MEMPHIS APPEAL.

WEDNESDAY : : OCTOBER 28, 1885

NASHVILLE AND THE MISSISSIPPI RIVER.

In order that the Eastern opposition to the improvement of the Mississippi river may be met and counteracted, it is most important that the whole valley of the Mississippi should co-operate. It is therefore with regret that we see anywhere within the valley any sign of disloyalty to a work of such supreme importance to its prosperity. That feeling—not opposition to the project to make the Mississippi improvement a distinct thing from the harbor bill, for we do not regard such a proposition to be a present issue, whatever it may be in the future—led us to speak of the Nashville *Union* as being apparently in a doubtful position as to the main subject. It is with profound pleasure we recognize that the *Union* is alive to the importance and value of the improvement of the Mississippi. In its issue of Monday last that journal said: "We beg to assure the APPEAL that we did not mean to signify any opposition to any well-considered scheme for the improvement of the Mississippi. We believe the Mississippi interests will best prosper on the plan which we favored. At any rate there is nothing the *Union* can say of a character to aid the improvement of the Mississippi that will not be earnestly and faithfully said. Our suggestion of severance had in it nothing of opposition to the graver interests." We in our turn are "earnestly and faithfully" desirous of seeing the improvement of the Cumberland and Tennessee rivers carried out, as a work beneficial to one of the most valuable portions of the State. To obtain all the advantages those improvements can bring, however, those rivers must have access to the whole country from St. Paul to New Orleans, and to obtain this at all seasons fitted for river travel, the channel of the Mississippi must be permanently cleared of all shoals, bars and other obstructions. This done, every navigable confluent of the Mississippi shares in the vast gain that will bring increased traffic, gain, prosperity and population to the whole valley of the great highway of States.

MAN'S POWER OVER CLIMATE.

Has man the power to modify climate? This question is an important one, for it is clear that if he has such a power many a hundred league of land that is now considered sterile may be made fruitful, and, by abusing the power, fertile lands made sterile. That man's "improvements" have in some cases had a deteriorating influence is very commonly believed. We have good reason to conclude that where the forests are mercilessly cut down, the rains evaporate and flow from the soil with undue speed, injuring its fertility, and causing low water at one season and floods at another, in the rivers. There is also good reason to believe that where, on plain and prairie, trees are planted, there is an increase of rains and an improvement, or at least, a conservation, of the soil. The West, with its great plains and waterless deserts, affords good opportunity to test whether man has the power to modify climate, and the experience there of coming years will probably supply a full answer to the question. Already, however, there are indications worthy of attention. President Perry of Doane College, Nebraska, a graduate of Yale, went to Nebraska in 1872, and he reports that at that time the climate in the southeastern portion of the State, where he resided, had a dry atmosphere, a tough and stubborn sod that appeared unlikely to produce corn or grass or fruit trees, and there were interminable and tormenting wind-storms. At the present time a distinct change is perceptible. The atmosphere is so much moister that housekeepers have to be careful against mildew; there is an increase of rainfall, with a more even distribution of it; windstorms are rarer; hot summer blasts that used to wilt the corn no longer occur. The change, President Perry believes, is owing in part to the soil having been broken up by plowing, thus retaining an increased quantity of moisture, and in part to the shade of the very many groves and trees that have been planted; the growing vegetation has also aided by decreasing absorption, while all acting together have caused incre se of cloudiness and consequently of rain. The air is therefore less volatile, and the trees diminish the force of the wind. This testimony is corroborated by similar statements from other portions of the Rocky mountain territory. In some parts a less amount of irrigation is required and even altogether dispensed with, and the "Great American desert" recedes as settlements increase. On the whole the preponderance of testimony appears to show that where human, animal and vegetable life increase, a decided modification of climate is the result, which is an acquisition to human power formerly unthought of.

THE SMALLPOX SCOURGE.

Smallpox, previous to the discovery of vaccination nearly 100 years ago, was considered the most loathsome and fatal of all diseases. But of late years this world sweeping epidemic has lost much of its terrors. Science has divested it of much of its horrors. The whole country feared cholera and yellow-fever, but there was no dread of smallpox since the discovery of methods for preventing it. But the fatality of this disease in Canada and its appearance on the border have produced great alarm in the New England States. Without vaccination smallpox will again spread over the country and be as fatal as ever. Prudent nations in time of peace prepare for war, and every prudent community when free from smallpox should prepare against its ravages. To be forewarned is to be forearmed, and the fatality of smallpox on our borders and its advent into the New England States should be a warning to the whole country, and in every city and town vaccination should be enforced by the corporate authorities. "An ounce of preventive is worth a pound of cure." It will be too late to prevent the spread of smallpox after it has become an epidemic. At one time smallpox was the greatest scourge of the world. It was first introduced into Europe from the East by the Saracens. It was first accurately described in the year 900 by Rhoves, an Arabian. From Europe it was carried to America, soon after its discovery, and swept of the natives by thousands. In Europe it spared neither high nor low. Few crowned heads fell beneath the plague, but smallpox did not spare them. In 1694 Queen Mary of England died of the disease; the Emperor of Germany in 1712; the Dauphin and Dauphiness of France and their son in 1730; the Emperor of Russia in 1741; the Queen of Sweden in the same year, and in 1774 Louis XV of France. Millions of persons annually fell victims to the disease, until the discovery of vaccination with kinepox in England, in 1796, by Dr. Edward Jenner. Inoculation was introduced into this country from Turkey in 1721 by Lady Mary Worley Montague. Inoculation protects the individual, but spreads the disease among those who come in contact with him. In Egypt it was found to increase the total number of deaths. Although Dr. Jenner has received great credit and was highly honored for his discovery of vaccination with kinepox the discovery was really made for him, and he appears to have been a long time in learning its value and introducing it. In 1765, when he was an apothecary's apprentice at Sodbury, a young woman declared in his presence that she could not take smallpox, "for," said she, "I have had cowpox." At that time it was generally known to the country people that kinepox was a preventive of smallpox, yet Jenner did not introduce this knowledge until 1796, thirty-one years after it came to his knowledge. May 14, 1796, may be set down as the birthday of vaccination as now known, for it was on that day that Dr. Jenner vaccinated the boy, James Phipps. Dr. Baron, the biographer of Dr. Jenner, admits that a farmer by the name of Jesty had inoculated his wife and children with cowpox matter in 1774, and that a Mrs. Rendall had caused her five children to play with the teat of a cow to secure them from smallpox. "But this," says he, "never advanced the cause of vaccination beyond what popular rumor had already done."

ARISTOCRATIC HATE.

When "the progress of the age" sets in a particular direction it is interesting to observe from what unexpected quarters aid comes to impel the main current, as a tributary flows into the main stream and adds to its impetus. England, one of the most conservative of the progressive nations, is at this time the most active and energetic in cutting loose from mischievous influences the legacy of past and unenlightened times, and in throwing itself ardently into the race of advancement the nations are now more or less participating in. That a son-in-law of the Queen should join the forward ranks of the advance is a striking instance of the rank, power and influence the advance has attained. Forty years ago the political sentiments of which the Marquis of Lorne, husband of one of Victoria's daughters, is to-day a defender and sustainer, were brought into prominence—not by royalty, or aristocracy, or church, or the middle class, but by the suffering, oppressed laboring class. These we nick-named Chartists, denounced, ridiculed, despised and persecuted. Three of the leaders of the movement out of which chartism grew—Frost, Williams and Jones—were "transported" as convicts to England's penal colony. What has opened this man's eyes to the evils that the maintenance of feudal institutions have entailed upon England? The suffering he himself is undergoing from the rancor, prejudice and arrogance the feudal aristocracy and monarchy have poured out upon him. He married the monarch's daughter and, because he was not of "royal blood," the royal dukes and princes must show him scorn and contempt, descendants as they are of little German princelets, such as the one who recently married Beatrice, another daughter of the Queen; such as formed the court of the groveling George I, that came from Hanover, and the obscene court of George III, which was so vile that when Victoria was a girl her mother, the Duchess of Kent, would not allow her to be taken within its coarse precincts. The Marquis of Lorne has been in Canada for some years, clear of the atmosphere of the court. He has seen democracy ruling there and in the United States, and ruling well, and as was the case with the Earl of Dunham, author of the plan of forming the "Dominion of Canada," before him, he returned home from Canada understanding that in the free action of a free people lies the secret of true progress. Spite of court etiquette and aristocratic bigotry, he has the courage to avow his sentiments, and that he might more effectively and effectively be offered himself as a candidate for a place in Parliament. The Tories, from time immemorial, have been used to retain as their assistants at elections a body of roughs—often called "lambs" from their peculiar way of showing gentleness. These lambs aristocratic hate has let loose upon Lorne. He has been egged and stoned and buffeted by a Tory mob. Will he be less an advocate of democracy because aristocracy has showered upon him its hate, it heartless wrath, its arrogant vindictiveness? How often, in times when the people have risen against tyrants, men who have been outraged, insulted and borne down upon, as the Marquis of Lorne has now, have become the people's leaders and avengers! The feudal love of domination and arbitrary rule inherent in the customs and training of the British aristocracy is "scotched not killed," and every now and then it breaks out and shows its cruel teeth and malicious hate. It may turn out that in the Lorne case they have shown those demoniacal qualities once too often. Their House of Lords was in danger before, it will be more so now.

CALIFORNIA PIONEERS.

Annual Reunion of the Survivors of Stevenson's Expedition of 1846.

NEW YORK, October 27.—The annual reunion and dinner of the Society of the Survivors of Stevenson's California Expedition of 1846, known as the First Regiment of New York Volunteers that se ved in the Mexican war, was held last evening, celebrating the thirty-seventh anniversary of the discharge of the regiment in California. Gen. John C. Fremont and Maj. Edward C. Kemble ("Fremont's battalion,) the founder of the *Alta California* in 1847 at San Francisco, were guests. Maj. Clark, the president of the society, presided. His annual report showed that seven deaths occurred had occurred during the past twelve months, while during the same period six comrades who were regarded under the title of "whereabouts unknown" had been heard from and their names added to the roll of survivors. Of the 844 who served in the regiment there are 160 survivors, 110 of whom live in California, the remainder being residents of the States east of the Missouri river. The aggregate wealth of the 160 survivors is about $10,000,000. The greater part of the survivors are in good circumstances and engaged in active business.

Joseph Evans, the secretary, read letters received from many comrades of the Pacific coast, as also some in the Western States. On the 9th of September, which, "California Admission Day," Col. Stevenson deposited the colors of the old regiment with the Society of California Pioneers at San Francisco, to remain in their custody for all time, with the request that at his death the colors be placed upon his casket during the burial service.

Stokes's Latest Enterprise.

CHICAGO, October 27.—Edward S. Stokes of New York, gray haired and with a close-cropped iron gray moustache, is in the city. Associated with William King of Minnesota, ex-postmaster of the National House of Representatives and ex-Congressman from the above State, the two are about to build a telegraph line from St. Louis to Duluth. It will be incorporated under the name of the "North American Telegraph Company." The line will connect St. Louis with the United lines. Mr. Stokes says that the Western Union monopolize the telegraphic traffic between St. Louis and Duluth, and that his company will regulate and cheapen the traffic.

The Indiana Township Bond Swindle.

VINCENNES, IND., October 27.—The interest in the gigantic township bond swindle has been somewhat revived by the decision in the Circuit Court of Daviess county in a suit brought to enforce the payment of warrants issued by the trustee of Reeve township for school supplies, the judge deciding that as it was not averred that the goods were necessary or suitable the plaintiff could not recover.

Smallpox in the Northwest.

MILWAUKEE, WIS., October 27.—Smallpox has made its appearance at Colman, a small station on the Milwaukee and Northern railroad, in Marinette county. As in Marinette, the disease was introduced by a French Canadian family from Montreal, which was allowed to pass through Detroit. There are now four cases in the family, and many unvaccinated persons have been exposed.

Some People Snore Sonorously.

Why do some people snore? Some because they are thoughtless. Some because they sleep with their mouths open. Some because their digestive system is in bad condition. Brown's Iron Bitters will not shut anybody's mouth, but it will rectify digestion, and produce solid comfort and consequently delightful sleep. Mr. L. P. Smith, Montgomery, Ala., writes: "I used Brown's Iron Bitters for weakness and night sweats, and it cured me."

Chicago Socialists.

CHICAGO, October 27.—The Socialists and Anarchists, under the leadership of August Spies and Dr. Schmidt, will hold a meeting in a few days to denounce the action of the mayor and the police justices in regard to street-walkers. An address will be formulated denouncing the action of the manufacturers in paying such low wages to their female help as to compel them, as it is alleged, to join the ranks of the street-walkers.

Violations of the Registry Law.

CINCINNATI, O., October 27.—Judge Fitzgerald of the Police Court to-day declared John Wiley, colored, and John Butler Brown guilty of violation of the registry law. Wiley was sentenced to one year in the work-house and to pay $1000 fine. Brown's sentence was deferred.

FOREIGN AFFAIRS.

The Trial of the Eliza Armstrong Case Continued Before Justice Lopes—Sensation in Court.

Another Clash Between the Bulgarians and Servians—Turkey Still Massing Troops at Salonica.

Interview with the Bulgarian Premier—Comments of the Russian Press—Lord Salisbury's Condition.

LONDON, October 27.—The trial of Mr. Stead, editor of the *Pall Mall Gazette*, and the defendants in the Armstrong abduction case, was resumed to-day at the Central Criminal Court, before Justice Lope. A discussion between counsel arose respecting portions of the testimony of Mrs. Annie Broughton, taken yesterday. A reference was had to the shorthand notes of Justice Lopes, which confirmed the notes of the jury that Mrs. Broughton declared yesterday that Mrs. Armstrong said she would never let her daughter for immoral purposes.

The prosecution subpoenaed Dr. Smith of Harley street, and he deposed that he chloroformed and examined the girl Eliza Armstrong, and certified to her virginity, at the request of Mr. Stead and Mr. Branwell Booth. This testimony created a sensation in court. Mr. Stead paid Dr. Smith three guineas for the examination of Eliza, which was intended for Mr. Stead's protection. Mrs. Jarret was in bed awake in the same bed-room at the time. Dr. Smith was a friend of the Salvation Army. He had never performed such an examination before.

THE BALKAN COMPLICATIONS.

Interview with the Bulgarian Premier at Philippopolis.

ST. PETERSBURG, October 27.—The *Novoe Vremya* publishes an interview which its correspondent at Philippopolis had with M. Karoveloff, the Bulgarian Premier. M. Karoveloff denied that Bulgaria had any agreement with England or Austria before the Roumelian revolution respecting the union of Bulgaria and Roumelia, but that they acted on their own responsibility in bringing about the union. "If there was any instigator in the matter," said the Bulgarian Premier, "it was Russia, whose Consul-General at Philippopolis, M. Sorokin, first agitated the union and helped to start a newspaper at Philippopolis, devoted to the union of the two, with Bulgarian money. When I entered the ministry, believing the game dangerous, I stopped the subsidy of the Bulgarian government to the newspaper, and also forbade meetings of Unionists in Bulgaria. M. Karoveloff reaffirmed the statement that Prince Alexander had notified Russia of the intention of Roumelia to unite with Bulgaria, and that Roumelia was willing to continue Turkish suzerainty, but would not cede an inch of territory. In conclusion, the Bulgarian Premier said: "If Turkey declares war we alone are able to raise Macedonia in three days. A European war is none of our business, and we are not alarmed at the armament of Greece, as her army is far from being terrible."

Turkey Still Massing Troops.

CONSTANTINOPE, October 27.—The Porte continues massing troops at points available for offensive operations in Eastern Roumelia in the event of extreme measures being resorted to. A dispatch from Smyrna to-day says 20,000 men of the reserves have gone to Salonica. The Bulgarian diplomatic agent has informed the Porte that the Servians invaded Bulgaria on Saturday last, but afterward withdrew.

Comments of the Russian Press.

ST. PETERSBURG, October 27.—The *Novoe Vremya* and the Moscow *Gazette* in editorials to-day state that they are skeptical of the benefits of the intervence of the powers on the Roumelian question and fear that it will injure Russian interests.

Russia has notified foreign banks of the probable withdrawal of her deposits. The Russian press consider this a sop a political one.

Servians Fired On by the Bulgarians.

BELGRADE, October 27.—Reports from the frontier say that Bulgarian regulars fired upon Servian customs officials at Negotina and Radujevac, and that the officials withdrew from their posts pending orders, but afterward reoccupied them. The latest communication from the powers to the Servian government is promised that the *status quo ante* in Roumelia would be restored, and demanded that the Servian army be demobilized.

FOREIGN MISCELLANY.

Lord Salisbury's Condition

LONDON, October 27.—Lord Salisbury, who yesterday underwent a surgical operation for an abscess in the arm, is making steady progress toward recovery.

Scorn All Pacific Proposals.

CALCUTTA, October 27.—Advices from Mandalay dated October 22d, state that King Thebaw of Burmah scorns pacific counsels and is fortifying every available point on the proposed line of the British advance.

Extradition Between Russia and Bavaria.

BERLIN, October 27.—The *National Zeitung* states that Russia has arranged an extradition treaty with Bavaria, similar to the one recently negotiated with Prussia. The inference is that Russia is taking a similar proceeding with each of the component states of Germany, in order to avoid the adverse criticism of the Reichstag. The *Zeitung* comments on the subject in an angry manner, and upbraids the government for adopting this underhand policy of ignoring the Reichstag.

Smallpox at Montreal.

MONTREAL, October 27.—Official returns at the Health Office show that there were forty deaths from smallpox yesterday in this city.

Sensation on the Paris Bourse.

PARIS, October 27.—The Bourse is flat this afternoon over the report that an important financial house committed suicide owing to financial embarrassment.

Later.—The rumor on the Bourse this afternoon that a prominent financier had committed suicide proves to be true. The victim was M. Fremset, a banker of this city.

Ship-Building on the Clyde

GLASGOW, October 27.—The ship-building trade on the Clyde is greatly depressed. Over 70 per cent. of the workmen are out of employment. Soup kitchens have been opened to relieve the sufferings of the poor.

Accident to the Empress of Brazil.

LONDON, October 27.—A dispatch from Rio Janneiro says: The Empress of Brazil has fallen down a staircase and broken her arm. Her majesty's condition causes much anxiety.

The French Academy of Sciences.

PARIS, October 27.—At the meeting of the Academy of Sciences to-day M. Deprez reported that an experiment for the transmission of electrical power over a distance of fifty-eight kilometers, between Cecil and Lavillette, was a complete success. A forty-horse-power current out of eighty laid been conducted over the line without the current heating the wire or the dynamo machine. Baron Rothschild paid the cost of the experiment. Mr. Posteur furnished proof of his theory that inoculation was easily practicable, and had cured hydrophobia. M. Vulpian gave additional proof confirming the assertions of M. Posteur.

GRANT AND JOHNSON.

Another Contribution to the Current Literature on the Subject.

CINCINNATI, O., October 27.—Judge James B. Swing wrote a letter March 24th last to the *Clermont County Courier* (Batavia, O.,) in regard to the statements which have been made from time to time about the political and personal relations which existed between President Andrew Johnson and Gen. Grant. The *Courier* publication has been reproduced, and in substance practically agrees, in all material points, with the statements in the recent letter of Mr. Depew. The facts were given to Mr. Swing and to his brother-in-law, Philip B. Swing of the United States Court, by Gen. Grant, who was a personal friend of the family.

TELEPHONE SUITS.

Several Decisions Against the Bell Company at Evansville, Ind.

EVANSVILLE, October 27.—A few days ago it was reported in the Associated Press dispatches that Judge Parrett, of the State Circuit Court here, had given several informal opinions adverse to the local Bell Telephone Company, in a case wherein Vickery Brothers, merchants, sought to compel the telephone company to furnish them the use of two telephones, upon the firm complying with the usual terms and regulations. There had been a long standing disagreement between the parties. The case has since been under agreement and advisement, and the court has given its decision in the premises. It is held that the telephone company is bound by the statute to furnish telephone service to all applicants who comply with its terms and regulations, being a common carrier of news or intelligence as well as a quasi public corporation. While patents and new inventions may be rightfully and securely protected, yet, when voluntarily placed in the channels of general commerce, they must be so used as not to give partiality or discrimination in favor of or against any person or class of persons. In this case no previous quarrel or wrong would seem to have prompted this decision. The telephone company will have to pay, unless relieved by the Supreme Court, $100 penalty for each refusal to furnish telephone service to plaintiffs. The latter have nearly a dozen applications for two telephones, and upon refusal have sued for the penalties, amounting to $200 in each case. Incidentally, although not strictly involved in the case, Judge Parrett gives his opinion that another State statute limiting the charge for the use of telephones to $3 each or $5 for two is constitutional, and that the word telephone includes all the appliances necessary to communicate between different points according to the usage of the system.

JERSEY COWS

Superior to Holstein and Ayrshires for the Production of Butter.

Conclusive Tests Made Under the Supervision of Expert Cattle Breeders.

Mr. Valencey E. Fuller, writing from Hamilton, Ont., to the *American Dairyman* upon the respective merits of Jersey, Holstein and Ayrshire cows, makes it very plain that the former is superior as a butter producer, and therefore is to be preferred by dairymen and breeders who sell to dairymen, especially in the vicinity of large cities.

Mr. Fuller's Letter.

HAMILTON, ONT., September 29.—In the advance reports issued by Prof. William Brown of the Ontario Experimental Farm some most valuable and interesting comparative tests are set between a cow of each of the breeds claiming special attention as dairy animals, namely, Jerseys, Ayrshires and Holsteins. The Jersey was 5 years old, weighed 830 pounds, calved February; the Ayrshire was 4 years old, of 1150 pounds weight, calved January, and the Holstein, three years old, weighed 900 pounds, calved January.

The first series of tests was for the months of February, March and April, or eighty-nine days, with the following result for that period:

	Milk in 24 hours.	Lbs. cream.	Lbs. butter.	Lbs. curd.
Jersey	1,602	205.7	127.6	224.3
Ayrshire	1,780	228.0	85.5	240.3
Holstein	1,958	235.7	73.1	265.6

The second series of tests was for the same animals for May and June, and applying the tests to aggregate quantities for the sixty-one days. It is as follows:

	Lbs. milk.	Lbs. cream.	Lbs. butter.	Lbs. curd.
Jersey	2,944	487.2	243.8	456.4
Ayrshire	3,416	475.1	171.8	465.9
Holstein	3,259	570.4	108.0	503.1

In other words, the Jerseys weighing 830 pounds and three years old gave 2944 pounds more milk than the Ayrshire four years old weighing 1150 pounds and 299 pounds less than the Holstein of 900 pounds and three years old, but the Jersey gives 243 pounds of butter for the 160 days to 171 pounds for the Ayrshire and 108 pounds for the Holstein, nearly 100 pounds more than the Ayrshire and more than double the quantity given by the Holstein. When we turn to the butter-milk and curd yielded by the Ayrshire and Holstein, here too the Jersey leads "by a large majority," namely 456 pounds of curd to 465 of the Ayrshire and 503 pounds of the Holstein, or to add the products of the milk (other than water, which can be added in a less expensive way than through good food taken into the stomach), namely, butter and curd, the Jersey gives 699 pounds; Ayrshire, 554 pounds; Holstein, 471 pounds. Verily a wide and very material difference in favor of the Jersey, especially when it is borne in mind that one of the greatest foes of the Jersey is to hold most persistently to her milk. Indeed, so much so is this the case, that it would appear that Mr. Fuller's Holstein, of which is the best all around cow, if these figures can be relied on, "skimmed her milk."

By a series of weekly tests conducted by Prof. Brown, from December, 1884, to July, 1885, we find the following results, and where arrived at as to these three breeds out of twelve.

	Cream per cent.	Butter per lbs. milk.	Cheese per lbs. milk.	Total curd butter and curd.
Holstein	11.9	2 lbs. 4 oz.	10.9	12.13
Ayrshire	16.3	2 lbs. 1 oz.	13.3	14.14
Jersey	19.9	3 lbs. 1 oz.	15.6	22.70

The Jerseys leading all breeds in butter and in cheese.

The chemical analysis of milk from same source and in same order shows the following total solids:

Jerseys, 14.65 (list of all breeds).
Ayrshires, 13.53 (24 of all breeds).
Holsteins, 11.88 (9th of all breeds).

Some might contend that the Jersey was an especially good one. In my judgment she was not, but rather below the average Jersey. Granting that this is not sufficient proof, as a rule the best were brought to the Provincial and Toronto exhibitions. At the Provincial Exhibition, just finished, the Holsteins were represented in large numbers, and there was not a good average Jersey, many of the former with very large results in favor of the cow.

At the exhibition tests were made by Prof. Brown, of the Ontario Experimental Farm for milk, butter and cheese combined, according to the plan and count of points adopted at Dairy Show in Scotland at the dairy fairs, as follows: (1) *Weight of milk*: One point for every pound of milk given during twenty-four hours. (2) *Quantity of butter*: In England the standard is fixed at 3 lbs. to every 100 pounds of milk. In Canada the standard is 3.5 pounds to every 100 pounds of milk. Add or deduct ten points for every ounce of butter. (3) *Quality of curd, per 100 pounds of milk*: Allow one point for every pound of curd. *Time allowing*: Add one point for every ten days. All the cows were tested by the same count of points and under similar circumstances, but in different classes: Eight Holsteins entered in their class, three Ayrshires in theirs, two grade Shorthorns in theirs, and two Jerseys in their class, so we cannot say how one of Eden led them all, making the largest score made by any cow of any breed in the world for a similar contest, namely, 109 points, and the for *butter, milk and cheese combined*: Ayrshire 34 (83.85), Shorthorn grade 34 (83.85), the mother was 19 (78.10), Ayrshire 6th (68.27), Holstein 6th (64.29), Holstein 7th (60.71), Shorthorn grade 8th (57.14), Holstein 9th, 10th, 11th, 12th, 14th, 15th and 16th (50.00) and Ayrshire 5th (42.85). Mr. Jersey excelled the highest combined score of the Ayrshire 21 points and the highest of the Holsteins 40 points. The Ayrshire was 4 years old, the Holstein by cover 5½ months.

The averages of each breed were as follows:

	Milk in 24 hours.	Butter per 100 lbs. milk.	Wet cheese per 100 lbs. milk.
Jerseys	25.56	7.28	20.20
Ayrshires	16.9	5.24	20.70
Holstein	2.19	2.08	16.52
Short-horn grade	35.52	3.36	30.62

The highest milk record is that of a grade Shorthorn, 86 lbs. The best milk record for Holstein is 37.00 lbs., and the lowest 23.00 lbs. Highest and lowest Ayrshire, 42 lbs. and 12 lbs. Highest and lowest Jersey, 27 lbs. and 24.12 lbs. Quantity of milk required to one pound of butter: Jersey, less than 11 lbs.; Ayrshire, 19 lbs.; Holstein, over 33 lbs.; Shorthorn grade, over 29 lbs. Here is the very strongest testimony in the mouth, ears and public manner, and in the hands of disinterested experts, of the very great superiority of the Jersey not for butter alone, but for that combined in milk, butter and cheese.

Last year I made the same tests, two Jerseys were the pick of the Oaklands' herd. I may say that Rose of Eden, for butter production, stands first rank as the first by any means in the Oaklands herd, but about 7th, and that the other Jersey has no butter record that Day.

The weather at the London exhibition was very cold and wet, nevertheless it showed that the cows in favor of the Jersey, especially when it is borne in mind that one of the greatest foes of the Jersey is to hold most persistently to her milk. Indeed, so much so is this the case, that it would appear that Mr. Fuller's Holstein, of which is the best all around cow, if these figures can be relied on, "skimmed her milk."

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At this exhibition tests were made by Prof. Brown, of the Ontario Experimental Farm for milk, butter and cheese combined, according to the plan and count of points adopted at the Dairy Show in Scotland at the dairy fairs, as follows: (1) *Weight of milk*: One point for every pound of milk given during twenty-four hours. (2) *Quantity of butter*: In England the standard is fixed at 3 lbs. to every 100 pounds of milk. In Canada the standard is 3.5 pounds to every 100 pounds of milk. Add or deduct ten points for every ounce of butter. (3) *Quality of curd, per 100 pounds of milk*: Allow one point for every pound of curd. *Time allowing*: Add one point for every ten days. All the cows were tested by the same count of points and under similar circumstances, but in different classes: Eight Holsteins entered in their class, three Ayrshires in theirs, two grade Shorthorns in theirs, and two Jerseys in their class, so we cannot say how one of Eden led them all, making the largest score made by any cow of any breed in the world for a similar contest, namely, 109 points, and the for *butter, milk and cheese combined*: Ayrshire 34 (83.85), Shorthorn grade 34 (83.85), the mother was 19 (78.10), Ayrshire 6th (68.27), Holstein 6th (64.29), Holstein 7th (60.71), Shorthorn grade 8th (57.14), Holstein 9th, 10th, 11th, 12th, 14th, 15th and 16th (50.00) and Ayrshire 5th (42.85). The Jersey excelled the highest combined score of the Ayrshire 21 points and the highest of the Holsteins 40 points. The Ayrshire was 4 years old, the Holstein by cover 5½ months.

The averages of each breed were as follows:

	Milk in 24 hours.	Butter per 100 lbs. milk.	Wet cheese per 100 lbs. milk.
Jerseys	25.56	7.28	20.20
Ayrshires	16.9	5.24	20.70
Holstein	2.19	2.08	16.52
Short-horn grade	35.52	3.36	30.62

The highest milk record is that of a grade Shorthorn, 86 lbs. The best milk record for Holstein is 37.00 lbs., and the lowest 23.00 lbs. Highest and lowest Ayrshire, 42 lbs. and 12 lbs. Highest and lowest Jersey, 27 lbs. and 24.12 lbs. Quantity of milk required to one pound of butter: Jersey, less than 11 lbs.; Ayrshire, 19 lbs.; Holstein, over 33 lbs.; Shorthorn grade, over 29 lbs. Here is the very strongest testimony in the mouth, ears and public manner, and in the hands of disinterested experts, of the very great superiority of the Jersey not for butter alone, but for that combined in milk, butter and cheese.

Last year I made the same tests, two Jerseys were the pick of the Oaklands' herd. I may say that Rose of Eden, for butter production, stands first rank as the first by any means in the Oaklands herd, but about 7th, and that the other Jersey has no butter record that Day.

The weather at the London exhibition was very cold and wet, nevertheless it showed that the cows in favor of the Jersey, especially when it is borne in mind that one of the greatest foes of the Jersey is to hold most persistently to her milk. Indeed, so much so is this the case, that it would appear that Mr. Fuller's Holstein, of which is the best all around cow, if these figures can be relied on, "skimmed her milk."

At a series of weekly tests conducted by Prof. Brown, from December, 1884, to July, 1885, we find the following results, and where arrived at as to these three breeds out of twelve.

	Cream per cent.	Butter per lbs. milk.	Cheese per lbs. milk.	Total curd butter and curd.
Holstein	11.9	2 lbs. 4 oz.	10.9	12.13
Ayrshire	16.3	2 lbs. 1 oz.	13.3	14.14
Jersey	19.9	3 lbs. 1 oz.	15.6	22.70

The Jerseys leading all breeds in butter and in cheese.

The chemical analysis of milk from same source and in same order shows the following total solids:

Jerseys, 14.65 (list of all breeds).
Ayrshires, 13.53 (24 of all breeds).
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