# DESERET EVENING NEWS: SATURDAY, JANUARY M, 1900.



How Fortunes are Being Made in Utah Out of Beets and Mines - A Visi to a Beet Sugar Factory - How the Planting is Done and What the Farmers Make -Beet Sugar versus Cane Sugar - Utah's Gold Mines-How Samuel Newhouse Made Millions Out of Copper - The Wonderful Silver Mines of Park City and the Rich Low Grade Ores of Mercur,

# annon norman annon an

Sait Lake City, Utah, Jan. 11 .-- I s is the valley of the Great Salt Lake, within a few hours' ride of Salt Lake we.000 pounds of white sugar this year. The beet sugar industry is increasing setories in a dozen different States, and twenty new ones have been erected his year. In Michigan alone eight beet rugar factories have been constructed; there are new factories in Idaho, and there are two very large ones in Utah. California alone will produce more than 90,000,000 pounds of beet sugar in 1899. Michigan expects to produce about 60,-(00,000 pounds, and Nebraska, Minnesola, Illinois and New York will each turn out sugar by the millions of ounds. The industry is springing up n Oregon and also in New Mexico, and it will be within a short time a profitahe industry in half of the States of the is estimated that more than 200,-

made this year, and that this amount be considerably increased in 1900. 'e are now paying out about \$100,-00.000 annually to foreign countries w0.000 annually to tolegh countries for sugar. We are using more sugar every year. Our teeth get sweeter and we have more of them. In 1880 the average was only forty pounds per capita, or about four-fifths of a pound per week for a person. In 1898 it had inreased to sixty-two pounds, and it is estimated that on the average ev man, woman and child in the Unitd States cats at least one and one-half ounds of sugar every week.

# MONEY IN THE SUGAR BUSINESS.

There is lots of money in the sugar usiness. The Utah company have been paying regular cash dividends of from ) per cent to 12 per cent per annum, addition to a number of stock divinds. Last year, I think, they paid bout 20 per cent. Their stock is now the many of the other sugar comwith many of the other sugar com-anies, and the business has undoubted. come to stay. Many of the facries belong to the beet sugar trust. others, like those of Utah, are still onning independently, and some of hem say that they intend to continue

The factories here are owned largely help their own farmers by giving

copyrighted, 1900, by F. G. Carpenter. | product of our beet sugar factories, so that we can make sugar cheaper than ever. It now sells for about 5 cents a visited today one of the largest beet pound. I won't tell you just how cheaply we can make it, for that is a pusities secret business secret b not cost us 4 cents per pound. After we take the sugar out of the beet we within a few hours. The owns it City, and the company which owns it will make in the neighborhood of 18,-will make in the neighborhood of 18,-will make in the neighborhood of 18,-will make of white sugar this year. we doe pounds of white sugar this year. year after the sugar has been taken The beet sugar induced are now immense normously. There are now immense out of it. It grows sour, but the aniing over 2,000 cattle during the coming year.'

### AT A BEET SUGAR FACTORY.

By this time we had reached the factory, a big three-story building filled with curious machinery. On one side of it were two sheds, each of which it seemed to me was half a mile long. To these came long lines of teams dragging wagon loads of beets. Each team brought two or more tons. The beets were weighed on the wagons before they were unloaded, and the men were paid cash according to the weight. From the sheds the beets were carried by water into the factory, elevated by machinery in great buckets on endless chains to the top floor, being washed by machinery as they went. The next process was cutting them to pleces. This was done by little knives, which sliced them into pieces about the length and thickness of a slate pencil. The pieces looked very much like little shreds of mashed potatoes when squeezed through a colander. Each shred was full of juice. I picked up one and bit into it. It tasted sweet, but it had also a sharp bitter taste much like that of a raw beet.

#### GETTING OUT THE JUICE.

The cut beets are next run through great cauldrons or cells comprising a diffusion battery. As they go from one o the other the sugar water comes out. Every bit of sweetness is extracted, and at the end without squeeezing the sugar has been taken from the beet and is now mixed up in the form of a dirty black liquid, which looks not unlike ink. The refuse or pulp is carried off by ma-chinery and is piled up in vais out of doors for the feeding of stock.

A PIPE LINE OF SUGAR WATER.

The factory where I saw this done was twenty-two miles away from the factory in which the sugar juice is turned into sugar. The juice is pumped from one factory to the other through a three-inch pipe, a continuous stream of sugar water flowing from one to the This pipe line has just been other. by the "Mormons." They prefer to keep opened. It is twenty-two miles long, and is the longest sugar water pipe line in the United States. The pipe inchise the fuice to be extracted al from the beets in the fields, and saves an enormous amount of money in the transportation of the beets.



# BLANCHE POWERS TAYLOR.

gra annona anna annona anna annona anna annona anna annona ann

MRS. A. V. TAYLOR takes rank amongst the most eminent of Utah club women. Her intellectual gifts and energy have brought her into enviable prominence in affairs pertaining to the wide interests included in local club activities, and her name has become a synonym with club-women for bright and incisive thought and clever achievement both in the way of personal literary effort and assistance in the various progressive movements instituted under club auspices.

Mrs. Taylor was born at Durand. Wisconsin, in 1870. Her parents were both actively connected with newspaper work so that she grew up in a distinctively journalistic atmosphere. The greater part of her youth was spent with her parents in Baraboo, Wisconsin, after which she entered the University of Wisconsin, graduating from that institution in 1891, as valedictorian in a class of ninety-one collegiate members. In the year following she married Mr. Alvin V. Taylor, the well known lawyer of this city, and has since resided in Salt Lake.



Customs and Characteristics of the People-Portuguese Women of High and Low Degree - The Peasant Class by Far the More Interesting - Amiable Weaknesses of the Mis-called Stronger Sex.

# annow www.www.www.www.www.www.

Special Correspondence. Lisbon, Portugal, Dec. 12 .- Of deeper interest than anything else in this fair land are the people thereof; and of these the lowliest are most interesting, because most unique. The cosmopolitan upper classes are distinguished for little but universal and invariable correctness of attire-a pronounced characteristic of all Latin people, on both sides of the Atlantic. While energetic, rough-and-ready Americans, sometimes even those of wealth and high position, may be met in clothes that would hardly pass muster in respectable European society, you can never surprise a Portuguese gentleman otherwise than faultlessly attired. whatever the state of his finances. At any hour of the day, abroad or in the seclusion of home, his dress, from top to toe, shows scrupulous care and neatness. Better than all, "the eternal fitness" is observed in smallest details, with no suggestion of foppishness, or appearance of having been especially gotten up. Always well-groomed from his cradle, after the habit of his ancestors, he never seems conscious of his clothes. From king and courtlers, down to the social gamut of an impoverished nobility, gentleman of leisure, professional men, planters, merchants, clerks,-broadcloth and fine linen are as much a part of the man as his eyes and hair. It is certainly easier for an effete aristocracy, which never dreams of lifting a finger at anything which bears the remotest resemblance to manual labor, to keep

EVERLASTINGLY DRESSED UP,

than for the sturdler Anglo-Saxon, whose dignity has no connection with his clothes and who disdains no work that comes within the line of legitimate business.

Even the humblest fishermen, porters and muleteers in Portugal are always immaculate as to white shirts and cotton trousers, the only exceptions to universal cleanliness being the beggars, licensed and professional, whose stockin-trade is rags and filth. No gentlemen in the world are better and more cheaply served in the way of valets than those of Lisbon. The servants of Portugal are all Spaniards,-from the ancient sovereignty of Galicia, which comprises the present four northwestcity alone-said to be one hundred thousand in all Portugal-the most docile, faithful and humble of servitors, skilled in their special lines, accepting whatever dole their employers may choose to bestow and enduring every indignity without a murmur. Few of these Gallegans are attached to a single individual or household, but like the donkeys that stand for hire in the pracas, they are ready at all hours to perform miracles of service at anybody's call. Do you want your apartment cleaned, your dinner cooked, your clothes mended. your hair dressed, your luggage transported-you have only to go to the window, shut your teeth, widen your mouth and emit the long-drawn Portuguese "Sh-s-s-s!" and before the magical hiss

do nothing else for a living. One the most interesting sights of Lis are the groups of handsome, b footed girls and swarthy, muscular en that always surround the fountainsperhaps loitering a bit to chatter and gossip, the women in musical staccato the men in baritone to match their broad chests; then shouldering the heavy earthen jars or wooden ca and trotting gaily away. Every of them hopes to return, some he day in the distant future, to his or beloved Galicia, when he or she saved enough mil reis by scanty liv to purchase a tiny patch of native soil Prettlest of all the women in this old city are the Gallegan mald-ser-vants of wealthy mistresses, whom hard work and insufficient food have not deprived of their natural dainty curves and contours. You may often see an excessively homely grand dame, of unmistakable high degree, striding along with the air of a Juno, to church, or the shops, or the promenade, respectfully followed by two or three bewitching maids. The latter are no doubt innocent of flirtation intentions concerning the passing strunger, but their good-nature cannot nuite suppress an answering smile which makes their bright eyes dance and discloses a gleam of pearly teeth and whole families of rougish dimples. The flower market, too, is full of lovely girls, the daughters of native peasants, whose bare feet have probably tramped many miles before sunrise. Their short skirts and low-cut bodices and bare brown arms afford wonderful studies for an artist, and their great dark eyes have haunted many a

#### TRAVELER'S DREAMS

when far from Portugal. Even the broad-hipped peasant-matrons, who bring butter, milk, cheese, eggs, fruit and vegetables from their distant farms to sell in the city markets, and the fisher-women who every day troop down the Belem road and wake the echoes with their pecullar cries, present some extraordinary types of perfect figures and often beautiful faces.

The women of the Portuguese peasantry seem to hold a very independent Though working hard from position. dawn till dark, they are always cheerful, genial, helpful to one another in time of trouble, and full of ready wit. They know well their value and equality, take their full share of all the hap-piness attainable. They work habitually in the fields, beginning to do so as small children. Girls of ten or twelve years accompany the ox-carts, walking in front of the load and unload the carts, Little girls drive the cattle afield and mind them while they graze. Young women cut and carry home the grass, weed the corn and wheat, and perform their full share of all plowing. While this general employment of women nearly doubles the agricultural workernmost provinces of Spain. There are fully eleven thousand of them in this their labors. Early marriages are the rule among the peasantry-partly because most of the Portuguese conscriptions spare married men, and therefore bachelors have temptations toward matrimony which otherwise might not occur to them. A growing family is a good investment for a young fellow who does not desire the dog's

ron rC er novi nst this eiro hat s go l Li if a div Bu dire eene are he ver is n toge g in tle re. d in nmi .hou piain a Be :orn ng I Bo .ve wit at g to fro re king

ecti

y i

tee th 1

lape lone dyi

nat

uair

gua

ey i wa

) ca

uth

ckir

nent tive

are

the

to m acc r ol

ot 1

Ma

vice

own

dispi Cole

Nev

[ales

a fro

ed. 1

burg

Rem

cets,

UN

nd

oni

hem fair prices for the raising of their

# HOW THE BEETS ARE RAISED. It was in company with Bishop

Cutler and a crowd of Thomas R. Cutler and a crowd of "Mormons" that I took the train to visit the big sugar beet factory at Lehi. We rode about forty miles from Salt Lake down the valley, now passing trainloads of cars filled with white ets, now going by great fields in which the green-top beets were being plowed out of the ground by the farmers, and now seeing long lines of teams carrying them to the railroad or the Beet raising is fast becoming the chief industry of this section. The ompany controls the product. It allots to each farmer just so many acres of his own land for beets every year and no more. The usual amount is from five to six acres. The company furnishes the seed and plants the land for the farmer, and agrees to take the ets of him when they are raised at certain fixed price. The charge for seed and planting is about \$2.75 an acre, and it costs the farmer in labor about 15 per acre to raise the crop. This indes pay for his own labor and that of his family, so that in actual money tlay the cost is low. From each acre he can raise from thirteen to fifteen tons of beets, for which he can get ash at the factory to the amount of 14.50 per ton, so that he clears from 155 to \$30 per acre, and at the same has big pays for the labor of himself and his children.

At first the farmers would not raise beets. They were afraid of them, Bishop Cutler and his assistants went from school house to school about use lecturing on the profits to be made out of beet farming. Now they have more applications for seed than hey can supply. They have in the neighborhood of 4,300 acres under cullivation and next year expect to di-rect the putting in of more than 8,000 acres. The land, it must be remembered, belongs to the farmers, but the company regulates just what shall be used and how much of it shall be planted.

#### NOT EASY WORK.

I asked Bishop Cutler to tell me how sugar beets are raised. He replied The ground must first be thoroughly Then the beets are planted from the seed, the seed being drilled in rows about eighteen inches apart. We have a drill that puts in four rows at a time After the beets have come up we have them thinned out so they stand six or eight inches apart in the They have to be heed and kept lear from weeds, and within five months they are ready for making The beets are then from twelve sugar. o eighteen inches long, about four or ive inches thick at the top and they weigh from a pound to a pound and a half each. We don't want large beets The small beets have the sweetest juice make the best sugar. We try to have them run as near to a pound and quarter as possible.

"How many beets does it take to make a pound of sugar?" I asked.

"It requires from six to eight," was e reply. "Eight is about the average The number varies according to the soil and climatic conditions. Some regions will produce more sugar to the beet

# BEET SUGAR VS CANE SUGAR.

"How does beet sugar compare with the sugar, Mr. Cutler? I have heard it aid that cane sugar is the sweeter. "That is not true," was the reply. "A ngar crystal is a sugar crystal the world over. Pure sugar made from cane s just as sweet and no sweeter than ure sugar made from beets."

"By the way," continued Bishop Cuthave you noticed how the beet utar consumption is increasing. A sw years ago the world ate nothing but tane sugar. In 1860 the consumption was 251,000 tons of beet sugar and 1,092,tons of cane. In 1880 the world used .748,000 tons of beet sugar and 1,911,000 one of cane sugar. Last year almost 1000,000 tons of beet sugar were used ind not quite 3,000,000 tons of cane. The ay will come when the beet sugar will

rowd the cane sugar out of the mar-

## MAKING SUGAR.

We took the train and followed the pipe line to the factory where the juice was turned into sugar. First, it flows into great tanks, each of which holds 3,500 gallons. Here the juice is heated; it is mixed with lime to precipitate the dirt. Carbonic acid gas is introduced, and by various processes the sugar water is so clarified that it becomes as white as pure alcohol. It is now ready This is done to be bolled into sugar. in great tanks, through which run many steam pipes, which keep the liquid at a boiling boint. It grows thicker and thicker, and soon becomes a syrup. Its color has now changed to a light yellow. It is cleaned again by running sulphurous fumes through it, and then reboiled until it becomes a granulated mixture of sugar and molasses. This mixture is as brown as the brownest New Orleans molasses you have ever

As you look at it you wonder seen. how white sugar can ever come from If you walt a moment you can see. Ht. The molasses is washed, and this not with water, but by rapidly whirling it about in a sort of steel tub, which has walls of such a fine network that all the molasses molecules will fly through and the granules of sugar be kept back. As you look, the tub is revolving at the rate of 1,000 revolutions per minute. The molasses and sugar stick to its walls, As it continues to revolve, the color of the walls becomes pale yellow and then as white as snow. The molasses has all gone through the net and the white sugar only remains. As it sticks to the wall while the tub is still revolving, a light spray of water from a tube is dusted over it, and within a few mo. ments it is as white and clean as the sugar on your dinner table. It is now ready to be dried and sacked for the market. The drying is done in an im-

mense cylinder, through which a steam pipe runs. As it dries it is sifted, and from the cylinder it falls down into a pipe, and from there into one of the sugar sacks which you see in every

wholesale grocery store The molasses is reduced to a second. grade sugar, much like the cheap brown sugar which is made from cane. After this it is melted over again, classfied and reclarified until at last it becomes as clean and white as the first sugar which we have already seen.

UTAH'S NEW GOLD MINES.

During this trip to the sugar works

had a chat with Governor Wells on the present condition of mining in Utah. The miners of the State have never been more prosperous than they are now. There are thousands of men prospecting, and every week or so new territory is discovered. Some of the old territory is developing new mines. "One of the most remarkable strikes

we have had recently," said Governor Wells, "was that made by Samuel Newhouse, a man from Pennsylvania. He came to Utah about two years ago and bought the Highland Boy, in the Bingham district. He thought he was buying a low-grade gold mine, and put up a cyanide mill to work it. As he went down, however, he struck one of the richest deposits of copper known to the world. At first he did not say anyworld. thing about the copper. He did not con.

sider it worth working, and covered it up and went on with his gold. Later on however, he discovered its value, and since then he has capitalized that mine at \$12,000,000 in \$1 shares and sold it to Eastern parties. The stock is now worth about \$1.50, so that the real value of the mine is about \$18,000,000."

"Where is the Bingham district, Gov-ernor Wells?" I asked.

"It is just about twenty miles from the city of Salt Lake," he replied. "It is very rich in silver and gold and cop-per. It is an old camp that has produced a great deal in the past."

EASTERN CAPITALISTS AFTER UTAH MINES. "You speak about the mine being sold

She became associated with the Woman's club at its organization and in 1897 was elected president of the club. Two years later she was elected president of the Council of Women's clubs, a position which she still holds.

In 1898 Mrs. Taylor was appointed chairman of the educational committee of the Utah Federation of Women's clubs, and at the convention of the Federation last October was chosen to make the address of welcome at the opening meeting. The Federation at this convention paid a tribute to the ability of Mrs. Taylor in electing her delegate to the biennal meeting of the National Federation of Women's clubs which takes place in Milwaukee early this spring.

#### an and a second a second a second second

for good things. It is no trouble to sell a good mine now. "Among the men who have been buying many properties in Utah." Governor Wells went on, "are the Guggenheims This is a very wealthy family. here is an old man and his seven sons, and together they represent about \$60,000,000. They are engaged in smelting and min-They have recently formed an exploration company to purchase min-

ing property, and, among others, have been buying largely in Utah. They have a large number of smelters which they run independenly of the smelter trust." "How about the mines of Mercur and

Tintic? "They are doing very well, indeed," replied Governor Wells. "At Mercur the ore lies in a great blanket not far from the surface. It is a low-grade ore, but it is paying enormously. De La Mar has an enormous property there. The old Mercur continues to pay as well as ever, and there are other properties which are steady dividend payers. "The Tintic district is about ninety

miles southwest of Salt Lake, right in the mountains. It is highly mineralized, containing gold, silver, lead and copper. Among other mines the Bullion-Beck continues to pay. The Centennial Eureka was recently sold for \$5,000,000. I think Boston parties bought it.

"Another region that is paying well in the silver district is about Park City. The Ontario has already produced about \$30,000,000 of silver and lead. The Daly-West mines are big producers, and the Silver King, which was discovered about 1890, has, it is said, \$6,000,000 in sight. Utah is developing new Altogether, riches in all classes of mines every year. The State has hardly been scrached, don't know what we and we really FRANK G. CARPENTER.

SCIENTIFIC MISCELLANY.

The electric organ of the Malapteru rus electricus, the formidable electric fish of the Nile, is situated in the skin enclosing the entire body, and consists of rows of compartments, each having a peculiar protoplasmic disc with projecting stalk. The total number of these leaf-like discs is 2,000,000. Each half of the organ is connected to a single nerve fiber, and late investigations show that the power of the shockreaching a maxium of 200 volts in a fish eight inches long-is due to the simultaneous development of similar electromotive changes in all the discs The electrical disturbance in a single disc is about the same as that in ordinary nerves. The shock consists of a rhythmical series of rapid impulses, and the interval between the shocks increases from a tenth of a second to several seconds as the animal becomes

fatigued. The organ as a weapon is likened to a self-loading and self-discharging automatic gun. The early history of appendicitis cannot be traced, but Dr. Geo. M. Edebohis believes the first reference to it to have

been in 1642. The first recorded operation on the appendix was performed Aug. 24, 1883. The first successful removal of the appendix was carried out on May 8, 1886, and since that time the percentage of successful operations has been slowly increasing. The obstruct-ing bodies found include a great varlety of articles, pins being very coming the most northerly points from which molluses have been obtained. total number of species The known from the coast of Norway is 460.

A peculiar property of the water of Lake Titicaca-attributed to contained salts-is said to be its lack of action on immersed metals. Chains and anchors continue for weeks as bright and free from rust as they were originally.

The physiological effect of alcohol still attract much attention. Speaking to a British temperance society. Mr. Victor Horsely stated that, though himself a rabid teetotaler, he could not endorse the assertions on this subject often made on temperance platforms. But the harmful tendency of even small doses of alcohol has been definitely proven in recent experiments. The nervous system is injuriously affected by it, the oxidation necessary to the protoplasm of the brain is diminished, and a certain amount of tissue degeneration produced, even in healthy persons. Hospital practice with alcohol has greatly changed during the last halfcentury. In cases of pneumonia and typhoid fever, milk has been largely substituted for the alcohol formerly used, and in surgery the antiseptic system of Lord Lister has made alcohol unneccessary.

What is one animal's meet may be truly anothers' poison. Mr. J. E. Harting lately reported to the London Linnean Society several cases in which porrots had been poisoned by eating parsely; and he recalled that on the other hand, the berries of the yew and privet, held to be poisonious to man, are greedily eaten by blackbirds, thrushes, and other birds. Cases are on record, however, of the polsoning of pheasants by yew leaves. The imminity of goats from yew poisoning is remarkable in view of the fact that deer and cattle have died after eating the leaves, although a suggested explanation is that the dried leaves eaten by cattle differ from the green leaves eaten by goats.

About thirty different theories are found by M. A. B. Chauveau to have been offered to explain the diurnal variations of atmospheric electricity. From a comparison of various records, he concludes that the influence of the soilprobably due mostly to the evaporation of negatively electrified water-is a disturbing cause in the daily variation; and that the general law of variation is reresented by a simple oscillation having a maxium in the day and a remarkably constant maximum between 3:30 and 4:30 a. m.

The artificial silk of Chardonnet is one of the most interesting of the many products of cellulose. The value of this product is attested by the rapid growth of its manufacture, the enlarged works at Besancon, France, having a capacity of 2,000 pounds daily and the production at Sprietenback being 600 pounds per day, while factories are projected England, Belgium and Germany, The first stage of manufacture is the nitration of the cotton or woodpulp producing pyroxyline. This operation requires great care, as mistakes may occur, and several varities of pyroxyline are obtained by using different mixtures of acid. The pyroxyline is placed with ether and alcohol in a alcohol in a

of tapes terminating in glass capillary tubes, and the collodion is forced by a pressure of forty-five atmospheres from the reservoir through these pipes and the fine tubes. It hardens as it has died away, several

reaches the air, forming fine threads or silk. The threads are led to bobbins. from twelve to twenty to each bobbin, as in the case of natural silk. This silk being very inflammable, the product is reconverted into cellulose by rocess of denitration. A novel use of the material is for the mantles of incandescent gas lights, the rare metals mixing with the collodion better than with any other thread.

Folds of rock, with allied phenomena, are reproduced for the instruction of geological students by a novel apparatus devised by Prof. G. A. Lebour, of the Durham College of Science. Two parallel wooden rollers, about four inches in diameter are mounted about three feet apart, and are provided with gears and a crank to rotate them slowly in opposite directions. A sheet of rubber is firmly attached to both rollers. The rubber is stretched by rotating the rollers, when layers of cloth, clay or paste are laid on it, and on reversing the rotation the folds are shown gradually growing with the contraction.

Crystallized naphthaline, Prof. S. P. Thompson points out, has sixty per cent greater effect in producing double re fraction than Iceland spar. It is difficult to work into prisms, however, as It is extremely brittle, and worked surfaces must be covered with glass to prevent sublimation.

# THE MANAGEMENT OF GEESE.

Wherever there is a running stream on a farm, a flock of geese may be kept with profit. The feathers are saleable for pillows and beds and manufacturing purposes, and if of the best quality will bring 50 cents per pound. A Tou. ouse goose will often yield a half-pound at a picking, while the Christmas goose often costs its consumer a higher price than any other kind of poultry. The Toulouse goose is the largest known, often weighing from 35 to 40 pounds per pair, while exceptional weights of 60 pounds have been obtained. Goslinga weigh from 4 to 6 pounds when a month Their plumage is dark gray on the back, shading to light gray and almost white below. They are not so noisy, as some breeds, are hardy and easy to raise. Embden geese are not as large as Toulouse, but their flesh is of superior tenderness and delicacy. Their ally perfect physical specimens, and the young women have lovely faces to match their figures. You see them by plumage is pure white and their feathers are in steady demand.

The goose begins to lay in late Feb ruary or early March and will lay 20 to 25 eggs before coming broody. If the eggs are taken away she will lay again. A goose seldom lays over 40 eggs a year, beginning to lay when a year old and being profitable for several years. Goslings require plenty of water, to drink, but must be kept out of it until three weeks old. At six weeks they may be allowed the run of a pasture being fed once a day. At eight weeks, they will forage for their own living. Provide ample pasturage and keep growing fast until full size. Geese fattened to sell at six or eight weeks old sell well in any large market. Three geese to each gander is the usual rule STALWART FELLOWS.

stand at your side. Thus the poorest clerk may have his valet, who "finds" and lodges himself, who can repair garments with the dexterity of a tailor, and for a few cents a day will keep his employer's wardrobe in perfect order. The most enthusiastic admirer of the Portuguese nation cannot call

its women of the higher classes beautiful. Indeed, one is almost pained at the lack of female beauty, as compared with that of other Latin countries, when viewing Lisbon's uppertendom in the undress of ball or opera, or on the fashionable promenade, or in the costly equipages of the Campo Grande. The youth does not linger long with the Portuguese lady and at twenty-five she is passe. Moustaches show themselves early; her complexion grows muddy and assumes a greasy look, and at middle age her figure is either of the geaunole order, or its opposite-the meal-bag-tied-in-the-middle shape. But she has "redeeming features." Her eyes are large and expressive, her teeth are good, and there is a certain honest radiance in her smile which is very captivating. She dresses richly, but with the oddest mingling of dates and styles, if not of col-ors, and her clothes "fit" as if flung at her in a whirlwind. There is not the remotest hint of French chic about her, nor the trig appearance of English women, nor the voluptuous attraction of her cousins, the Spanish senoras, and

GOOD BROWN HEN

their steps that way. Whatever the Portuguese ladies lack in taste and

beauty, is more than made up by their

manifold virtues. They are model wives and mothers, devoted to their

families, deeply religious, kind-hearted

There is plenty of female beauty in

Portugal, however, but it is mostly

found among the peasant classes. The

scores at the many public fountains,

or chafariz, into which all the water used by the city is poured from the

great aqueduct of Agoasteores. This aqueduct, by the way, is worthy to

rank among the wonders of the world.

It begins in the mountains twelve

miles away, spans the valley of Alcan-

tara upon thirty arches, each 100 feet

from pier to pier, the point of the high-

est arch towering 264 feet above the

earth. Thus a pure mountain torrent is

ervoir, and thence conveyet to hundreds

of fountains, scattered all over Lisbon. Since the days of Joao IV, the public

conducted to an immense covered

Gallegans, male and female, are gener-

she looks like a

and hospitable

LIFE OF A SOLDIER,

and cannot pay several hundred dollars for a substitute in the army; so he takes a wife to ensure himself against what he considers a worse fate, and maybe his everlasting quietus from cold steel or gunpowder. Before marriage, the Portuguese suitor in love is absurdly humble and elavish and his sweetheart leads him a merry dance indeed; but soon as ever the village priest had tied the knot, the positions are reversed, without violating any law.

As in every country, the songs of the people set forth their sentiments. In a popular serenade, the Portuguese swain tells his Dulcinea that he writes to her on the palm of his band, his tears are his only ink and the pen is a fibre from his inmost heart. Perhaps her reply, sung behind a closed shutter, is like this:

> Quando o sovreiso des baga E o lourelero der cortica Entao te amrel, meu bam, Se nao me der a preguica.

which means, "when the cork tree yields bay-berries, and the bay-tree ork, then perhaps I may fall in love with you, if I condescend to notice you." Or else she sings: "I have already five lovers-three for the morning, two for the afternoon; what time is there left for you?"

In Portugal men play upon the guitar as naturally as Yankees whistle. The peasants are universally given to the instrument, chiefly as an accompaniment to the voice. In towns and village the artisans are often expert guitar players and walk in groups to and from their work, enlivening the journey with music and song. The carpenter who comes to your house to execute a small job, brings his guitar with his tools, and the blacksmith is a far better performer on the guitar than the anvil. When the Portuguese day-laborer or workman has finished his long day's toll, he does not hie him to a wine shop squander the few cents he has earned: he does not even lean against a post and smoke, nor whittle a stick while swapping yarns with his fellows. he did not bring his guitar with him, beside her perfectly-dressed husband, he goes straight home and gets it, rests and comforts himself with the music while supper is being prepared. Afterwards he spends the evening singing with a bird-of-paradise. Is it because doggerel songs to a strumming acco the modistes of Portugal are so inferior paniment, tilted back in a chair against to the tailors? If so, the surplus dress-makers of the world would better turn

his own house wall, or on the door-step of a neighbor. If, in the rural districts and it be Sunday, or a holiday, he puts on

#### A CLEAN SHIRT,

with a big gold or silver stud as neck fastening, his "other pair" of wel brushed trousers, and his newest black felt hat, of the pattern you often see in pictures of Spanish life, Then he throws over his shoulder a black cloth cape, with a real gold or silver clasp. He takes his favorite ox-goad in his hand, which is, to him, what a natty cane is to the Broadway dude. It is tall as himself, straight as an arrow well rounded and polished and bound with brass. Last of all, he slings his guitar around his neck; and thus fully equipped for social conquest, goes to the nearest fashionable threshing floor -the peasant's drawing room, all his neighbors, young and old both sexes, are sure to be gathered, t while away the day in cossip, song and dance. The Portuguess dance, brought originally by gypsies from the far east, is not particularly graceful. It is slow and firm in movement, acceptuated in time and depending almost entirely upon the motions of the arms and body.

a yet train noon tely Jital. But ving

valu -Fri ugh

> ve a out tow pasib pecl con

> r h mpt t ha

, her

rady

expla

appel

cont

nslde

bwde

para

who

SOLE

n, W

land

