TELEGRAPHY IN AUSTRALIA. Sailroads and Other Improvements Ase Unusually Extensive in That Country.

The circumstan, es of Australia, and the conditions of its settlement, have had the effect of making both its railreads and its telegraphs unusually extensive in comparison with the numhers of its population, and this is markedly the case with its mileage of helegraph lines, writes Hugh H. Lusk, in the North American Review. At greent the great island is only setshed on a strip of country bordering am the coast, and even that strip does sot include the more northern shores either on the east or west, and takes im no part of the north side at all. The consequence is that a line of telegraph which connects the settlements of Queensland on the northeast of Amstralia with those of West Australia. the west coast-a distance, in a Mirect line, of about 2,500 miles-covone fully double that distance from the necessity of keeping in touch with the settled districts. There is, indeed, one line of telegraph which of necessity ignores this rule, and passes for mearly its whole length of about 1,700 uniles from the south to the northwestern corner of the island, through unsettled country. The purpose of this line is to connect settled Australia with the rest of the world by way of Java and India, and it gasses through great districts of the Interior which were first explored for the purpose of its construction.

TANGIER NIGHT FASCINATES

Writer Declares That Hothing Is Quite So Beautiful as Moorish Evening.

Tangier is most fascinating at might; then the clear moon of the south throws a veil over the city; the browns become softened, the shadows deepened; the shrouded women Booking down from the roof tops apmear as pale and lovely ghosts, writes Martha Lowell, in the Four-Track Mews. It is at night that the Moor goes to some cafe, joins the circle of his brethren seated around a lighted brazier, emokes and hears the musicians sing of valor and of love And if the musicians sing well, a wealthy Moor may throw some rare incense mpon the brazier, and the gir is then alled with a wondrous perfume, such in is found in no other country in the world. It is at night that the wedding processions march through the windand streets. A band of men, singing the weird wedding song, accompanies the bride. She rides in a covered mianquin mounted on a mule. She has never seen the man whose wife she is to be. If he isn't pleased he will remern her next day together with the meaniful gift of two chickens

MAKE GEMS FROM QUARTZ. Sook Crystal, Purest Form of That Stone, Employed in Manufacture of Diamonds.

Diamond cutting up to a recent time was nearly all done abroad, Holland Being the chief center of the industry for some centuries, but of late a good seal of it has come over to America, where electrical machines are used in the work to great advantage in all ways. European work has always been done by hand, as it still is, and the lapidaries there are only just waking up to the knowledge that artificial power can be applied. Besides cutting real gems, the machinery employed here turns out great quantities of artificial ones, which now rule the markets of the world. They are no brilliantly cut and polished that only experts can distinguish them from the genuine article. Rock cryssal, the purest form of quartz, is employed in making artificial diamonds. and this can only be worked to advantage with the electrical machines, hand work leaving no profit in the business, besides turning out inferior results.

MO BOUNDS TO HIS LOYALTY

Balloon Vender Celebrates Recognition by Duchess by Throwing Wares Away.

A pretty little incident was recentwitnessed in Moscow in connection with the imperial children of Russia. While driving in the fair ground with Ber sisters Grand Duchess Olga espied a peasant offering colored balloons for sale. Giving an order to stop the carriage, she called the man to her side and selected several balleons for herself and her sisters, for which she rewarded the actonished peasant with a ten-ruble piece. The gratified mou-Sk in vain endeavored to stammer out his thanks to the little princess and at the same time, in the characteristic Slavonic manner, he crossed himself and called on all the saints witness his good fortune. Then, to a sudden excess of loyalty and abandonment, he cut the string which beid the remaining ballooms together, and allowed all his stock in trade to Boat away together.

Wooden Russia.

Yew people who have not traveled about the Russian empire can imagina how boundless is its weath in timber. "Wooden Russia" is the name applied to the vast forest areas of Russia in Europe, which over meany 500,000,000 acres or 36 per cent of the entire area. of the country. In Russia houses built of any other material than wood are almost unknown outside the cities, and wood constitutes the principal fuel. The forest belt called the "Taiga," in Siberia, stretches in a direct line from the Urals to the Pacific for 4,000 miles, and is in many parts 500 miles broad. All this is the property of the czar.

FRUIT TREES FROM EAST. Lynn, Mass., Man Was the First to Introduce Industry Into California.

It was a Lynn (Mass.) man who carried to California her first fruit trees E. A. Ingalis, a '49-er, took from Lynn to California 55 years ago the shipment of cultivated fruit trees that started the state's great fruitgrowing tudustry. When the gold fever broke out Mr. Ingalis, a young man then, took passage round the Horn The voyage required 133 days. All the pioneers carried such things as they thought would be useful and profitable to sell or trade, but Mr. Inmalis' luggage was the most cumbersome of any, for his fruit trees were asmerous and of all sorts. He disposed of these trees at a good price, and then set out for the interior to and gold. He found none. His luck was miserable. So he returned to Lyon again and there his life was as successful as in California it had been unsuccessful. Mr. Ingalis was a lawyer, and a business man in Lynn. and his is one of the most honored names in the town's history. It should be one of the most honored. names in California's history, too. It was no small thing to have started that great state on her magnificent fruit-growing career.

SEA HAS GROWN DEEPER. Level of the Mediterranean Nine Feet Above That During Old Roman Times.

The phenemenen of the changes in the level of the sea is one which is well shown in the case of the Mediterranean. M. Ph. Negris, in a recent brochure presented to the Academy of Sciences, furnishes interesting information on this point, it being apparent that the sen has greatly increased in depth as compared to ancient times. Formerly a bridge 3,000 feet long united Leucade to the continent. To-day it is submerged, but the foundations of the work were discovered, 11 feet beneath the surface. It may therefore be concluded that since the construction of the bridge the sea has risen at this point over nine feet At Itea in the Bay of Amphissa, there has been observed a mole that is also over nine feet beneath the surface At Rhenee there has been found a complotely submerged dock, evidently of Roman construction, the depth of the sea above the dock at places being fully nine feet. From all of these facts one may conclude that there has taken place an important increase in the depth of the sea since the Roman period, the Mediterranean having risen at least mine feet in 2,000 years.

TOLSTOI BOYS FIGHT JAPS. Although the Count Is Demouncer or Present War, Sons Are with Russians.

Count Toistoi, social reformer, abhors all wars and denounces the particular war which is now raging between Russia and Japan, yet three sons of his have quit the wolf trails to go man hunting in the far east. The eldest boy and a brother are camped with the army of Kuropatkin, having been at the front for several. months. The youngest son not long ago declared his intention of volunteering and already may have donned the uniform of a soldier of the czar. This action has affected the aged count greatly and he has been seen to weep. The war has brought unusal family dissension into the Toistoi household. The countess is utterly at variance with her husband on account of his denunciation of the confitet. Only Tatyana, the eldest daughter, adheres to her father's views and seeks to give him solace. Tatyana is a gifted woman. The Tolstoi essay against war, published in the London Times, was only sketched out by the count. His daughter filled out the draft and gave it the literary finish.

PRINTS PHOTOS ON APPLES Portrait of Edward VII. on Franch Fruit Arouses Interest-The Method Explained.

A firm of fruit auctioneers at Covent Garden recently received from France a remarkable consignment of apples. On each apple was a portrait of King Edward VII. The fruit created a great sensation in the market, and brought a big price. The apples were of the Peasgood Nonsuch variety. A photographic film was fixed on themjust before they colored, and the foliage was fastened away from them to insure full exposure to the sun. Tha portrait of his majesty was put upon' these first fruits, because the French peasants consider the "entente cordiale" greatly due to the king Doubtless in future years many will emulate the example of the ingenious French cultivator and produce portrait fruits. As advertisements they would be very valuable

Winter and Summer Stamps.

The post office department is sending out its winter stamps now. Few know that there is a difference between winter stamps and summer stamps. In the cold months the gum on the stamps is a little thinner and softer, while that on those to be used during the summer and in southern states is not so easily affected by heat

Onser Names in Town.

Fremantle, West Australia, has some queer names. The mayor is a Cadd, the chief printer is Cant. a contractor Thick has just sued a local soup-preserving company, and a man named Offering Webb was fined recently for keeping an unlicensed dog.

OPALS NO LONGER FEARED Superstition That the Stone Brings had Luck Passing Away-Stren-

uous Life the Cause.

Superstition fades away in the strensous life of the twentieth contury. And the return to common sense has shown itself in the modern fancy for opais. Bir Walter Scott was chiefly responsible for the idea of bad luck being connected. with this stone, as will be remembered. by readers of "Anne of Geteratein." And others declare that, as the word opal is from the Greek ops (the eye). the gem shares evil influence with a peacock's feather. However, women have lived down all this and opais are the lucky atons for autumn and have been word by recent brides. But even now stories are told of the uncanny influonce of the opal. Alphouse XII. of-Spain presented an opal ring to his young wife, Mercedes, on their wedding day and her death occurred soon afterward. Before the funeral the king gave this ring to his sister, Maria Del Pilar, and she also died a few days afterward. The king then presented the ring to his sister-in-law, Princess Christian, and she died in the course of three months. Alphonso, distressed at these fatalities, resolved to wear the ring himself, but be did not wear it long, as his unhappy life shortly came to an end. The queen regent them attached the fatal ring to a gold chain, which she hung around the neck of the Virgin of Almudena in Madrid.

NUDENESS JARS JAPANESE. Severe Shock Is Administered to the Islanders by This Form of Art.

At the 8t Louis fair a Japanese merchant was praising the exhibit of Ja-

"We shall undoubtedly get a number of awards, prizes, medals and diplomas," he said "I hope that on none of these will appear drawings containing nude figures. We are a modest people; nude figures shock us. A number of Japanese manufacturing concerns that took part in the Columbian exposition received diplomas, suitable for framing, whereon there were drawings of nude women. These concerns, with some misgiving, hung their diplomas in their factories at home. Hence a great deal of scandal, and the diplomas had to come down. There was one firm, a rice-polishing firm at Takamatsu, that came near incurring serious trouble. Its diploma, very nude indeed, was hung in the half of the factory and the women hands refused to go to work the morning it appeared. The men, taking the matter up, refused to work either. The factory, had not the Columbian exposition's diploma been removed, would have had to close its doors. In Japbuman figure is always draped. Foreign artists should remember this in work intended for Japan."

WARMS NOSE WITH CIGAR. New York Man Holds Fire End Close to Face and Then Takes Snuff

Many and varied are the ways and means adopted by people these days as a protection from the cold, but one of the oddest schemes is that of a man who uses his clear to warm his nose. While on the street be invariably smokes a cigar, and at frequent intervals he removes it from his month and holds the lighted end close to his nose, which happens to be an organ of uncommon size, says the New York. Times. Some years ago this gentleman froze his nose, and ever since it has been extremely susceptible to cold. "Moreover," explained the man, "there is a considerable amount of heat radiated from the fire end of a cigar. much more than you would naturally suppose; yet I admit in extreme cold weather it is not sufficient to keep my nose comfortable, and at such times I have snuff. The resultant sneezing amply serves the purpose."

CALLS SUN A BINARY STAR Prof. Bigelow Expounds Ideas About Old Sol and Laws Governing Him.

"The sun should be regarded as an incipient binary star," says Prof. Bigelow, in the Weather Review. Recent scientific work in investigating the circulation of the solar atmosphere in accordance with the laws governing the convective and radiative action of a large mass of matter contracting by its own gravitation, have led Prof Bigelow to the hypothesis that "the single flery envelope conceals two disks." A series of observations extending over many years on the period of solar rotation at various points in the surface shows that "the same meridian of the sun is seen twice in a single rotation of the entire mass, first as the eastern limb, and second, 13 days jater, as the western limb." Therefore the sun has a dumbbell figure of rotation.

Diplomat a Fine Pianist

Theodore Hansen, first secretary of the Russian embassy in Washington, is an accomplished musician, being deveted especially to the piano. Most of his spare time is passed fingering the keys of a concert grand, which he has in his apartments. But he is haunted by street planos, which seem to have a satanic propensity for cutting loose just in front of wherever he happens to live Three times he has changed his quarters on this account, and he solemnly declares that unless he can effect permanent escape from the torment of "popular music," he may be driven to resign his position.

INCENUITY TEST OF MIND. Inventive Ability, Says Professor Thomas, Is a Sure Sign of

Mental Soundness.

Another test of mental ability which deserves special notice is mechanical incennity, says Prof. W I. Thomas, in the Forum. Our white preeminence owes much to this faculty, and the lower races are reckoned defective in it. But the lower races do invent, and it is doubtful whether one invention is ever much more difficult than another. On the psychological side, an invention means that the mind sees a roundabout way of reaching an end when it cannot be reached directly. It brings into play the associated memory and involves the recognition of analogy. There is a certain likeness between the flying back of a bough in one's face and the rebound of a bow, between a serpent's tooth and a poisoned arrow, between floating timber and a raft or boat; and water, steam and electricity are like a horse in one respect-they will all make wheels go around, and do work. Now, the savage had this faculty of seeing analogies and doing things in indirect ways. With the club, knife and sword he struck more effectively than with the fist; with hooks, traps, nets and pitfails he understood how to seize game more surely than with the hands; in the how and arrow, spear, blow gun and spring trap he degised motion swifter than that of his own body; he protected himself with armor from the hides and scales of animals, and turned their venom back on themselves. That the savage should have originated the inventive process and carried it on systematically is indeed more wonderful than that his civilized successors should continue the proc-

ees; for every beginning is difficult. JAP WROTE POEM IN BLOOD

Handkerchief Found on Person of Dead Islander Contains Verse Telling Loyalty.

On my way to the rear, after the battle of Nanshan, writes a Japanese officer, in Leslie's Monthly, I came suddenly upon a couple of soldiers with a lantern. They were about to take the lifeless body of one of our officers from the hostile trench." The uncertain light of the lantern fell upon the pallid face of the lifeless officer covered with blood; in the dead man I recognized one of my own friends. Thrusting my arm under his head, I took him in my arms. Tied around his brow was a piece of cloth, a towel. perhaps a handkerchief. It was stained with blood from the fountain that a Russian bullet had opened at his temple. I untied the piece of cloth around his head. In the light of the lantern which the soldier held beside me I naw the round sun of our imperial standard. It was not a towel, then, not a handkerchief. Beside the sun of our national flag, in spite of blood stains, I saw something on this flag that made me frown I made out two lines of writing upon it, evidently a classic couplet. The rusty red of the letters told me that it was written in blood. In spite of the bloodstains I managed to make out the following couplet:

"Forever shall we guard the august standard of our sovereign prince, Even though these, our lives of earth. should vanish with the dews of the morrow."

ROMANCE OF SUMATRA LEAF

Many Little Episodes Are Attached to This Unique Tobacco Plant

The story of Sumatra leaf tobacco. as grown under cheese-cloth in Connecticut, is one of the romantic episodes of agriculture, says a writer in Country Life in America A Florida fruit grower had some tobacco plants that got into his pineapple shed by acoident, and he noticed that they were tailer and of finer texture, under the lath shade. The bureau of soils, while surveying the Connecticut valley; found a soil that was practically the same as that of Sumatra, on which the famous tobacco is grown. (The bureau has samples of soil from almost every important agricultural region of the world.) The government got an expert to start an industry, and the first two years some of the growers made over 100 per cent. profit. The industry, as a whole, is successful. A large company with plenty of capital is necessary, for it costs \$650 to cover and grow an acre of this tobacco. The growers receive from \$1.20 to \$2.50 per pound for the product. The imported article brings \$2.50 to \$3, and we have been importing about \$6,000,000 worth a year.

Although champagne is called the "wealthy water," there are few hotels in the country where one can pay more than four dollars a quart for it, while, on the other hand, there are hundreds of places where Burgundy is sold as high as \$35 a quart. At one hotel the menu advertises a special brand of this fine wine for \$25 a bottle. There are any number of Rhine wines which cost above eight dollars, and there is a big demand for

Costlier Than Champagne.

No Scar Under Red Light. As a result of experiments made in some of the hospitals in Paris, it is stated that vaccination performed under a red light leaves no scar and causes less pain. The patient is vaccinated in a

room where the only light is an in-

candescent lamp with a red globe.

them Champagne does not improve

with age as the other wines do, and

this probably accounts for the differ-

TREATY CAUSED THE WAR. China's Compact with Russia Responsible for Pight Over

Port Arthur. Japan is about to come into possession of Port Arthur, after sacrificing 50,000 infantrymen, two hattleships

and half a dozen torpedo boats. Russia is about to lose the fortress. To keep it she sacrificed her sea power and lost 40,000 soldiers.

Port Arthur is really the cause of the war, and how Russia came into possession of the place is interesting, MAVE the New York American

It shows how little things in a bond, trivial on their face, may involve nations in a death struggle. After China's war with Japan the

Russians lent sympathy and money to the Chinese Count Cassini, now ambassador at Washington, and Li Hung Chang ne-

gutiated a treaty Under this freaty Bussla agreed to lend China money. Clana gave Russia permission to burid a branch of the railroad from Harbin to Port Arthur. This road was to be guarned by Russia. At the end of 15 years it was

to be turned back to China and Russia

was to clear out of Manchuria. To guard the terminus, Russia got this clause inserted in the treaty: "To provide against interierence with or harm to-the said railway, Russia shall be permitted to occupy one of the islands near Tallenwan and make it a rendezvous for Russian ships, and land troops, and also to fortify the same in order to protect the terminus of the railway and the shops connected therewith and to provide against disasters.

Then, to guard this terminus of the railroad from bandits or train robbers, Russia began the fortifications at Port Arthur, it is the greatest railroad blockhouse in the world

When the Japanese saw the extent of the work they began to prepare for war. They built on sea it issia built on land

The Chinaman saw, instead of a sentry box, a fortification as strong as any other in the world except Gibral-

It was too late to profest. There was the treaty if Japan gets

the material thing will be won-Thus a million soldiers are in the field fighting because of a sentry box at a railroad depot Other wars have begun from equally

apparently trifling lines in a treaty The brilliant Cassini negotiated the treaty. In it Cassini made Russia's initial move for Manchuria, China and even India. He distitled the little paragraph that has brought about a war which has already tax dothe power of two great nations, and after eight months' desperate fighting may be just at its beginning

BARBERS' TOWEL SUPPLY. Special Branch of Business That Has Grown Out of Modern

Needs.

One of the special branches of the distinctly modern but now well established. business of supplying thean towels in found in establishments that supply and launder towels for batters exclusively. of which there are now a number in this city, says the New York Sun-

The to within a few grage every harner bought and owned the towels used in his shop, which, as likely as not, if he had a small shop, he took homesto be washed, or which he sent to come fair one. Now there are hundreds of barbers in the city who use towels supplied by some barber towel sapply concern which supplies towels of any sort and in any number frequired and at any time and takes away the soil d ones the barber have ing no trouble about his towels what-

All the barber has to do is to say how many towels he wants and when he wants them, and the barber towel sup-

ply concern will do the rest A big concern in this business owns many thousands of towels, and its operating plant represents a considerable capital besides, and it employs a considerable number of people. It is explained that, by handling towels deroted to one use only they can be handled to greater advantage than mixed towels could be. It is stipulated in the barber towel supply contracts that any other purpose than that for which they are supplied, and the trade of good shops only is sought.

The great majority of the towels used for ordinary barbering purposes are not made greasy in use. There are, besides these, towels used for the head rests of the chairs and Turkish towels used for face massage. The towels used for these separate purposes are washed separately, and they are all sterilized in the taundering Only perfect towels, perfectly laundered, are sent out, and these are uniformly folded so that they stack trimly and look well, as well as being convenient for use

With these advantages in it the numper of shops using the barber towet supply service is large and increasing.

No Milkmaids.

Dr. A. E. Harris, medical officer of health for Islangton, England in a report presented to his council, states that during his inspection of dairy 'arms in various English counties, in no single instance did he find that a woman, as in the olden days, milked the cows. "The loss of the dairy maid." he writes, "is a national one, for she was at least cleanly. Now it is not unusual to find a man fresh from other work milking the cows with dirty nands."

Immaterial. Jones (at the bank)-Must I be dentified?

Teller-Not unless you wish-the theck is no good!-Town Topics.

WAYS TO KILL MILK GERM,

There Are Many of Them, But the Bacteria Crushing Machine In Last.

Many ways of killing the bacteria in milk have from time to time been suggested. A recent and ingenious way is to crush the bacteria to death by pressure, as a man crushes an insect under the pressure of his boot "A bacteria-crushing machine," said a chemist, "has been built and tried with partial success. This machine is capable of putting forth a hydrostatic pressure of 450,000 pounds to the square inch. Milk has been squeezed under it till the bacteria howled for mercy. Serfously, milk has received at the hands of this machine a pressure of 90 tons. The effect of a pressure so enormous was to make the milk keep longer-it kept for five, six and seven days. This showed that some of its bacteria, the fermenting bacteria at least, had been killed. But though the milk remained sweet it began to emit finally a strange, new odor and it had a strange, new taste. This. showed that other bacteria in it had not been harmed. Prof Wiley's poison squad's tests have proved that preservatives in milk are harmful. A pressure of 70 tons preserves milk for three or four days and there is no strange odor or strange taste. Maybe before long chemicals as a preservative of milk will be succeeded by pressure"

MUSIC AS A THERAPEUTIC.

Mental and Physical Ills May Be Believed by Its Aid-One Example of Use.

Much assistance is in many instances to be derived from the intelligent use of music, either vocal or instrumental, as a therapeutic adjunct. Melanchoita. insomnia, hysteria, family affliction, business reverses, delirium, pain, fatigue mental or physical, will all be hesped by the beneficial influence of music, rightly used. As a post-operative measure it would have an undoubted influence for good in taking the patient's mind from his bodity distress So, also, could "painters" dentistry be relieved of some of its pain and distress by the quieting influence of music. which would, as has been amply demonstrated, produce a pleasanter mental influence during the administration of pitrous oxide or other anaesthetic. A German writer recently stated (February, 1904), that in a number of test cases in which music was provided during the administration of the anaesthetic there was an absence of distress and resistance on the part of the patient; also an absence or reduction of the post-operative nauses under the *ame circumstances. To be advantageouts the nature of the composition must be carefully selected with a view to the needs. of the individual case, and the execution must be as nearly fault een as possible

UNNECESSARY DISTINCTION

Expressions "By and By" and "By the Bye" Are Cause of Arguments as to Origin.

The two expressions "by and by" and "by the bye" are really serived. from the same original word and the winds "by" and "bye" have the same general sense. How the spelle ing thye has long been used in the second of these phrases without any real reason for the change adeetares St. Nicholas Magazine We should not speak of a bymaw or a bye-path, and yet many are careful to write by the byell and "bye and by" In good-bye there mucht be some reason for keeping the final telf since it stands for the word "ye" in the shortened form of God be with ye," but where so much has been dropped the "e" is hardly worth keeping, especially as the old meaning is seldom recalled.

MUSIC A GOOD STIMULANT. Experiments Prove That Melody Acts on Heart Thus Causing Rapid Breathing.

The experiments of Ginet and Courtier were conducted with a view to determining the effect of music upon breathing and upon the action of the heart, writes Gustav Kobbe, in Good Housekeeping. It was found that lively major chords, without relation to melody, quickened breathing. Melodies, grave or gay, caused rapid breathing, the respiration approximating its time to that of the music. Rallentando and diminuendo effects made the breath come more slowly. Single notes without tune accelerated the heart's action, but melodies quickened it still more, operatic pieces resulting in the quickest action. These experiments would seem to show conclusively the stimulative effect of

Would Seek North Pole. According to British sources, the duke of Orteans has applied to the Norwegian government for permission to hire Dr. Nansen's ship, the Fram, for the purpose of an arctic expedition next year. A Norwegian newspaper states that the admiralty will propose as conditions of the arrangement that Otto Sverdrup shall captain the ship. that the plan for the expedition shall be sanctioned by the Norwegian authorities, and that the University of Christionia shall have the benefit at least in part of the scientific results of the expedition.

Jackies Join Christian Endeavor. Forty-one of the jackies on board the battleship Ohio, at San Francisco, have, become charter members of a Christian Endeavor society, which was organized on the ship on October 31.

L'ABEILLE DE LA NOUVELLE-ORLÉANS