repair, to preserve public order, to pay for schools, and, generally, to look after the well-being of the pueblo which has elected him. He walks about the town, followed by a municipal guard, sword trailing behind him, his note-book in hand, and spies out all that is going wrong. But, alas! of the thousands or hundreds of pounds that find their way into the alcalde's strong.box, only a small portion, too often, is used for its proper purposes. The alcalde's office is unpaid, yet why are men so anxious for it, and why does many an alcalde, who was nearly penniless when olected, resign his office, after a couple of years, with money enough to start a café or build a dozen houses?

Then there is the judge of the town; the judge of the larger town adjoining it; the regent, or head of all the judges of the province; and, finally, the judge, or president of the nation, at Madrid. The first of these is called the juez municipal; the next, juez do primera instancia; the regent; the fourth, the president of the nation.

The office of the judge is unpaid, save by fees, on a fixed scale, and (must I say it ?) bribes. Civil and criminal cases, as a rule, are tried before the same judge. The first hearing is before the municipal judge. If it be a matter of too great importance, he sends it to the next above him, and so on.

Castelar has introduced, by a late edict, the trial of civil cases before a jury of twelve men. Before his edict, a prisoner, or claimant, however, might claim this as a privilege. The blots in the Spanish administration of justice are great indeed : a judge may constantly be bribed. Thus, in one case that I knew, the judge, a man of strict integrity, refused a bribe of $£ 70$; the case went to the higher court, and
there the judge accepted it, and gave a verdict accordingly.

Here is a case illustrative of the ludicrous as well as the pernicious side of this system of bribery.
A lawyer, in my own pueblo, was, according to an old and barbarous law, condemned to have his right hand cut off for forgery. He escaped, being a man of property, by paying a bribe of $£ 500$ to the judge for the time being. Of course, however, his sentence was left recorded on the official list, and he received no formal acquittal; in fact, he walked about under a sentence of the loss of his right hand.
Another judge soon succeeded the first, and, being a strict disciplinarian, as most of them are for six months, finding the sentence against the unhappy lawyer still "recorded on the books," and seeing the man walking about with two hands, he proceeded to order execution. The poor lawyer drew out another $£ 500$, and proffered it once more to his foe: it was: accepted, and he was free; but the sentence still stood recorded on the books.

Judge succeeded to judge, and each, in his turn, accepted the bribe. The lawyer's whole capital is now gone in bribes, and, when the next judge comes, next year, he will most surely lose the long-foughtfor right hand! This story is fact.

Another blot in the administation of Spanish law is the system of constant remands. You bring a prisoner into court, you appear against him; the judge, for no earthly reason, remands the man. Six months after you receive a summons to attend the court: the same weary routine of identification, \&c., is gone through, and the judge says,-" You are remanded again." The poor, pallid wretch, guilty or
not guilty, is carried back to the same lousy, filthy den called a prison, there to languish for another six months.

A third blot in Spanish justice is in the conduct of the lower officials. If they find a man drunk and incapable, they are allowed to beat him to a certain extent. This power they abuse in the vilest manner. A poor miner whom I knew (a teetotaller, by the way) was subject to fits. One night he was seized with one, and fell down in the street. The municipal guards came up, raised up his head, and beat him so cruelly with the scabbards of their swords, that one arm was broken. They took him to the hospital, and the doctor, a humane man, seeing what was really the state of the case, informed against the two municipales for " exceeding their duty." The judge, however, or alcalde, acquitted them both !

These municipal guards, $/$ who wear a sort of uniform, and always may be seen in the market-place, on the look out for a disturbance, \&c., are a cross between an English policeman and a sheriff's officer or bailiff, and, consequently, they are thoroughly hated. A Spanish girl will, jestingly, say, "If I must marry either a butcher or a municipal guard, I think $I$ would elect the former." And, be it remembered, that to marry into a butcher's family even is a terrible disgrace.

The civil guards, too, noble-hearted fellows as they are, are somewhat severe. Indeed, the whole principle by which the Spanish legal officials carry on their profession is this, that every culprit is a brute beast, a mad dog, and to be treated accordingly.

Here is an instance. A man (a miner) got excited with drink, and stabbed two men in the street. The
civil guards, rifle in hand, pursued him, and ran him to ground in a courtyard. The guard who came up first presented his rifle at the man's head, and said, "Give yourself up, or I fire."-"Never," was the answer; and in a moment the fellow's brains were scattered all over the patio!

Here is another instance. In other days the order, "Take special care that they don't escape," meant "Kill your prisoners on the road." One batch of convicts (political prisoners), on hearing this order given to the civil guards, said, through their spokesman, " Please shackle both our hands and feet, that you may have no excuse for shooting us."

Another blot upon the Spanish administration of justice is the proviso that every one who kills or maims another, even if the deed be a just one, and simply done in self-defence, shall suffer a certain term of imprisonment.

Here is an instance which happened to a mining agent, a personal friend of the writer's. A miner of his own mine conceived that Mr. H. had insulted him, and rushed at him with a knife. Mr. H., who was unarmed, rushed away, and met the guard of the mine, gun on shoulder. Breathless, he seized the gun; the guard held it doggedly. Up came the would-be assassin, and the guard knocked him off, and protected Mr. H. On being asked why he so acted, he said,-"If you had had a fair fight with gun or knife, all well ; you both had, may be, gone to glory. But if you had shot him, you would have had two things, remorse and prison."

From the administration of justice, to those who come within the pale of the law, the transition is an easy one. A more lawless, desperate set than those voL. II.

H
who, to evade the law's sentence, or to escape being' drawn at the conscriptions, betake themselves to the sierras, or mountain fastnesses, and there win a precarious existence by hunting, robbing, and other kindred pursuits, it would be hard to find. These denizens of the Sierra Morena are quite a race of themselves. Some are "ladros factiosos," or political robbers; some "partidos," which is much the same thing; some are miners and others who have committed murder; some are those who (to use their own phrase), "if they must shoot at all, prefer shooting deer to Carlistas"; some are common thieves and robbers. These men, many of them, own a kind of wild allegiance to some robber-chicftain, at whose bidding they will carry off any rich man, handing most of the ransom-money to their chieftains. They cannot be taken, owing to the thick brushwood, the wild precipices and crags, the caverns, and the wide extent of their mountain-home. Now and then, riding in the Sierra, you will see a man, quite like a savage and half-naked, who will fly like hunted hind at the approach of another human being, and be lost in the brushwood in a moment. Red-deer, quails, foxes, badgers, and partridges are plentiful, and a few bears, and these men are first-rate shots; so that they have enough meat, while the charcoal-burners and chickensellers from the hill-villages supply them with tobacco and skins of red wine.

Oftentimes, when these men get an exceptionally " good haul," they will get clothes, rig themselves out like caballeros, and take train to Seville or Madrid, to enjoy themselves, and then return to the hills, or stay in Madrid to become politicians!

Some of them are men of some attainments and
education, who, for political offences, have been outlawed. These, if their favourite Government should come into power, would emerge at once from their hiding-place, and accept office!

Sometimes these outlaws may be seen "groping for fish," wherewith to vary their diet. They descend to the plains, strip naked, and wade in the shallows of the river, putting a wary hand under every rock and boulder. One man stands on the bank, his fire lit, his frying-pan hard by, ready to cook the fish. Women, too, stand idly gazing, unshocked at these naked figures, until a few fine but coarse barbel are caught, when all sit down to the feast. They catch the barbel by the gills, and, as soon as caught, put his head into their mouths to kill him with a bite.

In the winter, the large shooting-parties of Spaniards and Englishmen who seek the Sierra for red-deer and large game (the caza mayor), often come across these wild banditti, and, if they fancy themselves likely to be over-matched, they strike tent at midnight, and make good their retreat to the nearest town. These shooting-parties generally consist of at least fifty men, all well armed.
"A Spanish prison," so says a Spanish refran, "is not a vineyard." Once inside its filthy walls, and manacled, you may never see daylight again, or you may be despatched to Cuba (if a political prisoner), or, in rare cases, you may be shot in the market-place of the town wherein your offence was committed: The prison diet is very coarse ; its eternal round consists of the coarsest oil, beans, peas, potatoes, and rice, all given in homœopathic doses. No bed, save what you supply yourself, is allowed you. In winter's cold and summer's heat you lie manacled, chained
to the filthy stone floor of the dungeon. Your companions are, usually, some eight or nine in number: their conversation is the filthiest, their habits the vilest. "This floor is harder than the feet of Christ," is their common blasphemy!

In some places, the prisoners are employed in constructing or repairing the Government roads of the first, second, or third class. At such times they may be seen, working in the full blaze of the Andalucian day, in gangs of forty. At every hundred yards stands an overseer, and a knot of soldiers, with loaded riffes. Each prisoner has a chain from the ankle fastened to an iron band across the waist. At night they are chained to each other, two-and-two. These men are called "presidarios." When employed on a road at any great distance from their prison-houses, a temporary barrack/is sought for them in the nearest houses.

The indulgences allowed to Spanish prisoners are threefold. Firstly, on feast-days they may wander the streets, heavily manacled, to get what they can by begging of the passers-by. Secondly, their relations are sometimes allowed to bring them some little luxury, if the master of the prison be leniently inclined. Thirdly, were a man of influential position condemned for, say, ten years, his relations might get him off by having him bound as servant to some friend, who will be responsible for him to be "brought up when called for," and give him, in the meanwhile, food and clothing.

Besides the sierras, there are other retreats open to those who fly from justice, or from a world that has dealt hardly with them. Many of the "cortijos," or small lodges in the Campo, belonging to, and used as
summer-houses by the landed proprietors of the country, are kept by these outlaws, and no one cares to interfere with them, or inquire into their past history, or, at least, these places form a home for many of them, who aid the regular guards in looking after farm, or olives, or vineyard,-assist at all the hunting-parties,-and, now and again, when very hard up for food, ask a moderate amount of pecuniary assistance from the landlord-a request which it is prudent to grant.

Again, those who have been disappointed in their worldly affairs, sometimes find a shelter in one or other of the few monasteries now remaining in the South, paying a fixed price for their humble room, working in the garden at early dawn to secure their vegetable sustenance, praying for the welfare of their fellow-creatures, idling and sleeping their sad life away. Theirs, to use the touching phrase of a poor Spanish girl, ever has appeared to me to be "a broken life,"-a life more aimless, if possible, and less manly than that of the wild denizens of the Sierra Morena.

The monastery called "Las Hermitas," at Cordoba, a short time since numbered among its inmates one or two men who had "known better days," and, among others, a world-wearied colonel in the army, who (for no crime) had retired thither to pass the close of a somewhat noble life.

The new levy of middle-aged men has made hundreds fly to the shelter of the Sierra. It is not that the Spaniard would not, but that he cannot, be patriotic, "For," says he, "for what am I going to fight?" And there is, it is to be feared, too much truth in what he says. Besides, in the army he is
poorly fed. A short time since a fine young carpenter near me was "drawn," and went to the depôt. Three times within the first fortnight the warm-hearted apprentice wrote to his master. In his last letter he concluded with the words-"At last they have varied our meals. We used to have rice and garbanzos twice; but now, gracias a Dios! we have rice and garbanzos in the morning, and garbanzos and rice in the evening!"

Passing away from the Sierra, with its outlawed and unhappy inhabitants, and entering upon the cultivated plains, we shall find that, in all that relates to agriculture, Spain is well nigh a century behind the age. There are many small holdings, and they are generally let, on the following terms. Common (that is, rather sterile) land would fetch three or four dollars the fanega (the fanega $=8,000$ square yards, as nearly as I can calculate: $/ \mathcal{I}$ see the Ibest Spanish dictionary calls it 400 square fathoms). Really good land would fetch about eight dollars per annum. I speak of arable land, for Andalucia knows no green pastures. An olive-grove would, in its perfection, be valued at an annual rental of four reals per tree, a vineyard not much more than a halfpenny or penny per tree.

Many farms are let on the following terms: the landlord claims annually one-third of the produce, or £50, say, per annum, and a certain number of pigs or sheep in addition. But the farming is of the roughest. It is needless to say that the English plough or the threshing-machine have not found their way into the wilds of Andalucia. The two mules dragging their quaint plough, just stirring the surface of the earth, wind slowly along the fallow; the unmuzzled ox
treads out the corn upon the threshing-floors, or the mule or pony scuttles about it, dragging the primitive "threshing-machine," as it is called. The farmers are a rude, ignorant class of men; like English farmers, very conservative. The labourers are men who take little interest in the farm on which they work for the few months that working is possible. They are very poor, hopelessly ignorant, fare wretchedly, and dress sordidly. Still, they are ever polite, kindly, and generous to the stranger. About $1 s .6 d$. per diem would, perhaps, be the average amount of the agricultural labourer's wages; but he never strikes! He is ever "contented," if not " gay." True, his pleasures are very few, but he makes the most of them, and, where an English peasant would grumble, the joyous Andaluz laughs. He eats his bread and oil, he chews his lettuce, he makes and smokes his tiny cigarette; he earns a dollar, it is well; but to risk it is better. So, instead of buying clothes, or getting wine, or taking it home to the poor, hard-worked wife, who once, remember, was a dark-eyed, handsome Spanish lassie, but, with hard feeding and hard breeding, and hard toiling in the field or at the wash-tub, is as much like a man as a woman now, he goes to the nearest gambling-house, . stakes his dollar, loses it, and walks out without a murmur!

Gambling, indeed, is a passion, and nothing else, with the Spaniards, high and low. If a man makes a large fortune, he never knows how to enjoy it unless he gambles at cards, or in the Government or private lotteries, or at dice. In fact, the Spanish gentleman, if he does not gamble, seems to have nothing to do with his money: he hides it under the floor of his
house, or sinks it to the bottom of his well, if times be troublous. The peasant, besides smoking and gambling, has his look at the bi-annual bull-fight; he takes a peep, on Sunday, at the cock-pit; he hurls the iron bar or throws the iron ball along the dusty road, if strong and active; or he plays dominoes or truge (the simplest game of cards) for cuartos (farthings) with his companions.

But what, then, you will say, does this careless, improvident fellow do when his hair is more than flecked with snow, when his limbs tremble under him, and his strength departs?

He simply becomes one of the beggars. He literally begs his bread from door to door, and, morning, noon, and night, you hear his double-knock, and his everlasting salutation, "Ave Maria purissima, da me una limosnita, por Dios"," and there, at your door, his crooked staff in his hand, his lialf-naked frame covered with a ragged manta or rug, stands the worn-out labourer, artisan, or miner. He has long since left his house, and he herds with the motley company of beggars in the caverns and clefts of the rocks outside the town.
He is filthily dirty. He has lost all hope, all self-respect,-and why? There is no poor-house, where, however uncongenial the element in which you live, you, at least, are clean, sheltered from wind and rain, and fed; and there is no parish relief. In fact, begging in Spain is a necessary evil. The cripple borrows a donkey, and begs from its back; the maimed man thrusts the ghastly stump of his hand or arm in your face.

On Friday, which is generally the beggars' day, the houses of the charitable are thronged with a
motley crowd of men, women, and children, of all ages, sorts, diseases, sizes, and descriptions. A noisy, wretched, forlorn, unkempt lot they are. They fight and push for the nearest place to the door. Many have come for miles to get their wretched chavo, or cuarto, or-halfpenny, at the various houses. Then your kindly servant, her lap full of coppers, opens the door. The crowd surges up to and around her. At last all her store is exhausted. She draws back, and hastily bolts the door, against which a crowd of malecontents batter for five minutes, with loud cries of "Por Dios, señorita,". i.e., "For God's sake, my lady!" and then all is quiet. The blind, the lame, the halt, and the maimed have gone, and the house is quiet until Friday dawns again.

Sad to say, many strong young men and maidens, lost to all sense of self-respect, leave coff their work habitually on Friday, in order to share and lessen the dole of their helpless brothers and sisters.

Well for you, when the beggars' hour is over, if you do not find a few fleas, and even lice, at your gateway; for, to use the very expressive word of a Spanish gentleman who was attempting to speak English, most of these people are, as to their clothes, "inhabited."

The education, or rather the want of it, claims mention in any account, however brief and necessarily imperfect, of the social state of the part of Spain here described.

Certain schools there are; and, in cases like that of the model schools of large towns like Cadiz (as described in a separate chapter); they are very good in theory, and work well. But the schools in the smaller towns are simply wretched, and those who
teach in them inefficient. The rooms, too, although supposed to be selected and paid for by the alcalde and ayuntamiento of the town in which they are situated, are dark, close, ill ventilated, and crowded.

Besides this, many among the higher classes are very imperfectly educated, and write and spell badly, especially the women. In a. town well known to the writer, one gentleman, whose daughter was heiress to some $£ 20,000$, refused to allow her to learn to write, lest she should indulge in some clandestine correspondence.

This vile system of never trusting, of always preferring physical to moral power, of using external precautions to prevent sin or indiscretion, instead of cultivating that moral sense which the Almighty has implanted in every heart, has ever struck me as one of the great blots in the Spanish national character.
Awful and horrible ecruelty to animals again, an utter indifference to their sufferings, is another blot on the-Spanish poor man's character, and one that stares you in the face at every step. To beat his ass till it reels, to stone slowly the dog he wishes to kill, to drown the captured rat by slow and easy stages, holding it by its tail in a pail of water, these sights are things of every-day occurrence.
Religion, again, has generated into superstition. It has lost its backbone, its reality, and, consequently, its hold upon the masses. The priests, too, in the country places, are greatly degenerated from what they were, as we all must degenerate, if oppressed, day and night, by the sense of a soul-eating poverty, especially in the case of those whose tastes lead them to desire, and even need, a certain amount of culture and refinement in life.

In the smaller villages, the priests sometimes do not even get their pittance of $£ 20$ per annum from Government, and they turn, necessarily, to other employments, such as making bee-hives, mending watches (in the rougher cases), to win their bread.

In one instance known to me, the priest of a small town, of some five hundred people, actually won his bread by making bee-hives and bird-cages, and in another case, by his gun and his garden, which, joined to the scanty offerings of bread, or skins of wine, of his poor flock, supplied his simple needs.

Naturally, with the decay of true religion, and the absence of useful learning, the tone of morality, both among high and low, is frightfully bad. Cheating and lying are absolutely thought trifles by the Spanish coal-seller, or water-carrier, and such alasses; while married life among the rich will, in too many cases, not bear a very strict scrutiny.

My picture, you will say, is not a bright one. I answer it could not be bright and true at the same time, of this beautiful, wild, and picturesque, but most unhappy country. Still, with all their faults, the Spaniards have many qualities that render them lovable. Their warmth of heart, their excessive kindness and politeness to the stranger, their love of seeing others around them happy, their genial courtesy to their dependents and inferiors, their great sobriety, their ready wit, all help to make up a national character which, if not stable, is certainly not wanting in a certain attractiveness.

## CHAPTER IX.

a SPaniard's estimate of english politeness.
"I thought the Englishman was drunk when he knocked me down; but when he begged my pardon, I knew he was!"

The above is all I shall offer on this point ; it speaks for itself better than any words of mine.

## SPANISH BLACK COUNTRY.

## PART II.

## CHAPTER I.

## INTRODUCTORY.

IT is my purpose, in this Part, to intioduce the reader to the mines and miners of Spain; to a portion of the country and to phases of character so little known, that these chapters (which will abound with strange anecdotes, and statements of facts hitherto unchronicled, drawn from daily intercourse with the Spanish miners) might well bear the title of "Sketches in Untrodden Spain." And I believe that the plain, unvarnished tale which I shall offer will be full of interest to all my readers, especially to those who love to study human nature under its strangest phases.

Perhaps there is no country in the world with a more varied, extensive, and widely-spread store of mineral wealth than Spain. It is truly a "land whose stones are iron, and out of whose hills thou mayest dig copper." Its hills, in many places, are pregnant with metal; north, south, east and west, lead, copper, iron, coal, and quicksilver are found; but in many places, owing to the hilly nature of the ground, and the expense and difficulty of transit, these deposits are still untouched.

The question of Spanish mines and mining is a very wide one ; and for an unprofessional man to attempt to treat it scientifically, would be not only presumptuous, but hopeless. Having, however, resided for some months in the heart of a Spanish mining district, the writer of these pages has taken great interest in all that relates to Spanish miners and mining, and has studied attentively, and with care, the life and character of the Spanish miner, with whom he has had ample opportunities of becoming well acquainted.

Let us first take a general view of the chief centres of mining interests in the country; then we will go to the mines, and spend a day underground with the Spanish miner.

In various parts of Spain the mines have yielded their treasure successively to the Phoeniciang the Roman, the Moor, the Spaniard; and now " concessions" are being duly granted to the estrangeros, or foreigners, among whom English and German mining companies hold a prominent place.

Among mining districts, the province of Murcia, which lately gained from its unhappy city, Cartagena, so unenviable a notoriety, plays an important part. In native produce, both vegetable and animal, this province is rich; and the Carthaginians, despite its parching droughts, knew its value. Whole districts are covered with the esparto grass-a tough, wiry grass, something like the "spear-grass" of the northeast coast of England, which is not only largely used throughout Spain for ropes, sandals, mats, baskets, and the like, but has lately been largely exported to England and France for the manufacture of paper. The soda-plant, yielding alkali when burnt, grows
also plentifully. Off the coast of Cartagena a species of tunny is also taken, and salted down for exportation; and salt is found nearly as plentifully there as at San Fernando, near Cadiz. But the chief trade of Cartagena is in lead and silver. So pregnant with minerals is the district, that the silt washed down by the wintry rains yields lead in abundance, with a small proportion of silver.

The province of Jaën, perhaps, comes next in importance, having many lead-mines, the lead of which yields a small, but very small, proportion of silver. Linares, its chief mining town, situated amid arid plains and slopes of stunted, dusky olives, boasts a colony of Englishmen, Frenchmen, and Germans, and, without one particle of beauty, and with little comfort, is one of the chief districts of mining industry. This town is said to be the Hellanes of the ancients.

In the north-west, amid the wooded hills of Leon, where the pine and fir would recall to the passing traveller's mind memories of Scotland, and where are patches of verdant scenery almost Devonian, are the coal-mines of Arnao, the principal shaft of which is below the water's level; and not far off, in the same province, are the mines of Cangas de Onis, rich in copper and carbonate of zinc. The rough weather and deep snows of winter, however, detract from the working value of the mine, by making it inaccessible for weeks together.

In Aragon and Navarre are silver-minès. In the Basque provinces, near Bilbao, are two of the richest iron-mines in the Peninsula, although the hardy "caballero" peasant prefers poverty, rough fare, and independence on his tiny three-acre tenure, to the service of an Englishman; while Estremadura, the

Spanish peasant's "land of corn," the birth-place of Cortes and Pizarro, the land of locusts, and sports, and loneliness, and sweet jamones (the sweet ham of Spain), offers one of the largest quicksilver-mines in the world, and is a source of increasing wealth to the Spanish Government.

The mines of Rio Tinto give a fair amount of copper, while Ronda and Granada can also show their wealth of mineral, chiefly lead.

Such is a slight outline of the chief centres of mining work in this country. Some few of the abovementioned districts I have personally visited, and it is to a mine and mining town, where, with the miners, I have lived on terms of daily intercourse, and, in our rough way, friendship, that I wish to introduce my readers.

Perhaps there are no towns in civilized countries where the whole atmosphere of the place is rougher -I know not how better to express myself-than in these mining towns. Exceeding roughness and an unheard-of primitiveness are stamped on.everything: the country is rough, the people are rough, the talk of daily life is rough. In the lead mining districts one's ear is deafened and one's heart numbed and beaten down by the ever-recurring topics of "dineros" (money) and "plomo" (lead), day after day, week after week, month after month: "Plomo-plomoplomo." "Alas!" said a scientific man, who came to live near me for awhile, "I should at last grow like the lead, as dull and heavy, if I had to live here." And so it is. From morning until night you hear nothing, see nothing, but lead: lead at the railwaystation, lead-smoke (from the smelting works) in the air, 'lead on the donkeys' backs: plomo en galápagos,
plomo en plancha, plomo primero o segundo (lead in pigs, in sheets, lead of the first or second quality). Lead and money, varied by money and lead, it is depressing alike to soul and body; and, gentle reader, remember there is a proverb among us, "Andar con pies de plomo" (to proceed with leaden feet); and a disease among us which is called "being leaded," and makes a man's eye dull, and his brain sleepy. So, if I seem to you to merit the application of the first, overlook it, and follow me patiently, and believe that while I am writing this I am "leaded," and, therefore, it is to be borne with me. But if you have ever done as I have, and struck out a few lumps of lead, " underground," by the dim light of the Spanish miner's lamp, you will know that even the dull lead, as you strike it from its granite surroundings with the pico (pick-axe), or, as the miners call it, "picajo," sparkles; and so even the dull atmosphere of Spanish lead-mines is enlivened with Spanish salt!
Both among the mining-agents and mine-owners, as well as among the pitmen, the observant eye and ear will find a rich fund of originality, quaintness, and droll humour side by side with the deepest pathos and the most hopeless suffering.

After many months' residence in the heart of one of the largest and most densely populated mining centres of Spain, I sought permission of a Spanish mine-owner to visit personally the workings of his finest mine and go underground; and he gave me (rara avis in terris in the mining districts) a glass of first-rate vino de Oporto, the port wine of the English squire. As we drank it, and discussed mines and mining, he said that his wine always recalled to him "a truly touching anecdote." A young Spaniard had

[^0]married a lady fifty years his senior, not a love-match, but a dineros-match. They called upon him together, and a bottle of the ruby port was broached. The old lady enjoyed, even (so he said) made music with her lips (?smacked her lips) over the grateful drink. Her adorer sat by her side, sipping his wine in silence. Suddenly the ancient dame said, "O señor" (to her host), "if you could only get me a barrel of that same wine I should live for another eighty years.""And," said my host, "if you could have seen the pleading look the young man gave me, you had never drunk the wine without a sigh!"

But this semi-pathetic, ever-ready humour is one of the redeeming points of Spanish conversation. You never converse with a Spaniard, high or low, without a laugh. In the course of the same conversation we were discussing the general state and internal management of Spain, and I said, "There are two things in England, in the cause of 'humanicacion,' to which I attach great importance, as showing that this humanization is marching onward, the Life-boat and the Home for the fallen woman. Are there any in Spain?" - "As to the former," said he (and he was a man of education), "I do not know, not living near the sea; as to the latter, I have heard of no homes for them, but plenty of homes of them." The latter statement, up to this time, I have been unable to verify, and I merely quote it as showing the ready wit of the Spaniard, even in the mining districts.

Here is a typical mining town. It is on the outskirts of the wild range of the Sierra Morena. It stands on the gently declining slope of a hill ; around it stretch plains of tawny sand, covered in spring with green crops of barley, broad-beans, and coarise
wheat, belted in with olive groves, their dusky, stunted trees enclosed in crumbling stone walls, each enclosure having a small, dark-roomed shanty, the "lodge" of the olive-guard, in its midst.

The town is old, as many a fragment of crumbling. Roman or Moorish masonry will show. It was built originally for some eight thousand people, and now at least forty thousand are packed within its walls, literally "like herrings in a barrel." The town is not Moorish, for the Moors knew well how to build the houses high, and with courtyards or patios for coolness within doors, the high wall on either side of the narrow street precluding the rays of the tropical sun from ever looking upon them. Most noticeable is this in Cordoba, where the old streets are so narrow that two vehicles cannot pass, and the high houses seem almost to meet overhead. The houses of the mining town are, at least a great proportion of them, of Spanish design, and consist of a one-storied building made of the liuge thick blocks of the granite in which the lead usually is found, with very small iron-caged windows without glass; others of modern and wholly different architecture have sprung up in a thick and growing crop all around and among them. The streets are not paved, as a rule, but have been pitched at some remote period. In the summer droughts the loose stones roll about, and yield to your tread, often giving horse or man a nasty fall; in the winter the water stands in pools six inches deep, and streams of water rush, during the tropic rains, down the streets. Open drains abound in the suburbs; here is a long, sluggish, black stream, which flows from the " washing grounds" of the servants on the hill just above the town; it once was soap-suds, but has lost its beauty
now. You never would believe that inky fluid had made your linen clean! As you approach the streets toward the suburbs, they, hitherto narrow and pitched, are broad, straggling, and of the natural soil; that is, in summer six inches of dust, which the slightest wind whirls into your face in dense and blinding clouds; in winter six inches of deep, black mud. Here and there it is "being mended," that is, huge lumps of granite are being carried to the worst places in panniers on donkey-back (the refuse of the masons), and are shot down into the mud, or pools of inky water, unbroken. Great, many, and loud are the curses of the muleteer,-the road-mender, the saints, his beast, his kin ("sangre," literally blood) all come in for a share of his curses.

I have seen these roads, on the outskirts of the town, sometimes well-nigh impassable for man or horse; only a donkey could be trusted to pick his way over the stones and through the pools of black, stinking mudU(From these latter sometimes even a sensitive donkey will recoil with a face of horror, and shut his brown eyes if he must take the plunge!

The streets are generally called after the names of saints, Calle de San José, Calle de la Virgen; or from political events, Calle de la Republica Federal, and so on. The rent of the houses, wretched as they are, in these over-stocked towns, is very high. In the Spanish interior, generally, house-rent is very low; but in these towns a small house of four rooms and tiny courtyard will fetch $£ 30$ per annum, unfurnished. The roofs of the houses are of massive white tiles, and slope gently; the top story, with its tiny "cat-holes" (for the cats from the roof to enter by), being used as a camera or granary, the heat rendering it unfit for
any other purpose. The walls, of grey or red granite, are made enormously thick, for the sake of coolness. Here and there one tiny bow-window, with lighted candles burning on either side of the brightly-dressed image which it enshrines, proclaims the house of a "religious" or strict Roman Catholic. At night, to a stranger wandering down these dimly-lit streets, the effect of suddenly coming upon one of these lighted up is striking. Saving this, however, the aspect of the town is not, as in many of the old country towns of the Spanish interior, religious.

The miners, wandering about the streets at night, may often be seen to stop and devoutly cross themselves before the images. Although not really a fervently religious set, they have a certain sense of the nearness of the world unseen, a sense probably inspired by the perils of their daily life. In my personal intercourse with them, I have on more than one oceasion been led to mark a great similarity between the religious side of theiepharacter and that of the fishermen on our south coast of England. Both the fisherman and the miner see "the works of God and His wonders in the deep," both daily hold their life in their hand, both are irreligious in the ordinary acceptance of the word "religious," and yet both have a certain great generosity of character, a certain freedom from fear, a certain natural dependence, half-unknown even to themselves, upon the love and power of Him who made them.

The subjoined extract, relating to the Tarshish of the Bible, as is supposed, is from the note-book of a leading civil engineer and mine-owner in Spain :-
"In time of Strabon, century of Tiberio, the Rio Tinto, or River Tinto, so well known in Spain as giving a name to the celebrated mines (copper and
iron) at its source, was called Hyberus, or Hir-beras. At this time Ura-berosa in the Basque, supposed to be one of the most ancient languages of Spain, means burning water, and the Rio Tinto was then, doubtless, as now, destructive to vegetation on its banks and injurious to cattle. It is popularly supposed that the province of Huelva was one of the first colonies of the Phœnicians, the Carthaginians, and the Romans in Spain; and it is not improbable that the Roman name of Hyberus was derived from Ura-berosa, and thence, from Hyberus to Iberia or Hiberia, the connexion does not seem remote. Another of the celebrated mines in the province of Huelva is the Tharsis. The country people still call the Sierra in the neighbourhood of that mine Tarse; the Romans called it Tartésia, and its inhabitants Tartéssi. It is said here that 'writings of tho time of Solomon state that a journey of three years was necessary to get to Tarsé to get copper, silver, and gold.' (?) It is supposed, with some foundation, that the Phœenicians associated the name of Solomon with wealth, particularly mineral wealth; and it is certain that many mountains, \&c., in the south of Spain are so called: thus-at Rio Tinto is the Cerro Salomon (peak or ridge of Solomon); near Rio Tinto is the town called Salamea la Real (Royal Solomon); in Estremadura is Salamea la Serena, near a large deposit of lead slag; near Cordoba is another Cerro Salomon, also near a large deposit of lead slags; at and in the neighbourhood of the Tharshish mine are found remains both Roman and Phœnician, as is said."

These notes were taken by a leading civil engineer, after a conversation with a well-known Spanish antiquary at Seville.

## CHAPTER II.

## -MINES AND MINERS.

Still continuing my description of our typical mining town, let me say that its leading characteristics appear to me to be untidiness, noise by day and night, wineshops, gaudiness of colour, and general picturesqueness of costume; absence of Spanish beauty among the women.

And, first, as to its untidiness. (I shall not detain my reader long on any head, but just give the detail of facts as I have seen/them.)ent The huge pitchingstones are rolled on to the pavement, where there is a strip, by boys, for play, and left there; dead cats, and dogs, and fruit, in various stages of absorption, are lying in every direction-I say absorption, for decomposition and stench, owing to the extreme dryness of the atmosphere, are not found, as a rule, from such causes; the bundles of fire-wood (green) supplied to the houses are left out in the street often for twentyfour hours, and in the dark you fall over them; the débris of building materials is not cleared away oftentimes for months; donkeys take possession of the pavement, and, where you find a paved road, you are at free liberty to ride upon it and save your beast; beggars sit at every corner, and pursue you and seize your coat; begging children kiss your hand, and run by your side, with their unhappy, everlasting whine, "Una limosnita, por Dios, señor." I have known a Spanish
horseman (a mining-agent) ride up one narrow street, down which I was walking, with an iron bar carried cross-ways across his saddle's pommel; it reached from one wall of the street to the opposite, within about two feet; the horse started, and went from side to side; a few minutes, and the man would be safely in the open country, so he held his bar firmly. Just as he neared me, one end caught in the iron bars of a small window of one of the houses, and as he managed to stay his horse, I too managed to get by. All the combing and dressing of the women's hair (I speak of the lower orders) is done sitting on low chairs in the streets, each person doing it for her next-door neighbour, or mother for daughter; and vice versd. I think I have said enough on this head. What would a London policeman say, or rather, what would he not say, to all this; or to the sight of guitar-parties, or drinking-parties, squatting in the street, or sitting on low chairs right in the midst of the streets, to the great hindrance of traffic? "Obstructing the thoroughfare" is a mild term for all this; and as to " nuisances"-!

Next, as to noise, daily, nightly, as one of the leading characteristics of the mining town. An English miner, stealing forth to his work in the grey of dawn, would smoke his pipe in silence, and look at the clouds. The Spanish miner, even at five in the morning, commences that wild, peculiar, monotonous ditty which is the song, well-nigh the only song, of the Andaluz. As to the tune, it is ever the same. As to the words, he makes them up as he rides out to, or returns from, his work. His mule, too, is covered with bells hung on the collar round its neck. I once counted thirty bells on one mule laden with
cloth; but five and six to each mule for music is nothing.

Then, as to music. Many people in England think of Spain, and speak of her, too, as the land of music and flowers, and the dance; and there is some truth in the words, but, like every general statement, it needs modification. In the interior, as regards music, the musical powers of the people are very slender. Still, in a rough way, by far the greater proportion of them are musical, especially among the lower orders. The guitar is the favourite instrument, and hundreds of the men play upon it, or, at least, get a few notes out of it.

But let me describe to you the sort of music that it is. We are in a Spanish mining district, and it is evening. We are passing down the quarter inhabited chiefly by miners, rough labourers who tramp from place to place for work. $i$ in some streets, every room of every house contains at night from seven to ten of these poor fellows, who wrap themselves in their mantas (large warm rugs) without undressing, and so get their repose. All down' the street you hear the tinkling of guitars; every door is open, and you will be warmly welcomed if you enter in to join the circle of twenty or thirty who are sitting, some outside the room, in the street, some within, doing nothing but smoking their usual little paper cigarillos, and listening to the music.

One man is now holding forth. There is very little air in what he sings, none at all in what he is playing; all that comes from his guitar is "tinkle, tinkle, tinkle," the same note struck over and over again very quickly. It is an accompaniment, a relief to his voice, and nothing more. As for his song, it is nothing but
a wild, loud ditty; the words are childish, but full of love:-
> I.
> "Black her eyes are, And rich her hair, Chaste is my girl, And very fair.
II.

I love her well, She loveth me, Wait but awhile, We'll married be."

And so on. At the end of each verse, the man raises his voice in a series of rising and falling cadences, "la, la, la, la; la-la-la; la-la," several times repeated. The Spaniards will sit listening to this until midnight. I have often joined the party, and, it is lbut fair to add, that several times I have, in these lough parties, heard music of guitar and voice simply enchanting and beautiful. But that is not the rule.

The noise of the street-cries is also excessive. In the town of which I write, most of the trading is done in the streets, and I have ever found that the itinerant seller of fruit, cloth, handkerchiefs, candlesticks, is more reasonable in his prices, and has a better and more varied stock of goods, than are to be met with in the shops. But, really something ought to be taken off from the price for the nuisance caused by these cries. From five o'clock in the morning until seven or eight at night, your house is never quiet. The cries are peculiar, the fashion being to prolong one syllable of the word cried until breath fails. "El toneler-...- ro!"-here comes the travelling cooper. "El herrer-...-ro!"-the black-
smith. "Pañuel-.-.-.-.-- os!"-here come handkerchiefs and cloth, strapped up to the height of four feet on the sides of a tinkling-necked mule, and wrapped in red, blue, green, and yellow waterproof cloths. "Muy buenos tomates y pimiento --..-....--s!" -here comes a donkey laden with vegetables.

While at early morning, say five o'clock, or thereabouts, you are awaked by the cry of the goat-milk seller, "Leche-e-e-e-e-e!". I timed one of these last men, and found that twenty seconds was the time he kept up the cadence of the final $e$.

So much for noise. The muleteers shout; the donkey-riders sing, or hum their Andaluz ditties; the women sing at their work. Every cart-mule, every chief goat of a flock, and sometimes every goat, has its bell.

Then, as to the tiny/wine-shopss. CThe wine-shop is simply, in the mining town, one small dark room, with a heavy curtain across the door; within which stands a barrel of white, and a barrel of red, Val-dePeñas. The room is rented of the owner of the house, and locked up at night. It is stone flagged, dark, und a little red curtain, half drawn back, across the door opening from it into the back courtyard, shows the women who keep the venta sitting on their low stools sewing, in the cool, out of the reek of the wine and tobacco. A few tiny shelves, in one corner of the venta, are studded with bottles of various colours; the white fluid (aguardiente blanco) predominates; then comes mentha, or mint-spirit; apio, or liqueur of celery; and, probably, a rough kind of plumbrandy and cherry-brandy; all of which cost four cuartos (farthings) the wine-glassful. Plenty of cooling vessels stand about, and green and yellow pottery.

Over the door is hung a tiny bush of wild olive, or chaparro, whence the proverb, "Good wine needs no bush!" and over the door is written, "Vino de Bal de Peñas, Vlanco y Tinto, Aguardiente Valenciano." The wine is sold in a-vaso, or tumbler; the halftumbler being called "caño de vino"; the full, "ration," in vulgar Spanish.

Every tenth house seems to have a venta; and, on the road to mines from any town, the vintas are little windowless, chairless, one-roomed stone shanties. The wine is vilely adulterated, as a rule; and it is best, when you are travelling, to ask at some private cottage for a drink of wine. If the cottager boast no barrel, he will at least possess a skin or bottle of wine, and will readily give you a draught.

Gaudiness of colour and general picturesqueness of costume, I spoke of as being also characteristics of the Spanish mining town. The drapery in the shops is of the brightest, coarsest colours; a rich light yellow, for the women's dresses, predominates. The handkerchiefs, worn over the head by men and women, are red, blue, yellow, and the three mixed. Many women, of the lower class, wèar a yellow skirt of a kind of coarse woollen serge, with red stripes about four inches broad sewn on. Every one who flocks to the mining town for work preserves for awhile his individuality, and you see the Valencian peasant in canvas shirt, and baggy canvas trousers to his knee, tied round the waist with a piece of common cord; the Manchegan, in blue and yellow handkerchief knotted round his head, with skull-cap of fur, and huge flaps over his ears; the hardy peasant of Leon, with embroidered waistcoat, low-brimmed hat, and black cloth gaiters with steel buttons; the

Castilian peasant, with montera and tattered capa; the Catalunian, with his picturesque semi-Genoese dress ;-these, and half-a-dozen other costumes, mingle in the Plaza with the pork-pie sombrero, short black jacket, scarlet faja, and woollen trousers of the Andaluz, and form a Babel of tongues, and lend a general picturesqueness to the scene.

As to the last characteristic of the mining districtabsence of personal beauty among the women-I can only say that, with the exception of their magnificent dark eyes, and bushy, glossy, well-kempt hair, I never saw plainer features, both among rich and poor. Of course, Spanish beauty in some parts of Spain, especially Malaga, Cadiz, and the northern provinces, is the hair and eyes, and the exquisitely proportioned figure, and small hand and foot that strike you, set off, of course, by the graceful trailing dress, and that unrivalled head-dress, the mantilla. P The Spanish beauty generally fails in her nose and mouth, which toward middle age, often develope into actual unsightliness, the upper part of the face being still pretty. But in the interior the women are somewhat under-sized; inclined to be too much embonpoint, and not by any means so pretty as the English peasantry.
As to the shops of the town, they are of the roughest, but the drapery, cloth, \&c., is marvellously strong and serviceable. There is the Tienda de Comestibles, where you can buy anything from a stabbing-knife to a sweet ham, bedsteads, goat's-milk, cheese, cocoa, \&c.; the "Despacho de Aceitunas de Sevilla," or store of Seville olives-the finest in Spain; the "Despacho de Carne," or butcher's shop, where mutton sometimes can be got, tough as leather, in the summer, and in the winter, carne de macho, or goat's flesh-most
distasteful to a foreign palate; the "Sombrereria,". or hat shop; the stall, not shop, of "Refrescos $\dot{y}$ Gazeosas"; and the "Despacho de Dulces," or sweets' shop. As to shops for luxuries, books, articles of virti, they do not exist; but every year a travelling-man comes, and, for six weeks, rents a front room; he brings really beautiful and good articles, and his shop, ere he departs, is empty, his pocket full. Shops wholly and solely for the sale of navajas, or clasp-knives-some of astounding size-are found in plenty; and saddlers' shops also abound.

And now, let us leave the town, with its dirty streets, its teeming inhabitants, its ever-recurring savour of garlic, and strong-smelling aceite (oil-olive used for frying), and get a breath of fresh air as we breast slope after slope towards the mines.

On a bright, but chilly and blowing, morning in February, I once passed out of the town, accompanied by a Spanish miner as guide, for one of the chief mines, distant about four miles. First, ere we left the outskirts, we passed the "Valley of the Washerwomen." A stream and spring flowed through the sandy, rock-strewn hollow, the waters of which were collected at two points; on the one side, they flowed into a long stone trough for the mules and donkeys engaged in the traffic to drink at, and overflowed into the hollow, making inky pools of mud; on the other, they flowed into a long collection of stone troughs, with sloping stones at the side of each, on which to rub the clothes. On either side rose a slope of olives, and all about the sandy, rocky ground were tiny stone-hovels, tenanted by every sort, shape, and description of persons. Gipsy, beggar, worn-out soldier, strumpet of the lowest class, men on tramp for work,
all were sitting outside these, what in English landlord's phraseology would be called, "cottages on the waste." Hither, to these washing-grounds, flock the servants, washer-women, mothers of families, and, paying to the owner about a penny, more or less, per hour, they stand over their dripping linen from morn till eve. A more motley crew I never saw; their dresses of every imaginable hue, chiefly red, yellow, green, and striped; their bare arms, strong as those of a man; their uncouth, unceasing jabber; their hot words, for they often turn up sleeves and have a setto with fisticuffs; all presented a strange picture. But, as a rule, they are a hard-working, industrious, honest lot. They may be described as, what English soldiers call, "Rough Christians."

The first half-mile of the road is made somewhat picturesque by the ever-recurring gaudily-painted stalls of the sellers of early coffee and aguardiente to the miners, as they pass on their workward road; by the donkeys, whilly hidden beneath their load of wild-olive boughs and evergreen oak, going into the town to supply the early bakehouses; and the rich hues of the morning sun, that, flooding hill and vale, lend a certain beauty even to the red dusty road, the shivered lumps of brown granite, the dusky olives, and the halfyellow plains of stunted barley.

Two little episodes, so wholly Spanish that I may be pardoned for introducing them, happened to enliven the earlier part of the journey, a journey otherwise only broken, as to its monotony, by the gay prattle of my guide, who gave me a long description of a midwifery operation he had performed the night before, and suddenly broke off from his Andaluz ditty to exclaim, "Caramba! I'll go to the
end of the world with you, I like you so well," and the shouts of muleteer and donkey-driver, as we met or passed them, "Ar-r-r-r-r-r-e, moo --..- lo, ar-r-r-e," or "Arre, borri -.-- co," and the everlasting viaticum, which you receive and give as a matter of courtesy to all, "Vay usted con Dios," sounds which seemed to go up like a chorus along the whole length of the road.
The two incidents were these. A lead-laden donkey had fallen in the road, and the driver could not get the poor beast up. He cursed the Virgin and the saints for bringing him such ill luck, and finally fairly wallowed on the ground with blind and senseless passion.

At a bend in the olives, we came on four miners, fine muscular young fellows, stripped, their knives lying on the rock hard by, playing their favourite game of the iron bar. F The iron-bar is about five feet long, with smooth round handle, and weighs, I was told Allof course I had no means at hand to verify the truth of the statement-from twenty-five to thirty pounds. Each man in turn steps forward, grasps it about the middle, gets a little purchase as 'best he can, and throws the bar in a horizontal position. Whoever throws farthest, wins the stakes. It is needless to say the game is always played for money." Amusement without the excitement of gambling added would be no amusement to the Spaniard.

The men offered me the bar, and I can only say that a man who threw it would, if unused to it, run a great risk of a rupture or strain. We sat down hard by, my mining friend and I, to make our simple breakfast of Val-de-Peñas and bread and bacon-Spanish fare; and on my proffering the bottle to Juan, he said, as
he took a long and steady pull, "My father was a teetotaller, so it behoves his dutiful son to drink heartily, to atone for his one defect."

The stunted character of the trees; the clumps of prickly pear; the quaint wild figures; the shoal of wild-looking dogs at the road-side at one spot, some lying smeared with blood, as to their head and forepaws, and wholly surfeited, but looking very well contented with themselves, some lying half-inside the ribs, and tearing at the flesh, of a horse that had dropped; the utter absence of water and green, and all that one associates with the name of home, certainly strike an Englishman whenever he sees them.

As we crossed one more hill, the tall, smoking chimneys of the lead-mines, and the long ridges of granite thrown out (for all the soil about here is but two or three feet deep, and then comes granite rock, to an enormous depth, in which granite the lodes of lead run), Land the clanking of the machinery, rose close before us. My first impression was, what indústry, what enterprise is here; for, remember, these mines are miles and miles from any railway, and, of course, there is no demand for the mineral on the spot. My next thought was, what a hopeless enterprise it must seem at first to commence mining, and in such a district. Foreign artificers and engineers, machinery, hands, all must be brought to, for they cannot be found upon, the spot.

## CHAPTER III.

## UNDERGROUND.

The way of entering upon a mine is this: first, a competent person finds out at what depth, in what direction, and at what angle the "lodes" or veins of lead run,-all this can be judged with some little degree of certainty, but an opinion often proves illfounded ; then the Government, which holds all these unclaimed districts of rock, and wood, and fell, is applied to for what is here called a "concession," that is, the Government are asked by the mining company to sell to them the "mineral rights" of such and such a tract of country. This effected, the mineowner's agent does what is called "denounce" (denonciar) the land-that is, formally lay claim to and take possession-ratifying his agreement with the civil authorities of the nearest town. And then he must get machinery and men-no easy task in many cases, owing to the exceeding badness of the roads, distance of the tract denounced from railways, and the hilly ground ; but over all these drawbacks enterprise and faith have triumphed, and Spain is dotted with many little colonies of French, English, and German miners.

Perhaps, after all, at the commencement, the taking a mining tract does not require so much more faith in the man than ploughing the grey, slaty, wintry seas for fish, or casting the seed on the brown soil, not so
much faith, perhaps, as is required of the little child when first told to say its prayers, and "keep on saying them, though you seem to receive no answer," as the teaching of the dame's school ran in other days.

I met the friend with whom I was to spend the day underground, and we repaired to the undressing-room. A glass of vino tinto and a cigarette repaired my nerves, which had been somewhat shaken by the contemplation of " breaking with the daylight," and we proceeded to put on the "underground dress." It consisted of a pair of thick woollen socks and list slippers, canvas trousers to the ankle, a warm sailor's jersey next the skin, and over it a short brownholland (it seemed) jacket, lined with wool and flannel; on our heads we wore a tight-fitting linen skull-cap, and over that a 4 billy-cock te made of a composition of wool, felt, rosin, grit, hard as cement, and sounding, when tapped, like metal. This is to preserve the head in case of a stone or piece of rock falling on it. This last is a Cornish institution, and a most valuable one, but the Spanish miner works with his head unprotected save by the linen skull-cap, which, of course, is a protection against nothing but the dust and dirt.

Thus attired, we walked across to the mouth of the shaft, one of us, at least, not feeling very comfortable. The "shaft," for the first descent, was so narrow that, passing down the ladder, we could reach back, and lean against the opposite side. It looked like a simple well-head, and the ladder-head, standing a foot above the surface, was only one foot wide. "Which shall it be, ladder, or swing down by the rope?" had said my kindly companion, and I had elected the
ladder. Down we went, I holding on like grim death. The arrangement of the several flights of ladders in this mine was very ingenious. At very short spaces each ladder came to an end, and there was a small space for a "rest," so that even were a man to fall he would only fall a small distance, ere he swung himself down on to the next, holding firmly with one hand to the former ladder. I should say that we each carried a common tallow candle for light, with a ball of clay stuck round just below the lighted end. As the candle burns down to the ball of wet clay, you push the ball an inch lower. This clay prevents the tallow from running over your hand, and so making it slippery.

The ladders are of wooden sides, and have iron spokes for the most part. They seemed firm and strong ; but in some of the other Spanish mines this was owned by an English company, Tand worked by Spanish miners-I am assured the descent is not sosafe.
This mine was a very wide-spreading one. Wonderful indeed is it to walk through the dark, narrow galleries, and see, towering high above you on either side, the huge walls of solid granite. You hold your candle up, and, lo! the lead lodes, looking like the spatter left by a bullet on a rifle-butt, glitter and shine above, below, about, and around. On the first working you can sometimes see the distant daylight through some cleft above for a moment, and suddenly you have to climb through a low, dark passage, roofed with heavy oak trees and planks, capable of supporting five hundred tons of falling granite. This "roof" is placed in those places where there is a likelihood of a fall of granite.

We crept and stumbled along. Suddenly three
miners came hurrying round a corner, looking ghostly enough by the light of their flickering oillamps, and into our gallery. "Barreno, Barreno, Barreno," they shouted, and the hoarse shout echoed and re-echoed from gallery to gallery. In a moment, as they rounded the corner, a dull boom like thunder shook and made to tremble and vibrate the granite rock against which we leant, and nearly put out our candles; then another; then a third. This was the blasting, by which much of the work is necessarily done.

I noticed in this mine the "old men's workings," as the miners call them; they were the shafts driven in by Phœenician or Roman; but the mining companies of the nineteenth century have gone four times as deep below the end of the "old men's workings," and been rewarded with rich treasure.

This mine has four workings, each about forty fathoms below the other. In the uppermost the soil is dry; fout in the lower galleries the miner has to work up to his ankles in mud and water, although the pumps are for ever at work, night and day. We had, in some places, in order to get to a working, to crawl through dark, dismal-looking passages on hands and knees, passages about two feet high by two broad, and the natural thought of a mind unused to this sphere of labour was, "How easily a block of granite might fall and cut off my retreat, and I hardly be missed in this labyrinth of darkness."

The darkness, the huge granite rocks, shivered about by pick and gunpowder, the pallid faces of the miners, lighted up by their little triangular oil-lamps, the dull boom of the blasting, the ceaseless, slow, measured, steady " pick, pick, pick," the utter sense of
suffocation one experiences, the sulphurous smell of the blasting-powder,-all these must be heard and seen, described they cannot be in such a way as to give even a faint idea of the immensity of labour and force in rending tunnels, and galleries, and chambers out of the granite womb of the earth.

The lead is found running in regular "lodes," or veins, from eight inches to two and five feet broad, and, perhaps, equal height-although this last has rarely been found-through the granite rock. It generally runs from east to west, at an angle of about thirty-two degrees. When a miner lights upon one of these veins, if large, he commences to blast, bore, and work with pickaxe at once; if small, the engineer or captain measures its proportions, and can tell in a moment whether it will pay to work it.

The losses and risks to the mine-owners are chiefly these : the vein is often lost for a while, or wholly, and the men's labour for weeks, in endeavouring to regain it, perhaps, without ultimate success, is lost. Then, again, it often takes weeks, even months, to find, in all the mass of granite rock, what is called a "paying" or "working lode." Strikes are unknown here, so there is no loss on that score.

There seemed to me to be two kinds of granite, one of a dark, tawny-red colour, and another of whiter colour-a sort of grey granite. I noticed, also, iron pyrites, and also frequently a border of white mica on either side of the vein of lead, separating it from the granite on either side. The lead is picked off in irregular-shaped lumps, like pieces of rock. By the lamp-light it looks quite silvery, but, above ground, just like the lead spattered on a hard surface from a rifle-bullet.

There are three kinds of lead: first, the vein, or lode of solid lead, just described, which is, of course, pure, and the most valuable,--this is taken straight to the smelting-works; next, there is the second-class lead, or that which has a certain proportion of granite mixed with it, and needs crushing and precipitating in running water before going to the smelter; the third-class lead is that with a greater proportion of granite than lead, and also the flakes of lead that fly about and get mixed with the granite, dust, \&c. All the lead yields, when smelted, a certain but very small proportion of silver. Half-a-crown in the pound is the average profit on the silver when it comes to market.

The amount of lead yielded by the mines has of late years been on the increase, owing, of course, to the increased efforts of different companies in working. As an instance, it may be cited that, on one line with which I am conversant, the value of the lead passed on was $£ 15,000$ during the year 1870, whereas for the year 1873 the returns showed it to be $£ 60,000$.

As to the miner's life and character. There are two sets, the surface-men and the pitmen, or miners proper. The former, who are variously employed, as shall be afterwards pointed out; in wheeling lead, crushing, washing, driving the mules, or managing the steam-engine, or turning the "whims," are not men of so distinct a class as the pitmen. The ranks of both these classes, however, are supplied by men chiefly of the province in which the particular mines are situated; but, attracted by the high rate of wages, men from every province, and in every picturesque variety of costume conceivable, flock to the mines, and swell the ranks of surface and pit men. Nor are men
driven to mine-labour only by the necessity of winning bread. As of old to David at Adullam, so now to the various centres of mining industry flocks "every one that is in distress, and every one that is in debt, and every one that is discontented," forming a rough and motley, but, as a rule, by no means a disorderly or disagreeable set. Indeed, I have personally always found, both taken individually or taken en masse, the Spanish miners an open-hearted, honest, hard-working set of fellows. They meddle but little in politics, and prefer their cock-pit, music, and games to the more dangerous walks of life of Spanish artisans. "A short life and a merry one" is the rule with them, poor fellows. I fear, too often, it is short without being merry.

A man of moderate height, say about five feet five inches (for the Andaluzes are short and fleshy men as a rule, and they form the staple of the workmen at the mines from which I write), rather inclined to be stoüt, with singularly well-developed chest, and sometimes breasts almost like those of a woman, of pale, sallow complexion, with a keen dark eye, and bright fearless smile, hair cropped close to his head, fleshy arm, and small hand and foot, is the Spanish miner.
His dress consists of a short, but very thick and warm, jacket, of some dark coarse material, and lined with woollen, in length and shape like an English schoolboy's jacket before he attains to the dignity of a coat; a coloured handkerchief, tied in knots below the ears, the ends hanging over the back of his neck, a most wise precaution in a country where the swelling of the glands at the back of the ear is very common; a pair of thick woollen trousers; canvas
shoes, or sandals bound with rope, or, if he can afford thirty-four reals for the purchase, a pair of lightcoloured leather Blucher boots; generally over the head-gear above described, the thick felt pork-pie hat, or sombrero, is worn; a crimson waistband, containing knife. (the famous navaja, or clasp-knife, for eating or stabbing) and purse; coloured checked shirt; with his "alforca," a kind of bag with two pouches, the one for small tools, and the other for provisions, slung over his left shoulder, so that it is evenly balanced, the one pouch being in front, the other hanging down his back; this, with a frying-pan strapped on his back, completes the miner's general appearance. When he goes underground, he puts on nothing but a tight-fitting brown-holland jersey, open at the chest, and lined with flannel, and trousers of the same, baggy, down to the knees. AlHe wears canvas shoes or sandals, or works bare-footed, as he may choose.

In age the miner varies from about seventeen to thirty-four, and then his short life, as a rule, is ended, his children are fatherless, and his wife a widow. The poor Spanish girls say, "It is hard to marry a miner, for he must leave us so soon." In the quicksilver mines of Almaden, the sickness and death-rate, in great measure caused by excessive salivation, is said to be enormous; and at the copper-mines of Rio Tinto, very great. But in the lead-mines the mineral does not so entirely penetrate and break down the constitution as in these last-mentioned mines. The diseases to which the Spanish miner falls a victim, and their causes, are chiefly these :-
(1.) Pulmonary consumption, accompanied, as in England, with spitting of blood. This is the poor
fellow's greatest foe, and hundreds fall a victim to it. It is probably induced by breathing the unwholesome, confined, sulphurous air of the mine; by working with wet feet for the eight hours, until the other shift comes to relieve guard for the night; by the exertion of climbing up the perpendicular ladders quickly and eagerly to get to the surface, which induces profuse perspiration, and also palpitation of the heart. The miner passes at once into the cold air of the surface, perhaps at five in the evening, when the chilly dews begin to fall. The perspiration is suddenly checked, and, with his thin and clammy underground dress on him, he walks across to the undressing shed to wash and smarten up. Then, in the cold evening air, he walks home, perhaps not over-well wrapped up. The exertion of running up the ladders is great. Sometimes, instead of sloping as ladders generally slope, they slope the other way, $i$ i.e, outward, and climbing them is like climbing an ordinary wall-ladder on the under side.
(2.) Calentura, or fever. This is of three kinds, or rather has three stages, and probably is induced by the same causes as the above. The first stage is merely calentura. The second, intermitente, that is, it is tertian fever, with bilious symptoms. This stage is best treated with quinine, and many a man is deafened by the strength of the dose given. The third stage is perniciosa, from which recovery is wellnigh hopeless. High fever, sheer exhaustion, constant vomiting, and deafness, as of typhus fever, are characteristics of this last stage of the calentura. The spring and fall of the year are the most favourable seasons for this' calentura, which, in many respects, answers to the "low fever with typhoid
symptoms," so common among the peasantry of the English Midland Counties. In some cases, or stages, the tongue is black; in others, thickly coated with white. A medical man assures me that this fever is very closely akin to African fever, and other fevers which arise from living in a district where morass and swamp abound, with tropical temperature. The calentura of the interior often clings about the constitution for months, and its effects on a weakly frame are only with difficulty shaken off entirely. It is constantly brought on by a sudden chill, and, at its first appearance, is marked by alternating fits of heat and cold, shivering, bilious eyes, utter inability to keep food or drink on the stomach, great dryness of the skin, and exceeding mental depression. In its first stage the Spanish doctors treat this disease with bleeding and "febrifuge", in pills, inducing profuse perspiration. What this "febrifuge" consists of I know not, but I have seen very great benefit derived from its use; indeed, I have myself derived benefit from it while suffering, at a distance from my English medical adviser, from a like attack.

There is a tree known in Spain among the lower orders as "calentura-tree." It is a tree of moderate dimensions, and is constantly found planted at railway stations, ferry lodges, \&c., in districts scourged by this disease. The botanical name of this plant, I am informed by an eminent English doctor in Spain, is Eucalyptis globulus. It is, I believe, a native of Peru. Whether the febrifuge of the Spanish medicos is a decoction of the leaves of this plant, I know not, yet it is so asserted by the miners themselves.
(3.) "Dolor de costado," or "pain in the side," a term which is applied by the miner either to inflamma-
tion of the lungs or pleurisy. Both these last diseases are common, and when allowed to become fully developed, are most serious. Probably they are induced by the cause above named, the sudden change from the heated atmosphere of the mine into the chill air of the Spanish winter evening, or the cold damp of midnight. One "shift" of men comes to surface about 5 p.m., the second about 2 A.m. Working in the lowest shafts, ankle or knee deep in water, is also, of course, a fruitful cause of these evils.
(4.) "Leading," a disease which is variously called " being leaded," " lead colic," or "leading." Lead colic, however, is its proper designation. It is common to the surfacemen, pitmen, and men engaged in the smelting of the lead. This disease is induced by the absorption into the system of a larger amount of lead than it has the power to throw off. Generally speaking, the bowels are powerless to act, and the vomiting is not sufficiently strong to throw out the offending particles. A. Sometimes diarrhœa is present. Violent cramp in the side and stomach, almost amounting to paralysis, is constantly present in this disease. In some cases, the sufferer is doubled up with agony, and is carried off in four-and-twenty hours. Two cases of this kind came under my notice, in both of which recourse was had to bleeding and violent purgatives, but without beneficial results, and the two poor fellows died, each within six-and-thirty hours of the seizure. But in these cases the attack was not a first attack, the constitution of each of the poor fellows having been previously enfeebled by the same disease. This colic, however, is not, as a rule, fatal. A person who is "leaded," or who is on the road to it, looks ghastly pale in face, his eyes are dull and the whites
yellow, his appetite decreases, and his thirst increases daily. In certain forms of this colic, when the constipation is long continued and the agony great, croton oil is administered in infinitesimal doses, and generally with a beneficial effect. In others, where the bowel is relaxed, and continues unable to fulfil its duty, strong irritants, such as red cayenne pepper, are administered, and also with good results. The Spanish medical men constantly bleed patients suffering from the constipated phase of this disease, which is generally accompanied with fever.

Prevention is ever better than cure, and I have been told by two managers of large lead-smelting works that they found it possible to keep off the foe, in great measure, by exercise, if possible, great personal cleanliness, frequent doses of simple aperients, as compound rhubarb pills, and, above all, by a regular and judicious use of acids, which do much towards neutralizing the poison. A few drops of some preparation of sulphuric acid in water,-a bottle of this is put at the service of the miners at every mine; they come with a tin mug of water, and take thirty-one drops in it,--or lemonade, tartaric acid, and the like, they assured me they had found of the greatest possible benefit. The way in which the lead is taken into the system is through the lungs chiefly, the atmosphere being impregnated with lead, necessarily, in the smelting works. The very smoke you breathe there is lead, and, in the mine, the tiny particles of lead floating in the air, disturbed by the pick of the miner, are inhaled by him. The Spanish miner increases this risk by his mistake in blasting. An English miner, wishing to blast a lode of lead, would drill the hole for the fuse, and store the gunpowder, in the granite below the lead, and thus the
cloud of smoky dust, which necessarily fills the cavern and hangs heavy in the air for long afterwards, will be, not lead smoke, which is poisonous, but granite smoke, which is comparatively harmless. The Spaniard, however, drills the fuse-hole and stores the powder in the heart of the lode of lead, and thus the whole cavern is filled with poisonous lead-smoke, which he and his poor companions are inhaling for hours.

Apropos of "leading," I may mention a curious accident which befell the dog of a friend of my own, a large mine-owner in Spain. The dog, a fine specimen of the "bull-dog," or "bull-mastiff," of Spain, was cooped up in the town, and pining for air and exercise. For a week or two his master took him up to the mines, and on each occasion Juan took a plunge into a pool of water strongly impregnated with lead, and lapped a little of the water. He soon showed signs of illness; his eyes grew dull, his hair began tolcome off. His master, never dreaming of the cause of the poor fellow's suffering state, took him oftener than ever. At last the poor dog was seized with cramp, and howled with pain, paralysis supervened, and in a few hours from his last bath poor Juan's spirit had gone for ever.

This incident illustrates the second way in which the miner takes the lead into his system, namely, through the pores of the skin. In all probability, the quantity of the water alone, without the lead-bath, would not have been sufficiently poisonous to destroy life; and so, with the miner who perspires freely, the poisonous particles settling upon his half-naked body, and becoming absorbed through the open pores of the skin into the system, are highly conducive to lead-
colic. Part of this latter danger might be avoided, were the miners forced to wash in warm soap and water, on leaving the mine, in a warmed shed provided for the purpose. • But they are not by any means strict (to use the mildest term) in this respect. They use but little water, and soap is well-nigh unknown among them for this purpose, although, perhaps, from its power of uniting with the greasy substances on the surface of the skin, and forcing them to come off, it is almost as indispensable for health and cleanliness as the water itself.

Under the head of diseases may be classed accidents. The number of accidents, so far as I can ascertain, in a mine, or part of a mine, employing some two hundred men, would be somewhere about two per month, many, if not most, of which are due to sheer carelessness or negligence on the part of the men employed. Let me instance three such cases:-
(1.) A miner, rendered careless by habit, goes down the ladder, barely holding on with one hand. A little tallow has dropped on one of the spokes of the ladder, rendering it slippery; he loses his hold, is overbalanced, and falls some few yards to the next rest, breaking arm, or leg, or ribs.
(2.) Again, a miner knows that he is working in a dangerous working, i.e., in mining phraseology, a place where loose fragments of stone fall from a height, say, of sixty yards. He works, nevertheless, with no protection save his linen skull-cap-this I have myself witnessed-a bit of cébris falls, strikes his head, and he is carried up insensible.
(3.) Two or three miners are pursuing a lode in a passage, the roof of which is formed of trees and planking, firmly joisted in, capable, if left alone, of


[^0]:    VOL. II.

