

A protective tariff would not help England in her hour of need. A measure of that kind could not be made universal on all products, and its partial application would lead to interminable complications. Protection would make a bad matter worse. It would raise the prices of commodities, wages would have to rise in proportion to place them within reach of the people. The prices of goods going up in consequence of the higher rates paid to workmen would still more effectually close them out of distant markets where competition has to be met. Home consumption being utterly inadequate to the supply or production, the complication and distress of the situation would be deepened instead of relieved by protection.

### THE SESAME.

An oil producing plant called sesame is now being cultivated in California that we think might also be raised in this Territory. We should at least be pleased to learn of the agriculturists of this region trying it. Olives cannot be successfully cultivated in this Territory, except it be possible in the extreme southern part, and this plant, the seed of which yields oil which rivals that of the olive for domestic purposes, would be a valuable addition to the products of our country if it can be grown here. The Sacramento Bee says of it:

It is largely grown in India and China. It is an annual, maturing in three months from the time of planting, and two crops are grown each year. The seeds are very small, ten of them weighing only a grain. They contain 50 percent of oil, by weight, while the fruit of the olive has but 30 per cent. The imports of sesame seed into France amount to 70,000 or 80,000 tons per annum. The oil is much used to adulterate olive oil, which it closely resembles. The "British Encyclopedia" says that cold-pressed sesame oil is equal in every respect to the finest olive oil for table purposes, and is by many preferred to olive oil on account of its piquant taste. It might prove more profitable than the olive. The man who plants the olive must wait half a dozen years for fruit, while the sesame yields two crops in a single season. Just as kerosene has driven whale oil out of the market, so the sesame may supplant the olive. The olive, however, has such an established hold on the markets of the world that to displace it by any other natural product must be slow work. Still, it is notorious that a large proportion of the so-called olive oil of commerce is composed of other substances. Cotton-seed oil, sesame oil, peanut oil, and even lard oil are largely used as adulterants for olive oil. To what extent these adulterants are employed is a matter for conjecture, but the percentage of adulteration must be large. Our Consuls in Italy and France say that no pure olive oil is exported from these countries. So well is this fact recognized in California that in spite of the popular prejudice in favor of imported goods, a certain California brand of olive oil, whose purity is above suspicion, brings a higher price than any imported brand. While sesame oil, so far as we know, has not been squarely put on the market as a food oil in competition with olive oil, it may yet stand upon its merits instead of masquerading under the name of the olive. The great advantage of the sesame in such a competition is its comparative cheapness. As it has no tendency to rancidity, the oil of the olive has no preference in that respect. Sesame seed is used as food in China and India, as the olive is wherever it is grown. Even the cake from sesame-seed mills is said to be eaten by the poorer classes of India.

### GAS WELLS.

The recent discoveries of gas that have been made in and about this city in boring or driving for water, and prospect for utilizing this gas for heating and lighting purposes, thus cutting off the important items of expense for light and fuel, are likely to lead to extensive experiments in this and other parts of the Territory. It has been known for some time that natural gas existed in Wyoming, but no one seems to have suspected its existence in this region and especially where found, until a discovery was lately made by accident. Who is prepared to say that natural gas will not yet supersede the use of coal and wood for fuel, and artificial gas or petroleum as an illuminator? As we stated a few days since, this gas is usually found in connection with petroleum, but there are exceptions to this rule, and this county may yet prove to be one of them; and then it is possible that future investigations may develop the fact that our wonderful country, the history of which is one continued series of surprises as to its agricultural and mineral resources, may yet be found to abound with petroleum. The geological formation would probably not justify such a hope, but geological rules and calculations have proved erroneous in so many instances in this Territory that they will not do to rely upon entirely. Petroleum is usually found at great depths, and no one has yet bored to any great depth in this country.

The last issue of the *Scientific American* contains the following on this interesting subject:

"Drilling for gas was begun at the town of Madison, Ohio, by Messrs. Gunning & Sond on the 29th of June, and by the 14th of July the well had reached a depth of 780 feet. At this point a heavy vein of gas was struck. The well was continued down to 1,025 feet, about 200 feet of the distance requiring tubing on account of the influx of salt water. The pressure gauge at the mouth of the well registered 100 pounds. The parties named are now supplied with fuel and light.

The great value of natural gas has already been demonstrated at Pittsburgh and neighboring places. So rapidly and completely has the substitution of gas for coal taken place, that the principal mills of Pittsburgh are now using the new fuel. Oil in the days of the great excitement did not attract such broad attention as has the natural gas in the last year or so, and the wonder now is why we have never used it before. The area of its distribution is probably as large and almost coincident with that of petroleum. We know with a degree of certainty prompted by its commercial importance that our supply of petroleum comes from the rocks of the Devonian, which immediately underlie the productive coal measures, and it will be a matter of much interest to follow the development of natural gas, and note the order of production which the different States and Territories will assume. Of the petroleum producing States, Pennsylvania of course ranks first, then comes New York, and then California. These are followed by West Virginia, Ohio, and Kentucky. In the Rocky Mountain country, Wyoming, Colorado and New Mexico have been found to yield some small quantities of the oil, but those regions have as yet been only imperfectly explored. Of the wells opened over this large territory, many were blowing wells, and carried with them a large amount of gas, but there was no constancy in this respect, and no particular area could be pointed out as productive of gas above the rest. The whole subject is too new for any complete knowledge of the distribution of the natural gas, but so far as the point has been determined, our assumption of its general coincidence with the oil country seems to be justified. Whether, however, the same quantitative order that we have named for petroleum will follow in the case of the new fuel is still a question. As every one knows, it is already largely used in Pennsylvania and to some extent in Ohio, West Virginia, and other places.

Unless we regard the earth as a vast reservoir stored with gas, somewhat after the order of the Pintsch system of compression, we must contemplate a time when this fuel supply will become exhausted, and abandoned pipe lines will tell the same story as the decaying oil derricks. But the past of our industrial progress is a promise for the future; and we may feel with confidence that as the candle gave way to whale oil, whale oil to petroleum, petroleum to gas, and gas to electricity, so with our fuel, that natural gas will disappear, only to make room for something still better."

### FAITHLESSNESS AGAINST FAITH.

A SHORT time since we observed in a local journal a peculiar reason why the General Government should not permit any relaxation in the determined effort to obliterate "Mormonism."

It was held that if there were any let up in the present assault it would confirm the faith of the "Mormons" in God, thus increasing what should be destroyed. They had been in the habit, in past times, when under a cloud, to attribute its clearing away to the direct interposition of Divine Providence in their behalf.

This species of faith appeared to be obnoxious to the writer of the article referred to, and in his opinion it ought to have an extinguisher placed upon it. This trust in the strong arm of the Lord was characterized as an "illogical expectation." This definition of faith in Omnipotence is probably original, and it has doubtless numerous endorsers, as has also the desire to destroy that confidence in God that is so striking a characteristic of the Latter-day Saints. It is the natural condition of the infidel and the species of religionist who does not believe in his heart that the Almighty takes any immediate cognizance of human affairs. They remind one of the fox in Aesop's fable who had his tail cut off by being caught in a trap. He betrayed great anxiety to have the other foxes denude of their caudal appendages also, endeavoring to persuade them that it was quite the thing to be thus bereft. So those who have been caught in the trap of spurious popularized Christianity and infidelity are many of them—worried over the fact that the Latter-day Saints have faith, putting their trust in the God of Israel rather than in the "arm of flesh."

There has been a great deal of ventilation of religious fanaticism and intolerance, but exhibitions of unreasoning extremity and stupid bigotry from non-religious sources are also largely open to criticism. When people of the latter class who are devoid of faith in God,

so far as intervention in human affairs is concerned, advocate the crushing out of that principle from the minds of people possessing it, they are equally as intolerant as religious fanatics who display a zealous desire to crowd their religion down other people's throats. They are not much more liberal and magnanimous. And it is absurd, from a reasonable standpoint, to point with disgust to the Puritan practice of nailing the ears of heretics to posts, when people in this day are so swallowed up in irreligious fanaticism as to advocate the application of a gigantic crushing process upon a religious community, and to give them no breathing spell by relaxing the operation, on the ground that the leniency would be attributed by them to the interposition of God. The method now resorted to is vastly more cruel and intolerant than that in vogue in the days of Puritanism, but the overwhelming conceit of the present day bigots blinds their eyes to that conspicuous fact.

Then, according to a zood many people, this habit of attributing deliverance "from evil" to the beneficent interference of the Most High, must be broken up. It won't do in these days when nineteenth century intelligence is blazing with blinding brilliancy for a people to have faith. To possess it must indeed, in some folk's eyes, be a deadly and unpardonable sin, when people are to be crowded to the wall without any cessation for fear that an easing up might "encourage what ought to be destroyed."

Persons who have and express such ideas as these are professed Utah redemptionists, and may it not be pertinent to ask to what source are the Saints to attribute boons and blessings when they are bestowed upon them. Should they be credited to human agencies, and if so, to what particular portion of the race? It certainly would not be to such pusillanimous pigmies as advocate such narrow, illiberal and, it could be said without stretch, inhuman views as those to which we have referred. Surely not to those who would delight to see a God-fearing people subjected to an unremittant process by which their faith in Divine intervention would be crushed out of them or they themselves crowded into the dust. Such narrow, intolerant ideas are a disgrace to the age and the race.

The dependence of the Saints lies in two sources of strength. They have availed them thus far in every time of need. They will never fail, no matter how dark the cloud by which they may be overshadowed. Their trust is in the God of Heaven and their own honest endeavor. The latter would avail nothing without the aid of the former. Their faith is not an "illogical expectation," because it is based on numerous instances of verification in their past history—in what has been done they have a logical basis for an expectation of repetition under similar conditions. It is not generally deemed illogical for a man to believe in the existence of a God, because of the innumerable evidences that the Divine Being lives. Neither is it unreasonable to believe that He takes an active interest in His creations in detail. The Saints believe in and trust Him, and it is far from unreasonable to expect that He will, in His own time, make a manifest response to the confidence reposed in Him.

That human being who has no faith in God may have wealth and worldly influence, but when the fact is considered that he is living in the midst of eternity, his condition is not one to be envied. Compared with his poorer brother who has confidence in the Almighty, he is afflicted with a poverty of resource of which he has no comprehension. Faith is a principle of power by which its possessor is enabled to reach out beyond the pale of his acquired knowledge, an aid most necessary to the finite being. When genuine it produces demonstrations that in various directions enable man to pass, as he progresses, from faith to knowledge, in which the former is then submerged. And so far as true Latter-day Saints are concerned, the present embarrassing situation in which they are placed increases instead of diminishing their faith, not only in the power of Jehovah to deliver them, but in the expectation that that capacity will in due time be exercised in their behalf. By the situation that exists now, ahead of their anticipated escape from it, their faith is enlarged, because the circumstances that now prevail have been foretold to them with minute fidelity of description. This confirms their confidence in the Divine character of the work they are associated with, and when final deliverance comes, as it will, and in a manner of which their enemies have no conception, their faith forever after will be so strong in the Lord that they will never more doubt him nor fail to place their reliance in the strong arm of His power.

Instead of it being commendable to grind the faces of the Saints and seek to crush faith out of their hearts, it is most exquisitely cruel, and woe to those who engage in and advocate the barbarity. They will yet be put to shame and be covered with contempt. The attitude of the "Mormons," a handful of people, in standing true to their faith and religious convictions when assailed from every side by gigantic forces, will be looked upon as one of the most sublime spectacles afforded in history.

### PRETTY WOMEN.

Ladies who would retain freshness and vivacity. Don't fail to try "Wells' Health Renewer."

Considerable progress has been made in some portions of the Southern States during recent years in the matter of establishing manufactures of various kinds. It is said that there are now 233 cotton mills in operation in the South. They run over 1,000,000 spindles. Yet at the outbreak of the war there were but two cotton mills in the South, and six years ago but eighty odd. In fact, the South is only just awakening to the fact that she has vast undeveloped manufacturing capacity. Her water power is equal, and in many cases superior to that of New England. Her climate is more favorable to year-round labor, her mills are run less expensively, and they are contiguous to the source of cotton supply. But her labor is less productive, and this fact is the only equalizing one between New England and Southern cotton-manufacturing. Travelers in the South have often expressed their wonder at the lack of progress there exhibited. In many of the old settled portions of the country the people appear to be a hundred of years behind the age—generally living in log cabins and frequently without doors or windows to their dwellings, while all about them are the elements of wealth and independence, awaiting the magic hand of industry to develop them. There can be little doubt but that this condition of affairs is due in great measure to the inclination which has been developed during the age of slavery to depend upon the blacks doing the manual labor, and the enervating effects of the warm and malarious climate may also have something to do with it. It is high time for an era of greater prosperity to dawn upon the South, which has never seemed to have thoroughly recovered from the effects of the war, and the development of the mineral resources of the country and the establishment of factories are certainly indications of its having come.

An officer now in Arizona has written a letter in which he answers the inquiry, "Why don't the United States troops catch the raiding Apaches?" He says that the Indians have from five to seven good saddle horses each. The soldiers are compelled to follow with one horse each, loaded down with blanket, overcoat, two canteens, larlat, picket pin, side lines, nosebag, currycomb and brush, sometimes four to six days' rations, a pannikin, tin cup, and numerous other little traps that are of no use but always in the way. Then comes the gun and field belt, with fifty rounds of cartridges, with one hundred more in the saddle pockets; then the pistol and belt, with twenty-four pistol cartridges. "Weight a man with all this," says the sergeant, "and then turn him loose after an Indian pony, with a shell of a saddle, a gun and ammunition, and an almost nude buck, and see which wins in the race of three hundred miles, to say nothing of the buck's remounts and perfect knowledge of the country."

The phenomenon mentioned in Tuesday's News as having been witnessed in the 6th Ward—that of a blaze being produced by touching a stream of water flowing from an artesian well with a lighted match, is common enough in some portions of Pennsylvania, where petroleum abounds, and we find it even mentioned that recently in Scotland, at Bothwell bridge, the river Clyde was actually in flames. This curious circumstance was caused by mineral gases rising from the rocks in the bed of the stream, and which can be ignited on the surface of the water by an ordinary match. Thousands of people visit the spot at night to witness this singular freak of nature. Setting "the Thames on fire" may not be such an impossible thing after all as the people who have used the phrase for ages have imagined; for boring in that region might develop petroleum and render the feat quite easy of accomplishment.

The first commissioners of patents in England were appointed in 1852. The applications then did not exceed 1,000, and in succeeding years rarely exceeded 5,000. A new act in 1883, reducing the fee, and in other ways making the process easier, so stimulated the demand by inventors for government protection, that in 1884 the number of applications rose to 17,110; 79 per cent. of these were made by residents in Great Britain. Americans filed 1,181 applications, Germans 890, and Frenchmen 788. The department is more than self-sustaining, and for the year shows a surplus of \$200,000.

The *British Trade Journal* states that the dead meat trade has proved a failure to all intents and purposes. Not only does the meat lose in quality, but the weight shrinks by more than 6 per cent. The live-cattle trade, however, it regards as a far more serious matter. The Wyoming territory alone sends from its borders nearly enough meat to satisfy the requirements of London, and now that the northern system of railways is finished, transit is comparatively an easy thing. Three-year old bullocks, weighing 1,000 lbs. each, can be bought at railroad points in Montana and Dakota for \$31.50 per head. Transportation from Wyoming to London adds \$22.80 to this figure, and at these rates "it will be found that in this trade of supplying London with cattle from the great prairies of the northwest there is an enormous and profitable field for enterprise." This low figure is arrived at by direct shipments, without the intervention of brokers, while cattle which are taken from Bucks to Smithfield pass through half a dozen hands before they reach the retailer.

The Postmaster General has issued a circular in which he informs postmasters that it has been decided to introduce on the 1st of October next the special or immediate delivery system provided for in the last postoffice appropriation act. The system is to be put in operation at all postoffices at which the free delivery system is in operation, or which are located in cities or towns having a population of 4,000 or over. Letters bearing special delivery stamps will be delivered by messengers within the carrier limits of free delivery offices and within a radius of one mile from the postoffice at all other special delivery offices. The special delivery stamps are to be in addition to the lawful postage, and are not to be used in the payment of postage of any description, or of registry fees, nor can any other stamps be employed to secure special delivery except the special delivery stamp.

Phylloxera, the grape vine pest, is reported to be very bad in some portions of Australia—so bad, indeed, as to threaten the entire destruction of the crop. It has existed there for years, and as long ago as 1876 infested vines to the value of \$200,000 were destroyed there in the hope of getting rid of the pest; but the work was not thoroughly done, the roots of some of the vines were left in the ground and are still undecayed, and when these are dug up now live phylloxera are found. The insects soon spread, as a strong wind will sometimes blow them a distance of thirty miles when they are in their winged form. California is also troubled with the phylloxera, and though stringent methods have been resorted to by viticultural commission of the State for the suppression of the pest, it is feared the effort made will yet prove fruitless.

### "ROUGH ON PILES"

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A special from Jamestown, N. Y., says that ex-Governor Fenton dropped dead in his office at the First National Bank at 2.45 this afternoon. He was apparently in good health, heart disease being the supposed cause.

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