

### An Early Plan to Improve the Mouth of the Mississippi by Jetties.

The New Orleans *Times* finds on page 357 of the first volume of Gayarre's "History of Louisiana" the following notice of an early proposition to deepen the mouth of the Mississippi River by means of jetties. The author says:

"The necessity of deepening the mouth of the Mississippi had attracted the attention of the French Government at the earliest period of the establishment of the colony, and the engineer Pauger made, in this year, 1723, a very interesting report on the practicability of arriving at this desired result. He represented that it was easy and not expensive to *fix* (fixer) or to control the current of the Mississippi so as to make it subservient to the plan of operating upon the sand banks which obstructed the several mouths of the river, and so as to give admittance to the largest ships, whatever might be the depth of water they drew; that, if necessary, a fine artificial harbor with quays might be created at the Balize, with the numerous resources which the nature of the locality offered, and that it might be effectually protected by such fortifications as he indicated. He recommended to *shut up all the mouths of the river except one*, in order to force a greater volume of water into the remaining channel, which would consequently acquire more depth."

It detracts nothing from the merit of Captain Eads' work that the idea of the system he adopted was not original with him. He never claimed that. It is to his credit, nevertheless, that he was able not only to appreciate the system, but was willing to risk fame and fortune in carrying it out in the face of strong professional opposition.

### Our Trade in Foreign Fruits.

The seventh annual report of the foreign fruit trade of New York, just completed by U. S. Inspector of Customs J. H. Bostwick, contains much interesting information. The principal statistics for the year 1879 are as follows:

The importation of Mediterranean fruit at the port of New York during the year 1879 consisted of 108 cargoes by steamers and 54 by sailing vessels, and comprised 880,729 boxes and cases of oranges and 900,505 of lemons, showing an increase of 26 cargoes by steamers and 24 by sailing vessels, and of 525,732 boxes and cases over the importations of 1878. The number of oranges was 239,751,255, of which it is asserted 119,875,627 perished on the voyage, a loss of 50 per cent. The number of lemons was 315,176,750, of which it is asserted 113,463,620 perished on the voyage, a loss of 36 per cent. Total number of oranges and lemons, 554,927,975; boxes and cases of oranges and lemons, 1,781,234. There were 44,365 barrels and 56,721 half barrels of grapes imported last year, at a loss of 25 per cent, a slight decrease compared with the imports of the preceding year.

The trade in Mediterranean fruit during the past year has been disastrous to the parties engaged in it, especially to the producers. The price of box fruit was as a rule very low, particularly in the case of oranges imported from Catania and Palermo. These were seriously affected by a parasite which greatly impaired their value. A large proportion of the fruit arrived in bad order.

The importations of oranges from the West Indies consisted of 16 cargoes and several parts of cargoes by sailing vessels; also 33,736 barrels of oranges per steamers. Of the above, 21,286 barrels were from Kingston, Jamaica, and 7,450,100 oranges, of which 3,352,545 perished on the voyage. There were 15 cargoes and 665 barrels imported from Mayaguez, comprising 4,388,045 oranges, of which 1,912,195 perished on the voyage; from Havana, 7,212 barrels, comprising 2,307,735 oranges, of which 1,038,480 perished; from Nassau, 2,734 barrels, comprising 919,659 oranges, of which 299,249 perished; from Montego Bay, 1,389 barrels, comprising 771,665 oranges, of which 347,249 perished; from Trinidad, 445 barrels, comprising 285,917 oranges, of which 214,438 perished; from Abaco, 1 cargo, comprising 190,000 oranges, of which 17,000 perished; from Baracoa, parts of cargoes, comprising 84,900 oranges, of which 35,950 perished; from Guyanilla, 4 barrels, comprising 1,400 oranges, of which 600 perished. The above shows a grand total of 16,399,421 oranges, of which 7,217,706 perished, an average loss of 44 per cent. An increase is shown of two cargoes and 7,610 barrels of oranges over the imports of the preceding year.

The importation of bananas from the West Indies the past year consisted of 105 cargoes by sailing vessels. Of these there were 90 cargoes from Baracoa, comprising 191,888 bunches, and 15 cargoes from Port Antonio, comprising 28,823 bunches; from Kingston, per steamers, 47,965 bunches; from Montego Bay, per steamers, 36,134 bunches; from Trinidad, 284 bunches. Total number bunches of bananas imported from the West Indies, 305,094, of which 79,518 perished on the voyage, an average loss of 26 per cent. There were also imported from Aspinwall, per 55 steamers, 240,000 bunches of bananas, of which 38,000 bunches perished on the voyage, an average loss of 17½ per cent. There was an excess of 40,000 bunches of bananas over the imports of the previous year, and a decrease in loss of 22½ per cent.

The importations of pineapples consisted of 53 cargoes, of which 8 cargoes were from Eleuthera, 11 from Cat Island, 8 from Governor's Harbor, 9 from Nassau, 5 from Abaco, 3 from Rock Sound, 3 from Harbor Island, 1 from Tampum Bay, 1 from Rum Key, 2 from Mayaguez, part cargo from Antigua, and comprised 2,558,833 pineapples. There were also imported, per steamers from Havana, 143,555 pineapples; from Kingston, 21,148; and from Montego Bay, 16,466. The total number of pineapples imported from the places above named was 2,740,002, of which 712,391 perished

on the voyage, showing average loss of 26 per cent. A comparison of the above with the imports of the preceding year shows an increase of about 40,000 pineapples.

Cocoanuts were imported from the following named places during the past year, viz.: Baracoa, 3,112,006; San Andreas, 1,540,863; Aspinwall (per steamers), 560,602; Carthagena, 374,492; Falmouth, 245,000; Ruatan, 217,500; Montego Bay (per steamers), 158,863; Honduras, 139,800; Port Antonio, 132,704; Port Maria, 100,000; Kingston (per steamers), 55,000; Gilario, 38,800; St. Jago, 21,600; Mayaguez (part cargoes), 10,430; San Ann's Bay, 8,200; San Domingo (per steamer), 7,000; Maracaybo, 3,000; making a grand total of 8,205,578 cocoanuts, which comprised the cargoes and parts of cargoes of 114 vessels, exclusive of steamers. Of the above, 662,249 cocoanuts perished on the voyage, a loss of 8 per cent. A comparison of the above with the imports of 1878, the result shows a decrease of 981,307 cocoanuts.

The importation of limes comprised 988 barrels, on which there was a loss of 33 per cent; 126,000 grape fruit, loss 10 per cent; 5,144 shaddocks, loss 33 per cent; 9,000 plantains, loss 25 per cent; 28,000 mangoes, loss 80 per cent. There were also imported in small quantities of each, mandarins, cantaloupes, sapodillas, alligator pears, manna apples, and watermelons, on which there was a loss of 25 per cent. The countries and places whence the foregoing varieties of fruit were imported are the United States of Colombia, Mexico, Central and South America, Venezuela, British West Indies, French West Indies, Cuba, Porto Rico, England, Scotland, France, Spain, Portugal, and Italy. The value of green fruit entered for consumption at the port of New York from January 1, 1879, to December 31, 1879, is exhibited in the following table:

| Varieties of Fruit.  | Value.      | Duty.        |
|--|-------------|--------------|
| Oranges and lemons, 20 per cent.....   | \$2,919,003 | \$583,800.60 |
| Grapes, 20 per cent.....   | 227,014     | 45,402.80    |
| Pineapples, 20 per cent.....   | 105,297     | 21,059.40    |
| Bananas, 10 per cent.....  | 382,473     | 38,247.30    |
| Limes, grape-fruit, shaddocks, plantains, mangoes, mandarins, cantaloupes, melons, sapodillas, alligator pears, manna apples, and watermelons, 10 per cent.... | 9,315       | 931.50       |
| Cocoanuts, free.....   | 213,438     | .....        |
| Total.....   | \$3,856,540 | \$689,441.60 |

A comparison of the value of green fruit imported in 1879 with that of 1878 shows an increase in value of \$121,490, and of duty, \$23,425.

### RECENT DECISIONS RELATING TO PATENTS.

#### United States Circuit Court—Western District of Pennsylvania.—Acheson, J.

#### STROBRIDGE vs. LINDSAY, STERRITT & CO.—COFFEE MILL PATENT.

1. The first claim of reissued letters patent No. 7,583, granted to Turner Strobridge, March 27, 1877, for an improvement in coffee mills, is valid.
2. The mere fact that the device of the defendants has a function additional to that accomplished by the patented invention will not justify the defendants in the use of the latter without liability.
3. Letters patent themselves *prima facie* establish the fact that patentable invention is embraced thereby, and strongly confirmatory of this will be evidence tending to show the favorable acceptance by the public of the improvement and its recognition by the trade as something new and meritorious.

Messrs. Bakewell & Kerr for the complainant.

Mr. B. F. Thurston for the respondents.

#### United States Circuit Court.—Western District of Pennsylvania.—Strong, J.

#### ROBERTS *et al.* vs. SCHREIBER.—OIL WELL TORPEDO PATENT.

1. Reissued letters patent No. 6,258, granted to E. A. L. Roberts, January 6, 1875, the claim in which is for "the method or process of increasing or restoring the productiveness of oil wells by causing an explosion of gunpowder or its equivalent at or near the oil-bearing point, in connection with superincumbent fluid tamping, substantially as described," declared to be for the same invention as his original patent dated May 20, 1866, and sustained.
2. The decision in the case of *Roberts vs. Dickey*, 4 Fisher, 532, construing the true meaning and scope of such original patent, approved.
3. The application of a blast in a bore hole sunk in an ordinary well is not an anticipation of a process by which a torpedo may be exploded many hundred feet below the surface of the ground and below the top of the rock through which an artesian well has been sunk, and at the exact point in the well where the effect of such explosion is desired, with a water tamping sufficient to confine the effect to the vicinity of its location.
4. Unsuccessful and abandoned experiments cannot avail to invalidate a patent to an inventor who has disclosed to the public an invention the utility of which has been demonstrated by its general adoption.
5. The cause that works successful results cannot be the same as that exhibited in abandoned experiments, and holding the latter up as anticipations of the former is but an illustration of what is very common—an attempt to defeat a meritorious invention by proof that something similar had been previously known, though it had never been perfected, and had never been any useful contribution to human knowledge or convenience.
6. The process invented by Roberts, as disclosed by his specification, does not require that the superincumbent fluid tamping should fill the well, but that there should be a sufficient column of fluid to confine the effect of the blast.

7. Letters patent No. 47,458, granted to E. A. L. Roberts, April 25, 1865, for improvements in apparatus for exploding gunpowder or other explosive material in artesian or other similar wells, construed and sustained.

#### By the Commissioner of Patents.—Marble, Commissioner.

#### EX PARTE MCDUGALL.—PATENT OIL CAKES.

1. The rule that several distinct inventions cannot be included in a single application is alike applicable whether such inventions be improvements in processes or machinery, and the mere circumstance that several processes pertain to the same subject matter will no more warrant their joinder in a single application than will the bare fact that two machines are in the same class of invention warrant the issue of one patent for the two.

2. Although each of the several "acts" of the "series of acts" constituting a process may be capable of performing separately its own peculiar function, and may be used independently of the others, yet if they all contribute in producing the final result they may be joined in a single application, and a claim may be made to the entire process, and separate claims can also be made to the sub-processes which go to make up the same.

3. Where one has discovered that a desired result can be attained by a process consisting of a series of steps, and that certain of the steps in such process can be replaced by others which will operate in an equivalent manner, a broad or generic claim can be made including all the modifications, and a more limited and specific claim can be made to any one of the modifications.

4. Where in several processes the order in which the several steps follow each is different, as are also the final results attained, the processes cannot be said to be modifications each of the other.

5. Alternative claims and claims for modifications condemned. The mere fact that courts, in order to save a patent, have sustained such claims is no warrant for the Office to shirk its duty in requiring that the claims shall be framed in the clearest and best form, and shall not embrace distinct inventions.

#### New Varieties of Tea.

An English consul reports the discovery of two curious varieties of tea on the western frontier of China. In the monasteries on Mount Omi (or Ngomi) he was given an infusion of tea which is naturally sweet, tasting like coarse congou with a plentiful addition of brown sugar. It is only grown by the monks on the slopes of the mountain, and two days' further west its existence was unknown. The other variety, odd as it may appear, has the natural flavor of milk, or, perhaps, more exactly of butter. What is most interesting is the fact that it is wild tea, growing in its native elevated *habitat*, without cultivation.

This wild tea is found in the uninhabited wilderness west of Kiating and south of Yachow, at heights of 6,000 feet and upward, and is a leafy shrub 15 feet high, with a stem 4 inches thick. Every part of the plant, except the root, is used for making the infusion; the wood is chopped up and put into a kettle of water with the dried leaves and twigs, and being boiled yields a strongly colored but weak tea, possessing a buttery flavor, which gives it some resemblance to the Thibetan preparation.

#### Cold Air Fruit Curing.

The California *Mountain Messenger* reports an interesting experiment in fruit curing lately made at a Placerville foundry. About a peck of sliced apples were placed in a sieve and subjected to a cold air blast for three and a half hours in the cupola furnace of the foundry, and the fruit is reported to have been completely and beautifully cured by the treatment, remaining soft and without the slightest discoloration. The cured fruit showed none of the harsh, stiff dryness which results from hot curing, the cold blast completely freeing the fruit from excess of moisture, with no possibility of burning or shriveling it. The *Messenger* says: "Compared with our sun drying, it effects a great saving of expense, attention, and risk. Anybody who can command or devise a strong blast of cold air, can dry fruit in a superior—we might say perfect—manner, without being dependent on the weather and waiting on the slow process of sun drying, and without the most expensive resort to fuel and the risk of overheating."

#### Old-fashioned Flowers.

The editor of the *Rural New York* recently visited what he terms an old-fashioned garden, in which were growing and blossoming luxuriantly white herbaceous pæonies, *Pæonia tenuifolia* (single), tree pæonies, larkspurs, Canterbury bells, fox-gloves, June and hybrid roses, and many other good old things, now seldom seen except at some old country home. Are we not, pertinently asks the editor, making a mistake in neglecting these fine old plants? At some future time we may wish for them in vain.

#### Benjamin D. Frost.

Benjamin D. Frost, civil engineer, under whose supervision the Hoosac Tunnel was constructed, died at St. Louis, Mo., July 19. Mr. Frost was a resident of Massachusetts, but had been in the West several months prosecuting surveys for the improvement of the Mississippi River, in which work he was actively engaged to the end. He was within a few years of completing his fiftieth year.