greatest breadth of the ram, or nearly one half greater than can be obtained by the parallel arrangement.

The simplicity and numerous other advantages resulting from this double-diagonal construction, will be at a glance appreciated by all familiar with the operation of these machines.

The valve gearing is of the utmost simplicity. A rock lever or bell crank is pivoted on a stud in the frame, one arm of which, A, is connected by three links to the valve spindle, B, and hand lever, C. The other arm, partially hidden behind the guide plate, rests lightly against the face of the ram, but entirely independent of it and not attached in any way. An incline is planed in the full length of the ram (which is longer than the stroke of the hammer), in order to operate this rocker arm when the hammer is in motion.

The valve is perfectly balanced. Its weight, and that of the links resting on the horizontal arm of the rocker, hold the vertical arm against the inclined plane in the ram.

The hand lever serves to alter the relative position of the valve to the piston, so as to work it by hand when required, and to adjust the stroke to the thickness of the forging. By it the force and length of the stroke can be changed in an instant, a single blow can be struck, the metal can be squeezed upon the anvil as long as desired by the force of the top steam. The hammer ram can be raised to the very top of the stroke, held there as long as desired, then brought down gently or violently, as preferred, and by a slight gesture sent up again, etc.

A thousand blows can be struck all alike, or each one can be varied at will. It is always in gear for self-acting motion, while never out of gear for hand working. The two are parts of each other and inseparable.

The working of the self-acting motion is as follows: When the steam is turned on the hammer rises, the incline plane pushes outward the vertical arm of the rocker, which, of course raises the horizontal arm and with it the valve. The position of the hand lever determines at what point the steam is reversed from below to above the piston. When this happens the hammer descends, driven by the top steam, while the valve has only its own weight to lower it and that of the links and horizontal arm of the rocker. But this weight is partly counterbalanced by that of the rocker's vertical arm, and thus the descent of the valve is momentarily delayed—the ram gets the start of it and strikes the anvil before the piston takes steam under it.

A peculiar feature about it is that as the throttle is opened admitting more steam, while the force of the blows is increased in a regular ratio, their rapidity remains about the same or rather diminishes, so that in actual practice it runs rather faster when striking light blows than when striking heavy ones. This new feature gives time to turn the metal on the anvil, and avoids the complaint made against almost all steam hammers of the self-acting kind; namely, that when a full head of steam is turned on they run away, and the full power of the machine is therefore unavailable.

The *rationale* of it is, that as the steam is turned on, the up stroke quickens and gives more momentum to the valve and links upwards. It takes them a little longer to recover from this momentum and fall. Hence the slower blow and the greater force of it.

By the arrangement of the gear, the speed of the hammer can be varied while running from the slowest dead-blow to the quickest "pick-up" that the most insatiable steel maker could desire.

As the rocker glides easily upon the incline plane during the whole up stroke, and, at most barely overtakes it on the down stroke, no jar can come upon any part of the valve motion, nor can any lost motion affect it as the wear is constantly taken up by the weight of the parts. They must rest upon each other during the up stroke and they fall themselves of their own weight.

These hammers are manufactured of different sizes from 100 pounds up to 2,000 pounds. Some are made with double and some with single standards or frames. In the smaller sizes the hand lever is dispensed with, the links are differently situated, and a simpler arrangement effected. They can be seen in operation at the manufacturers' works, N. E. corner Twenty-fourth and Wood streets, Philadelphia, Pa., where any further desired information can be obtained.

[For the Scientific American.]

YAUPON TEAS OF CAROLINA---MATE OF PARAGUAY.

BY PROF. H. E. COLTON.

All along the Atlantic coast, south of Norfolk, grows an evergreen shrub tree, but in the greatest luxuriance and extent in eastern North Carolina. The people there call it Yopon, and from time immemorial its leaves have been used as a tea. The Indians thus used them, and the people of the colony planted by Sir Walter Raleigh, and their successors learned its use from them. Lawson, in his quaint history of the Carolina colony (1707), states that every spring the Indians would come down from the hill country to fish, and that it was also their custom to prepare a strong drink from the leaves of the "Ebpen" shrub, whereof they drank until they were made sick, and purged and vomited until their systems were cleared of all foul matter; thenceforth for the year they were free of sickness.

This plant belongs to the Ilex (holly) family, and is classed by some *Ilex cassena*, by others *Ilex euponia*. There are two varieties; one bearing a red berry close to the main stem of the branch. This has a small leaf about one inch in length; the other has no berry, and the leaf is longer. In the rude parlance of the country they are classed as female and male. The leaves of the latter are those usually used for tea. In South America there are two similar shrubs, one classed *Ilex Paraguayensis*, the other *Ilex Songonha*. It has ever been our opinion that they are the North American plant altered by climate and soil, and careful investigation confirms us in this opinion.

The Yopon contains tannin and a volatile essence, but probably a smaller proportion of the first than Chinese tea. The Paraguay tea has about the same characteristics. Medicinally, the yopon is a sedative sudorific, and anti-febrifuge, and possesses greater invigorative powers than any Chinese tea, at the same time it leaves no feeling of exhaustion either in the system or the stomach; it is aperient, and, when taken in very strong and large doses, produces vomiting. These are exactly the qualities of the Paraguay tea. That tea is eagerly sought for and used by the inhabitants of South America, and is by some thought to possess properties equivalent to both bread and meat. Laborers required to undergo severe exertion are said to accomplish more work by its use than by the use of any other beverage. It is a well-known fact in eastern North Carolina, that the laborers of that section, especially raftsmen and sailors, find more nourishment and refreshing qualities in the yopon than in any of the imported coffees or teas. Captains of the coasting and sound vessels have told us that it had all the exhilarating effects with none of the bad consequences of spirituous liquors.

The *Ilex Paraguayensis*, from which the Paraguayan mate, or tea is made, grows in the interior of Paraguay and Brazil to the extreme hight of fifteen feet. Its full-grown leaf is from 2½ to 3 inches long, serrated, with flower and fruit on the stem at the foot of the leaf. The bark has a smooth surface and a grayish color. The tea is gathered mostly by the Indians, employed by contractors. The leaves are dried in rudely constructed kilns, then powdered and put in skin bags for market. The trade is known to amount to $2,000,000, or more per year. It is used mostly in the powdered state. A quantity of this, greater or less, according to the desired strength, is put in hot water and allowed to steep a short time. It is drunk through a tube called *bombilha*, from a cup with a cover. With ice it is a favorite drink in summer, even among the higher classes. The covered cup is used, as on exposure to the air the tea turns very dark—this is especially the case in strong decoctions.

The yopon, or, as Lawson calls it, yaupon, grows near the coast on a poor sandy soil. It is claimed that there are several distinct species of it, but we think the distinction is due to difference of soil. It is a beautiful evergreen, and is cultivated for hedges on some of the coast plantations. We have been told that it is also found on the Gulf coast, and we know that it is cultivated as an evergreen in some of the gardens of Louisiana. It grows readily 40 or 50 miles inland, but efforts to cultivate it on the upland red clay soils have not been successful. The extreme length of leaf is nearly two inches. It grows wild in large thickets, but nearly every plantation and farm has what is termed a yopon nursery. Hogs and cattle are very fond of the young tender sprouts and leaves. To prepare the tea the leaves and small sprigs are picked indiscriminately. They are put in a wooden trough or mortar, and chopped with a spade or ax. They are then placed in a covered pot over a slow fire, the cover occasionally removed to stir the leaves. When they begin to smoke, which indicate sthat they are properly dried, they are taken out and packed way for use. Some give them a further drying in the sun; others sprinkle salt over them while in the pot—this no doubt from a foolish notion that it helps to keep the tea. If carefully prepared and then tightly barreled, it retains its proper aroma and good qualities for several months; but, like all teas, the package should be air-tight to keep for any considerable length of time.

The trade in it has never been of any consequence. A small quantity was sent to Norfolk and Baltimore, and the captains of the coasting vessels bought small lots for their own use. During the fishing season on the Albemarle and Pamlico sounds a great deal was consumed. The price was from 75 cents to $1 per bushel; about 5 or 10 cents per pound.

The leaves can be gathered at any part of the warm season, or if one chooses in winter; but tea gathered in the spring is considered the best. The made tea turns dark on exposure to the air; if very strong, this takes place almost immediately. This has been attributed to the roasting in iron pots, but the same effect occurs in the South American article, and hence it may safely be assumed to result from some chemical property of the tea itself. From this peculiar change of color it was called black drink by the Indians. It is erroneously stated by some botanists to have been used by the Creek Indians.

The Tuscaroras were the great tribe of the Carolinas, and it is in North Carolina that it chiefly grows, and in which the early historians mention its use. The name is supposed to be a corruption of Yeopim, from a tribe of Indians thus named, who lived in the section where it grows most luxuriantly. The supply is practically inexhaustible, and the growth of the tree can be indefinitely increased, as it grows in its native soil from a sprig set out in early spring.

We, perhaps, have not made out a clear case of identity between the yerba, or *Ilex Paraguayensis*, of South America, and the yopon, or *Ilex Cassena*, of Carolina. My readers must remember that the former grows in a land of perpetual spring, on a different soil, while our Carolina shrub grows in a comparatively poor soil, and has to meet the rough breath of many a northeaster. We are sustained in our opinion of the identity of the two plants by the Rev. Dr. Hanks, in his "History of North Carolina," Vol. II., page 218; also by Messrs. Kidder and Fletcher, in their "Brazil and the Brazilians." They state that the town of Paranagua alone exports every year a million dollars' worth of mate. I quote the following, with which they close their article on the subject:

"He found in this out of the way port of Brazil an American woman engaged in the delightful art of preparing *peijoes* and *toncinho* (pork and beans) for the natives and foreigners who patronize her establishment. In conversation with her in regard to the maté, she exclaimed, 'Why doctor, this is the same truck we use in Carolina to make tea.' Here was a most striking confirmation of the true conclusion of science."

Any person who will turn to this work will find still stronger confirmation in the general description of the Paraguay shrub, and the preparation of the tea. It is a matter to be regretted that the botanical characters of either have not been thoroughly investigated. We do not claim exact identity of the plants botanically, but the same chemical qualities of the prepared tea. We have stated our belief as to the alteration of the plant by soil and climate, and all are well aware that nearly every plant and tree is subject to such changes under such circumstances. The use of tea and coffee is an acquired taste, and in fact, perhaps all tastes are acquired, except that for the mother's milk; the use of yopon may be distasteful to some at first, but we think not more so than their first taste of Chinese tea. It has been said that any drink which affects the nervous system will become a popular drink. If this be so, yopon must sooner or later take a high place among infused beverages, as it has sedative qualities superior to any of them. At the risk of being laughed at for want of aristocratic taste, or for preferring a thing entirely American, we say that we prefer it to any tea, coffee, or stimulating or sedative drink that exists; and we know of remarkable instances of its beneficial effects on the decaying systems of the aged, and the shattered nerves of the feeble. One old lady used to tell us "Why, laws me, it's the greatest truck! it's kept me out of heaven these twenty years!"

Even admitting that it has no qualities superior to the best Chinese tea we get, only that it is as good, the question arises, why cannot this tea be made a new article of trade and commerce from the South? If the people there will not enter this new field, let Northern capital and enterprise occupy it. Once introduced, a ready sale might be found for it at 25 cents per pound, and if more carefully prepared, as high as 50 cents. It would be not only a source of profit but of benefit, and a blessing to that large class of our population who now drink those vile, low-priced adulterations called coffee and tea. The cheapness of the article detects the fraud. But if nature must have some such beverage, why not the truly beneficial yopon of the Carolinas?

[For the Scientific American.]

PLATINIZED LOOKING-GLASSES.

BY C. WIDEMANN.

NO. 1.

A long time ago the French sanitary commissions had founded a prize to reward the successful inventor who could obviate the use of mercury in applying tin to looking glasses. The consumption increasing daily, the diseases caused by the absorption of mercury have increased in proportion. Many engineers had devised a remedy for these evils by successful ventilation in the extraction of the ore. The manufacturers themselves, in view of the disorders and sickness caused by the use of mercury in their works, encouraged every attempt made to obviate it, and, in 1836, the celebrated chemist, Liebig, had already called the attention of scientists to the application of silver on glass.

Encouraged by some successful experiments, Messrs. Drayton, Petitjean, and Tourasse, and lately, Mr. Brosette, obtained at last industrial results.

Little by little this operation was simplified, and is now conducted on a large scale. I shall describe the process used at present as giving the best results.

In order to obtain a silver coating on glass so as to obtain a reflecting surface, two liquids are used.

First solution—100 grammes, nitrate of silver; 62 grammes, liquid ammonia, from 870° to 880° density; 500 grammes distilled water.

This mixture is filtered and is afterwards mixed with 16 times its volume of distilled water, in which 7 grammes and 50 centigrammes of tartaric acid have been added, dissolved in 30 grammes distilled water, care being taken to stir the whole violently. This forms solution number one.

Solution number two is prepared in the same way, and varies only in the proportion of tartaric acid, which is increased to 15 grammes.

The operation of silvering is carried on as follows:

After having carefully cleansed the surface of the glass to be coated with very fine tin pulp and water, applied with a chamois skin, it is then washed over and left to dry. It is then rubbed with a dry chamois skin and with a fine rag. The glass is then laid on a wooden grate, and all the dust that might have fallen on it during the former operations is removed by an india-rubber cylinder dipped in distilled water. The glass plate is then laid upon an iron table, heated by steam to from 40° to 50° Centigrade; this table is covered with a varnished or oiled cloth. The plate being placed horizontally, as much of the solution number one is poured over it as the capillarity of the glass will retain (say almost 3 millimeters thickness) without running over the sides. In about 7 to 10 minutes the deposit takes place; and in about 15 to 20 minutes afterwards this part of the operation is at an end. The plate is then lifted upon one side and washed with a chamois skin, and luke-warm water is poured over it in order to remove the non-adhering dust which may have fallen during the process, which occupies about 25 minutes. The plate is then immediately replaced in the horizontal position, and solution number two is applied in the same way as the first. In 12 or 15 minutes after the operation the application

is completed. The plate is washed carefully and dried, and a protective coat of paint, composed of minium, siccative oil, and spirits of turpentine is applied. After 4 or 5 hours the mirror can be delivered to the buyer. Galvanoplasty can be applied to coat this silver with a surface of copper as a substitute for the paint.

It has been noticed that an old solution of tartaric acid acts with more rapidity than a fresh one.

As it is, this process is still far from satisfying all requirements. The metallic surface of the silver is finer than that of the mercury tinning, but very often the operation fails without any assignable cause for the accident. Another great inconvenience is the action of the hydro-sulphureted vapors blackening the shining surface of the silver and destroying its reflecting property in a very little time. The locomotive headlight reflectors, manufactured by this process, being in constant contact with the smoke of coal, are generally destroyed with very great rapidity, even when protected by the minium paint and the copper coating.

As these defects manifested themselves, Mr. Dode, who for a few years had devoted his time and a small fortune to this important question, announced that his researches had met with success.

For twenty years this inventor has pursued his work with perseverance. Then the idea struck him to apply platina on glass. It is already known that the chloride of platina renders immense services in the arts. By its use porcelain manufacturers already coat wares requiring a metallic luster intermediate between silver white and steel gray. In order to obtain these results a concentrated solution of chloride of platina, mixed with essence of lavender, is applied on the varnish of the china to be coated. The object is then placed in the oven, very soon the platina appears with its metallic appearance, covering all the places where the composition has been applied, hiding the original color of the object, and possessing a brilliancy equal to that obtained by the burnisher.

It was a Prussian chemist, Klaproth, who in 1793 made this process known for decorating porcelain wares. Up to the past year platina had only been applied to decorate china and the application to coat glass in order to obtain a reflecting surface is due to Mr. Dode. Either the front or back of a platinized mirror is a perfect reflector.

Mr. Dode has adopted this metal as the one offering every advantage as it resists all the actions which destroy other metals. At first Mr. Dode platinized his glasses on the posterior surface; to this end he dissolved the platina in an equal mixture of nitric acid and hydrochloric acid. This solution evaporated to dryness was treated by diluted acetic acid; in this solution a certain quantity of amylic alcohol was added. The latter substance precipitates the platina and thus separates it from its aqueous part. The precipitate was then washed and this composition was then applied in a very thin layer on the back of the glass in the usual way. After a little while, exposing this glass in a dryer heated sufficiently to evaporate all the traces of amylic alcohol, the glass possessed a perfect brilliancy; but, unhappily, this coating had no more adherence to the glass than the old amalgam, and a varnish was necessary to prevent accidents that might happen by friction.

[For the Scientific American.]

GUATEMALA, ITS INHABITANTS AND PRODUCTS---ADVICE TO EMIGRANTS.

BY I. CANTINI.

Since the great civil war of America, the emigration from the Southern States to Central America, and especially to Guatemala, has been quite considerable, although the great expectations of the immigrants were not always realized.

Guatemala, which, under the government of its actual president, General Xerna, has enjoyed several years of peace and quietude, blessings which are but little known throughout the Spanish American countries, has been chosen by many for their new adopted country; these people having bought land and property with the intention of carrying on the sugar, coffee, and tobacco culture. Indeed, the laws of that state have, ever since the reign of Rafael Carrera, been so much in favor of foreigners, that there are several instances on record in which natives have acquired the citizenship of some other state, and thus lived as foreigners in their own country in order to enjoy the privileges of such, and to be exempt from military and other duties.

These advantages are, however, of value only as long as the country is not in a state of revolution; but if the latter should take place, it would be fortunate for the settler if he could pack up his coffee or sugar plantation and leave the country, for he will find but little protection on the part of the government from the herds of roving outlaws and revolutionists who swarm over the country, and take or destroy all they can lay hold of. This fact the immigrant ought not to lose sight of

For some time past, and at present, peace and prosperity are reigning throughout the republic; and there is every prospect for a happy future. Providence has emptied its cornucopia in a full measure all over the country, and an improving civilization and cultivation combine to make it a most desirable country for immigration. Those who intend to settle down in Guatemala, would do well, if time and money will permit them, to take a look at the country first before they buy any land. Many have gone there with the intention of cultivating coffee, sugar, or tobacco, without any knowledge as to the soil or climate. They have almost all failed in their attempts, and some of them have left again in disgust, if not wiser, certainly much poorer than when they came

Traveling throughout these Central American states is not expensive, though not always comfortable. What we understand by roads here, is there an object of illusion, and what might be called a good cattle-path here in the North, is there termed a "camino real," a royal road. The mountainous soil and the tropical rains are two great obstacles to the building of good roads. The ascents and descents through the range of the Cordilleras are precipitous and dangerous, the roads rough and narrow, and the privations often great. These "royal roads" do not permit any traveling in vehicles, except in the immediate neighborhood of the larger cities. Mules and horses are the only mode of conveyance. Ladies, or even men sometimes prefer to be carried on a chair by an Indian. This mode of traveling is, however, not advisable to very lively or fidgety persons. Imagine yourself sitting on a common chair, the back of which is attached by a strap, made from the bark of a tree, to the shoulders and forehead of the Indian who is to carry you, and who weighs not more than a hundred and twenty pounds, while his burden weighs a hundred and fifty, and often more; and yet he will carry you for four or five hours successively. You must, however, sit perfectly still in your chair; you may take a look at the passing scenery, but without turning your body or even your head; never attempt to sneeze or cough, else you or your carrier or both together will lose your equilibrium.

The natives possess a great strength for carrying, yet their strength lies only in the head, shoulders, and legs, and never in their arms.

While traveling through the country you are often startled by the sudden appearance of a caravan of these bare-footed Indians, each one carrying a heavy load of maize, cigars, indigo, cheese, or some other article of their commerce. They always travel in single file, one closely following the heels of the other; it is the same whether they are on the narrow mountain path or on the wider "camino real." Should you happen to be in want of any of their goods—which is but too often the case, especially articles of food—you will in vain offer them double the price which they will get in the capital of Guatemala, or other large city they are bound for; they prefer to get less for it and carry the heavy load of four hundred and more pounds a few days longer on their shoulders, in order to go to a city and there have a good time or spree on the few shillings which they get for their goods. They spend all the money on the spot, and then return to their mountain villages, talk over the good time they had during their visit to the city, until another crop has grown, and then the same journey with the same result is made over again. Happy people! they do not care to accumulate riches.

The coffee sugar and indigo planters of the interior have the greater part of their products carried to the sea-ports by the Indians. Their imported machines and agricultural implements are mostly landed at Ystapa, the main sea-port of Guatemala on the Pacific coast, whence they are transported on carts as far as the roads will permit such travel, and then they are carried over the mountains by the natives in a journey of one or more weeks. The Pacific sea-ports are preferred to those of the Atlantic; the roads leading from the latter coast are steep and difficult to pass, especially during the rainy season, while the Pacific coast, or "Costa Grande," is more sloping and much better adapted to the coffee culture than the former.

An impulse is given to the trade of this state by an annual fair, which is held in January in the town of Esquipulas. It is a place of pilgrimage, not only for the states of Central America but also of Mexico, and even South America; it is a "Holy Sepulchre of Palestina," a "Caaba of Mecca." A large crucifix in the principal aisle of the spacious church is the wonder-working effigy which vouchsafes to operate in behalf of true believers; and more than 80,000 persons have been known to assemble, some to assist at the solemnities others to attend the great fair, which is held at the same time, as is the case in all Eastern places of pilgrimage. The church of "our Lord of Esquipulas," is very rich, as many thank-offerings are given by the penitents, and when the government is in want of money, the "Lord of Esquipulas" is ready to make a loan, if the conditions are favorable. Those who have committed some great sin are ordered by the priests to make the journey to Esquipulas on foot, and the hardships of a pilgrimage to Mecca cannot excel those of Esquipulas.

The approach to the capital of New Guatemala is, to the traveler, a most imposing sight. The road leads through deep mountain gorges, that remind us vividly of some scenes in Switzerland; as we descend the mountain ridge, we see far before us the extensive fruitful plains and valleys, with here and there a modest-looking, one story dwelling house.

The never-dying verdure of the tropics is particularly charming on these hights. Whoever travels through these countries must be a lover of the beautiful in nature, otherwise he will find but little compensation for his laborious journey. He certainly should not be a "gourmand," for all he finds to eat are eggs, tortillas, some country made cheese, and beans cooked with garlic, the national dish of all the natives. The frugality of the natives is exemplary, and the stranger is more or less compelled to follow their example, which he will also find is much better for his health.

The houses in the city are only one story high, and built to resist as much as possible the frequent shocks of earthquakes. The streets all bear a look of desolation; the windows of the dwellings all open into the spacious courtyards, after the old Spanish fashion, which imparts a dismal aspect to the streets.

Many foreigners have established themselves in this healthy locality, the temperature being greatly moderated by the cool mountain breeze Though the depredations committed during the revolution under Morazan and Carrera are still fresh in the memory of the inhabitants, yet they have recovered from their heavy losses, and hasten to support all means for the development of education.

The agricultural implements of the natives and their mode of working the ground are somewhat primitive yet, and those who bring any innovations into the country are often laughed at; or if the novelty secures the approval of the Indians, they never fail to show their veneration.

Coffee and sugar are the staple articles of their commerce. The cultivation of indigo, once the main product of Guatemala, is annually decreasing. The coffee crop is often destroyed throughout large districts by night frosts. As the traveler advances from the coast towards the interior of the country, and ascends the range of the Cordilleras, he quite forgets that he is moving under a tropical sky. The temperature is moderate, the nights even cold. Everyone is supplied with a coarse, home-made blanket. The natives no longer sleep in hammocks as they do in the valleys and along the coast, and woolen clothes are worn by almost everybody. The climate is exceedingly healthy and invigorating, and this combined with the products and advantages of a tropical region, make some parts of the Central American states a perfect paradise.

The many languages spoken in the provinces are a great annoyance to the traveler through Guatemala. Twenty-seven separate dialects are known to exist, which differ so much from each other, that the members of one tribe are unable to understand those of their nearest neighboring province. Spanish is, however, the language of the law and government, and those who are able to speak it can easily make known their desires throughout the country. It is necessary, when arriving at a village or town, to seek the hospitality of the priests or *padres*, who, always kind and obliging, are here not only the spiritual advisers, but also the inn-keepers, guides, and provision-dealers. A word from the *padre* has a wonderful effect upon the natives, when often not even the money of the stranger could induce them to move a step to get him something to eat, or to serve him as a guide. Hospitality is, nevertheless, one of their redeeming virtues, yet it is but too often only an idle word; the people are poor, they have nothing to offer, not even a shelter. If they have two ears of corn, the stranger is always welcome to one. They never think of laying up provisions, even when the climate would permit it; nature is so abundant that all the year round fruit and blossoms are beside each other.

Two crops of maize can be gathered within one year. The bananas, which are the bread and potatoes of the tropics, are always blossoming, growing, and ripe on the same tree. Meat is a secondary article; the beef is tough, though cheap. The price of a pound of beef never exceeds six cents, while pork is nine cents, it being considered a greater delicacy. To a stranger this latter meat is particularly disgusting here. It seems as if the pigs were more omnivorous in the tropics than in the North. There is an abundance of game everywhere, though not always inviting to those unaccustomed to such delicacies; for example, a dish of monkey, or a stew of lizards or iguanas. But taste and dislike are often out of question, and the hungry traveler must generally take what is offered to him. A most excellent quality of cocoa beans grow throughout the country, which are hardly inferior to those of the Mexican province, Tabasco. In many places cocoa is a general article of food, taken to allay thirst and appease hunger, both at the same time.

The climate of the west coast is much more preferable to that on the Atlantic side, where malignant fevers are often fatal to the natives as well as the immigrants. The natives mostly object to our mode of curing fevers by the use of quinine. They agree that the medicine may be efficacious in the northern climate, but that it is too heating to the body in a tropical country. Their theory is not without some good foundation, and their own remedies are certainly less destructive to the human system than those overdoses of quinine, taken by foreigners to break off the fever.

It is essential for those who wish to make that country their home, to carefully select a place most adapted to their constitution, and above all things, to lead a life adapted to the climate. The natives give much good advice to newcomers, which, however, is not always followed; such as never to eat any kind of fruit after sundown, and never to expose one's self to the night air. On the other hand, the stranger should never, in his good nature, permit himself to offer good advice to a native; a last remnant of Spanish pride does not permit him to accept it without feeling insulted.

Americans go abroad to see the antiquities of Greece and Italy, or the ruins of Egypt; they are perhaps, ignorant of the fact that they possess works of ancient splendor on their own continent, which are not only as interesting as those of Egypt, but also quite similar in their construction. When the wonders of Italy and Greece, of Egypt and India, have become a little more hackneyed, then the curiosity-seekers may begin to turn their steps towards the ancient palaces of Central America, the sculptures and hieroglyphics of which speak of their former grandeur and magnificence.

A GENERAL order promulgated by the War Department provides that hereafter no volatile oils will be issued or used for illuminating purposes at military posts, and all varieties of coal oil will be regarded as volatile. In general, lard oil will be supplied for issues of oil authorized for the necessary illumination of military posts.

IT is announced that all the disorder attending the strike of the workmen at La Creuzot, France, has been repressed by the troops, and that the strike is ended.