20

THE PACIFIC CABLE,

America Now Has Its Opportunity to Take a Hand in the Traffic Beneath the Seas.

WASHING OUT WEAK STOMACHS.

Shortsightedness Not an Indication of Intellectual Activity, but Rather of Bad Schooling.

A TWENTY-FOUR-HOUR CLOCK DIAL.

Comprensed Leather Being Urged as a Material for

Brakes on Railroads.

PREPARED FOR THE DISPATCE.

It is a somewhat singular fact that the manufacture of submarine cables has from the first to the present day remained in English hands on English soil. With but one or two trivial exceptions, the cables of the world, which stretch a length of 120,000 nautical miles, have cost \$200,000,000, and are watched over by a fine laying and repairing fleet of 40 for steamers, are of British construction and of like ownership. The French manufacturers have lately become so jealous that they now propose to impose country, but it would also appear that this | acid. duty is directed against cables of American manufacture for land use, as an order has recently been secured by one of our leading companies for no fewer than 50 cables of a well-known type for telegraphic use in Paris.

In this class of work American skill and invention are pre-eminent, and it is therefore considered the more remarkable that in making long submarine cables this country has no status at all, even the Government buying its short sea cables from abroad. A. large trade is now being done in American land cables in Europe, and large sums of English money have just been invested in one of the most extensive insulated wire and

cable factories on this continent. What makes this matter of more than ordinary interest at this moment is the fact that the first great cable across the Pacific Ocean to Japan, China, Australasia and "Lands of Ind" must soon be laid. A British man-of-war reported a series of Pacific soundings last month, and the project is being thoroughly and tavorably discussed in cable circles in London. President Harrison has called upon Congress to do some-thing to prevent the Pacific mail steamers from forsaking San Francisco for Vancouver, and a like appeal will soon be in order as to the Pacific cable, the western landing of which within her territory will be of the tmost strategic importance to Great

Britsin. But with our immense and growing trade in the Pacific, where already we exercise a protectorate over the Sandwich Islands and are acquiring new responsibilities or opportunities daily, it is of no less importance that the cable should land under the Stars and Stripes. This question is agitating American electrical engineers, who are patriotic enough to believe that the cable should be made in America, be owned by American capital, and be operated by Americans. They say that since we have done practically nothing in all the great cable work in South America, and played but a subordinate part in the work that created the North Atlantic cable system, it is high time to pre-empt that which still awarts in the deep waters first gazed upon by the doughty old Bilboan, Vasco It has been suggested by one electrician that this cable laving would be the most creditable and useful performance that could distinguish the Columbian

photograph can be electrically transmitted to turning a sort of lever. He then rubs the two against each other, vatil the sharp stone has made a notch in the other stone. He uses three blaces, one all er the other. With the first he makes a groove, which with the second knife is regul arized, and with the third finished off in a specific manner. Then holding with his left hand the baton on which is the stone to be split, and at the sume thus a steal knife. the oder of which At a recent meeting of the British Medical Association, one of the subjects discussed by some of the most distinguished specialists in England was myopia, or short-sightedness. For men engaged in study or minute work there is same time a steel knife, the edge of which is fixed in the "thread," he hits the knile a clean blow with a small iron bar, and the clean blow, with a small from bar, and the diamond is separated exactly at the point desired. This "cleavage," as it is called, is not always necessary; still, lapidaries have recourse to it when they wish to take from the crystal its defective particles, or to give it convenient shape for ther operations.

England was myopia, or short-sightedness. For men engaged in study or minute work there is some advantage in a slight degree of myopia, which in old age confers the privilege of read-ing without glasses. It has been said that myopia is the companion of intellectual pro-grees, but it is an unpleasant companion, not a friond. Even excessive intellectuality, when accompanied by myopia, does not compensate for the simples and movements of living creatures, architectural beauties, and the facial expression of our friends. There is no doubt that myopia is increasing. While the children of short-sighted persons are not often born with myopia they are very hable to it at early age. Myopia reacts upon itself. The more a child at school stoops over his book the more myopic he becomes, and consequently he stoops still more, until the shape of the eye-ball is so changed that it is impossible to use both eyes for distinct vision. It was for some time thought that the large increase in this affection was peculiar to the schools of Germany, but recent statis-tics show that in England, France and America the percentage of myopes is exceedingly large. M. Drolais, of Paris, who has made this sub-ject a special study, asserts that the hygienit defects in the schools-bad light, want of space, improper desks and stools-are the score of this lamentable horease in short-sightedness. I can scarcely be doubted that with our pres-ent school systems, the bad light, unsuitable Novel Treatment for Dyspepsia A simple and novel treatment for the cure of dyspepsia and cancer of the stomach has lately been practiced by many prominent physicians. This consists in washing out the stomach. A long flexible pipe is passed down the throat until one end is in the stomach. The upper end has a funnel attached into which hot water is poured until the stomach is filled. "Che Junnel end of the pipe is then turned down until it is lower than the bottom of the stomach, which is the stomach which is thus emptied as through a siphon. The hot water closes the blood vessels and reduces inflammation, and the relief is immediate.

Are We Losing Our Eyes?

Leather Brake Shoes.

Protection for Betaller

A novel idea has been presented to the En-

glish trade to meet the competition from man-

ufacturers who have stores for retailing their

A company has been formed in New South

To Clean Silver Filigree.

A ready mode of cleaning silver filigree is afforded by dipping it in a solution of of myopes cyanide of potassium. This, however, is a dangerous liquid to have much around, and a solution of hyposulphite of soda, which is Wales for the purpose of exploiting the manu-facture of railway brake shoes from comperfectly harmless, will serve the purpose nearly as well. If it is a matter of absolute pressed leather. Waste leather scraps are steeped in a solution and subjected to a hycertainty that there is no metal but silver in the jewelry, it can be easily and effecta heavy duty on cables imported into the ually cleaned by boiling it in sulphurie

Cure for a Plagues of Insects. The wholesale destruction of insects

through the medium of large floods of light from an electric are has long been the hobby of various persons who have observed the number of moths and other

insects which at certain times of the year' pay the penalty of their inability to withstand the fascination of the bright speck of fire produced by the incandescent carbons of the electric lamp. On the author-ity of a very reputable European journal such an application has been recently made on an extensive scale and with most beneficial results, A cutin Ueber Land und Meer gives a des-

olate picture of a once beautiful park near Munich, Bavaria, the vegetation of which has been completely destroyed by the rav-ages of a moth called the nun, on account of the peculiar black and white shading its wings. The trees are all denuded of leaves, and stand gaunt and cheerless, a silent reproach to the inability of the inhabitants to cope with the scourge. It is said that all known devices were brought into requisition in the at-tempt to rout the enemy; fires were lighted, sheets of cotton cloth steeped in adhesive glue were stretched from tree to tree; legions of children were enlisted as a cater pillar-packing army, but these and all other efforts were as but a drop in the bucket,

against the sweeping onslaught of the in-sects. At last the electric light was thought of. On the top of a rough frame work a powerful search light was fixed, and underneath this was an exhaust fan operated by a notor leading to a kind of grinding mill. It is stated that the insects attracted by the intense light were drawn down in myriads the dial is divided into minute sect to the rollers of the grinding mill.

Electricity in Boots and Shoes.

The use of an electric micrometer has been imported into the manufacture of boots and shoes. The function of this device is the sorting of pieces of leather according to their thickness, and their distribution in their respective receptacles. So accurately is this performed that the pieces in the various receptacles hardly vary one-thousandth part of an inch in thickness. Besides the sorting of the pieces of leather, the machine automatically records the number distributed. When the apparatus that required of the attendant is to put the taps in a trough-like box. A tollower is adjusted behind the taps, which keeps them in an upright position and maintains a constant pressure as they are fed from the trough into two abutting flanges, the taps in return being fed from the trough into the micrometer fingers, which pass successively into position. The fingers, which are moved around by a ratchet movement, pause a short time over the receptacle for taps, and when one of them reaches a bin in which the tap Catharine Weed Barnes, in a recent paper, should be dropped, the inner extension of the finger touches an electric contact, and dvocated the maintenance of high ideals in photographic work, and showed the legitimate the tap falls, from the jaws. The operation lines on which such work should be followed. Miss Weed argued that a fancy photograph is of the finger is made to actuate a connector which indicates the number of taps in every receptacle.

PITTSBURG DISPATCH SUNDAY. DECEMBER THE

CHRISTMAS THOUGHT Message of the Angel That Came

Nineteen Hundred Years Ago TO THE WATCHING SHEPHERDS.

No Greater Event Has Been Announced in the History of the World.

IT MEANS SALVATION FOR THE RACE

"Unto you is born this day a Savior." That was the message of the angel, as out of the shining glory of the Lord he came, above the fields of Bethlehem, where shep herds watched their flocks. That was the good tidings of great joy, so strange, so wonderful, so filled with blessing and happiness unspeakable, that when the angel uttered it suddenly there stood beside him a multitude of the heavenly host, praising God and saying, "Glory to God in the highest, and on earth peace, good will towards men." is Christ the Lord."

That is what the psalms and authors say. ent school systems, the bad light, unsuitable furniture and long hours of study, with no in-That is what Christmas means. telligent supervision over the pupils and school houses, we must before long become a nation He who was born on Christmas Day came

into this world to save us. He did and does save every man who puts his hands in his, and gives him his heart. We want to think about that this morning. We know it so well that we are in danger of not knowing it at all. We want to think about it, and really get it into our hearts and lives, if we can, more than ever before.

IT'S A FAMILY DAY.

draulic pressure to mold them to any desired shape. The leather shoe is said to possess dissnape. The leather shoe is said to possess dis-tinct advantages over that of iron, with su-perior efficiency in every way. The leather shoe weighs 35 pounds against 2135 pounds for iron, and it will wear three times as long. More than this, it has a greater coefficient of friction, so that 40 pounds air pressure is as effective as 70 pounds with iron brake shoes. There is one pre-emplete benefit which the introduction of a We want to leave behind us for a little while all the other associations which gather about the day. There is the joy in all our hearts of love one for another. There are our homes, with Christmas gifts in them and homes, with Christmas gitts in them and Christmas cheer. Christmas is the great day of the family, and most rightly and blessedly so. But let us put all that out of our minds for a little space and think just about this. Let us remember that Christ was born that He might save us. pre-emfnent benefit which the introduction of a leather brake shoe would confer on communi-ties which are subjected to the pecessary evil of the elevated railroads. They would thus be spared the dangerous shower of iron particles, which now injure so many eyes. An attempt has already been made to remedy this serious You know what need there was in the world for Christ's help, when He came. You know what sort of world it was, with re-ligion almost dead, and morality very little source of danger by the use of compressed pa-per. This however, was found to be impracti-cable. It is earnessly to be hoped that the new shoe will stand the test of practical work. better. How black the sky was all around that shining of celestial light where the an-

gels stood-a black sky with only a scattered company of stars to give light in it. That was how the black world closed in about the manger in the Bethlehem stable.

ufacturers who have stores for retailing their own foods. It is proposed to form a company, with a capital stock of \$100,000. This company will pay cash for the goods, which will be re-sold to shareholders at invoice prices, plus a charge of 5 per cent to cover expenses. The object of the company is that the shareholders, who are retailers, will be able to buy all classes of goods at the lowest wholesale prices for cash, without reference to the quantity bought. By this plan of co-operative buying, it is figured that a great saving can be made over the regular way of buying in small lots by retailers, who lose the trade discounts and other items, which it is estimated make a total of about 15 per cent. The multiple shop competition is said to be bearing heavily on the small retailers, and some plan of this kind is necessary if they are not to be crowded out. The idea is an excellent one, but whether it can be made a practical success or not remains to be seen. There lay the Christ-child, and all about was the world lying in darkness. There was light there where the holy child lay upon the bosom of the virgin mother. The light which lighteth every man which com-thinto this world was there; but obl how dark it was everywhere else-dark with ig-norance of God, dark with unbelief, dark with pain, dark with sin, with only here and there a good man like a star. And out of this darkness Christ came to save us. The world is better now than it was on that first Christmas day, and yet it is a pretty dark world even now. All our hearts, I am afraid, have dark corners in them. All our lives, I know, have experiences of pain in There is a good deal of sin still in the world, and sorrow beyond anybody's neasuring.

THE TEOUGHT OF GOOD FRIDAY.

A 24-hour clock dial has been adopted on all Now there is one part of the Christian doctrine which we call the atonement. I would say that it is the very central and es-sential part. It includes all else which the Indian State railways. The periphery of the dial is divided into minute sections as in erdinary clocks and watches: the hour is indicated by a small figure on a small conspicuous plate or disk above the center of the dial so that the necessity for more than one hand is

Twenty-Four Hour Clock Dials

obviated. Artificial Rubias.

About three years ago two French chemists succeeded in producing rubles artificially. The crystals obtained however, were small, and nce then the inventors have been occupied with the problem of increasing the size of the rubies obtained. To this end cousiderable changes have been made in their methods of operating. Instead of using pure alumina, as formerly, alumina alkalinised by potassium carbonate is employed. This addition of an al-

The Ideal in Photography.

ways, and loves us everyone infinitely more than we can know. Christ told us-Christ, the Master, told us-that God cares, that God loves. And that truth, if we can ouly get hold of it, and keep our hold firm upon it-that truth gives us just the comfort that we need. We go to Christ in trouble, and He helps us always. That is what a Savior is for-to help people, and to help them every day, and in every kind of trouble. That is how Christ saves us. The Senators Now Sit Where Once CONGRESS MEETS IN ST. MARK'S. NOBODY LEFT OUT.

One of the Novelties of the City is the "Unto you is born a Saviour." It was to the shepherds that the angel said it, as if he would teach us that no man is so lonely, so obscure, so ignorant, so poor, but that Christ who was born this day was born for him. By and by came the wise men from the East, as if to tell us that no man is so rich so wise so could so michty but that COWS THRIVE ON THE HOUSE TOPS rich, so wise, so noble, so mighty, but that the Christmas message is for him too. Unto you is born a Saviour. Nobody is left out-unless he leaves him-self out. He who took our nature upon Him,

Senate chamber and hall of Congress is the old council room of the Inquisition, and in self out, he who took our nature upon him, and out of heaven for our sake came to earth, and took up His hard life, with the cross at the end of it—out of all that is bad in us, or mean, or low, or selfish, or un-brotherly, He will save us; out of the darkness of all our doubtings He will lead the very place where the presiding officer sits, an inoffensive looking little gentleman with a claw-hammer coat and hair parted in the middle, the stern, black-gowned Inquisitors used to pronounce their awful sentences us; out of the blackness of our pro-foundest sorrows he will make the Christmas pon trembling victims. To reach the 300-year-old building we light to shine. "Unto you is born this day in the city of David a Savior, which

28.

1890.

RAMBLES

IN

Heretics Were Tortured.

Milk Supply Trade.

CORRESPONDENCE OF THE DISPATCE. 1

LIMA

cross the Plaza de Bolivar, in which many "heretics" (which name included all who were at variance with the reigning powers, GEORGE HODGES. emporal as well as spiritual), were burned to death, and where thousands of merely suspected men and women have been pub-licly scourged. This plaza contains a notable statue, one of the two of three the Chil-ian army left to Lima out of the many fine works of art that once adorned it, represent-ing Simon Bolivar, the liberator, seated on a plunging stead in an impossible attitude something like the equestrian statue of Gen

eral Jackson, in the United States capital. WHERE THE CONGRESS SITS. ence of two weeks the books of the concern The National Congress holds its sessions in show a shoringe of \$2,000. Many of the stock-holders became dissatisfied with the way Harry L Grau, the manager, was running things, and his resignation has been accepted. The association has been accepted. The association has been accepted. The association has been accepted. Son charged for the meals. Mr. Gran now says the project will be a failure, and will go under before many weeks. Seven dollars a week is what persons who know claim as the lowest rate at which the elaborate meals pro-vided under the present regime can be served. The association was incorporated with a capital stock of \$5,000 a few months since, and served its first meal at luncheon Monday, De-cember 8, to over 50 prominent families. The plan which has been in operation until this time is about as follows: The bills of fare are sent round 24 hours in advance of the meal show a shoringe of \$2,000. Many of the stock the long, narrow and somewhat dim and dingy apartment that for three centuries was the chapel of St. Mark's University, the very oldest temple of learning in the Western World, which the "Liberal" government confiscated from the church in Spectators are penned in a very nar-1860. row gallery, high up above the heads of the representatives, and the latter are ranged like so many tolerably well-behaved school boys, all around three walls of the room, in two rows of chairs without desks.

Near the center of the fourth side is placed long table; at one end of it sits the presiding officer, and at the other a tall cross is fixed, upon which the Congressmen are re-quired to swear that they will support the this time is about as follows: The bills of fare are sent round 24 hours in advance of the meal ordered, and the order blank is sent back at once. The meal prepared is then placed into a contrivance which is kept warm by hot water and is sub-divided into compartments for the various edibles. These are distributed in a wagon at the residences of the subscribers. Bread is furnished each morning freshly baked, and milk, cream and fruit are delivered daily. constitution. Between the crucifix and "Senor Presidente" are a number of clerks and reporters, and among them a few are actively as a state of the second second second scribbling away in shorthand, as indus-triously as do their cousins in Washington. Whenever a formal speech is to be made, the orator mounts a little platform, which has a sort of pulpit desk upon it; but orde-nary debates are marticipated in by members aily. Each week the lady of the house makes : requisition for butter, coffee, tea, cocca, sugar, pepper and sait, which are prepared at home. The ladies are still enthusinstic, and declare that they will not allow the scheme to fall nary debates are participated in by members from their respective chairs, who seldom take the trouble to rise while speaking.

FOUNDING OF THE OLD COLLEGE. The most interesting things about this

place pertain to the far-away past. One remembers that this college was founded 69 years before the Puritan fathers sought our orthern shores. The first steps toward i were made by the authorities of Lima as early as 1550, when they dispatched Tray Tomas de San Martin (who afterwards became the Bishop of Chuquisaca), in com-pany with Pedro de la Gasca, one of the first Governors of Peru, over to Spain to apply for erection of a clerical temple of apply for erection of a clerical temple of learning in the new country. The Emperor Charles V. and his wise mother, Juana, not only granted the desired decree but con-ceded to the University, which they ordered to be established at Lima, all the preroga-tives enjoyed by that of Salamanca. Pope Ping V confirmed in section here are the section of th Pius V. confirmed its crection by an especial bull, and the learned Dr. Don Gasper de

Meuesis became its first rector. Still the university, so nobly begun, was without a suitable building or even a site for its foundation until the year 1574, when a piece of ground was purchased for it, near the parish church of San Marcelo, and hence the college derived its name "San Marcus." The site, however, was found to be inconveniently distant from the center of the city; so it was sold, another purchased near the palace of the Inquisition and the with an oval handle, and a small portion of the point broken off. As their investigations were prosecuted far-ther, the petrified bones of animals and the re-mains of men of some prehistoric race were present building completed about 314 years RELICS OF OLDEN TIMES. The most mysterious part of this wonderful It consists of a great courtyard sur-rounded by cloisters, on the walls of which discovery is that it was found in virgin ground, 400 feet beneath the surface, and with no ap-parent outlet. How it came there is a question that cannot be answered. queer frescors are painted, supposed to represent the arts and sciences. Doors lead rom the cloisters into the various ABUSING THE STOMACH. rooms and into the great hall of the Univerity, where still hang the portraits of the The Country Men Use Themselves Muc most learned men of Peru's earlier days. The first full-fledged "D. D." who was graduated here was Don Domingo de San Better Than Those of Cities. Tomas, a Spanish Dominican, who after-ward attained great local celebrity, whose One reason why city people are so much m afflicted with illness than country people, said a leading physician yesterday, is because of the difference in their habits of eating. Your ugly countenance may still be seen in the great hall. The first graduate born in Peru was Don Juan de Balboa, professor of the countryman eats a hearty breakfast before 7 in the morning. He eats a hearty dinner at noon, Quichus language and canon of the Lima the morning. He cats a hearty dinner at noon. At 6 o'clock he takes a light supper, rests for a couple of hours or more and goes to bed to sleep and recuperate. There is nothing like sleep to give renewed energy to the physical man. Your city man gets his breakfast, but he eats light because his heavi generally heavy. It he has been late in getting up he bolts his food and rushes off to his office, with his stomach struggling to get the best of the chunks of stuff he has fung into it. At 12 or 1 o'clock he bolts a lunch-meats, pastry and fruits and lignor in stude conglom-eration as to make his poor stomach howl with anguish. Then at 6 o'clock he eats an enormous course dinner, washes it down with two or three kinds Cathedral. The cultivation of literature during the time of the viceroys, though confined by a jealous priesthood within the narrowest possible limits, made considerable progress and was advanced by several men of learning and ability, sprung from the noblest families of Spain. Perhaps the most scholarly of all he vice kings was Senor Don Antonio de Mendoza, a grandson of the Marquis de Santillana, the renowned poet and warrior of the Court of John IL, who claimed the Cid as the founder of his family. But Don Antonio died in 1551, after a very brief en-Then at 6 o'clock he eats an enormous course dinner, washes it down with two or three kinds of wine, coffee and liquors. He has no time to rest afterward, but rushes off to the theater, and when he leaves the theater he sits down to a midnight supper that drives his poor stomach wild again. He rolls into bed at 1 or 2 o'clock and wonders why he cannet dean. There are joyment of his power, and before he had much time to do more than lend his mighty influence toward the establishment of this University.

PICTURES OF STARS. You would hardly be able to guess where some of the cows are kept that furnish the milk of the city; not all of them, but a few. milk of the city i not all of them, but a lew. No where else than on the tops of suburban houses! As the roo's are periectly flat, the common people utilize them for all manner of purposes, notably for heneries, pigsties, dog kennels, gardens, where flowers and veg-etables grow in boxes; laundries, and even How the Dome of the Heavens is Reproduced on the Plates. LONG EXPOSURES ARE REQUIRED. COWS ON THE ROOFS.

A recent writer on this subject says: "In many cases a Lima cow spends all her days on the roof of her owner's residence, having

been taken up when a calf and brough down at the end of her life as a fresh beef In the meantime she is fed on alfalfa, tropi-cal clover, and the slops from the kitchen.

cal clover, and the slops from the kitchen. Chicken coops are still more common on the roofs of dwellings, and in the thickly popu-lated portions of the town, your neighbor's cocks waken you at daylight with re-minders of Saint Peter." Going to the central market, we find it is LIMA, PERU, Nov. 23 .- The Peruvian

gave an interesting lecture at the rooms of the Camera Club in New York the other spacious and convenient as any in New evening upon astronomical photography. He said that astronomical photography pre-York or any other Northern city. The prin-cipal dealers have stalls, but the mass of sented few difficulties, and that more knowlvenders, who are women of lowest degree, squat all day upon the pavement at the edge edge of astronomy was required than of photography by the observer; in other of the galleries, or on the ground in the open spaces, with their fruit, or fish, or vegetables or whatever it may be, heaped up in flat baskets, or on mats spread before there, in small piles called montones. Each monton words, that the ratio between the two was about three parts of astronomy to one part of photography.

If, however, a photographer should at has a fixed price, which never varies, what tempt to photograph a star he would find ever the fluctuations of the market; but the that his image would be blurred, owing to rise and fall of the commodity is marked by the size of the monton, a little more or less, the movement of the object during the exas the case may be, for the same amount of money. As do their confreres in other posure, therefore it was necessary that the instrument must be kept in motion in keepparts of the world, they chatter like magpies ing with the motion of the star, and the apparatus for photographing stars, therefore, adjusted to meet these difficulties. The usual method of keeping the star on the with one another and with their customers. perhaps nursing their babes the while, of performing other less pleasing maternal plate in photographing was by moving the telescope, but owing to the size of the in-strument at the Lick Observatory this was impossible, as the telescope weighed seven tons. The plan adopted, therefore, was to

SOMETHING ABOUT THE PROCESS.

naked eye are located on the dry plate and brought out by development. This is ow-ing to the fact that the effect to the eye in

looking at a star is immediate and the light seen as sharp as is possible, but when the rays are directed on a plate the light is cumulative and increases on the image till enough light is gained to fix the star, and of comme on devalopment it is brought out

course on development it is brought out

makes it more desirable for the uses of pho-

PHOTOGRAPHING THE PLANETS.

The photographs of the planets are more

tography, and many pictures are taken there. They are mostly small stars, how-

clearly. The clear air at Mount Har

The Telescope Must Move to Compensate

for the Earth's Motion.

STORIES ABOUT LICK OBSERVATORY

Prof. James E. Keeler, who is connected

with the Lick Observatory in California

NEWSPAPERS OF PERU.

There are four daily papers published in Lima, besides several periodicals devoted to society matters and general literature. make the plate movable by means of turning screws.

Most prominent among the latter is a finely illustrated and well conducted weekly, called *El Peru Illustrado*, owned and published by Mr. Peter Bacigalupi, who is by all odds the most enterprising North Amer-When the photographer wished to do some of his work the thing first to be done was to move the big telescope so that a leus could be capped over the end. It is necessary to put on a different leos for photographic pur-poses and it happens that a different focus is obtained in the big telescope. The dry plate ican it has ever been my fortune to meet. As he is a very prominent character in Lima, and his career illustrates what foreign brains and energy may accomplish among these slow-going Peruvians, I went one day to interview him. So busy a man obtained in the big telescope. The dry plate is therefore placed in the tube nine feet from the eye piece, ahole having been cut in it for that purpose. A seed-25-plate is used and for development the section. as Mr. Bacigalupi, flying here, there, everywhere, attending to his dozens of "irons" that are all in the fire at once, it is no easy development the ordinary pyro and potash. The developer is used very weak and plenty of time given to bring out the image. When matter to find him: or when found to nin him down to conversation. But persever-ance accomplished it, and here is the result: the plate is developed the operator has to go it in a blind sort of fashion, as the smaller He was born in New York City in 1855, and consequently is now 35 years old. Though he never went to school after the age of 13, he speaks French, Spanish, Gerstar images will not appear till the developing work is done. Smaller stars than can be seen with the

man, Italian and English equally well. When 13 years old he was employed by the New York Equitable Life Insurance Com-pany in some humble capacity where he remained six years. Then he drifted to Cal-ifornia and at the age of 22 married a young lady in Oakland. Less than a year later, after a breezy tiff with his mother-in-law, he left in haste and sailed for South Amer ica. Landing at Callao early in April, 1878, he had exactly \$4 left in his pocket; and that was stolen before night.

AN EVE FOR THE DOLLAR

He found employment immediately and

ever, and the photographs are made for the purpose of measurements. before many months became the confidential clerk of Mr. E. D. Adams, a prominent merchant of Lima, formerly from the United States. Mr. Adams was so accommolifficult to secure, owing to the refraction in dating as to die soon afterward, leaving Mr. dating as to die soon afterward, leaving Mr. Bacigalupi in charge of the business; and within the year he married his late employ-er's widow, a Peruvian lady who then had five children. They now have a beau-tiful home; and the number of olive branches has increased to nine. In 1884 the old place of business was de-stroyed by fire, but powise disheartened, Mr. Bacigalupi set up again in a better location and since then the amount of his sales has the atmosphere. Some fairly good pic-tures have, however, been made of Jup-

Bucigalupi set up again in a better location and since then the amount of his sales has photograph. The pictures of the Milky Way, which Piof. Keeler has in his collecbeen something phenomenal. His goods are mostly from the United States and comtion of lantern slides, are most excellent, and are the best ever taken. The hundreds are mostly from the originates and com-prise the greatest conglomeration ever collected under one roof. For instance, he has a large stock of books silverware, jew-drugs, soaps, lamps, clocks, silverware, jew-elry, sewing machines, typewriters, photo-

of stars shown on the picture are none of them visible to the naked eye. The photographs of the planet Jupiter showed plainly the different positions of the pots and bands on the surface of the planet which demonstrate that they are constantly changing, and that prohably the surface of Jupiter is a mass of changing matter, IT'S VERY TEDIOUS WORK.

A CAVE DEEP IN THE EARTH.

Enives and the Remains of a Prehist Race Found in it. News comes from Red Cliff, Col., of a wonde ful discovery made there of a number of relic of some prehistoric race, and an ancient sepulchre in the most peculiar place, which it would appear had never been visited by man-

would appear had never been visited by man-kind in any age. The men were dirging with picks and shovels in virgin soil, when suddenly, as one of the men struck a blow with his pick, it al-most flew from his hands, and by the light of their candles they saw a small aperture in the earth, which was quickly widened suffi-ciently to admit the body of a man. A light was thrust into the opening, and as far as its rays could reach only space was discernible, and a musty smell came from the place that had been closed for so long a time-probably ages.

through.

had been closed for 80 long a time-probably ages. A stepladder was procured, and a descent was made to the bottom of the cave, where more surprises awaited the miners, who were new thoroughly aroused over the new sights, the like of which they had never seen before. Buperintendent Conners and John Songer pressed forward in the natural opening, and they had worked but a short time before their pick encountered a hard metallic substance in the soft soil. Investigation proved it to be a knife, about 12 inchesiong, of inredened copper,

GIVE NAME AND ADDRESS.

Druggists Might Save Lives by Insisting

St. Louis Globe-Democrat.]

This Simple Precaution.

THE BELLAMY KITCHEN. An Experiment at Evanston, Ind., Not Working Satisfactorily. Philadelphia Telegraph.] The Evanston Co-operative Housekeeping Association, upon which the eyes of thousands have been turned with keen interest, awaiting he outcome of the scheme to solve the servant girl problem, a dispatch from Chicago says, is already in trouble. During its brief experi-

Systematic Study of Inventions.

Edward P. Thompson, in a recent lecture on "How to Make Great Inventions," suggests that classes for the development of the power of inventing should be established in our various scientific colleges, so that instead of a large mass of knowledge being stored away, to be, perhaps, eventually forgotten, the systematic application the principles the student is daily imbibing will have the effect of fixing them in his mind forever. Suppose, for instance, the exercise embraced the practical atilization of the electrical principle that selenium is a conductor of electricity when exposed to light, and a non-conductor of electricity when in the dark. One student might propose to solve the problem of rising with the sun. He would have an electric bell in circuit with an electric bat-tery and a piece of sclenium, which would hang in the window. No current would pass in the night because the selenium is in the dark, but it would pass and ring the bell when exposed to the light of the rising sun. Another student might suggest the wonderful invention of Elisha Gray, who employed this principle for transmitting sound. Still another student might propose to make a meter for measuring the amount of energy consumed by an incandescent lamp during each month by placing the se-lenium near the lamp. While the lamp was burning away a local and small current would flow and operate clockwork; when the lamp was out, the clockwork would stop, or the current, while flowing, could operate any suitable meter.

Such a discipling as this would be manifestly of the highest value. Mr. Thompson, alter describing the various methods of working adopted by different inventors, some of whom would ponder laboriously over a pro lem for years, while others would begin to experiment upon the very first conception, building a machine forthwith, and then fighting the difficulties, and afterward building improved machines, stated that he had recently visited the home of the inventor of a "Put a nickel in the slot and have your photograph taken." The machine did all the work, being automatic from beginning to end of the process. Although marvelous to behold and apparently intricate, it was the result of the very first experiment, and it did its work not only well but every time. It took the inventor but two months to reduce the mental invention to the physical; but to complete the mental invention, and to experiment with all the movements in the mind, assisted by pencil and paper, occupied the larger portion of a year.

Communicating With Light House

Now that the subject of submarine telephone cables, and their future possibilities, is being so freely discussed, it is interesting to know that the cable which has been laid by the pilot authorities in Finland, between Hanzo, the most southern point of Finland, and a light house two and one-half mile from the coast, for telephonic communica-

tion, is working per/ectly.

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Cutting the Diamond The operation of cutting the diamond comprises three phases; splitting, shaving and polishing. All crystals possess the quality of easily cracking in certain directions; in the diamond there are three principal and very distinct directions, without counting several secondary ones, and cleavers or splitters call these the threads" of the stone. A good workman always knows where to find the thread, and this ishow he does it: The diamond to be cleaved is fixed in a convenient position at the end of a short stick by means of cement; then to another baton, and by the same process, is fastened a sharp diamond. Taking in his right hand the baton bearing the sharp point, and in his left the one that holds the diamond to be cleaven, he rests them at the middle on a box which is firmly screwed down to his table, thus produ

Blowers for War Ships.

these machines from an American firm, and it has now sent for another large consignment of the most powerful machines made.

New Cure for Gout

On the authority of the Matin, of Paris, it is stated that Mr. Edison has discovered a new

cure for gout, which consists in the simul-taneous use of lithine and electricity.

Stopping Machinery.

A most ingenious application of electricity

has been made to the machinery dealing with

cotton in what is called the "sliver" form. A

most important thing in connection with this

process is that the frames must not be allowed

to work, even for a moment, with one or more

of the slivers broken, otherwise the count o

been devised. The latest and most effective is an electric stop motion,

and to such automatic perfection has this mi

avoid all risk of this all manner

Miss Weed argued that a fancy photograph is not a portrait any more than a fancy painting, and the the photographer in this work is just as much at liberty as the painter to carry out his artistic taste. But, while he can-not make such decided alteration in his model as the painter, he is entitled to use any and every means in his power to make his picture a success. A painter often alters entire features in a face, or decidedly changes the figure, and that is considered perfectly legitimate. In purely fancy work the photographer should be permitted the same privilege without question, but with portraits pure and simple, the likeness should be thought of first; that is the main thing. An industry which promises to attain very considerable dimensions is the manufacture of the electric blower, which, started not many months ago, is now rapidly growing. This apparatus was primarily designed for use in dynamo and engine rooms of steamers and other places where the space is thing. limited and where at the same time rapid limited and where at the same time rapid and thorough ventilation is abso-lutely necessary. Owing to the extreme compactness of the blower, 'it may be placed in the smallest room, and proves a most powerful exhanst. It was speedily seen that such a device was invaluable on war ships, and its installation on the Baltimore was soon followed by its adoption on nearly all the modern war ships of the United States Navy. Notiong ago the Italian Navy ordered some of these machines from an American firm, and it

Cement Improved by Salt Water.

An important series of experiments has been carried out to determine the effect of salt water on cement. The results are somewhat revolutionary in their tendency, since they appear to show conclusively that instead of being harm-ful, neutral or variable in its effect ou cement, sait water is positively con-ducive to the strength of all ce-ments, with the exception, perhaps, of one or two special brands of minor importance. In every case where sea water was used a corre-sponding test with fresh water was made. In the salt water tests sea water was used both for mixing the cement and covering the briquettes while in water. Each series of tests was made

while in water. Each series of iests was made as nearly as possible under the same condi-tions. The results proved that in every instance, save one, cement used with sait water is much the stronger. The establishment of this fact will certainly prove a boon to engi-neers working along the sea shore, as they can use sait water by preference, instead of avoid-ing its use, as has heretofore been the custom. If the results attained are eventually received with confidence by engineers, it is guite possi-ble that sait may be added to cement mortar on important works not adjacent to sea water.

Emulsifying Oil for Painting

the yarn would become irregular, and to A well-known manufacturer claims that the only proper way of making a ready-mixed paint in which there is a considerable portion valuable and complicated appliances have of white lead and zinc white present to keep indefinitely, is to emulsify the oil. This pre-vents the chemical action which the painter knows as "fatting," that is, prevents the form-ation of that particular kind of lead soap which will not dry. chine been brought that if one of the delicate

chine ocen brought that if one of the delicate films should chance to break the frame would instantly stop dead. When the sliver is passing between the two iron rollers it necessarily keeps them apart, but when the cotton breaks they come together, and thus an electric chr-cuit is completed, to which the current is sup-plied by a small magneto-electric machine. Another equally simple motion is providing for stopping the frame when the can is full. A Station Indicator The device for indicating the names of sta tions in such a manner that passengers on railway cars can at all times be saved any anxiety

Speed in Ballway Travel.

on various lines some time ago, has shown it-self so well adapted for its purpose that its genself so well adapted for its purpose that its gen-eral adaption in every passenger car on the Grand Trunk system, both in the United States and Canada, has been decided upon. A nicely finished frame of polished wood, at both ends of the car, contains a num-ber of thin iron plates, painted with the name of stations in the order in which the train passes through them. As each station is passed, the conductor pushes a lever on the indicator, a gong sounds and the previous plate drops, expressing the words: "The next sta-tion is —..." This is repeated after every sta-tion, so that a passenger has only to look at the indicator to discover at any time the name of the town or city which the train is approach-ing. Prof. Thurston, in discussing the possibilities of speed in future railway travel, states as his onviction that where rallways are carrying large numbers of passengers on short routes, as as on elevated roads-where, if ever, we may reach enormously high speeds-the electric mo tor, or some advance even on that latest marvel of invention and engineering, must come into one. Heat, light and electricity will then con-spire in that coming revolution, which shall combine for us the speed of the bird, the com-forts of home and the safety of a hermit's cell. And what must come will come.

Transmitting Pictures Electrically. Not many months ago a new system of sent

ing pictures by telegraph was described in the electrical journals. The principle of this pro New York Sun.J From Kansas, the mighty mother of alliances, comes news of the formation of a Grand Lodge of the Knights of Reciprocity, the cess was the division of the picture to be se nto squares, each square being numbered to Into squares, each square being numbered to correspond with a paper similarly prepared, and to be used at a distant point, to be drawn upon according to the direction sent from the trans-mitting station by the number communicated. While applicable to pictures having only straight lines, this process was not found feasi-ble for the transmission of portraits. For this purpose an improved method has been sug-cested, by which it is claimed that an exact re-production in chiaroscure of the critical Plumed Knights of Beciprocity, we suppose.

They Might be Inoculated.

New York Press.] The baccillus of lockjaw is said to have been scovered, but it is the lockjaw that the country wants given to the upending nakers in Congress.

Very Likely.

ventures its commentary upon this fact sat-isfies us. This, I say, is the part of the knife, about obtained, while it facilitates their regular for-Christian truth about salvation which cenmation. In the original experiments the op-eration was completed in 24 hours, but the re-action is now extended over several months, with the result of obtaining much larger ters about Good Friday, and adds its empha-

anyone can teach about how we may be saved. It comes into our thoughts most emphatically at another time of the Chris-

tian year than this. It centers about the death of Christ, This revelation of the

bearing of Christ's death upon our sins is very difficult to understand. Indeed it is

so difficult that, seen after pretty nearly 1,900 years of study, men have not really got

I, sow years of study, men nave not really got any further than just the simple fact. Christ died to save us from our sins. That we know. And beyond that we know abso-lutely nothing. Not a single theory which

sis to the joy of Easter. That is not the whole of the Christian with the result of obtaining much larger crystal*. As much as seven pound weight of rubies is said to have been obtained at a single operation. Although the crystals are still rela-tively small, they are sufficiently large to mount, which was not the case in the first es-says of the inventors. truth about salvation. That is not the part of it which comes into our hearts at Christmas. We remember to-day how He who died at last to save us from our sins was born, and taking our nature upon Him lived our human life, to save us from our

sins, to give us guidance in our temptations, to give us consolation in our sorrows. Christ saved us not only by His death but by His life.

It is significant, indeed, that Christ came New York Press.] as a little child into the world. Think how infinitely that widens out the application of His example! At every step along the way, we may ask ourselves, How would Christ have met this difficulty, or encountered this temptation, or improved this opportunity? From childhood up Christ's life is lived beside our own.

THE EXAMPLE OF A LIFE.

That is one of the things that we want. We want somebody to show us how. We want somebody to go ahead before us and give us guidance and the inspiration of his example. We all recognize the help we get from good men and women who live beside us, in whose eyes a light dwells which brightens the lives of all who see it, whose lips speak wisdom, whose character uplifts our character. These good people are the saviors of their friends. He who was born on this day was and is the Savior of the world. He is just that which we see in the saints and heroes of our common lives magnified and multiplied in-finitely. It does help a man in the force of finitely. It does help a man in the face of

with again. He role into bed at 1 or 2 o clock and wonders with he cannot sleep. There are a few old-fashioned men in New York who still insist on the country habit of eating dinne: in the middle of the day and supper at 6. I know some of them, and they havn't an ache or a pain. But the other fellows are troubled with headaches, kidney troubles, liver difficul-ties and all sorts of disorders. spiritual danger to think about the purity and truth of Christ. It does give a man courage to bear misunderstanding, to re-member how Christ was misunderstood. It does uplift us, it does ennoble us, it does save us, to think of Him. Sometimes it all seems dark about us; we

look up and there is no such light in the sky as the Bethlehem shepherds saw; we listen for some revelation out of heaven, and the sky, which echoed with angelic voices 1,900 years ago, is dumb. We want to know what the truth is. And so many people clamor this, and so many that, and

everywhere are questions without any answers, that we wonder if there really is any truth anywhere, or if we can ever find out what it is. We are tempted to take the easy way of the Apostles and say, "I know not." And then we turn to Christ. We go to Him as the wise men went, confessing that we are not wise men at all, but that He is wise, and say to Him we bring our doubts and our darkness and ask Him to give us light.

TO BE THE LIGHT.

And that is what Christ came into this world for-to be the light. There is no truth which we need to know, but He will as to their whereabouts, which was put on trial tell us. There is no question to which we really need to have an answer, but He will answer it for us. He who on Christmas Day took up our life and began to live it, was the Master. In spiritual things, in knowledge of God. in knowledge of the heart of man, insight into heaven, He was the Masier. What He said, He spoke out of a mind and heart before which we can but bow in reverence. What He spoke is true, be-cause He spoke it. He who knew so much more about these things than the most of us can ever know, said so. It is enough, And so we come to Him, if we can only trust Him that much, and He who saves us from sin, saves us from the darkness of doubt.

And so it is in sofrow. We cannot all be glad even on Christmas Day, Christmas -Two hunters were paddling a cance or Poke Moonshine Lake, Me., one night recently, when one of them, in the dark, thought he saw a rock ahead. His companion in the stern, who had been warned to sheer out, exclaimed that it was something alive, and, grasping his rifle, fired two shots and killed a fine buck which are anight found tables. oomes, and men and women are in want and in the pain of sickness, and in the grief of loneliness just as at other times. Christ did not teil us why. But He did tell us that God, our Heavenly Father, who ordereth all which was quickly towed ashore

things in heaven and earth, who ordered at things in heaven and earth, who knows the end irom the beginning, and can distinguish —as we cannot—between the better and the worse. Christ did tell us that God, who knows what is best, does what is best almy Argus: Calvin S. Brice was at the Reform banquet lass evening. Fine re-former, that man Brice!

PROGRESS IN FINE ARTS.

streets about 10 o'clock at night, and their Since Peru's independence from Spain names are yelled out by the newsboys with and the general emancipation of the minds of her people, poetry, painting and music all the vigor of New York gamins. Late in the morning carriers deliver the same edition have received great attention from the imaginative but somewhat frivolous youth to regular subscribers. As an index to the state of trade, it may be mentioned that the of the country. But the truth is that the newspapers have about two pages of ads to one of reading matter; but I am told that the modern society of Lima is too dissipated and artificial to afford very promising soil for the growth of extraordinary genius in rates are very jow and the merchants require editors "to trade out" the amounts.

any direction. The beneficent institutions of Lims, though not numerous, are certainly very creditable. Prominent among them is the "Sociedad de Beneficencia," which was Said a St. Louis druggist: You ask me why inquired your address when writing out the prescription for your cough. The reason will established in the year 1825, and has the general guardianship and supervision of all the public charities. It also has the direction of the bull ring, the cock pit and the lottery, from which popular amusements it derives a considerable share of its revenue. Private individuals frequently subscribe to

prescription for yoar cough. The reason will at once commend itself to every sensible mind, and is simply this: There have been cases in-numerable where lives might have been saved had the number of the residence of the party for whom the prescription was put up been known to the druggist. For, as we all know, mistakes are made even in the most reliable drug stores through the carelessness of clerks. Not long ago a druggist found, on returning from supper, that a bottle of strychnine was on the counter and asked the reason why. The clerk replied that he had just been putting up a prescription, and was herrified when he found that he had made use of strychnine in-stead of some less harmful drug mentioned in the prescription. The frightened young fellow did not even know the name of the person who had come in for it, or for whom it was in-tended, and after hours of search on the part of the distracted druggist, the unfortunate vic-tim was at last traced to his home, but too late, for the first dose had killed him. That is why I place the name of the patient both on the prescription for the druggist and on the stud let in my prescription book. it generous sums; matrons occasionally get up a swell "charity ball," much as the same thing is managed in the United States and other parts of the world, and sometimes the belles and beaux of the city give a grand concert for its benefit, principally with the music of mandolins and guitars, in which they excel.

THE FEMALE MILK PEDDLER. Here comes one of the sights of Lima, a emale milk peddler, who sits astride mule, with a bare foot and a tin can dangling on each side of the saddle. These "milk men" in petticoats neither toot a horn nor ring a bell as do their northern broth-ers; but riding from house to house, they -New Orleans has just shipped her largest stop at the door of each customer and give a peculiar shrill little scream, which the servcargo of cotton. It amounted to 12,250 bales, valued at about \$612,000, and was carried away valued at about \$612,000, and was carried away by the steamer British Queen. The largest cargo of cotton that has ever left a United States port consisted of 13,700 bales, which was taken out of Norfolk, V.a., in March, 1888. The weight of the bales in that cargo fell consider-ably short of those comprising the cargo of the British Queen, hence the actual difference be-tween the two cargoes was less than appears by the actual count of bales. ants instantly recognize. The quart meas-ure of this one is a gourd, just as it grew, except that a hole has been cut in one side and the seeds scraped out; but whether naure made it the exact size to contain what the law recognizes as a quart, we need not trouble ourselves to inquire, if the customers do pot. Indeed, that form of measurement is not so much in vogue here for liquids as by the gourdful, or, still more commonly by

the bottleful. Manufactured tinware is dear, and the Manufactured tinware is dear, and the people are noor, but everybody drinks wine, consequently glass hottles, such as or-dinarily contain claret, and hold perhaps three pints or thereabouts, abound. Many dealers have a fixed price on milk and other fluids for the "bottleful" and the "gourdful," who would be puzzled to know what it ought to bring by the quart or pint. Trinidad's Future. Trinidad's Future. Trinidad's future. Trinidad's future. Trinidad's future.

short, almost everything imaginable except dress goods. He introduced the first telephones into Peru and they are now in general use. He also introduced the first am

teur photographic outfits. BUILT AN OPERA HOUSE.

ways of American journalism. Most of the papers make their first appearance upon the

High Cheek Bone

Pretty cheeks are a rare finishing touch,

an otherwise handsome face being often

FANNIE B. WARD.

It is a well-known fact that better photos are obtained through the smaller telescopes During the late war Mr. Baeigalupi purthan through the big ones. Photographing stars, especially the small ones, is tedious work, as in some cases the exposure must chased two vessels, one of American make called "Young America," the other English, named "Union," and fitted them up as men last for several hours. During all that tim of war. Through their agency and by the help of the "Monitor" he managed to make the plate or telescope must be moved so that the image of the star will continue in one another fortune in coal and pickled pork. Last year he built an opera house on the place. The exposure for a star of the sixteenth magnitude is two hours, and only spot where the old theater was burned. It is capable of seating 2,000 persons, and it is one at a time can be secured unless the stars happen to be of the same magnitude, so that one of the neatest, daintiest and most com getting clusters is particularly long and tedious in its operation. In procuring the photographic star pictplete little theaters on the continent. Its builder loves to boast that he put it up in 60 days, exploying 75 workmen, and personally

ures, often what is known as the trailing process is followed, that is, the plate is ersuperintending the use of every inch of 150,-000 feet of lumber. Mr. Bacigalupi's main posed to the star, and then no attempt is business, however, the others being mere outgrowths and side issues, is that of a made to fix the image in one place, but it basses along over the plate, making a trail. printer and lithographer. In his establish-ment ten Gordon presses, two large Campe presses, and a lithographic press, all moved by the only gas in Lima, are kept constantly A number of trails can, of course, be got on plate, and then studied out and ured afterward.

LENGTH OF THE EXPOSURE.

going. His "Peru Illustrado" has been a great The exposures for planets are short-that hit. The other newspapers of Lima are edited with considerable ability, and conof a sun spot taken in Paris was about as lightning-like as possible, the shutter being tain telegraphic news from all parts of the stached to the strongest kind of a spring world, besides choice selections and the The exposure for the moon takes about a effusions in prose and poetry of local literary lights; but their editors have a quarter of a second, and that for Jupite bout four seconds. grandiose and flowery style, in wide, if not ludicrous contrast to the terse, plain-spoken

People who visit the Lick Observatory often ask very remarkable questions in regard to the telescope as well as to the meth-ods of photographing the stars. The covering of the observatory is made of three-inch steel plates, and, of course, is arranged so that a plate can be moved tomallow the telescope to point to any part of the heavens. A visitor who happened into the ob-servatory when all the plates were closed asked most earnestly if the steel plates were transparent. A frequent question asked in regard to star photographing is if a flash light is not used to make the exposure. There is an old saying that intelligent men are the first to lose their wits when entering an astronomical observatory and seem to forget the simplest laws. Many cases of this have been noticed at the Lick institu-

spoiled by high cheek bones and thin or STOP at the Hollenden, in Cleveland. flabby cheeks, says the Metropolitan. The American and European plans. SU

Mms. A. Ruppert's world-renowned bleach is the only face tonic in the world positively removes freekles, moth pe blackheads, pimples, birthmarks, eczen all blemishes of the skin, and when a

or th

63 and 204, Pittsburg, or sent to eccept of price. Sold at \$2 per

ion, \$5. Send 4 cents pe

high cheek bones can scarcely be softened unless the cheeks are made firm and plump. MADAME A. RUPPERT Contrivances worn in the mouth for filling out the cheeks have been resorted to, but **Complexion Specialist** scarcely without great discomfort; and the only reasonable way of accomplishing the desired result is to take on more flesh and to study carefully the dressing of the hair. In some instances, however, there will be a superfluity of flesh where it is not wanted,

while the cheeks persist in remaining thin. A firm, round cheek, with a slight dimple showing with every smile, is a most at-tractive charm, and the sister of a young gentleman who had a pencil accidentally thrust through one check in boyhood, leav-ing an indention that was quite a natural looking dimple, was wont to remark that she really wished it had happened to her, as she would have thrust a pencit through the other cheek and felt abundantly repaid by her increase of beauty. But her enthusiasm did not reach the

point of decorating both cheeks herself. Bathing the cheeks two or three times a day with weak ammonia water in which a small piece of alum has been dissolved tends to make the flesh firm and smooth. The com mon practice of pressing one check into the pillow while sleeping is very injurious te beauty of outline, and it also produces wrinkles,