing need of her; but should her services be required, it would not take long to fit her out for actual duty. In her we have truly a great ship, one that has perhaps no equal in the world.—*N. Y. Exchange.*

PETROLEUM IN LOCOMOTIVES.

The English engineers are discussing whether petroleum can be used as fuel for locomotives. Mr. Brydges Adams thinks it can, the only question being its economy. He describes an engine which could be used, and by which the fire could be so directed as to regulate at pleasure the concentration on the boiler, by which there would be no burning of the boiler, no cutting of the tubes by particles of fuel, no sparks or smoke through the chimney, and no sulphur or carbon in fumes to damage the copper or annoy the passengers. In building an engine purposely for such fuel, many things might be arranged advantageously; but there is no difficulty in applying the principle to any existing engines. The advantages are, absence of smoke and dirt, and noxious gases, and coal-dust, and occasional coal on the rails—or, if coke be used, the freedom from cutting the tubes, and the freedom from particles of coal-dust in the passenger's eyes—more frequent in tunnels than elsewhere. Practically extending the heating surface, by using the whole instead of a portion of it, a small boiler becomes equivalent to a larger one, and can use larger cylinders with a less total weight of machine. The enconomy of using coal oil is a queston he does not touch. Compared with coal, its cost must be greater.

SOME EXPERIMENTS have been made at L'Orient, on board the *Coligny*, the object of which is to utilize the electric light at sea. By means of a submarine reflector, the water was illuminated to a great depth, so that it was possible to look down from the deck and see the fish, attracted by the light, swimming round the lamp as if in an aquarium. A kind of diving-bell with a large glass eye in one side, and arranged to supply air to the diver, was also let down to the depth of thirty-eight fathoms. By means of this apparatus it will be easy to inspect submarine constructions, to fish coral, etc., and recover wrecked property. Signals were likewise exchanged, by means of the electric light, between the *Coligny* and the semaphore of Belle Isle. These different applications of the electric light were made, in the presence of a military commission, by the inventor, M. Bazin, civil engineer, of Angers, and were found to give satisfactory results.

THE new act for regulating locomotives on turn pike and other roads in Great Britain, will come into operation on the first of September. Three persons are to work a locomotive, and one is to precede it on foot with a red flag, as notice of its approach. On a turnpike road or public highway a locomotive is not to proceed at a greater speed than four miles an hour, and in a city, town, or village, at not more than two miles an hour. The act is only to continue in force for two years, and may be regarded as an "experiment" on locomotives in public thoroughfares, both in the metropolis and in the country.

WANTED.

A FILE of the GENESEE EVANGELIST, up to the time of its union with this paper. Address S. AGNEW, Presbyterian Historical Society, Philadelphia.