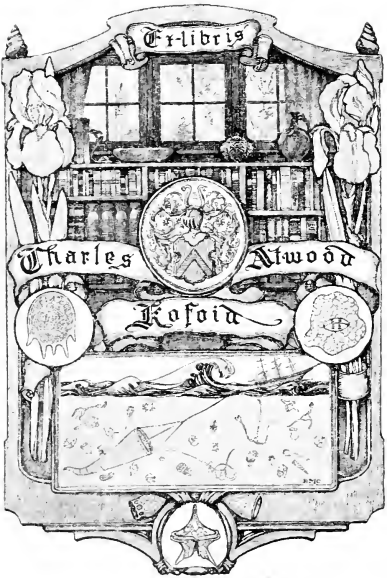
BY LAND AND SEA

· THE COMPANION SERIES ·

· BOSTON ·
· PERRY MASON & COMPANY ·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Charles Atwood
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THE COMPANION SERIES

By Land and Sea

Youth's Companion.
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1909
PERRY MASON COMPANY,
BOSTON, MASS.

CONTENTS.

GLIMPSES OF EUROPE.

THE AMERICAN TROPICS.

SKETCHES OF THE ORIENT.

OLD OCEAN.

GLIMPSES OF EUROPE.

LONDON.

LONDON.

We travel from Liverpool to London in one of the saloon-carriages which are attached to all important trains, and in which all passengers holding first-class tickets are allowed to ride without extra charge.

In the middle of the car is a large drawing-room, with small reading tables between the softly upholstered seats, and at each end there is a large compartment, one reserved exclusively for gentlemen and the other for ladies. There are separate dressing-rooms of a much larger size than those in the Pullman cars, and the fittings are of the most ingenious description. Wherever one may be in the car an electric bell is within reach, and a touch brings to our side a civil attendant politely asking what he can do for us.

If the passengers want luncheon, they are provided for three shillings with a little basket containing a napkin, knife and fork, condiments, bread and butter, a hot chop, or half a cold chicken.

In this luxurious fashion, with an ever-changing landscape framed in the window of the car, we rush along, at the rate of fifty miles an hour, through the garden-like fields and past the red-tiled villages, the ivy-mantled churches and the ancestral parks; it is like Arcadia and everything seems to breathe of contentment and prosperity.

Only two stops are made between Liverpool and London, a distance of two hundred and one miles, and in four hours and a half we are at the end of our journey and in London, the most wonderful of cities, which becomes more and more wonderful as one's knowledge of it increases.

The first thing we realize on reaching London is noise, and the second thing is smoke. The houses and buildings are as black as if they were draped in crape, and the air is full of floating particles of soot. We see with dismay the new

summer hats that we have brought from America growing dingy and brown an hour or two after our arrival, and at the end of a day or two our new summer suits are spoiled.

Although it is July, and the weather is hot, all the men are dressed in black, and the straw hat and light felt hat are scarcely ever worn. Black is, indeed, the only suitable color for clothing, and if the skin were black also it would be more appropriate than white.

We have to visit the wash-bowl once, at least, in every three hours if we have been out-of-doors, and we stare aghast at the water after we have used it; it is as inky as if a chimney-sweep or a blacksmith had taken a bath in it. The face collects specks of the soot, and unless the hands are constantly gloved they, too, become Ethiopian.

At nearly every corner there is a crossing-sweeper, sometimes a boy or a girl, sometimes an old man or a woman, who lives by the pennies and halfpennies which the pedestrians drop as they pass. The sweeper touches his hat to every one who hurries by, but it is seldom that he is rewarded by a coin. One sweeper will occupy the same crossing from day to day, year in and year out, and his claim to it is recognized by other sweepers.

There are many street occupations which we never see in America, and the aim of nearly all of them is the much-needed penny.

Ragged street-Arabs follow the omnibuses and cabs, and turn running somersaults while beseeching the passengers to give them a penny. When the tide is out, great banks of black and oozy mud are exposed under the bridges which cross the Thames, and half-naked boys wallow in the mire, groping for the pennies which some silly people throw for the amusement of seeing the little fellows begrime themselves.

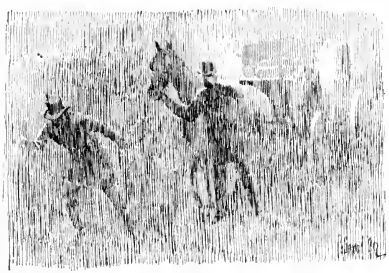
The hansom cab is the most comfortable of vehicles, and it is strange that it has not been adopted more widely in the United States; its motion is easy, and as the passenger sits facing the horse, he has a complete view of everything passing. It is driven at a high rate of speed, and in twenty minutes we

reach the old tavern at Charing Cross, at the door of which Mr. Pickwick had his famous dispute with the cabman of old.

Other English hotels have been modernized and Americanized, but this is as old-fashioned as ever. We do not "register," and we are not greeted by any bejewelled clerk. When we enter the hall, we go up to a large window with small panes, which screens a very cozy sitting-room, wherein we find the landlady and her assistants, all of whom are attractive-looking young women, and there a bedchamber is assigned to us.

Such a bedchamber! The very room, perchance, in which Mr. Pickwick found himself with his unwelcome companion; for here is a four-post bed, with heavy curtains, and all the furniture is so dingy that its proper place would be a curiosity-shop, or a museum of antiquities.

W. H. Rideing.



In Westminster Abbey.

I fear that on entering the Abbey you will at first be greatly disappointed. The grimy, dingy look of the place will vex you, particularly if you choose for your visit a dull day. I grieve to say that the dinginess is inevitable. The Abbey rears its towers into an atmosphere thick with the smoke of innumerable chimneys, and laden with acids which eat away, with increasing rapidity, the surface of its stones.

And yet, as you enter the cathedral which enshrines memorials of nine centuries of English history — as you pass under the roof which covers more immortal dust than any other in the whole world — you can hardly fail to feel some sense of awe. And before you begin to study the cathedral in detail, I should advise you to wander through the length and breadth of it without paying any attention to minor points but with the single object of recognizing its exquisite beauty and magnificence.

You will best understand its magnificence as a place of worship if you visit it on any Sunday afternoon, and see the choir and transepts crowded from end to end by perhaps three thousand people, among whom you will observe hundreds of young men, contented to stand through the whole of a long service and to listen with no sign of weariness to a sermon which perhaps occupies an hour in the delivery.

Here the Puritan divines thundered against the errors of Rome; here the Romish preachers anathematized the apostasies of Luther. These walls have heard the voice of Cranmer as he preached before the boy-king on whom he rested the hopes of the Reformation, and the voice of Feckenham as he preached before Philip of Spain and Mary Tudor. They have heard South shooting the envenomed arrows of his wit against the Independents, and Baxter pleading the cause of toleration. They have heard Bishop Bonner chanting the

mass in his mitre and Stephen Marshall preaching at the funeral of Pym.

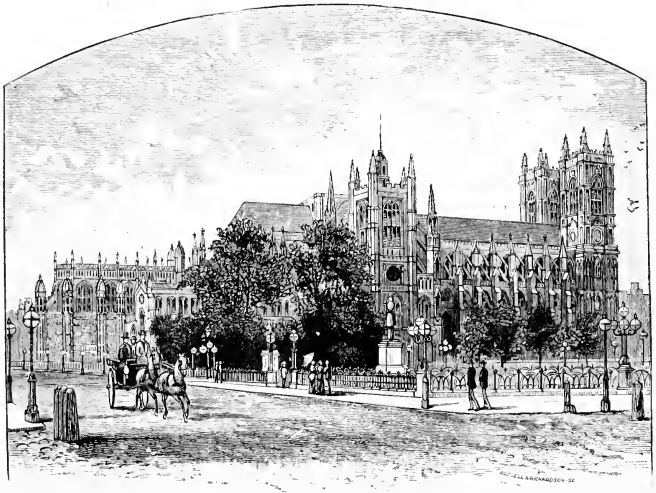
Here, too, you may see at a glance the unity of our national history. I use the expression, our national history, designedly. The Abbey will remind us, as no other place could remind us, that the history of England is no less the history of America, and the history of America the history of England. All that was bitter in the memories of the American War of Independence has long been buried in the oblivion of our common amity.

The actual traces which have been left by that struggle upon the Abbey walls are few. Gen. Burgoyne, "whose surrender at Saratoga lost America to England," lies buried, not in the Abbey, but in the North Cloister without a monument. A small tablet in the southern aisle records the shipwreck and death of William Wragg — who, as his epitaph tells us, alone remained faithful to his country and loyal to his king, and was consequently obliged to escape from Carolina.

The most marked trace of the war is to be seen in the monument of Major Andre; and the fact that in 1812 Andre's body was sent back to England by the Americans, with every mark of courtesy and respect, shows how rapidly all traces of exasperation were obliterated between brother nations.

There are several other objects which will remind Americans of their country. One is the beautiful window in honor of Herbert and Cowper at the western end of the Nave, in the old baptistery, which was the munificent gift of an American citizen. The other is some faint adumbration of Boston Harbor, which may be seen at the opposite end of the Abbey, the east end of Henry the Seventh's chapel, at the corner of the memorial window raised by the late dean to the memory of his wife, Lady Augusta Stanley. A third is the tomb in the Nave which was raised to Viscount Howe by the Province of Massachusetts. The genius of Massachusetts is represented weeping over the monument. Ticonderoga appears on the monument of Col. Townsend.

Even in walking through the Abbey to learn its general



Westminster Abbey.

aspect, you will be struck by the bewildering multiplicity of tombs. There is not a Valhalla in the world in which repose so many of the great and good. It is this which has made the deepest impression on multitudes of visitors.

There, over the western door, with his arm outstretched and his haughty head thrown back, as though in loud and sonorous utterance he were still pouring forth to the Parliament of England the language of indomitable courage and inflexible resolve, stands William Pitt. History is recording his words of eloquence; Anarchy sits like a chained giant, at his feet. And within a few yards of this fine monument is the no less interesting memorial of Charles James Fox; of Fox, who opposed Pitt's public funeral; of Fox, whom he once charged with using the language of a man "mad with desperation and disappointment."

The most noticeable tombs in the Nave (and to the Nave alone we must at present confine our attention) may be classed together under different heads.

There are the monuments to great statesmen; to the naval commanders; to former Deans of Westminster, and to the great Indian heroes. It is singular how exceedingly bad many of the epitaphs are, and how as we approach the eighteenth century they grow more and more verbose and futile in exact proportion as the sentiments expressed by the statuary grow more and more irreligious and fantastic.

The inscription on the grave of Clyde briefly records his "fifty years of arduous service." On Outram's monument is a bas-relief of the memorable scene in which he met Havelock at Delhi, and resigning to him the command, nobly served as a volunteer beneath his military inferior. On Pollock's grave is the appropriate text, "O God, Thou strength of my health, Thou hast covered my head in the day of battle." Under the bust of Lawrence are carved the striking words, "He feared man so little, because he feared God so much."

There is, close by, the bust of Zachary Macaulay, the father of Lord Macaulay and the great opponent of the slave-trade. The inscription — written by Sir James Stephen — is well

worth reading for the beauty and eloquence of the language. There is the grave of John Hunter, the great anatomist. Close by this is the simple rectangular slab under which Ben Jonson was buried upright, having asked Charles I. for eighteen square inches of ground in Westminster Abbey. On this stone was carved the quaint and striking epitaph, "O rare Ben Jonson," which, only the accidental expression of a passer-by, was afterwards copied upon his bust in "Poet's Corner."

Near the centre of the Nave a slab records that the grave beneath was the resting-place, for some months, of the body of George Peabody; and on this slab are carved the words of his early prayer, that if God prospered him, He would enable him to render some memorial service to his fellow-men.

A little farther on is the grave of Livingstone, which records the last pathetic words found in his diary: "All I can add in my loneliness is, May Heaven's rich blessing come down on every one, American, English or Turk, who will help to heal this open sore of the world"—the slave-trade.

There are, however, two monuments to which I must lead you before I conclude. One is the monument to Sir Isaac Newton, close beside whose grave were laid the mortal remains of Charles Darwin.

The tomb of Newton is well worth your notice from its intrinsic beauty, as well as from the fact that it is placed above the last resting-place of one of the greatest of Englishmen. The monument is by Rysbraeck. Over it is a celestial globe on which is marked the course of the comet of 1680. Leaning on this is the figure of Astronomy, who has closed her book as though, for the time, her labors were over.

The very ingenious bas-relief below expresses in allegory the various spheres of Newton's labors. At the right three lovely little genii are minting money, to indicate Newton's services to the currency; near them, a boy looking through a prism symbolizes the discoveries of Newton respecting the laws of light; a fifth—who (like other geniuses) has at present unhappily lost his head—is weighing the sun on a

steelyard against Mercury, Mars, Venus, the Earth, Jupiter and Saturn, which very strikingly shadows forth the discovery of the laws of gravitation; at the extreme left, two other genii reverently tend an aloe, the emblem of immortal fame. Over the bas-relief reclines the fine statue of the great discoverer, whose elbow leans on four volumes of Divinity, Optics and Astronomy and Mathematics.

There is one more monument in the Nave at which Americans will look with special interest. It is the tomb of the gallant and ill-fated Andre. Every American knows how he was arrested in disguise within the American lines in 1780, and for a moment lost his presence of mind and neglected to produce the safe-conduct of the traitor Benedict Arnold. He was sentenced to be hung as a spy, and in spite of the deep sympathy which his fate excited, even among the Americans, Washington did not think himself justified in relaxing the sentence.

The touching bas-relief represents on one side a British officer, who is carrying a flag of truce and a letter to the tent of General Washington, with the entreaty of Andre that, as a soldier, he might be shot and not hung. One of the American officers is weeping.

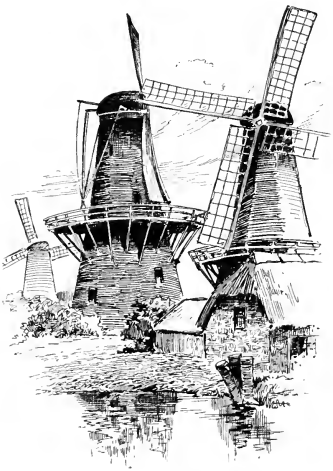
The request was refused, but as it would have been too painful to represent Andre's death on the gibbet, the sculptor has represented his youthful and handsome figure standing at the right of the bas-relief before a platoon of soldiers, as though his petition had in reality been granted. The sculptor Van Gelder has been very successful, but the heads of Washington and Andre have several times been knocked off and stolen by base and sacrilegious hands.

The American visitor will gaze on the tomb with still deeper interest when he is told that the wreath of richly-colored autumn leaves on the marble above was brought from the site where Andre's gibbet stood, and placed where it now is by the hands of Arthur Stanley, late Dean of Westminster.

ARCHDEACON FARRAR.

Scenes in Holland.

A country protected by dikes from the placid-looking but hungry sea, diversified with windmills, peopled by a thrifty and well-contented race, and soaked, as it seems to the observer, by an atmosphere bringing about such tones and effects as artists love; this is Holland.



Perhaps among all its attractions the windmills are most varied, and appeal most strongly to the eye. One never tires of watching them; there are as many varieties as there are of flies in our own country, though they never make themselves too prominent in the landscape, as flies so often do. One, like that in the sketch, which has lost one of its sails, always reminds me of a goose with a broken wing. Most of them are painted with the brightest of known tints, which are nevertheless toned into a delicious harmony by the blue-gray of the atmosphere, and all seem to embody the very spirit of thrift and industry, with their wildly whirling sails.

The traveller gifted with an artistic eye, in noting how they fit the landscape, may not at first realize their vast utility,

but he soon learns that they are the gigantic servitors of the country, and are used, not only in draining the land, but for various lesser operations, such as crushing grain or sawing logs. Their number on any farm accurately indicates the owner's wealth, and the bride is well satisfied who goes to her new home with a dowry of several windmills.

The head-gear of the women is usually most elaborate and striking. Almost all of them wear caps, sometimes plain, and often diversified like that in the sketch, which is trimmed with lace and ornamented by gold pins at the sides. The quality of the lace and the richness of the pins furnish conclusive evidence of the class and wealth of the wearer. A very effective head-dress is one common in Friesland, consisting of a helmet of gold, silver, or some other burnished metal, which is covered with lace, often of a very precious quality. Secured to the sides of the metal cap or "hoofdyzer" (head-iron), on a line with the eyes, are spiral ornaments of gold, or pendants set with jewels.

A lady thus bedecked presents a gorgeous appearance, not even to be exceeded by that of royalty, in its every-day dress. Still, the plain white linen cap is most common among the peasantry and very becoming to the broad, chubby faces of children.

The cleanliness of Holland deserves to pass into a score of proverbs. In some of the larger towns, where the houses front directly upon the street, without a vestige of yard, the morning is the time adopted for a general scrubbing. The early riser is liable to stumble over housemaids on their knees, or to be splashed by the pails of water, which they are dashing against walls and windows.

Often, too, girls may be seen kneeling, and rooting out grass from the chinks of a pavement, where it has tried to assert its unwelcome existence.

There are few hedges or fences in Holland, but rush-bordered ditches separate different plots of ground, and everywhere, in the frequent streamlets,

are reflected the windmills, in long, wavering lines, under the wonderful sunset light.

A little earlier in the day may be seen the milkmaid going home with two brass cans suspended on her shoulders, and adding vastly to the diversified beauty of the landscape. The farmer, also, takes his homeward way, smoking his pipe, held sidewise or upside down, according to the queer Dutch fashion.

Storks are flying at all hours across the country, their long wings loosely flapping, and their slender legs hanging down, as if broken. They are very much like the decorative Japanese stork, except that they are more lively, and the Dutch regard them with a consideration which amounts almost to reverence. Often the birds build their nests on the chimneys, but here and there are to be seen long poles stuck into the ground, and bearing at the top a sort of basket, in which the stork may rest in security.

These birds are of great benefit to the country for the reason that, although they are eaters of fish, they also devour large numbers of reptiles and insects. When one settles upon a house, it is regarded as such a good omen that the most skeptical person would never dream of driving it away, and there is still in existence a law imposing a fine upon any one who shall kill a stork.

ALEPH PAGE.

Work and Play in Belgium.

Belgium is a small, but a thrifty and beautiful country, and the Belgians are very proud of it. Their interests are all centered in it; and although many foreigners make their home here, the Belgians proper keep more to themselves, and do not make it easy for the foreigners to become acquainted with them.

The Belgians proper are chiefly composed of two races, the Flemish, who are originally of Germanic descent, and the Walloons, descendants of the Gauls. They have each a language of their own, in which they speak to their family and friends; but they also speak and understand French, which is the language of the country. In almost everything official French only is used.

The public schools are free, and children are sent to them very young. They have to obey strict rules, and are dutiful to their teachers.

They learn first and foremost all about their own country, drawing maps of great detail of the different parts of it so as to get thoroughly familiar with its geography. They learn the history of Belgium thoroughly, and an interesting study it is—not to them alone, but to everybody, because the Belgian provinces have been the object of many wars, belonging at different times to France, Holland, Spain and Austria.

Belgium's central position made it the theatre of war of many nations; and stormy and full of changes has been its fate. All that is interesting to the student; and the Belgian children love to learn all about the past of their country. Happy the people are that now they belong to themselves, and have their own good, wise king!

Everything pertaining to their own country is carefully taught, but what lies beyond does not interest them much. The rest of the world is nothing to them, and they know

little about it. Once a year prizes are distributed in schools for the best worker—the one who has tried hardest to do well. On that day you see the children dressed in their best on their way to school. Many carry or wear flowers; all are eager to obtain the prize.

The deserving ones return home, proudly carrying their prizes, consisting mostly of choice books; they are decked with flowers or gay ribbons given by their schoolmates, who surround them admiringly, happy in their success.

Thursday afternoon is always a half-holiday, on which comrades gather to spend a happy time together in the woods if it is summer, or skating or making snow-statuary in the winter.

On a fine day you can see class after class of merry children clattering along two by two in their "sabots" (wooden shoes), led by a teacher to some park or playground to play and romp for an hour or so. The teacher either joins in the games, or at any rate stays to watch that no harm is done, and on a signal the children obediently gather together, group themselves as they came and return to school.

Little girls have always to wear black pinafores at school to keep their dresses from getting bespattered with ink, and to make them, while at school, look all alike. It is a kind of uniform that all wear, so that none shall outshine the others by finer dresses, and also to prevent their thoughts from wandering from their lessons to each other's clothes. For the same reason, perhaps, the black dress is chosen for universal wear for young ladies in some boarding-schools.

On special fete days of a national character, as for instance on the twenty-fifth anniversary of the accession of King Leopold II. to the throne, one feature of the celebration is a procession of school children, marching past the king and queen.

Delegations of children are sent from schools all over the country. They join the Brussels children, having drilled for weeks beforehand, so that on the appointed day thousands upon thousands of them march in beautiful order like soldiers,

singing beautiful songs, past the king and queen, who are stationed on some balcony of their palace, and who smile and nod to the children as they march past.

Sunday is the great day for amusement here as in all

European countries. The streets, parks and woods are crowded on that day. All have been busy during the week; so on Sunday, after having attended church, which they do regularly, the whole family turns out, often taking their food

with them to the woods and spending the remainder of the day in the open air.

The summer-time is perhaps the happiest time for children as well as for the grown folks, because it brings the "kermess," a kind of Flemish fair which is held at different times all over the country.

On some open place in city or village quite a little town of booths and tents is erected. There you find merry-go-rounds, Russian slides, roller-coasts, menageries, wonderful exhibitions of all sorts of curious things and animals; fat people, dwarfs and shooting-galleries. All have pitched their tents in some convenient spot.

The crowd of eager people is immense every day; and many save up all their spare money for a whole year in order to spend it at the kermess. They enjoy themselves far better there than at a more costly entertainment; in fact, the great success of the fair is due to the low price asked for the different shows. It is indeed a true people's festival, and it is pleasant to see their thorough enjoyment.

The noise at the fair is terrible. Each merry-go-round has its big hand-organ of the size of an upright piano, playing as loud as a brass band. There may be six of these in a comparatively small space.

The reports of the guns at the shooting-galleries; the loud voices of the owners of shows and museums inviting the passer-by to see the contents of their booths; the clowns in front of the circus; the laughing and shouting of the throng, all that combined makes an ordinary tone of conversation impossible.

Everybody has to scream to make himself understood; and when the throat gets too dry, why, there are innumerable tents where refreshments of all kinds are served. For the children the stalls filled with candies of all colors of the rainbow, and gingerbread are not the least attractive ones.

With such simple, childlike amusements young and old are satisfied. The father goes with his family to join in the pleasure. He may not have the restless activity of the

American, but he will allow himself time to enjoy life with his wife and children as he goes along, and rests contented with a simple lot.

One thing that would strike strangers on coming here would be to see the children beg in the streets. Some are sent begging by parents who are too lazy to work, and in such cases a regular business is made of it.

But there are others who beg even when they do not need alms. They will run beside your carriage or trot along by your side, asking in a woebegone voice for "charite! un petit sou" (charity! a little penny). If you pay no attention to them they will, after awhile, stay behind, change manner and tone completely, perhaps make a face at you, and go on laughingly with their games.

If you let your heart be touched—which you are sorely tempted to do by their heartrending voice and entreaty, and their dirty, ragged and hungry look—they will as likely as not take the money you gave them to the nearest candy store and spend it in sweets, or buy a cigarette and make themselves sick with it.

Politeness is one of the pleasing features of children in Belgium. They are taught from earliest childhood to be polite, and they never forget it. Wherever you go, everybody is well-mannered and obliging. In stores one always receives most polite thanks and earnest entreaty to come again, even if one has not bought a thing.

On the roads in the country the peasants always wish you good day, and the men take off their hats. When a funeral passes on the street, every man and boy takes off his hat; this is called "salut a la mort" (salute to the dead), and is a beautiful custom. A troop of soldiers would always halt till the funeral procession has passed, and never cross it, as indeed no one would do.

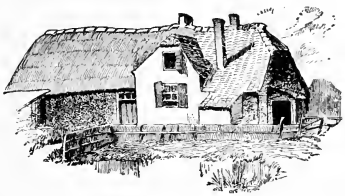
Children have to make themselves useful, too. After school hours they have to help in the business, or tend and care for the younger children, or work in the fields. Frequently you see them take the produce of the farm to the city

in little green carts drawn by dogs. Dog-carts are used a great deal, but the dogs are splendid big creatures, and well treated. In such carts the milk is brought mornings to the house in shining brass cans set in straw in the little cart, which is painted bright green and attended by a girl in a clean dress, blue apron and wooden shoes, with nothing on her head, winter or summer.

The dog is hitched to this cart like a horse, with a pretty little harness studded with brass nails. In some cases the dog is placed underneath the cart, and the girl pushes from behind.

I should like to tell you a great deal more about this country, but that would overstep the limits of my letter. What I have told you will have given you some little idea of the people and customs of Belgium, and of the children here.

E. H. TERRELL.



Boys and Girls of Paris.

Although America is of all countries the one in which the rights of childhood are most regarded, it is not by any means the foremost in provision for its comfort or enjoyment.

In this respect we might well take a lesson from the city of Paris. The wonderful pleasure-grounds which are to be met at every turn are open to the children unreservedly.

From the Bois de Boulogne, with its hundreds of acres of hill and valley, and the gardens of the Tuileries, bright with statues and flowers and fountains, to the small squares and places, or even to the peaceful old churchyards with their quiet paths and green arbors, there is no spot where the happy little creatures do not find room for outdoor diversion.

You will find them making sand pies,—the streets of Paris are too clean to provide mud,—whipping their gaily painted tops, pegging away at marbles with shrill French enthusiasm, playing soldier, or cache-cache or prisoner's base, or "I-spy," eager and almost as swift as birds, and to all appearance much less given to quarrelling.

Perhaps the universal courtesy with which they are treated, may be the cause of the courtesy they in turn show to their companions and elders; but whatever the reason, it is certainly a most charming trait in their behavior.

To see a French boy, hat in hand, answering or asking a question, or a French girl, standing with kindly deference until her mother or her mother's friend is seated, is to see a very pleasant sight indeed.

But it is not alone in playgrounds that the beautiful city takes care of its children. There are the ever fascinating Gingerbread Fairs. You come suddenly, at some street corner where there is an open space, upon a village of tents, with merry-go-rounds, swings, Punch and Judy shows, and all manner of devices pleasing to children. There are captive

balloons in which you can soar above the house-tops, and toboggan slides which dip frantically, as if into the bowels of the earth; and clowns, jugglers and acrobats, and streets upon streets of toys, and candy and gingerbread!

Gingerbread everywhere; walls of it, chunks of it, bricks of it; in slices, in blocks, in shapes of men and elephants, ships and houses; ornamented with gold and silver, glistening with frosting, covered with a mail of parti-colored comfits, packed full of plums, bristling with nuts sparkling with tinsel, fashioned into every device which the wit of man can conceive.

And oh, so cheap! The poorest small pocket holds sous enough for a treat.

Then there is the Garden of Plants, the great botanical and zoological nursery of the nation, with its long lanes flanked by pretty houses, some large as barracks, for the monkeys or the gracefully awkward camelopards, some tiny enough for the smallest forms of animal life.

There are conservatories filled with rarest butterfly-like orchids, and tall tropical palms; whole buildings devoted to aquariums, and rare, strange nooks, where the trees are cut into grotesque forms, as if one had strayed into some goblin country.

In the centre is a great oval ampitheatre without a roof where, every fine day, a perpetual circus goes on; and where, for a sou or two, a good boy or girl may ride upon any creature, from an elephant to a goat not much larger than a good-sized cat.

There are brilliant houdahs, in which a dozen can sit at

once, regally borne by some gigantic Jumbo; there are queer little saddles fastened on the hump of a camel, or a dromedary, or an ostrich; there are cushions across the back of a deer, or a zebra, or a Shetland pony, or some strange creature that looks as if it had wandered out of the Arabian Nights.

There are bands playing with fine flourish of drums and cymbals; there are travelling musicians with every variety of noise, from a hurdy-gurdy to a calliope whistle; and the air is full of flower fragrance and the joyous tumult of children's voices. What could be more like Paradise?

Here and there you will stumble, in some of the narrow streets of the old city or the broad boulevards of the new, upon a magic gateway, where you drop five cents into a lion's mouth. He swallows it without winking. Then you knock at a low door, and presto! you are in Fairyland. Real Fairyland this time, if there ever was such a thing!

There is the palace of the Sleeping Beauty, with her scullions and courtiers and maids of honor dreaming away in the gardens and halls, while she herself lies with sweet, closed eyes on the silken coverlet of her pretty bower. Only you are not allowed to kiss her awake.

There are talking birds and singing pigs, and strange enchantments all about you. There is an elephant with a staircase in his left hind-leg, and a suite of rooms in his monstrous body, and a supper-hall in his big forehead, whence you can look out on the world from his twinkling eyes.

If you turn to the right, you will meet little Red Riding Hood with the Wolf talking to her in very good French, and the old Grandmother being gobbled up before your very eyes, if you wait long enough. If you turn to the left, there is Jack the Giant Killer slaying his fearful Goliaths; or Hop o' My Thumb piloting his train of brothers through the woods; or the fatal castle of Blue Beard, with Sister Anna looking from the battlements; or some other dear old friend of childhood the world over.

Then there are dwarfs and fairies running about everywhere with cakes, ices, and strawberries and cream. You

have only to sit down at any one of the small tables amid the flowers to be sure of that.

By and by, as you wander through the shady lanes, not

quite certain yet whether you are sleeping or waking, you see a tempting small door leading into a magic tower,—and lo! you are out in the work-a-day world again, with the portals

of Fairyland closed behind you, and only a blank wall on a busy street to show where it had been.

The simple way in which the children are dressed cannot help being an attraction to other healthy little people. No frills or furbelows, or stiff cuffs and collars, to make one afraid of soiling or spoiling; but the plainest short gowns and trousers, with stout boots and thick stockings; and almost invariably a big, dark blue cotton or woollen blouse, belted at the waist, with famous pockets which will bear any kind of rough usage.

This is the way you will see tall boys and girls returning from school, little boys and girls at play with nurses and mothers, even young men and women in the normal schools and institutes. It is such an easy-going, comfortable, happy-go-lucky sort of costume that it seems the finest thing imaginable for comfort and for fun.

One example which the people of Paris set to the rest of the world is the habit of enjoying everything together. Rich or poor, you see the entire family in company. On Sundays and holidays they go into the parks, the woods, the streets, out upon the gay boulevards or the quiet country places, in the myriad small steamboats that glide like water-flies up and down the Seine, to the forests of Fontainebleau or the Gardens of the Luxembourg or Tuileries, but all together.

The big brothers and sisters, the little brothers and sisters, the father and mother, the baby, even the old, old people, smile and chat and sit in the grass, and eat their homely lunch in such happy and hearty fashion that it is a joy to watch them.

Perhaps of all the reasons which could be gathered together, there is none stronger than this happy, healthy union of family interests and amusements, to prove that Paris may well be called the Paradise of Children.

M. E. Blake.

Toledo and Cordova.

Imperial Toledo — Toledo of the Romans, of the Goths, of the Moors, of the Christians! We were full of enthusiasm as we started from Madrid in the early — too early — morning to find it.

The train seemed nearly empty. We could almost fancy it crawled on for our sakes only; but crawl it did. I suppose that even a snail gets somewhere at last, and at last we came in sight of Toledo, towering up from the yellow Tagus, yellower even than the Tiber at Rome.

The Tagus girdles the town, leaving only one landward approach, which is fortified by Moorish towers and walls.

Like Rome, Toledo stands upon seven hills, and like Rome, everything about it is venerable. No mushroom place this, built in hot haste, as solace for a monarch's gout. All here is substantial and ancient.

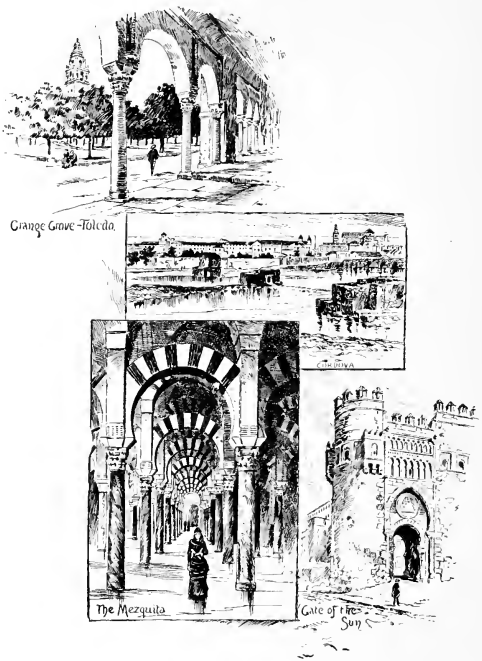
For three hundred and fifty years the Moors held sway in Toledo, and you see Moorish remains at every step. It was the Moors who built the noble gates, of which the finest is the Puerta del Sol, in the picture of which you will note the horseshoe-shaped arches which distinguish Moorish architecture.

Externally, nothing could be more imposing than Toledo, but when fairly into it, one realizes that all is desolate, forsaken, going to decay. It once had two hundred thousand inhabitants; it has twenty thousand now.

But how fascinating it is, even now! The narrow, illy-paved streets wind up and down and in and out, and lead you from wonder to wonder of interest and of beauty.

The carving of the stalls in the cathedral choir is so beautiful that I should like to study it every day for a year, and the stained glass windows are among the finest in the world. They sparkle as with jewels, and throw their parti-

colored reflections on the eighty-eight columns which uplift the gorgeous ceiling. There are noble pictures and glorious



tombs — a collection of works of art, in short, which might be the sufficient goal of any pilgrimage.

The Church of St. John of the Kings must not be forgotten, or its lovely cloister, with its richly clustered pillars on three sides, and its perfect Gothic arches. This cloister is being slowly restored, but meantime the undisciplined roses have

their way in it. We gathered great bunches of them. Outside this church hang chains, which were suspended there as votive offerings by captives who had been delivered from the power of the Moorish infidel.

Two synagogues yet remain to attest the former importance of the Jews in Toledo. The ceiling of one of these synagogues was made of beams from the cedars of Lebanon.

Legends say that Toledo was the place of refuge of the Jews when Jerusalem was taken by Nebuchadnezzar. So ancient is it that you can believe anything, from the tale that ascribes its foundation to Hercules to that other solemnly enforced and detailed account which asserts that Tubal began to build it one hundred and forty-three years, to a day, after the Deluge.

It looks old enough to have been begun even before the Deluge, and it is certain that, when the Moors first took it,it was largely populated by Hebrews.

You feel as if nothing there ever had been or ever could be young, until you look up to some vine-wreathed balcony, and meet the dark eyes of some Spanish beauty, smiling coquettishly from under her lace mantilla; and then, suddenly, the old, old world seems eternally young, with love and hope and smiles springing up like flowers in the sun of every summer.

When the Christians recovered Toledo from the Moors they set a heavy tax upon every Jewish head; but the Jews were allowed to retain their synagogues, on the plea that they had not consented to the death of the Saviour. When Christ was brought to judgment, they said, the votes of the tribes had been taken, and one tribe had voted for His acquittal, and from this tribe were the Jews of Toledo descended!

Can you fancy, at all, this quaint old town, high, high above its yellow river, with its substantial Moorish architecture, its narrow streets which wind and climb through the desolate city where two hundred thousand people used to make merry, and where its poor twenty thousand live now as quietly as if they were all holding their breath, in order not to wake the echoes of some long-dead past?

Can you fancy in this solemn, silent place, possessed by ghosts of Romans, Goths, Jews, Moors and Christians, red roses flaunting their brightness in the warm south wind, and young cheeks glowing with new joys and hopes as if no one had ever died?

It seems to me that they need courage, this Spanish handful, — to laugh and live thus among the shades of the departed.

Did we find Cordova more lively? Somewhat so, perhaps; and yet Cordova, like Toledo, is a city which has been, and is not — which belongs more to the dead than to the living; for the gay days are past when it used to be called "The City of the thirty suburbs and the three hundred mosques."

Here, as in Toledo, are "patios," and though I have heard them called courtyards, a "patio" is not precisely a courtyard, nor yet is it a garden or a room, but it is a delicious combination of all three.

A small vestibule is usually between it and the street. On its four sides rise slender columns, which support a gallery. It is paved with marble. In the centre there is often a fountain. Palms grow in these patios — flowers blossom there, ivy climbs round the graceful little pillars; here are statues, perhaps, or busts, or graceful urns.

The patio is the heart of the home — the place where you go to sip after-dinner coffee, to chat, to lounge, to dream.

Cordova was of importance in Cæsar's time; he half destroyed it because it sided with Pompey. "The Great Captain," who was born there, used to say that other towns might be better to live in, but the place in which one should be born was certainly Cordova. Cordova was renowned, in those farthest off days, for its men of letters, whose wisdom astonished even the Romans.

Roman Cordova yielded to the Goths. But the Goths were conquered in turn by the Moors, and Cordova became the capital of Moorish Spain. It saw, under the Moors, the days of its greatest glory.

In the tenth century it contained nearly a million of

inhabitants, three hundred mosques, nine hundred baths, and six hundred inns. How is the mighty fallen! It is said to have some fifty thousand inhabitants, now; but looking back to a sojourn of some days there, I can scarcely remember to have met any one in the streets, save tourists and beggars.

The place still has beautiful suburbs, and to drive out among the orange orchards and the olive groves is a memorable delight.

But to me Cordova means two things — and to find again those two, gladly would I cross sea and land. I would give you all else of Cordova willingly, if you left me the freedom of the Mosque-Cathedral La Mezquita, and of the Sultana's Garden.

How shall one picture in words the wonders of La Mezquita? Its exterior gives no hint of what awaits you, for it is surrounded by walls from thirty to sixty feet in height; but once you have entered through the Gate of Pardon the Court of the Orange-Trees, the enchantment begins.

It means so little to say, in set phrase, that there are a thousand columns, surmounted by the Moorish horseshoe arches; and that some of these columns are of jasper, some of porphyry, some of verd-antique, and no two alike. You do not stop to think of these details; you wander on and on, as among the countless trees of a forest. You lose yourself in this divine immensity. It is like nothing else on earth.

Look where you will, the interminable vista stretches out beyond, and allures your tireless footsteps.

The stained glass of the windows, when the sun strikes it, throws patches of vivid color against the marbles. The place is so vast that you scarcely think about the Cathedral church, which that royal vandal, Charles V., allowed to be engrafted in its centre in 1523 — a piece of barbarity which even he had the grace to regret when he came to see it later.

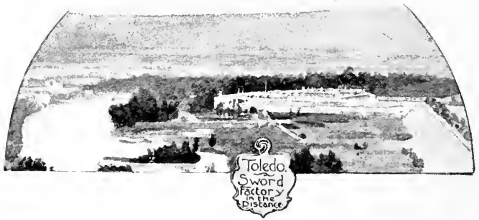
There is one tiny chapel, with a roof like a shell, which is adorned with mosaics sent from Constantinople. These mosaics are said to be the finest in the world. This is the Ceca, or Mihrab, the Holy of Holies, where the Koran used to

be kept on a stand which cost a sum equal to five millions of dollars, and around this spot the very marble was worn in a circular hollow by the faithful Mussulmans who used to crawl around it on their hands and knees.

I have passed long afternoons in La Mezquita — wandering up and down among the aisles of this wonderful forest, studying the exquisite tracery of the carvings, recalling the old legends which cluster about the spot, kneeling with the faithful at their prayers, or kneeling alone in some far-off corner, and listening to the remote sound of the holy music, half able to fancy that I was in some outer court of heaven. It is after such an afternoon as this that I would gather roses in the Sultana's Garden, that thus I might be brought back to the simpler joys of our human life, and find rest for my soul after the exaltation born of the Mezquita.

How long ago did the Sultan make this garden for his love? I do not remember how many hundred years have passed since the dark-eyed beauty gathered its first roses, but still they freight the soft wind with their breath, and still the fairy ferns grow green, and the oranges ripen in the sun, and the solemn old carp are happy in the fish-pool; and I audaciously pluck the roses that are the far-off descendants of those of that long-past time, and the Sultana never heeds my trespass. She is as dead as Cordova.

LOUISE CHANDLER MOULTON.



The Venetian Gondola.

The gondola is the carriage of Venice, and a most delightful one it is. The conductor is out of sight behind, like the driver of the London hansom cab, and nothing obstructs the occupant's view except the graceful steel prow, waving slightly to and fro as if it were a living animal dragging the vehicle.

A finely outlined, handsomely ornamented flat-bottomed boat is the gondola. It rests lightly upon the water, and is propelled and guided as easily as an Indian's birch-bark canoe. It draws so little water that it can pass through the shallowest canals at low tide.

When the Adriatic overflows the grand square of St. Mark's, as it does sometimes during the spring tides, the gondola glides up to the cafes and takes on board those who object to wading home along the quays.

But the gondola belongs to the luxury of Venice, as the private carriages and hacks do to our American cities. It is for pleasure and accommodation, not for business. Even when bringing strangers from the railroad stations and the foreign steamers, the heavy luggage is left to be transported by the "barca" — a more common flat-bottomed boat used for merchandise.

Those who have never visited Venice have a vague idea that to get from one end of the city to another one is always obliged to go by boat. This is not so. Unless one wishes to visit the neighboring islands, he can gain any part on foot, although he may have to pass through many narrow streets and climb up and down innumerable steps over bridges.

Comparatively few of the inhabitants ever go in boats. Only people of the class who in our cities keep carriages possess a gondola. The middle-class natives seldom hire a gondola, and would as soon think of taking one to go a short distance as, in a mainland city, a poor man would of taking

a cab. When a native must take a conveyance for the railroad station there are the omnibus boats, and lately the steamboats, to supply the place of our horse-cars.

Here in Venice, where all freight traffic is done by boats, there are large barges instead of trucks, and numerous small

ones instead of hand-carts and wheelbarrows for the butcher, baker and candlestick-maker. These small boats are of all shapes and sizes, but the usual form is a large, light, graceful skiff called a "sandolo," easily propelled by one oar.

I have heard a sandolo called "the donkey-cart of Venice." That well describes this small boat and its many uses; but

the sandolo or "gondoleta" often rises to the dignity of a pony-carriage when it is more carefully constructed of handsome wood. Then the single seat is cushioned comfortably, and the vessel is propelled by an amateur boatman.

I use the word propelled, as I am undecided whether I should say rowed, sculled or paddled; for the gondola and the sandolo are alike propelled by a single oarsman with a single oar. He does not paddle, for he uses a rowlock, and he does not scull, for the oar is not placed in the stern, but at one side.

The gondolier stands in the stern on a little raised platform, and plys his oar on the right side. He uses a high rowlock called "forchetta" (fork). It is not unlike a fork much battered and twisted.

He faces the prow, gives a long, vigorous push, and throws the force of not only his arms but his whole body into the stroke. Then he drags the oar slightly in the water before the next stroke, and by so doing, in some way all his own, keeps the boat straight.

The peculiar stroke gives a slight sidewise movement to the boat which is not unpleasant. As there is no thumping of the rowlock, the slight swish of the oar, that seems to whisper enjoyment, can be heard as it is dragged through the water.

It is difficult to catch the trick of using an oar in the Venetian fashion, and very easy for the novice to lose his balance; but a stranger is not recognized as a Venetian until he has fallen overboard, and I am sure few have played at being a gondolier without getting a complete ducking.

The gondolas and smaller boats are built in Venice. One of the principal "gondola yards" is on a canal near the Church of San Trovaso. It has served as a subject for many a picture, with its dark shed and church tower and acacia-trees for a background.

Here also old gondolas are repaired. As they lie bottom upward along the quay, they look much more like a lot of small whales washed ashore than the graceful boat that rides

so lightly on the waters. The cost of a gondola, entirely finished, with its steel prow, brasses, cushions and numerous trappings, is about one thousand lire, or two hundred dollars.

This is a large sum for a Venetian, who is often obliged to discharge the debt in monthly and quarterly payments. The debt frequently runs on for years. The gondolier, in the season of travel, hires out himself and boat for five lire, one dollar a day. There is a long winter in Venice with few travellers, when the gondolier will tell you he has "much want of money."

All along the quays opposite the Doge's palace and the public gardens, and at intervals on the Grand Canal, are gondola stations, which are also ferries. Here the gondolas that are for hire all cluster and do the ferrying across the Grand Canal or to the adjacent islands.

For centuries the gondoliers were a power in Venice and a close corporation, limited in number, into which it was not easy to obtain admission. But the organization of a steamboat company broke their power.

Although they joined in a strike, they could not fight against the modern invention. They still ply up and down the Grand Canal and are boisterous around the ferries, but their days are numbered; for the modern dragon, the steamboat, has come, and it will slowly but surely make the gondolier a picturesque object of the past.

HENRY BACON.

Campanile & Ducal Palace

A Climb up Mount Vesuvius.

There are few things more interesting to most people than a volcano — a "burning mountain." Even the dullest geographical lesson at school became interesting when the wonders of Hecla or Etna, the eruptions of Vesuvius or Stromboli, or the strange feats of the American geysers came under notice — even when these were dilated upon in a prosy way.

Of all the volcanoes in the world Vesuvius is perhaps the most interesting. It is easy to climb, for it is only four thousand feet high; and if you do not wish to climb it on foot, six dollars will take you up in a carriage to the foot of the cone, where you will find a wire-rope railway which will carry you to the very top.

Therefore it is of all volcanoes probably the easiest of access, and certainly of all it has the most continuous and thrilling history.

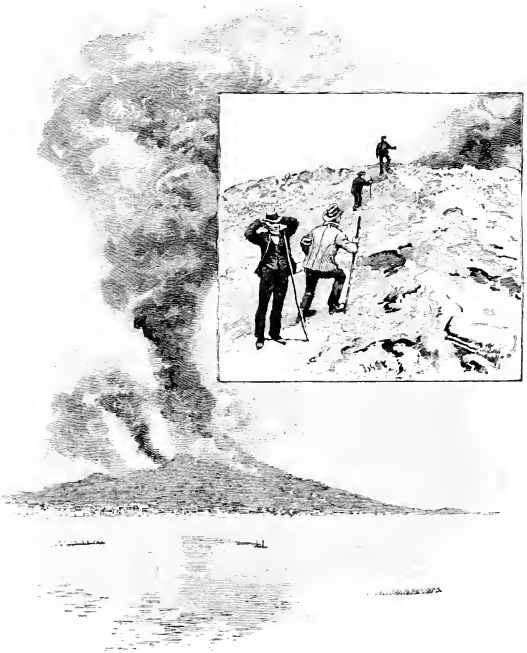
The plain in which Vesuvius stands is, and always was, one of the most fertile spots in Europe. It was called Campania Felix — the fortunate or happy plain — in Roman times, and this name has lingered on throughout the Christian centuries, as indeed so appropriate a name deserved to do.

In our days the district grows many crops of which the ancients were ignorant. It is certain that in Roman times Campania did not produce either oranges or lemons; now they are one of the principal sources of the wealth of Naples, from whose port many fruit ships sail annually to the United States.

It is certain also, that in Roman times tobacco, that plant with which the New World endowed the Old two hundred years ago, was not cultivated either. To-day, upon the plain round Pompeii, are many acres of this crop.

To enumerate the products of the district would be a long

task. Suffice it to say that on the sunny slopes of the vast plain we find indigo, liquorice, tobacco, rice, olives, lemons, grape-vines, oranges, walnuts, chestnuts, corn of all sorts, figs



and peaches; besides many of the fruits which belong to the Torrid Zone, and nearly all those of the temperate regions. Although the plain is too hot for some of the Northern fruits, these grow luxuriantly on the hills which surround it. The

soil is deep and rich, the sun is bright and warm, and the rain is abundant throughout the winter months.

In the midst of all this grand display of the prodigal bounties of nature stands Vesuvius, a grand monument of the hidden forces of destruction — dark, barren, uncultivated and desolate.

When we cast our eyes up the slopes of the mountain, the border-line of cultivation shines out with bright green radiance, while abutting on it is the bleak barrenness of what we can only compare to a huge cinder heap.

When an eruption occurs, a stream of red-hot slag flows down like a river of molten iron; sometimes rapidly, where the declivity is steep, sometimes slowly, where its course is impeded by a rock or a fissure. In any case it carries all before it. If it is flowing slowly we can hardly see its progress. It rolls up to a house, and the house falls before it — we hardly know how. It approaches a tree, and wraps it in its fiery mantle. The sap within the tree generates steam, and the tree explodes with a sound like the discharge of a cannon. As long as the supply continues from the mountain, so long does the stream push on until it rolls into the sea, where it casts up volumes of steam and hisses as if it were bent on competing with the fiery vent-hole at the top of the mountain.

Interesting as these eruptions undoubtedly are, it is always best to view them from a respectful distance, as the vapors issuing from their vicinity are very likely to choke or scald one who approaches too near them. This was the case in 1872, when a party of people were killed by a sudden jet of steam which burst forth from a fissure close to them without a moment's warning.

It is impossible to tell when or where such fissures will be opened, for the whole subsoil is in a condition of explosion. Earthquakes are almost incessant, and the shaking opens fissures in many places.

Let us ascend the mountain, winding in our spring wagon over the steep road, watching the Bay of Naples sparkling in the sunshine, and seeing the bright glow of evening casting

its rosy light over the busy city at our feet. The pleasantest way to see Vesuvius is to visit it on a summer night. As the sun dips below the horizon and throws up the island of Ischia, like a purple mist set in a gold frame, the first moon-rays are already beginning to gleam behind the distant Apennines; and before we are half-way across the vast lava-beds, we are in a fairy scene of silver brightness, checkered with the dark shadows and rugged outlines of the lava streams around us.

At midnight we reach the lower station of the rope railway which is to draw us up the cone. Here man and horse must have rest and supper. In an hour's time we are seated in a car, and being hauled up the steep sides of the cone.

A short walk brings us to the eruptive centre, and what a scene meets us there! Steam is coming out in large puffs from the eruptive cone, and now and then with a loud roar the mountain casts large masses of red-hot stones higher and higher into the air.

It is quite dark now, for the moon has set. We see the red vapor rise fiercely as the hot stones fly upward in grandeur. The still night air is rent by the roar of the mountain, as it discharges a fiery volley into space, presently to fall in a shower on the rocks around us, spattering upon them with a harsh clatter.

As dawn begins to break we see the shadow of the mountain projected across the bay. The peaks to the eastward are warmed with a glow of sunlight, and the blue sea to the westward is tinged with a golden halo. It is a scene of marvellous grandeur and beauty, and we should forget its danger if the dead city of Pompeii did not lie at the foot of the slope, four thousand feet beneath us, teaching us its dread lesson.

Our experienced guide wakes us from this reverie, for it is full daylight now, and we can approach nearer the crater without great danger.

We follow him confidently, though we are half-stifled by the fumes of the sulphur. As we approach we experience an

uncomfortable sensation, for the hot stones now and then fall unpleasantly near us. Our guide puts the ladies in a place of safety; but we may go on, always watching his every gesture and keeping an eye on the mountain.

The walking is rough and steep now; the fumes are almost stifling, and the cinders beneath us are so hot that we feel our feet burning. The guide puts his handkerchief over his mouth; we follow his example.

He has reached the top, and we are close behind him. We look over, and see a mass of red-hot cinders like a burning cliff. As the wind clears away the steam we look down, down, into a black gulf — a very Tartarus of immensity.

The mountain roars again; the red-hot stones fly past us. We are safe here because the wind is now quite strong and carries the stones to leeward; but it is not a place to linger in. A sudden change of wind might mean death. The falling in of the ridge on which we stand would mean death also.

The scene is inspiriting and exciting to the last degree, and as we turn to descend, and see our friends looking at us through their field-glasses, we feel that they, too, must have held their breath when they saw us apparently shrouded in steam and close to the vortex.

E. N. Rolfe.

Alpine Village Life.

The mode of life of the peasants in the higher and more remote regions of the Alps has remained unchanged for centuries. Far away from cities, railroads and modern travellers, the mountain peasant lives as his ancestors did many generations ago, and one is likely to find him living in the house where his great-grandfather was born.

The house is a large, unpainted, two-story structure, built of square pine logs, with the ends projecting at the corners, and sometimes carved into pretty shapes. The building is full of little, long windows, filled with flowers, and the roof is made of large clapboards fastened in place with poles and stones.

I recall such a house, one of a hundred forming the little village of Obstalden on the high bench of a mountain slope above the Wallen See — the most enchanting little lake, I think, in Switzerland. This body of water is seventeen miles long, and two or three miles wide. It is clear as crystal, five hundred feet deep, and closed in by a nearly perpendicular wall of rocks two thousand feet high.

Back of the lake a little distance are ridges and peaks nine thousand feet above sea-level, with white glaciers and beautiful waterfalls.

I spent three summer vacations in Obstalden, and aside from a few friends whom I took there, I never saw an English or an American tourist in the place. Like many another remote village of the Alps, the great outside world never heard of Obstalden.

The first and pleasantest recollection one has of the village, after the wonderful scenery, is the perfect simplicity of the people, and the familiar greeting of the stranger that comes from every lip. Every one seems to know him; every one speaks to him as to a friend. One seems to have been there a

long time, and to have known the people well. It seems hard to call the hundred houses scattered around on the green slope

a town. The grass grows everywhere, quite up to the door-steps. There is no other street in the place, except the white, well-paved post-road that goes by, not through, the village.

Little stony goat-paths lead up to and around the houses, and there is hardly a fence to be seen in the place.

But it is a town. There is the little stone church with the white steeple and the big-faced clock outside, and the stone floors and the plain wooden benches within. There, on the south end of the church, is painted, in great letters and figures, the big sun-dial, used long before the village had a clock.

Behind the little stone church is the village burial-ground; and near by the old, old schoolhouse, and the happy children, and the village pastor, also their teacher.

How old and long and thin the pastor looks! It is little to him that he is very poor; most village pastors are. But his religion is very rich, and his heart very great; great enough to contain the joys and the woes of every man, woman and child in the village. Where lives the millionaire so great or so rich as that?

I have said that the big brown houses are scattered about over the sloping meadow. Each is large enough for two or three families; and owing to the absolute want of dust and dirt on this green slope, every house is as clean as fancy could wish.

They are in a sense comfortable enough, but they are sparsely furnished. Rude benches often take the place of chairs. There are no carpets on the floor, few pictures on the wall, and little of the luxury known to the homes of many American farmers.

In almost every peasant's house stands an old-fashioned wooden silk loom. It occupies the best corner of the best room. It is of more importance than the piano or organ of the American home, for with it is earned a great part of the living of the family. Silk cloth is woven for the great exporters at Zurich, and the women are satisfied to earn thirty to forty cents a day, weaving from dawn till evening twilight.

While the women are weaving, the men cut grass and wood, cultivate a few potatoes, look after their little dairies, and prepare for the winter. Those of the women not engaged at

the loom help the men out-of-doors. Goat cheese is made here in abundance. It is an interesting sight to see the village goat-herd, usually a young man, start off every morning, driving all the goats of the village to the grass on higher mountain slopes.

His is a strange existence; he is alone all the long summer day with his goats, the sunshine and the mountains.

Evening twilight sees him at the head of his flock, winding his way down to the village. A great wreath of pink Alpine roses is twined about his hat; sometimes another rose-wreath is slung over his shoulders. He sings the Alpine "Kuhreihen," a hundred times more melodious for being echoed by its native Alps.

Sometimes with a rude flute he leads the herd, and like another Orpheus, seems almost to charm the rocks and trees with his music. The long line of goats follows him gladly down to the group of stalls called "the village of the goats."

The goat village consists of scores of little low, covered pens, lined with forest leaves, and as snug as can be. It is noticeable how every goat knows its own stall among the hundreds, and promptly enters it. "It's a poor, foolish goat," says the herdsman, "that does not know its own milking-place."

The cheese, like the woven silk, is all sent to the cities; and a large part of both are exported to the United States.

It is interesting to know that a large part of the raw silk used by these Alpine peasants in their weaving comes from far-off China, traversing our continent by the Pacific railways, crossing the Atlantic to London or Havre, and at last finding its way up into the Alps to be woven, and returned to us in silk dresses.

It is little wonder that silk is too dear for these weavers in the Alps to wear. Probably not one of them ever owned a silk dress in her life; but they are content without it, and prefer, a hundred times over, the picturesque village costume they wear on all festal occasions.

Aside from the flowers in the windows, the beautiful silk

on the weaver's loom is likely to be the only attractive thing in her room. One thing always to be found in a Swiss home, and in almost every room, is a great cylinder-shaped column of white porcelain. It is seven feet high, and cold as it looks in its whiteness, it is the family stove.

In the Alps the form of the stove varies. The huge pile of porcelain may be cube-shaped, painted green, and mounted on feet.

Sometimes tiny steps lead to the top of this peculiar stove, where a curtain is hung so as to form a little warm room, perhaps six feet square. In this the children go to dress on very cold mornings.

It has been said that the people of these Alpine villages are very poor — too poor and ignorant to love and enjoy the grand scenes about them. It is a mistake. Poor, in a sense, they are; but if, with their little herds, their green meadows and their simple lives they are content, then are they also rich.

The Alpine Peasant loves the mountains about him, and more than one lone wanderer from the Alps to foreign lands has been known to die of heartache, longing for the scenes of his childhood.

S. H. M. Byers.

Down the Moselle.

The River Moselle, often called "The Bride of the Rhine," is even more picturesque than the Rhine itself. It is more winding, and also narrower, so that the voyager is nearer the beauty and quaintness of its shores. Its bordering hills, although no higher than those along the Rhine, are at least equally impressive, while the valleys and ravines which wind away between them are more irregular and inviting.

A rowing trip down the Moselle is safe, easy, and full of pleasure. One may start at Metz, or even at Nancy, but the best point is Treves, the German Trier. This ancient town, itself so interesting by reason of its Roman ruins and its mediæval buildings, is reached directly from Cologne in less than six hours by the Eifel railway, through a delightfully picturesque country. From Brussels or Paris a longer journey is necessary.

A boat can be obtained at Treves, near the bridge. The ordinary Moselle rowboat is to be avoided, if possible, for it is heavy and clumsy. The lighter the boat, consistent with safety and roominess, the better, for along many a reach of the river it must be rowed straight into the wind, which meeting the adverse current, often stirs up quite a sea.

The writer and his friend were so fortunate as to find an English-built lapstreak wherry, just large enough to accommodate them and their luggage comfortably, and it proved exactly what they desired. They bought the boat outright, with oars and rudder, for about thirty dollars. Probably this was more than its real worth, but it was so much superior to the common river craft that the bargain seemed wise. At Coblenz it was sold for just a third of its cost.

The less luggage the better, and very little is needed. Heavy articles may be forwarded by rail or steamer to Coblenz. The summer suit which one ordinarily wears answers every-

where, if a pair of the trousers of the country — costing eighty-seven cents — be worn while rowing. Flannel shirts are most suitable. A thin overcoat and an umbrella for each traveller are desirable. A strong pair of gloves is important, because the oars, being hung on pins, after the antiquated Moselle custom, instead of resting in rowlocks, cannot be feathered, and chafe the skin severely.

There need be no anxiety about quarters for the night, for the villages seldom are more than a mile apart, and each has its inn, where one finds a friendly welcome and endurable, often very satisfactory, accommodations.

The trip should be made, if possible, as early as midsummer, for later in the season the water often is low. There is, however, neither danger nor much difficulty at any time. It may be completed enjoyably in four or five days, but if time be taken to go leisurely, to lie by during rainy days, and to make excursions inland, the enjoyment will be increased.

The longer the trip, within reason, the more completely its delights will be appreciated. The expense need not be great. Hotel life in the larger towns, including little extras, costs not more than three dollars a day, and on the river two dollars and a half will cover everything. Indeed, one can be fairly comfortable for something less.

But what is the trip like? Imagine yourself at last gliding down stream, with charming Treves fading into the distance as the afternoon shadows lengthen. You are at the oars, pulling with slow, even strokes. Your friend, in the stern, holds the tiller. You are fairly under way, and already the scenes on either hand begin to interest you.

Here, for instance, you pass a company of German infantry, bathing. They keep their ranks, and at signals upon the bugle, throw off their clothing, plunge, still in line, into the stream, and a few moments later, emerge and dress. One wonders if they do not eat, drink, and even sleep in company formation and only at signal.

Now you pass a great foundry on the other bank. Volumes of smoke pour from its tall chimney, the light of its

glowing furnaces illumines its dark interior, and its distant workmen suggest to your fancy gnomes working in some enchanted cavern.

Soon you round a bend and float for a mile or two between green meadows, behind which lie villages embowered in trees. A rude scow, laden with peasants returning from work and singing some evening hymn, crosses your course. There a group of merry girls and boys run along the nearest bank, taking you for Englishmen, and shouting, "Englander! Englander!"

Now it grows dark, and at the next little village you land, under the lee of a jetty, and moor your boat for the night. Until you have almost reached the Rhine, you may safely leave anything in the boat overnight. You quickly find your way into the village, and soon are settled snugly at the inn. Cold pork and ham, boiled eggs, rye and sweetened white bread, cakes, with plenty of whatever fruit is in season, and beer and wine, if you wish, form your evening meal. The thick feather pillows upon your bed, one of which is intended to serve as a blanket, are rather warm, and if your pitcher held five times as much water you would be better pleased. But you are so healthily tired that you sleep soundly until the bell of the neighboring church rouses you next morning.

After breakfast the maid-servant, acting as porter, carries your luggage to the boat. Before long, perhaps, the shores in front of you look surprisingly white, and, as you float down between them, you find them covered with the linen of hundreds of families which has been washed and spread out to dry and bleach. Many lively groups of washerwomen are passed, who keep up an incessant spat-spatting of their sheets and pillow-cases while they chat and joke.

Presently a steamer, one of the regular line from Coblenz up river, passes you, and its passengers scrutinize you smilingly.

Here you come to a chain ferry, a scow made fast by a buoyed chain to an anchor far up in midstream. When the scow is pushed off, the pressure of the current swings it over

Schloss Eltz.

to the other shore. But as the weight straightens the chain, bringing it sharply out of water between the six or eight buoys, you must be careful not to be caught above it, or you will be capsized instantly. Another sort of ferry is common. A strong wire rope extends from a tower upon one bank to a similar tower opposite. The scow, square-ended and flat-bottomed, is fastened to this cable by another rope adjusted to a pulley, and is drawn across cornerwise, so as to offer the least possible resistance to the current.

Presently you land, stroll through a quiet village, buy fruit, and sketch the picturesque outline of some old gabled house. Perhaps you climb a neighboring hill, to gain the lovely view from its summit. Later, in some secluded cove, you linger and bathe. You explore the ruins of a castle upon a bluff, or rest beneath some sheltering bridge while a sudden shower passes over.

Sometimes for miles the hillsides rise almost from the water's edge, and are covered with carefully cultivated vineyards. Now and then you pass a considerable town, and hear a band playing in the garden of its chief hotel. Sometimes the river is so winding that you row for two hours and a dozen miles in order to reach a point only a single mile, easily walked in fifteen minutes, from your starting-place. Such is the case between Punderich and Alf. Charming views succeed each other swiftly, and no one who is at all sensitive to natural beauty can fail to be continually delighted.

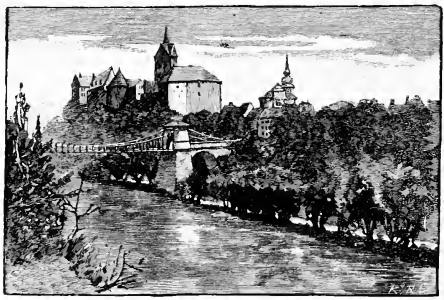
The Moselle castles are less famous than those on the Rhine, perhaps, but are quite as picturesque and equally worth visiting. Usually they stand, protectingly, upon high places above the villages. Above Bernkastel is Landshut, a fine old ruin, and above Trarbach is Grafinburg, also in ruins. Near Alf are the stately remains of the Marienburg. Above Beilstein is the castle of the same name, looking almost inhabitable. Cochem lies in the very shadow of the Friedburg, which has been restored, and now is more grand without and more elegant within than ever in the past.

But the most striking castle of all is Schloss Eltz, three

miles inland from Moselkern, rising upon its knoll above the mass of foliage which fills the surrounding valley like some great rock above the waves of the ocean. It is one of the best preserved specimens of the mediæval architecture in all Germany, and many rooms still retain their historic furnishings. It is not open to everybody, but the owner willingly allows entrance to any who apply in due form for permission.

These are only suggestions of the many pleasures which such a trip affords. On reaching the Rhine at Coblenz one finds his face browned, his muscles hardened, his appetite become enormous, and his appreciation of whatever is beautiful in nature, quaint in architecture, or entertaining and instructive in intercourse with a simple, kindly peasantry greatly intensified.

Rev. Morton Dexter.



SWEDEN.

If you were to go up in a balloon, and through some misadventure be swept so far away over the globe that you dropped down in Sweden, you would soon perceive that, wherever else you might be, you could not possibly be anywhere in the United States.

If you were to ask the first boy you met to tell you where you were, he would answer in a strange language. If you gave him a penny to make him speak more plainly, he would take off his cap and shake hands with you.

Suppose he takes you to his home, and you sit down to breakfast with his father, mother, brothers and sisters? A little flaxen-haired girl, the youngest child of the household that can talk, stands at her father's side and says a little verse in Swedish, while all bow their heads around the board. I will translate what she says. It is this:

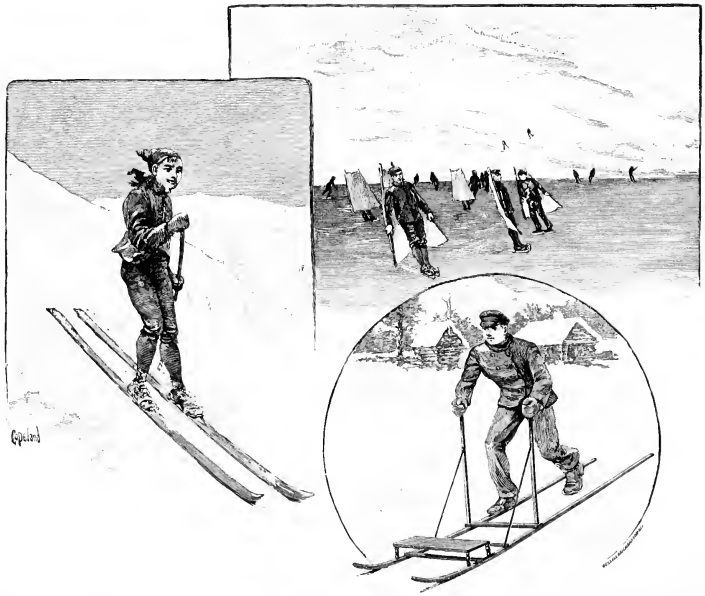
> In Jesus' name we sit at meat.
> May good God bless the food we eat.

When the repast is finished, the same little one returns thanks in another verse to the Giver of all good things.

Then every boy and girl shakes hands with mother and father, and says, "Tack for maten," "Thanks for the food," and you do the same as well as you can.

We will suppose it is summer-time, and in the country, and that after breakfast the boys take you out to the pasture. Here the horses and colts come running to you, stretch their necks over the fence, and rub their noses on your shoulder. The sheep say, "Good morning!" by rubbing their thick, woolly sides against you, and the great oxen lying in the shade give you a friendly wink now and again with their big brown eyes.

Every animal is tame and gentle; and you do not have



Winter Sports in Sweden.

to wonder long why this is, for you find that in Sweden the boys never throw stones at beast or bird, and never scare or torment them in any way. They feed and pat them, and make much of them instead.

Animals, after all, have much the same feelings as we; they know their friends, and love them.

After supper the sun is still high in the heavens, and at nine o'clock, when you go to bed, it is still shining brightly as it swings low along the horizon.

If you wake up at midnight and go to the window, you behold the whole northern sky glowing with red and yellow hues. Whether it is sunset or sunrise it is hard to say, for the heavens shine all through the short summer nights.

Indeed, were you to travel to the north of Sweden, you would behold the sun shining upon you directly over the North Pole at midnight, and you might remain a month without ever once seeing it set beneath the horizon. It would take too long here to tell you the reason of this, but it is all explained in your geography.

On Midsummer's eve, which in Sweden is the 23d of June, the boys and girls all drive into the nearest village, and you will surely go with them. You drive in a great, long hay-cart thickly trimmed all round with the bright green boughs of the birch. The horses are decked out with birch, too, and the driver sits in a green birch bower. How jolly it is driving along the pretty country lanes,—twenty or thirty of you young folks on the hay,—peeping out through the boughs and laughing and singing!

You drive up to the village green. Here are youths and maidens in plenty. You wonder where they all could have come from in such a sparsely settled country.

In the middle of the square you see a May-pole sixty feet high. This is trimmed with verdant birch leaves, while garlands and wreaths of flowers hang from its cross-trees. The blue and yellow flag of Sweden is flying from the top. At the foot of the pole is a fiddler, scraping away for dear life, and at his side a fellow pulling away on an accordion.

The boys and girls are all dancing round the May-pole. They are happy and thankful for the glorious summer-time, the earth all green again, the long days and the bright nights with no darkness anywhere. So they dance all through the night, which is no night after all — only a beautiful, luminous twilight that fills the short space between the rosy lips of sunset and sunrise.

Thus have their fathers and mothers and grandfathers and grandmothers danced before them on this same bright eve for hundreds and hundreds of years — yes, so far back in time that history does not know when the custom began.

If you like winter, you will surely be pleased with Sweden. Here are cold, snow and ice enough to satisfy anybody. So long the winter is, too! Four or five months of it at least you may be sure of. Here you can enjoy all your winter sports to perfection; build snow-forts and snow-men, snowball your comrades, coast and skate, go on sleigh-rides, or skim the frozen lakes on ice-yachts.

There are other winter sports peculiarly Scandinavian. Here you can learn how to slip over the untrodden snow fields and through the deep, dark northern forests on "skidor," or skees as they are sometimes called. These skidor, or snow-skates, are thin straps of wood six to nine feet long, about four inches in width, and turned up on the front end like the runners of a sled.

Your feet are bound to the middle of them in such a way that while the toes and ball of the foot are fast, the heel is free to move up and down. With a staff in your hand to help you up the hills and aid you in steering down them you may glide over the open country at the rate of six or eight miles an hour.

Then the "spark-stotting" or "kicker!" I know you will like that. It is the lightest sort of a frame sled. Two upright standards rise some three feet high from the back end of the framework, and behind these the runners — nothing else, mind, only the two runners — extend backward five or six feet. You grasp the top of the standards, one with each

hand, stand on one foot on one of the runners, and with your disengaged foot kick your kicker and yourself over the hard-trodden snow highways as fast as an ordinary horse jogs along.

The kicks should be long, strong, sweeping and regular. They are always delivered between the runners, and when one leg is tired you step over upon the other runner, and kick with the other leg. You must have a steel plate strapped on to the ball of each foot, and from this plate should project three or four sharp calks, like those the blacksmith welds into horseshoes in winter.

The only secret you have to learn in order to become an accomplished rider on your kicker is to touch the snow first with the heel of your boot as in walking, and then instantly kick, a swinging backward stroke, not with your toes only, but with the whole flat of your foot.

You will find the kicker a pleasant and useful "youth's companion." Its lightness makes it the velocipede of sleds. It costs but a trifle in comparison to a velocipede, and on it you may transport without difficulty your travelling-bag and knapsack, your skates and luncheon, and other packages sufficient to make you comfortable for a week.

Another winter sport is sailing on skates. The Swedish sail is in form like a capital letter A with the top cut off. You place the cross-bar over your shoulder to windward, and with a good breeze glide away over the ice at the rate of a mile in two minutes.

You can not only sail before the wind, but you may glide to and fro across the lake with wind abeam, or drawing your sail taut and leaning well against the breeze, tack to windward as gallantly as the fleetest yacht.

A merry sight, I am sure you will find it, of a December noon on the frozen fiord. The glittering ice rings with the steel shoes of the skaters, gliding about like the many-colored particles in a kaleidoscope. In and out among them skim the white sails of the skate-sailors. Along the snowy highways come the kickers, while down the white hillsides shoot

the skid-runens, swiftly as the swoop of the eagle. The low-running sun with level rays brightly illumines the whole wintry scene, and all the air is filled with the laughter and happy voices of youth at play.

But short are the wintry days. At Stockholm they are, in December, only six hours long, or rather short; and in the far north it is night the whole twenty-four hours day after day — if night can be called day — for over a month. Now you have to pay for the long days and luminous nights of summer.

But the very darkest of the year the Swedes make bright with the festivities of merry Christmas. Christmas time in Sweden means more than a day. The merrymaking is kept up for a fortnight; indeed, out in the country it is fully three weeks before all the celebrations are over. Such visiting and dancing and dining and present-making I really believe exist nowhere in the world outside of Sweden.

First of all comes Christmas eve. There is a Christmas-tree of course, and how brightly it gleams with myriad tapers! But the presents are not hung on the tree. They are all too many for that, and the servants have been bringing them in for a long time by the basketful.

The family and guests sit round the big table in the parlor. The father of the family takes up the presents one by one. All are carefully wrapped up in many thicknesses of brown paper, tied and sealed. The father reads the name of the lucky recipient; then some funny and pat verse of poetry written on the wrapper, and then hands over the gift amid much good-natured banter.

If you have been a polite, good-natured lad all summer and fall, I will warrant you fifty Christmas presents at the very least, and more likely you will get a hundred.

Now comes the "long dance," in which the young folks all join hands, form a line, and go scampering through all the rooms in the house, while grandma at the piano plays her liveliest old-time music. Then all sit down to a bountiful supper of rice porridge, "lut-fisk" — a ling leached in ashes —

and roast goose. Then to bed and to dream it all over again.

Next day, when you are jerking along home on your kicker from the skating pond, you will see a sheaf of grain on top of a pole set up in the dooryard of every farmer's house you pass.

"Well, what does this mean?" you ask your comrades.

"Oh, that is for the birds, the little wild birds. They must have a merry Christmas, too, you know."

Yes, my boy, this is the way they treat even the little wild birds in good old Sweden. You will scarcely find a farmer in all the land who will sit down to a Christmas dinner with his loved ones in the light and warmth within doors till he has first raised aloft a Christmas dinner for the little feathered wild guests in the cold and snow without.

W. W. Thomas, Jr.

A Fiord in Norway.

Life in Norway.

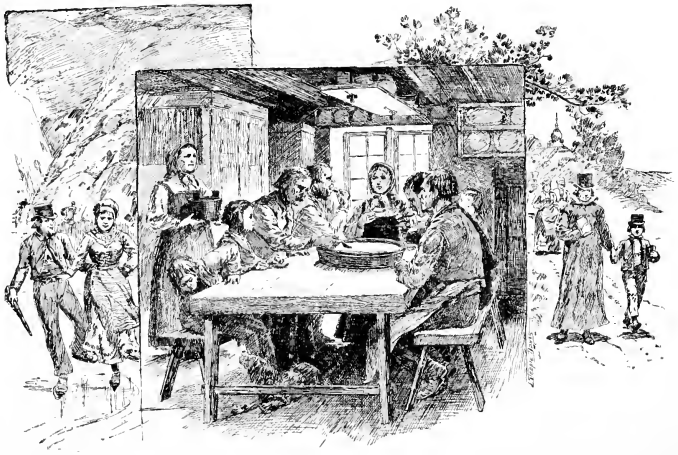
It is a mistake to suppose that Norway is a country remote from the world, whose chief claim to existence is that it is a romantic pleasure-ground. Norway is in fact easily accessible. Railways penetrate it from Sweden, extending to the North Sea; and steamboat lines ply regularly between its ports and those of Denmark, Great Britain and the United States.

Christiania, its capital, nestling among pine-clad hills at the head of a romantic fiord or inlet which is sixty miles long, is a beautiful city of a hundred thousand people, well built, with broad streets laid out at right angles, and with stores and hotels which would do credit to any capital.

The people of Christiania are exceedingly well educated, refined and hospitable, very fond of their city and country, and much given to social pleasures and music.

The Christiania police seem to have very little to do except to warn people politely not to violate the city ordinance forbidding people to stand and talk on the sidewalk, and to arrest an occasional drunkard.

Railways are comparatively few in Norway, owing to the cost of construction in a mountainous country, and to the disinclination of the people to speculative enterprise. The highways, however, are excellent, and one may "travel post" almost anywhere in a public carriole or post-chaise. The post stations are seven miles apart, and the traveller changes horse and carriage at each one of these stations. In certain remote country districts there are no inns; and here the traveller must lodge with the nearest farmer or priest. These people are so hospitable that they occasionally refuse to take pay, and invite the traveller to remain with them as long as he will; but the fare is often primitive. I have frequently found, in summer, that a farmer's larder contained nothing but



Scenes in Norway.

thick sour milk and rye bread, with sweet milk to drink. The sour milk is kept in a large, shallow tub, which at meal time is placed upon the table. Each member of the family marks off with his spoon as much as he thinks he can eat. Each covers his or her portion with sugar, and all fall to eagerly, as if it were the daintiest dish in the world.

The people of the cities dress as do people in England or America. In the country the women wear short, full woollen skirts, with bright-colored bodices decked with bangles, while the men look decidedly odd in extremely short cloth jackets with bright buttons, and trousers which ascend nearly to the armpits.

The Norwegian people are strongly inclined toward republican political principles, and greet the King of Sweden and Norway somewhat coldly on his rare visits to their country. The king is supposed to spend one-third of his time in Norway, but he certainly does not do so. He has about ten thousand dollars a year from the Norwegian revenues, and it is not surprising that the great majority of the people of Norway think they could get on just as well without him.

The people celebrate the 17th of May, the anniversary of their separation from Denmark, much as we celebrate the 4th of July — with cannon-firing, fireworks and processions, but without the firecrackers.

The Christmas and New Year's observances are not unlike those in other northern countries; but the Norwegians have a peculiar and beautiful Christmas custom, which is universal among them, of hanging out small sheaves of corn for the birds.

Skating, in the rinks and on the fiord, is a popular winter amusement, though the ice of the fiord is sometimes dangerous on account of the cuttings made by fishermen. Snow-shoeing, upon shoes frequently ten feet in length, is also a favorite diversion, and some wonderful tobogganing is done just outside the capital.

To the summit of a mountain close by the city great sleds are drawn by horses. Then each sled, laden with a dozen

people or more, comes coasting down the mountain with terrific speed.

One Norwegian custom is very objectionable to foreigners — the practice of maintaining a suffocating heat in the dwellings, and excluding the fresh air as completely as possible.

In April the winter vanishes as if by magic. The snow disappears, and vegetation springs up at a bound. The people soon betake themselves to summer quarters in the country, and the business streets of the city are almost deserted. Another round of pleasure begins — with picnics, fishing, boating, bathing, and out-of-door diversions of all sorts. The Norwegian forests, which are chiefly of pine brightened with birch, are full of the most beautiful of wild flowers. Many varieties which with us grow only when cultivated, such as the lily of the valley and sweet violets, grow wild in these Norwegian woods. Later there is a profusion of wild berries, and always a chorus of birds.

Bathing is a little dangerous in the fiords for any but good swimmers. The depth of the waters is great, and the descent of the shores abrupt. At times, too, there is in the water a sort of jellyfish which impregnates it with a poison as stinging to the skin as the nettle.

The summer residences are generally provided with bath-houses which have cages to keep the swimmer in and the jellyfish out. Boating, too, is somewhat perilous on account of the frequency of squalls.

The summer lasts from May until October, and is a most delightful season. From May to September lamps are dispensed with, and in the last half of June one may read a newspaper in Christiania at midnight by daylight. The birds seem never to sleep at this period; they are as lively at midnight as at noon.

Great fortunes are unknown in Norway. The people do not fully develop their mineral industries. The enterprising Norwegian's chief desire seems to be to get to America. Many intend to return to Norway when their fortunes are improved, but few ever do so. WILLIAM H. CORY.

THE AMERICAN TROPICS.

Scenes in Quito.

An odd old City in the Andes.

To reach Quito from the sea one must ride several days on muleback. The highway to the capital is not yet completed and only a bridle-path crosses the breast of Chimborazo at a height of fourteen thousand feet, so that the journey is one of great hardship and discomfort. Freight for the interior of Ecuador is carried upon the backs of mules or men, who travel twelve or fourteen hours a day, and take two or three weeks for the journey.

There are no hotels, but only filthy lodging-houses, in which a neat and nervous traveller would be very uncomfortable. There was no telegraph line until a few years ago, and it was useless most of the time at first, for the people cut down the poles for firewood, and stole the wire to repair their harnesses and panniers with.

But having once reached the capital of the Incas, one finds himself rewarded for his hardship and exposure, for the scenery is grander than can be found elsewhere, and the ancient city is so quaint and queer that it seems like entering another world.

Quito is at least two hundred years behind the times in almost every feature of civilization. There are no newspapers, and only one printing-office, which is owned and conducted by the government for the publication of official documents. It is so far removed from the rest of the world that the inhabitants seldom leave it, and people from the outside do not often go there.

The city is without a decent hotel, although there are forty or fifty thousand inhabitants, and strangers who want to be comfortable are compelled to stop with merchants, officials, or others to whom they have letters of introduction.

There is not a carriage or a wagon in the place, and only a few carts of the most primitive pattern, which look like the

pictures one sees in the illustrated Bibles of those used in the time of Moses.

The history of Quito has never been written, but the traditions make it as old as Jerusalem or Damascus. The Incas have traditions of a mighty nation called the Quitos, who lived there before their fathers came, but of whom the world has no other knowledge. All we know is that Pizarro found a magnificent capital of a mighty empire, extending three thousand miles, and as thickly settled as China or the interior of Europe, with beautiful palaces of stone, full of gold and silver and gems; but it was all destroyed.

The walls of the palace of Atahualpa, the last of the Incas, whose pathetic story Prescott has told in "The Conquest of Peru," now enclose a prison, and a gloomy convent stands upon the site of the famous Temple of the Sun.

Decay and dilapidation, poverty and ignorance, filth and depravity are the most conspicuous features of life in Quito, but the people are as vain and proud as if they had all the good things of the world, and think they have a grander city than London or New York. They know no better, and perhaps it is well that they do not. The only portion of the population who seem to be prosperous consists of the buzzards, the scavengers of the town, and as all the filth and refuse from the houses is pitched into the streets, they have plenty to do.

The men stand idly around the street corners, wrapped in their ponchos, for it is cool in the shade, and repulsive-looking beggars reach out their hands for alms to those who pass by. The women are seldom seen in the streets except on feast-days or early in the morning when they go to mass, and then they keep their faces so covered that it is impossible to tell one from another.

Soldiers are numerous, usually barefooted, and wearing uniforms of ordinary white cotton sheeting. Peons half-naked, and children entirely so, sleep or play in the sun, and Indian women clad in sombre black glide to and fro with their mantas drawn over their heads, or sit in the market-

place selling fruits and vegetables. Peddlers are numerous, and their shrill cries afford strangers amusement.

Water-carriers are always to be seen with great jars of clay, holding half a barrel, on their backs, going to and from the fountain in the plaza. There are no pipes or wells to supply the houses, and all the water used by the families has to be brought by the servants, or purchased from the public carriers at so much a gallon.

The city is traversed by deep ravines that are arched over with heavy masonry, on which the houses rest. All the streets are narrow, and carriages could scarcely pass upon them if there were any. The sidewalks are in proportion to the streets, and one wonders what they were made for, as two people could not possibly go abreast or pass each other upon them.

It is even difficult for one man to keep both feet upon the sidewalk without rubbing the whitewash off the walls of the houses, and the inhabitants, who are never guilty of any unnecessary exertion, have abandoned the effort, and walk in the road. The roofs of the houses, which are made of curved tiles, like sewer pipes cut lengthwise, reach over the pavements two or three feet, and water-spouts project still farther.

Few of the houses have windows looking upon the street on the ground floor, but are lighted from the inner courts. The second-story windows open upon balconies, where the ladies spend a good part of their time watching the passers-by and chatting with their neighbors.

Many of the houses, particularly those in the centre of the city, are large, and were once furnished with luxury and elegance, but are no longer so. The walls are thick, and the rooms are large. The lower floors are occupied by the servants and as stables for the horses and cattle, while the family live in the rooms above.

There is only one entrance, through which everybody and everything that enters the house must go, and at night it is closed with great oaken doors securely barred. There is no gas, but a law requires each householder to hang a lantern

over his door with a lighted candle in it. When the candles burn out at ten or eleven o'clock the streets are totally dark. The policemen carry lanterns and long pikes, and when the clocks strike the hours they call out, "Sereno! Sereno!" which means that "all is well." Therefore, the policemen are called "Serenos."

There are no fixed prices for anything in the stores. If you ask the cost of an article the merchant will reply, "How much will you give for it?" If you name a sum he will then ask twice or three times as much as you offer, and "negotio" with you. The women in the market will sell nothing by wholesale. If potatoes are a medio, six cents, a pound, every pound will be weighed out separately, no matter whether you buy two pounds or a bushel.

There is no money smaller than the quartillo, three cents, so the change is made in loaves of bread. On his way to market the buyer stops at the baker's and fills his basket with bread to make change with, so many rolls to the penny. Very few people have money, and those who have lack confidence in their neighbors, so everything has to be paid for in advance.

If you go to a market-woman and tell her you want such and such vegetables, she asks for your money. When you give it to her she hands you what you have bought. If you order a coat at the tailor's or boots at the shoemaker's, you have to pay for them in advance, for they may not have the means to get the materials at the wholesale store, and have no credit. The landlord at the hotel or at the boarding-house where you are staying, comes around every morning before he goes to market and asks you to pay your board for the day. Otherwise he could not buy food.

At the entrances of most of the houses are effigies of saints with candles burning before them, and all who enter must take off their hats and cross themselves. Service is going on in the churches almost continuously, and the air is filled with the clangor of bells from morning till night. No lady of quality goes to church without a servant following her, who

carries her prayer rug. There are no pews nor seats in the churches, but the floors are marked off in squares, which are rented like sittings. The servant lays the prayer rug down, the lady kneels upon it during her devotions, and at the close of the service the servant comes again to take it away.

Servants always go in droves. When you hire a cook you take her husband and the rest of her family to board, and they bring their dogs and rabbits, their pigs, their chickens and all their other property with them. The husband may be a peddler or a blacksmith, or he may be a soldier, but he continues to live with his wife when she goes out to service. The children of the family may be used for light duties, such as going on errands or watching the baby, and no extra pay is expected; but for every servant you hire you may depend upon having a dozen or more extra mouths to feed.

Sometimes the cook's relatives come to visit her, often half a dozen men, women and children, and stay a week or two. They also must be fed and taken care of, but are not so much trouble and expense as it might seem, for they are satisfied with beans, corn bread and a little potato soup to eat, and sleep on the floor of the kitchen, or on the straw in the stable.

There is not a stove or a chimney in all Quito. The weather is seldom cold enough to require a fire for heating purposes, and all the cooking is done with charcoal on a sort of shelf like a blacksmith's forge. There must be a different fire for every pot or kettle, and generally two persons to attend them, one with a pair of bellows and the other to keep the pots from tipping over, for they are made with rounded bottoms like a ginger-beer bottle. No laundry work is ever done in the house, but all the soiled clothes are taken to the nearest brook, washed in the cold running water and spread upon the stones to dry in the sun.

Very little water is used for drinking, for bathing, or for laundry purposes. There is a national prejudice against it. The people have a notion that water is unwholesome; that it causes dyspepsia if too much is taken into the stomach, and that a fever will result from too free use of it upon the skin.

Women seldom wash their faces, but wipe them with cloths, and then spread on a sort of plaster made of magnesia and the whites of eggs. When a person arrives from a journey, particularly if he has come from a lower to a higher altitude, he will not wash his face for several days for fear that the opening of the pores of his skin will result in cold and fever.

There are many doctors in Quito, and some of them are men of skill. There are drug stores, also, but when you go to one of them for medicine you are expected to take with you a bottle or a cup, or something else to bring it home in. The druggist has no stock of bottles, and never furnishes them to his customers. The reason for this is that all bottles have to be brought up the mountains from two to three weeks' journey on the backs of men, and are therefore very expensive.

The Indians constitute the laboring population, and they carry all their burdens on their backs. They do not seem to have any strength in their arms. A broad strap is passed around the forehead to sustain the load, and another around the shoulders. They generally take a slow trot when on a journey, which they can keep up for hours without tiring, even with a hundred pounds on their backs.

They never laugh nor sing, have no sports, no songs, no tales, but are sullen, morose, stupid, and submissive to all sorts of cruelty and oppression. The Spaniards have been hard masters, and three hundred and fifty years of cruel persecution and oppression have crushed out the spirit of the poor son of the Inca, so that he no longer smiles.

W. E. Curtis.

Carnival in Lima.

The merry season of Carnival is prepared for by all Peruvians, several weeks in advance of the eventful period. Numberless cascarones, which are hollow shells, generally made of stearine or wax molded in forms of tiny cannon, bunches of grapes, fish, and other articles, are filled with diluted Florida water.

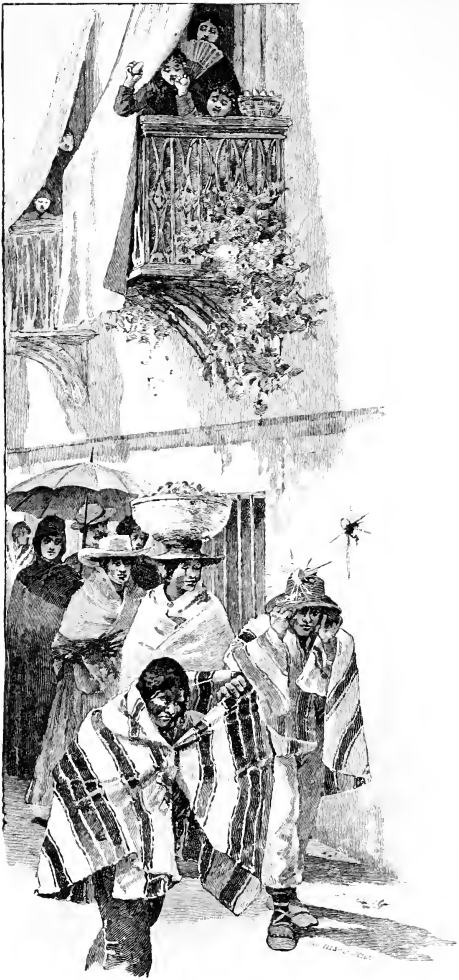
The cook saves all egg-shells whole, by blowing their contents out for culinary purposes, and then fills them with scented water.

In many families bushels of cascarones are laid away for Carnival warfare, and a thriving trade is worked up each year by manufacturers and venders of the missiles thrown in the three days given over to the sports and license of the season. The Sunday previous to Ash Wednesday opens the Carnival, and the exercises begin on that day soon after morning mass.

About noon every house seems converted into a fortress, the inmates constituting the belligerents. Senoras, senoritas and children hiding on balconies, peering out from behind screens, darting suddenly from all manner of strange places on the roofs, pelt cascarones at the passers-by, and the sticky pieces of shell, fastening themselves upon the face, hair and clothing of the victims, make them look like animated pieces of papier-mache.

The sweetness of the accompanying showers of delicate perfume hardly compensates for the rudeness. The cautious pedestrian, during Carnival, takes the middle of the street, and with an umbrella off the spring, ready to fly open in any direction, thinks himself well protected.

But suddenly some powerful syringe throws out a stream of water from an unsuspected source, and the sparkling drops fall around him in showers. His scowls and other



Carnival Fun in Lima.

demonstrations of displeasure avail nothing, and he has only to pass on to encounter, perhaps, a still more formidable drenching.

This amusing sport forms itself into a kind of thermometer, measuring the heat of temper in different individuals. The natives enjoy the fun thoroughly, running the gauntlet with unequalled skill, pelting back their tantalizing tormentors, when they get a chance, and, with their spirits on the crescendo, reach a height of enjoyment a less excitable people can hardly understand.

We were sitting in our hall by an open door one evening when the Carnival had just begun, as we felt the need of a little fresh air after the heat of the day, and were trusting to luck for our protection, when several friends gathered round us. I ought to explain that any gentleman, whether acquaintance or stranger, is fair game for any lady during this season. Almost before we were aware of it, we were objectively engaged in the Carnival.

We were reluctant to defend ourselves, as it was the Sabbath, and made a retreat as quickly as possible, thoroughly perfumed with Florida water administered by strangers passing, as well as by friends standing near.

Very early next morning our young people awoke in a high state of excitement over the expected festivities. Enough water lay secure in cascarones in our house to cause a deluge on a small scale.

I soon saw that a general demoralization of the family had taken place, and that our patience would have to be maintained through much tribulation. Before the hour for breakfast the clothing of each child was thoroughly soaked, and soon after breakfast they were saturated again.

At eleven o'clock this wild sport was, by an accident of the play, shifted to a neighboring native house, all the family taking an active part. The throwing of water was not confined to the garden; rooms handsomely furnished, and halls richly carpeted, were thrown open regardless of the damage that would result from the play.

The actors, dressed in bathing costumes, employed their skill and inventive faculties for many an hour, and surprised each other with all manner of curious ways of applying the water. The Carnival had resolved itself into a mimic battle.

According to the custom of the country, after the conflict was over and the participants had changed their clothing, the lady of the house served a lunch, over which a truce was established for a few hours.

Tuesday night being the last of the Carnival proper, the excitement reaches its greatest height. Foreigners as well as natives, completely drawn under the influence of the absurd custom, enter into the sport with energy.

Collected on the balconies and tops of the flat-roofed houses, they not only drench each other, but throw buckets full of water upon unfortunate persons passing by on the pavement. Those who think themselves safe in passing at a distance are reached by the aid of a hose. Bright-colored paints are also brought into requisition.

Some idea of the utter abandon of everybody at this time may be gained from the following incident: A day or two before Carnival a young lady anticipated the occasion by playing a little trick upon her dentist.

He was putting a neat filling of gold into a tooth — one of those delicate and difficult pieces of work of which a dentist is so proud — and was performing the most delicate part of his task, when the young lady quietly passed her arm around him, and bringing her hand up to his ear burst a cascarone into it! He said it sounded like a thunder-clap.

The water ran down his ear and neck; his nerves received a shock as from an electric battery. The job of dentistry was spoiled, the work had to be done over again, and the father had an increased bill to pay. But this was Carnival fun and the parties were obliged to laugh and make the best of it.

MARIA LOUISE WETMORE.

A Venezuelan Railway.

There are few more interesting engineering achievements than the little narrow-gage railroad running to Caracas, the capital of Venezuela, from its seaport, La Guayra. The distance between the two cities, as the crow flies,—supposing for the moment that he could fly straight through the mountain,—is only six miles; but the railway connecting them is twenty-three miles in length, and constantly twists and turns on itself.

The road runs in zigzag fashion up the mountain to an altitude of about fifty-one hundred feet above its starting point, and then descends some fifteen hundred feet in the same manner into the valley of Caracas.

Twenty-two thousand rails were used in laying the track, and of these over eighteen thousand are bent. It is jestingly said that the engineer almost died of a broken heart, because he could invent no excuse for bending the remaining four thousand. He did his best, however, and no one who has to ride over the road, and finds himself shaken at every one of the three hundred and forty-six sharp twists which the track makes, will find it in his heart to condemn the poor man for not making a perfect job.

Two passenger trains each way pass over the road daily, leaving La Guayra at half-past eight in the morning, and at half-past three in the afternoon, making the journey in two hours and a half. This is a speed, exclusive of stops, of not quite ten miles an hour.

Each train consists of a locomotive, a baggage-car, and two or three passenger coaches about the size of a street-car in Northern cities. The seats run lengthwise through the car—an arrangement necessitated by the narrow gage of the road.

The fare for the twenty-three miles is two dollars and a half first-class, and one dollar and sixty cents second. The

accommodations are equally bad in the cars of the two classes; the only visible difference between the two is that the first-class car is the less crowded.

The locomotive is a queer little machine, about the size of a dirt-cart. It has no bell, but the obliging engineer atones for this deficiency by keeping up an almost continuous whistling.

As we leave the little station at La Guayra, we take a serpentine course for about a mile through cocoanut groves along the sea. Why the road does not take a straight course through this first portion of the way, the constructor only knows, for the ground is perfectly level, and there are no obstructions more serious than a cocoanut palm or a banana plant.

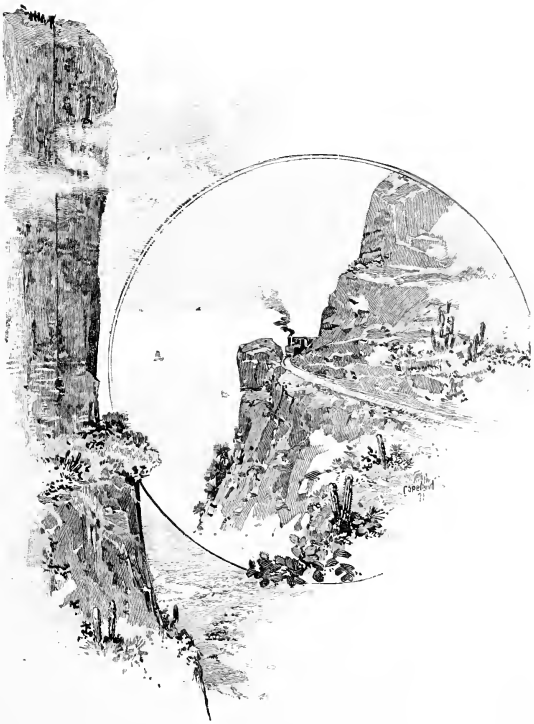
After writhing along the beach for a short time, we suddenly make a sharp turn, and then begins the climb up the face of the mountain.

Up, up, up we go, turning now to the right and again to the left, then making what seems to be an almost complete circle, now passing through a tunnel — where we are nearly stifled by the hot air and gases from the engine, which sweep through the open cars, carrying with them cinders that burn holes in the clothes, or raise blisters where they touch the unprotected skin. Then we emerge from the hole in the mountain-side in a place where we appear to be on the point of jumping over the precipice one or two thousand feet sheer down into the water that laps its base.

But we forget for a moment the constructor's passion for curves. We make two or three short turns, as if uncertain of our course, and then hoist sharply round, and go back the way we came. As we look down from the car window we see the track over which we have just passed about fifty feet from us, and directly beneath us.

Suddenly we stop. We wonder what has happened, for there is no house in sight, and it would be difficult indeed for any one to find a spot on which to perch a house, so steep is the declivity. The only thing visible except trees and rocks

is a large iron pipe running over wooden supports through a small ravine; and now we see that it carries water for the



A Venezuelan Railway.

refreshment of our thirsty little engine. Six times we stop in this way in our wild dance up the mountain-side, to take breath and water our engine, until we cross the highest point

and begin to slide down to Caracas. In going down the mountain on either side gravity is the only propulsive force employed, steam being kept up only to work the brakes and prevent too rapid a descent.

There is but one station, apart from the watering places, between La Guayra and Caracas, and this the railroad people have most appropriately named Zigzag. Here the trains from opposite directions meet and pass each other.

As soon as the engine has filled its boiler, it gives one long shriek of warning, the passengers climb into the little cars, and we follow once more the giddy wake.

The scenery, as viewed from the window of our car, is grand; but in order to enjoy it thoroughly one must possess strong nerves. At our feet, a thousand metres below, we see a faint streak, which is the narrow beach on which La Guayra lies. The houses in the town look like dice, and the men and donkeys in the streets have become invisible.

Beyond, stretching away to the horizon, now vastly extended by reason of our elevation, we see the sparkling blue waters of the West Indian Ocean. A mere speck which we can hardly discern on the surface of the sea is the ship which brought us to this coast, and which left for the chilly north an hour before we began our cloudward climb.

If we turn and look ahead, we see the mountain rising up ever higher and higher until its peak is lost in the cloud that always clings to it, as if fearful of trusting itself to fly alone and without support over the distant ocean.

The air, which was so hot and sultry on the coast, is growing more and more fresh as we ascend, and it becomes almost chilly as the cloud hugging the mountain-top receives us, and draws the curtain which hides from our view the beauties of nature as well as the dangers which encompass us.

Dangerous as the ascent of the mountain appears to be, and really is, accidents are fortunately rare, owing to the constant vigilance exercised by the officials of the road over every foot of the track. Landslides do occasionally take place, nevertheless, and no amount of watchfulness can prevent them,

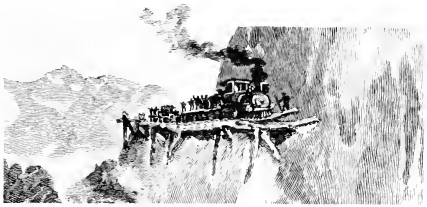
or even give warning of their occurrence. Fortunately they have never yet happened to strike a train. The road-bed in many places is a mere scratch in the side of the mountain, barely wide enough to permit the passage of the narrow cars. The outer rail is often laid within a few inches of the edge of the precipice, so that in looking from the window one sees nothing but the bottom of the ravine hundreds of feet below.

While the road was building, it was frequently found necessary to lower men by long ropes from above until they could make for themselves a foothold by means of pick and shovel.

When one realizes how much labor and money have been expended in forcing this way through almost inconceivable natural obstacles, it seems indeed a pity that such a triumph of engineering skill should be doomed to an ephemeral existence; but already the freight and passenger traffic taxes the capacity of the road to its utmost, and if the present rate of increase continues, it will be but a very few years before it will be utterly unable to handle it.

Work is already being rapidly pushed forward by an American company on a new route between La Guayra and Caracas, which is to pass under the mountain through a tunnel four miles in length. The cars on this new road will be hauled by cable power up a ten per cent. gradient, and will carry freight and passengers from one city to the other in less than half an hour.

THOMAS L. STEDMAN.



The Land of the Llama.

If I should hear of any one intending to visit Bolivia for pleasure, I should offer him the advice that Mr. Punch gave to young people about to marry — "Don't;" for the settled portion of that republic is almost as inaccessible as the interior of Africa, and there is but little to learn or see when it is finally reached.

But to a traveller who is in search of experience I would recommend the journey, for there is no other part of the world where one can get so much experience or so great a variety in so short a time, and for the same amount of money.

First there is the voyage from New York to Aspinwall, which in the summer season is comfortable and pleasant; next the trip by rail over the famous Panama road across the Isthmus, when one of the commodious vessels of the Pacific Steam Navigation Company is taken, and the traveller lives a sort of picnic life for the next three weeks, until the port of Mollendo is reached.

The waters of the South Pacific are always smooth, the weather is always fair during the dry season, the scenery is sublime, the temperature is never too hot nor too cool, and as long as you remain under the awnings or in the protection of some other shade, the breezes from the ocean or the Andes temper the tropic heat.

The ship stops at all the ports along the coast, often dropping anchor two or three times a day, and giving the passenger an opportunity to go ashore and inspect all of the quaint towns and villages, each one of which ordinarily offers some new and novel adventure. I can suggest no more agreeable or interesting voyage than that between Panama and Valparaiso.

Mollendo is about two-thirds of the way. There passengers for Bolivia leave the ship and take a railway, which was

built and is still managed by an enterprising Boston Yankee. The conveniences of travel by this line have not reached so high a state of perfection as are found upon those which run between New York, Philadelphia and Boston, but it is a great improvement upon muleback-riding over a thirsty desert and through the dizzy passes of the Andes.

This railroad is remarkable for running nearer the stars than almost any other railway, for where it passes over the western range of the Andes, into the great basin of the southern continent, the track is fourteen thousand seven hundred and sixty-five feet above the sea, and the only higher point at which a wheel was ever turned by steam is where another Peruvian railway tunnels the Andes. No other long road can show an equal amount of excavation, nor such massive embankments, and the engineering difficulties overcome in its construction were enormous.

Along the side of the track for a distance of eighty-five miles is an iron pipe, eight inches in diameter, which conducts water from the springs in the mountains for the engines and for the use of the people that dwell in the desert. On the other side of this desert is the city of Arequipa, whose name signifies the place of rest, although it is more subject to earthquakes and political revolutions than any other place in Peru, and human or natural agencies are raising a commotion all the while.

The former terminus of the railway was at Puno, a little town of five thousand inhabitants, at an elevation of twelve thousand five hundred feet; but it has been carried farther up the great basin, and extended through a pass in the eastern range of the Cordilleras, and down the slopes to the headwaters of the Amazon.

To reach La Paz, the former seat of government and capital of Bolivia, one must cross Lake Titicaca, that strange and bottomless sheet of water, one of whose islands was the legendary Eden of the Incas, and around whose shores clustered the prehistoric cities which the brutal Spaniards destroyed. Here one may take a steamer, at any rate that is what the

people call it, although it would amuse a North American shipwright, and usually excites a nervous apprehension in the minds of timid travellers.

If one does not care to board this unique craft, or if he wishes to depart from the regular route of travel and make a cruise among the ruined cities of the Incas, he can hire what is called a balsa, a curious combination of raft, flatboat and catamaran, which is propelled by a large sail made of skins and by long poles.

Reaching the southern point of the lake, the rest of the journey, wherever one may be going, must be made on muleback along the ancient highway of the Incas, which was constructed centuries before the conquest, and is perhaps the most remarkable of the many remains of that remarkable race. The Spaniards have done little to improve it since they have had control of the country, more than three hundred and fifty years, but it is still in a pretty good state of preservation, and is continually trodden by parties of travellers, battalions of troops and droves of llamas, often thousands in number, laden with the products of the forests and mines of Bolivia.

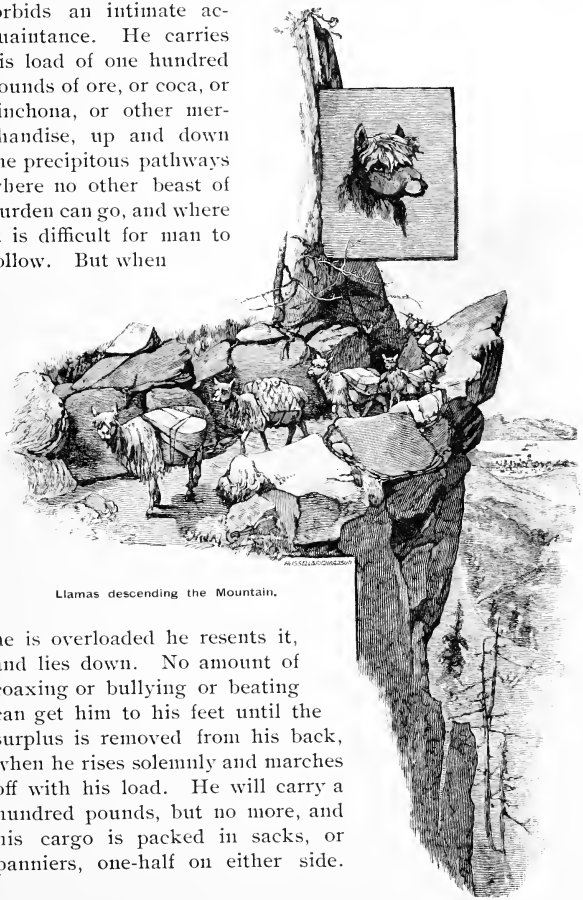
As the camel is to the people of the deserts of Asia and Africa, so is the llama to those who dwell in the Andes; a faithful, patient and enduring beast, without which the inhabitants would be utterly helpless, for mules and horses can neither survive the climate nor climb the mountain trails.

But the llamas one sees in Bolivia are as much unlike the animals shown in the zoological gardens as the tiger in the jungles of India is unlike his namesake that growls and yawns in a circus cage.

Their bodies are covered with a soft, thick gray wool like that of the merino sheep, their giraffe-like necks are proudly and gracefully curved, their eyes are large, lustrous, intelligent, and have an expression of constant inquiry. Their ears are shapely, and quiver continually, like those of a high-mettled stallion, as if to catch the first sound of approaching danger.

The llama to me is a most fascinating study. While he is

docile, obedient and enduring, there is always an air of suspicion or distrust about him, and a silent dignity that forbids an intimate acquaintance. He carries his load of one hundred pounds of ore, or coca, or cinchona, or other merchandise, up and down the precipitous pathways where no other beast of burden can go, and where it is difficult for man to follow. But when



Llamas descending the Mountain.

he is overloaded he resents it, and lies down. No amount of coaxing or bullying or beating can get him to his feet until the surplus is removed from his back, when he rises solemnly and marches off with his load. He will carry a hundred pounds, but no more, and his cargo is packed in sacks, or panniers, one-half on either side.

Therefore all freight subject to this mode of transportation must be packed accordingly, and limited to packages of fifty pounds.

When frightened, llamas always cluster in groups, with their tails together and their heads out to meet the enemy; and their only weapon of defence is their saliva, which, when angry, they squirt through their teeth in showers, as a Chinese laundryman sprinkles his clothes.

A drop of this saliva, falling in the ear or eye or mouth, or on any part of the body where the skin is broken, will instantly produce a most painful irritation, and often dangerous sores, like the venom of a serpent. The llama-drivers keep away from the heads of their animals as carefully as a colored man from the heels of a mule.

When they lie down they fold their long, slender legs under them in some mysterious manner, and chew their cud with an air of abstract contemplation and absolute content.

The kids afford excellent food, but the bodies of the old llamas are masses of muscle, tendon and gristle that are tough and rank. They live to a great age, subsist upon almost anything in the shape of food, and have as powerful a digestive apparatus as a goat or an ostrich.

In these elevated regions, as I have said, it is difficult for either horses or mules to exist, the air being too thin for them. Horses are seldom seen, and mules are kept only for the accommodation of travellers, and their nostrils are split so as to make it easier for them to breathe.

When a horse is brought into the high altitudes of the Andes the blood starts from his mouth, ears and nose, and men are often affected in the same way. The disease is known as "sirroche," and sometimes is fatal. The natives, having been born and bred at this great elevation, are no more affected by the rarity of the atmosphere than the negroes of the Brazilian swamps are by the heat.

W. E. Curtis.

An Evening in a Brazilian Forest.

Let us wander in imagination through a Brazilian forest, just as the burning heat of day is passing into the cool of evening. As yet nature seems asleep, and a solemn silence reigns under the shade of the colossal forest trees, some nearly two hundred feet high; the Brazil nut and monkey-cup trees, the king-tree and the cow-tree, which spread their vast cupolas of foliage over the smaller cecropias; tree-ferns and palms which, though smaller, are some of them from fifty to a hundred feet high.

By and by, as we look up into the branches of a cecropia-tree, we see a hairy mass resting in the fork between a bough and the trunk, and barely visible, so like is the tint of the hair to the lichens and dead-brown mosses which clothe the bark. This mass is a sloth, grasping the bough firmly with his clawed feet, as he sleeps through the heat of the day. It is only when the cool of evening sets in that he will wake up to feed, and move quickly along from tree to tree, grappling each branch as he goes with his twisted feet, and using his long arms and supple wrists to reach to the tips of the boughs for tender growing shoots, which he tears off and stuffs into his mouth to chew them with his feeble back teeth.

To see him on the ground when he has to cross an open space, you would think him a poor creature at best, for his ankles are so twisted that he can only tread on the side of his feet. His toes are joined, and he has three on each foot, armed with long claws very inconvenient to tread upon, and his arms

are so much longer than his legs that he is obliged to drag himself along on his elbows.

A Brazilian Forest.

But when once he has hoisted himself aloft again, these strange limbs serve him well. The twisted ankles enable his long claws to take a firm hold of the branches, his long

arms reach for his food, and his long, unwieldy neck, which has more joints than in other mammals, allows him to throw his head backward to seek for food. He has no front teeth, but his sharp claws do the work instead; and his back teeth, though they have neither enamel nor roots, continue to grow up from below as they are worn away above.

In this way the sloth makes the most of the very primitive body which he has inherited from his ancestors, which stood very low in the scale of mammals, and if he could relate the history of his forefathers it would be a very interesting one.

First he would tell us that he belongs to a feeble and dying group of creatures who wander few and far between in distant parts of the world; and that while he has two very distant relations — the ant-bear and the armadillo — roaming about the forests near him, we must travel right across the sea to South Africa to find the other two branches of the family stem, the aardvarks and pangolins.

It is toward nightfall that we must look for his American compatriots as, leaving the thicker parts of the forest, we wander toward the banks of the River Amazon or some smaller stream. There we may see creeping along in the dark a large, gray, hairy animal about four feet and a half long, with black-colored throat and shoulders and a line of thick hair along his back, ending in a bushy tail three feet long, which drags behind him on the ground.

His front feet are twisted so that he walks upon the edge instead of the sole, and his thin, tube-like, toothless snout almost touches the ground as he moves along, his thread-like tongue protruded at intervals, as though to test the objects he passes.

This shambling, heavy-going creature is the great ant-bear,* and he is in search of ant-hills and termite (or white ant) mounds, for these animals are his chief food, as he thrusts into their homes his long, flexible tongue, covered with sticky moisture, bringing out thousands at each thrust.

His toothless mouth, his imperfect collar-bone and his

* Myrmecophaga jubata.

twisted, clawed feet with united toes, all show that he belongs to the same low group as the sloth.

But our wonder ceases when we learn how strong the great ant-bear is. The muscles of his arms and shoulders are so powerful that he can hug his enemies to death, while his strong claws once dug into the flesh never loose their hold. Therefore, although he has no teeth, he can defend himself even against the jaguar; and he does not fear to wander freely and rifle the ant-nests of the South American forests, just as his distant relation, the pangolin, with like twisted feet and toothless mouth, feeds on termites in South Africa, protected not by strength, but by scaly armor.

Then is the time that the howling monkeys make the forest resound with their cries, and croaking frogs, chirping cicadas, chattering parrots and yelping toucans raise a very Babel of sounds, soon after sunset. It is at this hour, or perhaps rather later, when the evening chatter has sunk to rest, that the tatou, or great armadillo, about three feet long, begins to wander, feeding upon fallen fruits, or digging deep burrows with his long, powerful claws in search of roots and grubs. He alone of the American "Edentata," or imperfect-toothed animals, walks on the soles of all four feet, and in this, as in many other ways, more resembles the aardvark, or ant-eater of South Africa, than his companions in America.

But all this time our dreamy sloth is waiting to tell us the history of the past, and how it happens that he and his comrades have distant connections so far away as South Africa, and yet none in other parts of the world. If he could speak, he would boast with pride, as others have done before him, that there was once a time when his family spread far over the face of the earth; when from India, Greece and France to the Mississippi Valley, Nebraska and California, animals with imperfect teeth and immense claws wandered not in trees, but on the ground.

This was in hot Miocene times, when they were among the highest animals living on the globe; but as time went on, and higher and stronger creatures — elephants and buffaloes, lions,

tigers, leopards and others — killed them, or drove them out of the great continent, the remainder found homes in South Africa and South America. Then came the time when, cut off from the world to the north, huge ground-sloths* as large as elephants ruled supreme in South America, walking on their twisted forefeet, and instead of climbing trees, tore them up by the roots to feed on their foliage. And with these gigantic animals were others, nine feet long,† the ancestors of the armadillos, with armor-plates not movable, but formed into a solid shield, while to complete the group an ancient form of the ant-bear‡ bore them company.

For long ages these monsters flourished, and much later on left their bones in the bone-caves of Brazil, where, mingled with more modern bones of sloth, armadillo and ant-bear, they tell the history of the past. And then they died out; and as the great Brazilian forests flourished and overspread the land, the sloth and smaller ant-bears took refuge in an arboreal life, while the great ant-bear trusted to his powerful limbs, and the armadillo to his plated armor, for protection in their nightly wanderings; and thus they remained to tell of an ancient and once powerful race, now leading a secluded life in South American wilds.

ARABELLA B. BUCKLEY.

* Megatherium, etc. † Glyptodon. ‡ Glossotherium.

South American Games.

The boys and girls of South America have many of the same amusements that occupy the time of their cousins in the northern half of the hemisphere. Displays of toys are seen in the shop windows of Santiago and Lima and Buenos Ayres and Rio de Janeiro, that remind one of the attractions of the New York stores at holiday times, and the imported play-things come from the same places where ours are made,—from France, Switzerland and Germany.

The boys have rocking-horses, and tin locomotives, and lead soldiers; and the girls have dolls, and tiny sets of china, exactly like those sold in Boston and Chicago, and they play with them in the same way. The Spanish-Americans are an amusement-loving people, and gratify the wishes of their children with quite as much liberality and extravagance as the Yankees.

The South American children play "Hide and Seek," too, but they call it "Juego de Escondite;" they have picnics, which they call "Meriendes;" and "Gallinita Ciega," which is a sort of "Blind Man's Buff," only it is usually played in the patios or courtyards around which the houses are built, and not within doors.

They play "Pussy-wants-a-corner," which is called "El Juego de las Cuatro Esquinas;" tag and cross-tag; the girls have skipping ropes (Cuerda para saltar).

They also have a game called "Frio y Caliente," like our "Cold and Hot." One member of the party is sent out of the room. Those who remain select some object, a door-knob, or a picture, or some article of furniture, which is to be detected by the one who is "It," as they say. As the "It" approaches the article selected, the party cry "caliente," which signifies that he is close to it, and when he goes in the opposite direction they cry "frio," which means cold.

Sometimes the piano is used, and the performer plays louder as the "It" goes away from the article, and softer as he approaches near, until finally when his hands touch it the music ceases, and some one else takes his turn.

Dolls are called "Munecas" in Spanish, and their clothes are "Vestidos." The boys have tops that are called "Trompos;" pop-guns called "Tiraballes;" and marbles that are called "Metras" in the northern countries, and "Bolletas" in Peru and Chile. They usually play marbles in a ring, with a hole in the centre. If the player gets his own alley into the hole he loses it, but if he knocks the alley of some other boy into the hole it is his. They play with a row of holes, too, placing a marble in each, and then try to knock it out by dropping their own upon it.

There is a tree in the tropical countries that produces hard, round nuts like marbles. They are called "Jaboncillos," and the boys use them in preference to marbles made of clay.

The indoor games are comparatively few, as the weather in most of the South American countries is so mild that the children can spend most of their time out-of-doors.

They have bull-fights in imitation of those attended by their fathers and mothers, one boy acting as the bull, and the others teasing him as the "toreadors" and "matadors" torment the real animals, and when the time comes the bull is killed and dragged out by a pair of boys harnessed up like horses.

The military spirit is developed early, and the boys organize companies with drums, and tin swords, and wooden guns, and wear uniforms which their mothers make for them. Political parties are found also among the boys as among their fathers, and revolutions occur frequently, which are called "Pronunciamentos."

Baseball is not played as it is in the United States, but the European game of "handball," or "Peloto," as they call it, is common. The ball is thrown against a wall and then struck with the palm of the hand as it rebounds, the object being to keep it from the ground as long as possible. The

player who keeps the ball in the air, between his hand and the wall, the longest time, wins. Grown men play hand-ball, and have courts built for the purpose.

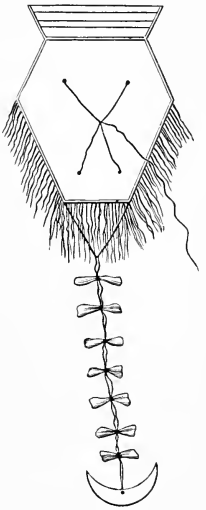
Tennis is as common as in this country. Once in Santiago, Chile, I called at the house of a Presbyterian missionary, and

"Bull-Fighting."

was told that he could be found in Cousino Park. I followed him there, and discovered him engaged with the principal of a mission school and a party of ladies playing tennis on the lawn.

The South Americans do not play "tenpins" with ten pins, but with three. The centre pin, or king, as they term it, counts twelve if it is knocked down, and the others six each. The game is called "Bollo." A game peculiar to Central America is "Cereas." A bowl is made of beeswax with a convex bottom, and balls of beeswax are thrown to knock it down. Quoits are common, and "duck and drake,"

which is played with stones, as it is in this country. The kite is a popular toy all over Central and South America, even more popular than in the United States, and is called "El Cometa,"—the comet. Some of the kites are made as ours are, but others are peculiar. The shape is usually a hexagon, the sticks are bamboo, and the covering tissue-paper. When a boy wants to show his artistic taste, he ornaments his kite with a fringe of tissue-paper around the bottom, as is shown in the accompanying sketch; and if he be musical he extends the sticks above the paper at the top and stretches across them strips of hide, which in a strong breeze give a beautiful sound like an Æolian harp.



A musical chord can be made by loosening or tightening the strings, as shown in the illustration. The surface of the kite is often painted to represent the face of a man, when the fringe around the sides has the appearance of a beard, and is trimmed accordingly.

Sometimes a tin knife cut in the shape of a crescent, with the inner edge sharpened, is attached to the tail, and the boy who is flying it tries to cut the strings of other kites that happen to be in the air around his. A good deal of skill is often shown in attacking or in escaping from these "pirates," as the knife-tail kites are called.

A popular game that is played both indoors and out is called "Tanganillo y Chito," the prop and the money. A ring is drawn upon the floor or upon the ground, about a yard in diameter, and a section of a broomstick or bamboo, twelve or eighteen inches long, is set up in the centre, with a penny

or any other coin on the top. The players stand off a certain distance, and by throwing pennies endeavor to knock the coin from the top of the stick. If it falls within the ring the player loses and forfeits a penny. If it falls without the ring it is his.

"La Tira, la Eloja," can only be translated, "to jerk, to slacken." It is played with a large napkin, or a small sheet, or a table-cloth. Four persons hold the corners tightly in their fingers, and a fifth, who is called "the director," stands by. He gives orders in rapid succession, but the players are expected to do exactly contrary to his commands. For example, when he shouts, "Jerk!" they are to slacken and let the sheet hang loosely between them. When he shouts, "Slacken!" they are to jerk and hold the sheet taut until the next order is heard. When a player obeys orders instead of violating them he is required to pay a forfeit, and some other member of the party steps up to take his place.

It will be discovered that the natural inclination of the human will is to submit; and only one who has great self-control can remain long at the sheet.

The last one acts as judge, and like the goddess of justice is blindfolded. Then the fun is renewed, for as the forfeits are held up one by one before him, he is to pronounce the penalty without knowing whether the owner is young or old, male or female. He may require some venerable patriarch to squeal like a pig or go around the room on his hands and knees, or some child of six to deliver an oration.

W. E. CURTIS.

A Young and Growing Mountain.

Down on the coast of Central America, in the little Republic of Salvador, so near the ocean that it may be seen from the decks of passing ships, is a mountain that grows.

There is another remarkable fact about Izalco, as the mountain is called, for it is not only increasing in height all the time, but it is the most violent and constant of all volcanoes. Every little while, from one year's end to the other, it spouts vast quantities of fire, lava and ashes, which fall in a shower, and wrap its sides for a thousand feet below the summit with a blanket of living coals.

It is impossible to conceive a grander spectacle than is presented at night to the passengers upon ships that go that way. No one goes to bed on the steamer till the mountain is out of sight. Travellers go a long distance to see it, and are always willing to admit that the journey repaid them.

The mountain rises nearly seven thousand feet, and as its base is almost in the sea it looks much higher. An immense plume of smoke ascends from the crater. The incessant bursts of flame, mounting five hundred feet every little while, can be seen for more than a hundred miles in clear weather. The mountain has been called "the lighthouse of Salvador," and the shipping on the coast needs no other beacon so far as the mountain can be seen.

Around the base of the volcano are productive sugar plantations, with a railway running through them. Then comes a wide strip of timber—an almost impenetrable forest, whose foliage is perpetual and of the darkest green. Beyond the forest, and between the timber line and the summit, is a belt of ashes and lava which is constantly receiving accessions from the crater, and every few minutes changes from a livid yellow, when the ashes are hot, to a silver-gray, as they begin to cool.

At night the effect is very fine. At each eruption there is a violent explosion, like the discharge of a thousand cannon, and afterward a terrible rumbling is heard beneath the surface of the earth.

Izalco arose suddenly from a plain in the spring of 1770, in the midst of what had been for nearly a hundred years a profitable sugar plantation. The owner, Don Balthazar Erazo, was absent on a visit to Spain at the time, and was greatly amazed on his return to discover that his farm had been exchanged, without his knowledge or consent, for a first-class volcano.

It was in December, 1769, that the peons on the plantation first noticed that something was wrong underneath. Although they were accustomed to "tremblors," as slight earthquakes are called, they became frightened at the unusual rumblings and growlings in the bowels of the earth. They decided to leave the place, and got away not a moment too soon. A few days later, when some of the most venturesome went back to see how the animals were getting on, they discovered that all the buildings had been destroyed, that great trees had been uprooted and large craters had opened in the fields, from which came smoke and flames, but apparently there had been no great eruption as yet.

A party of shepherds, braver than the rest, decided to remain in the neighborhood and await developments; and on the 23d of February, 1770, they were entertained by a spectacle that perhaps no other men were ever permitted to witness — the birth of a mountain. It was about ten o'clock in the morning, as they afterward said, when the grand upheaval took place.

First came a series of terrific explosions which lifted the crust of the earth in a pile several hundred feet high, and from the opening issued flames and lava, with masses of smoke.

An hour or two after there was another and a grander convulsion, which shook the country for hundreds of miles around, and did great damage in the neighboring towns.

Rocks weighing thousands of tons were lifted high in the air, and fell several miles distant. The surface of the earth bulged up nearly three thousand feet, and vast masses of rocks were piled up around the crater from which they issued.

These terrible earthquakes continued for several days, and great damage was done in the neighboring States of Nicaragua and Honduras, as well as in San Salvador.

The volcano was a healthy and vigorous child. In less than two months, from a level field arose a mountain more than four thousand feet high. The discharges from the crater from that time to this have accumulated around the edges until the pile has reached nearly seven thousand feet, and it is still growing. Unfortunately the growth of the monster has not been scientifically observed or accurately measured. It would be difficult to measure it, for the surface of the cone, down to two thousand feet from the summit, is always covered with hot lava over which no man could climb, and the fumes of sulphur would suffocate one if the heat could be endured.

Within view of the city of San Salvador are eleven great volcanoes, one other beside Izalco being constantly active, while the others are subject to occasional eruptions.

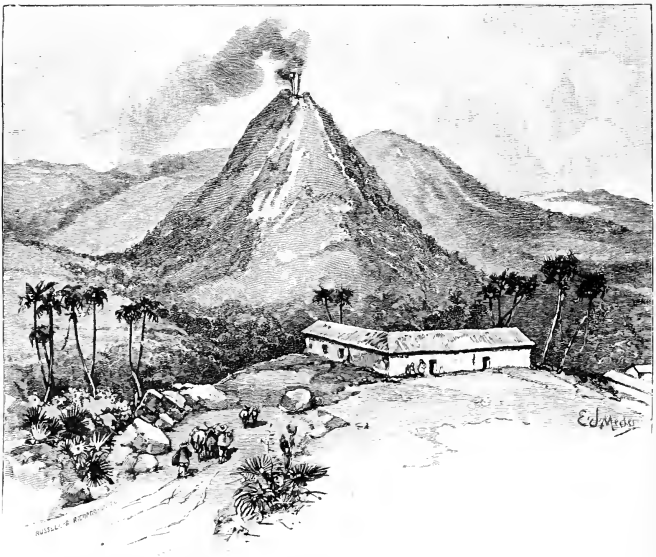
The nearest peak is the Mountain of San Salvador, which is about eight thousand feet high and shows to great advantage as it rises abruptly from the plain. It is only three miles from the city to the base of the mountain, but the sides are so broken by monstrous gorges and projecting cliffs that it is almost impossible to climb it.

The summit is crowned by a cone of ashes and lava that fell there centuries ago; but since the spring of 1854, when the most serious earthquake the country has known took place, the crater has been extinct, and is now filled with a lake of clear, cold water.

Lying to the seaward of the volcanoes, and not far from the city of San Salvador, is a forest of balsam-trees about six hundred square miles in extent, which is inhabited by a curious race of Indians. These people are little altered from

their primitive condition, and are permitted to remain there undisturbed and enjoy the profits derived from the sale of balsam.

The forest is full of foot-paths which are so intricate as to baffle strangers who try to enter, and it is not safe to make the



The Volcano of Izalco.

attempt, as the Indians, peaceable enough when they come out to mingle with the other inhabitants of the country, violently resent any intrusion into their stronghold. They keep their common earnings in a treasure-box, to be distributed by the old men among the families as their necessities require.

There is a prevailing impression that the tribe has an

enormous sum of money in its possession, since its earnings are large and the wants of the people are few. The surplus existing at the end of each year is supposed to be buried in a sacred spot with religious ceremonies. These Indians, who are temperate and industrious, are known to history as the Nahuatls, but are commonly spoken of as "Balsimos."

Although San Salvador is the smallest in area of the group of Central American Republics, and smaller than Massachusetts, it is the most prosperous, the most enterprising and the most densely populated, having about as many inhabitants as Connecticut. The natives are engaged not only in agriculture, but quite extensively in manufactures.

They are more energetic and industrious than the people in other parts of Central America, and gain wealth rapidly; but the constantly recurring earthquakes and political disturbances keep the country poor.

San Salvador has always taken the lead in the political affairs of Central America. It was the first to throw off the yoke of Spain. After several ineffectual attempts to gain independence, the Salvadorian Congress, by an act passed on the 2d of December, 1822, resolved to annex the little province to the United States, and provided for the appointment of commissioners to proceed to Washington and ask its incorporation in the great republic.

Before the commissioners could leave the country the revolutions in the other Central American States had become too formidable to suppress. The five states joined in a confederacy one year after the act of annexation to the United States was passed, and the resolution was never officially submitted to our government.

W. E. Curtis.

In the Grand Plaza of Mexico.

Here stood Montezuma's mighty temple to the Sun. Much allowance must be made, of course, for the vivid imaginations of the Spanish historians in the romantic days of the discovery and conquest of the New World; but even to this day, and right here on and about the great plaza you see unimpeachable testimony to this heathen temple's storied splendor.

This grand plaza is still, as it was when Cortez first entered it as the invited guest of the great Indian city, the heart of Mexico. The palace built, or rather begun, by Cortez, stands on the eastern side of the great square. This palace is the largest in the world. It is not the finest palace in the world, but it is the broadest; covering more acres of ground than any other palace or public building of any sort that I have seen in all my travels. It is a low and ugly edifice, and is built for the most part out of the stones of the overthrown temple to the Sun.

Every Monday morning all Mexico, or at least all the idle and curious and pleasure-seeking portion of Mexico, and that is a large portion of the citizens, comes to this plaza to hear the band play and see the troops deploy before the palace. The president and his officers, all in brilliant uniforms, sit or stand on the upper balcony of the palace, and review the troops. There are always many ladies with the president and his officers,—many of them American ladies,—and there is often much cheering and patriotic enthusiasm. The music is very good, as in all Latin lands.

The Mexican soldier, as seen here at these costume parades, is a queer, pitiful little fellow, and he is still more queer and pitiful as you see him out of the city marching up and down the country.

It is the policy of Mexico to keep her soldiers constantly moving about. And as the Mexican soldier nearly always has

his wife and children with him, he cuts a queer figure when marching up and down the country from town to town. At such times he is always barefooted; and at best, he has, as a rule, only wooden sandals to wear. When marching in the country he generally has his pantaloons and coat rolled up and tied in a bundle along with his blanket and provisions. His bundle the wife generally has on her head as she trots along at his side.

The poor little brown soldier, his naked skin glistening like polished copper in the sun, nearly always has a child in his arms. Their affection for their little brown children is beautiful, indeed. I have often seen a barefooted soldier struggling along with a whole little family—except the wife—in his arms or on his back. As night approaches and the troops are nearing the place to camp, the women go on before with their burdens on their heads and their babies on their backs, and make fires and prepare the scanty meal; while the poor little brown soldiers trim up their irregular lines a bit, and enter camp with a show of discipline under the sharp orders of the handsome officers.

When the bands play in the grand plaza and the troops deploy, and the glistening brass cannon rumble and trundle over the big cobblestones, you see thousands of women and

The Cathedral of Mexico.

children on the edge of the square watching it all with intense delight. For to many of them this is their first glimpse of the great palace, and the president of Mexico.

After an hour of rather awkward parade over the ugly cobblestones and under the eye of the president, one regiment after another is permitted to melt away, and drop out in a "go as you please" march again for the country.

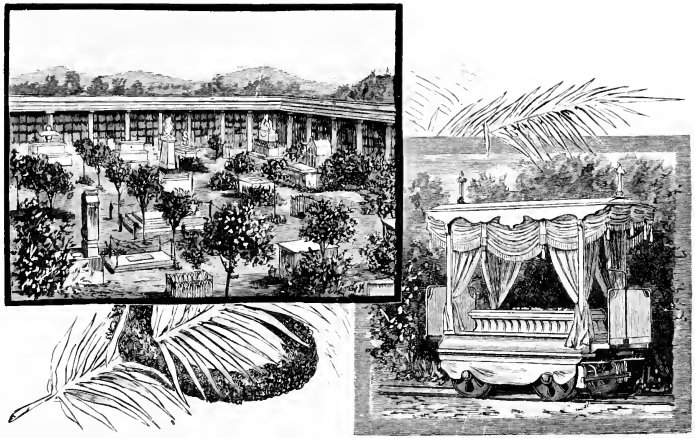
Ah, then you should see the wives, the babies who have been noting the brave soldiers all this time! They struggle forward, they clasp husband, father by the neck, hand, anywhere that they can get hold of him. They praise his beauty and his soldierly bearing, they insist on carrying his gun, they kiss him over and over again; and he is glad; he is very glad. He sheds tears of joy as he trudges on toward one of the seven gates of the city.

Now and then he stops, catches up a half-naked child, presses it to his heart, kisses it over and over again; and only sets its little naked brown feet again on the ground in order to take up another one of his miserable little children, and embrace it also.

All these soldiers are very, very small men. I have often seen them fairly stagger under the weight of their big, ugly muskets as they panted and perspired under a hot day's march in the country. At such times the little children lie thick along the line of march under cactus plants and in the shadow of stone walls, nearly dead from exhaustion, waiting for the poor, tired father to come back from the end of the day's march and take the little starved things to his heart.

The one special object of interest here by this storied plaza of Mexico City, after the palace, is the cathedral. It stands on the north side of the square facing the sun, as did the great heathen temple from the ruins of which it was built. This is the richest place of worship in the world, that is to say, it has more gold and silver in and about its altars and sacred places than any other like place now to be found on earth, if we are to believe our eyes.

And yet you hear it whispered that the great silver rails



Mexican Cemetery and Funeral Car.

around the altars here, as well as at the other rich church a league distant, are no longer solid silver; that the lofty golden candlesticks are no longer solid gold. But of this no one can say certainly except, perhaps, the few great dignitaries at the head of the Catholic Church in Mexico.

The music is fine here, certainly the finest of its kind in America. But the place is dirty and damp and gloomy from one end of the year to the other. A dozen or more deformed and repulsive creatures creep about the doors over the dirty stones, and implore you as you pass in to buy lottery tickets which they crumple in their dirty hands. You are not asked for any money, but there are plenty of little boxes tacked up here and there for the reception of whatever you may please to bestow.

There are many rare and costly pictures here in this glorious old cathedral; and yet the real pictures of Mexico, the pretty ones, the pathetic ones, the pictures that make you put your handkerchief to your eyes a dozen times a day are people themselves. How loving they are! How true they are to one another in all their misery, all their abject ignorance and most piteous poverty!

There is a little flower-garden and some great trees in the centre of the grand plaza, and here late in the afternoon the band plays, and the fashionable people congregate.

You should see the little brown gardener in broad hat and narrow white breechcloth at work in the flower-garden here in the grand plaza of Mexico City! You should see him mow the lawn. And how does he do it? Why, in the first place he squats flat down on his naked heels, and then he hitches himself along as fast as he cuts away the grass, without rising up or even lifting his head from his work. And what does he mow with? Why, a little piece of glass or rather of obsidian, the same as he used when Cortez came.

In digging up the stump of a eucalyptus-tree here last winter the gardener came to a stone which proved to be a huge and hideous idol. The government claims all such discoveries, and in excavating this idol for the fine museum in

the palace, two others were found. They weigh perhaps a ton each, and had long ago been tumbled down here, no doubt, by the Spaniards when they destroyed the temple to the Sun. It is said that many rare and curious things, as well as much gold and silver, are still buried here on the site of the pagan temple, but only the impoverished government can make excavations.

I have now described the eastern and the northern sides of the great square, the palace and the cathedral. The other two sides are made up entirely of broad porches. These porches reach out from fashionable stores and fine shops of all sorts, and are turned into little booths or bazaars by day and on till midnight. But, curious to tell, at and from the moment of midnight the porches belong to the people till sunrise!

A little before midnight those pretty little shops that blaze and brighten all day and till late at night begin to melt away. The Arab, the Turk, the Frenchman, the German, all sorts of storekeepers fold up their tents, and suddenly start out, as the little half-nude and helpless children of the sun steal in and lie down to rest on the hard stones of this half-mile of porches.

Till three in the morning when the sudden sun comes pouring over the low palace like a silver sea, and flooding their faces! They spring to their feet on the instant; they pour forth into the plaza in torrents; one, two, ten thousand people with their kindly copper faces lifted to the sun! They gather about the laughing fountains in the broad plaza, they laugh with the laughing water as they plunge their arms or their heads into flowing pools.

All the street-cars, more than a dozen lines of them, start from the grand plaza here, and never stop their gallop till they come to a station.

There is one very new and yet very solemn-looking and curious street-car starts here. It has a huge, black cross over its one broad, black platform, and is called "the car of the dead." The once long and dreary processions of priests for the dead are allowed no longer here. You go to your grave

by street-car in Mexico City now. This car starts every hour, and from the number of those who go out, but come not back, by this car, you would say that Mexico is a sickly city. But it is not so sickly as it seems. For in the first place all the dead, as a rule, are buried from this presence of the cathedral; and in the second place there are almost always two coffins to one corpse. One of these coffins holds the dead, the other holds flowers which are to be emptied upon the dead when in the grave.

How this seems to soften the whole hard fact of the funeral! One coffin holds beautiful sweet flowers; one — and you can't guess which one — holds the dead.

The poor people here — and they are, at least, nine to one — take all their dead to the grave on their backs. But they also always have the two coffins, and they also always come by way of the cathedral when on their way to the grave. There is a whole street close by the cathedral with nothing but coffins in it; but they are not all of them black and sombre. Some are a bright red, some are brilliant with painted roses, some are curiously marked by queer figure-paintings, and look like Egyptian work.

The poor never bury the coffin with the dead, it is always brought back, along with the narrow little box that was filled with roses. There are professional carriers for these occasions called "cargadaro." They sit around the grand plaza in dozens with little ropes in a girdle at the side. They always go in a trot, as if the dead had whispered, "Hurry up! I want to get out of this and rest in my bed of roses!"

Joaquin Miller.

The Boys of Mexico.

The Mexican boy has plenty of play, though he cares little for hoops or balls, tops, kites or marbles. Unless he is unusually poor he has a horse and saddle of his own, especially if he lives in the country; and no matter how poor he may be, he either has a donkey or can borrow one in five minutes.

He often learns to ride when he is so small that he has to climb up the fore leg of the horse, pull himself up by his mane, swing one leg over the neck of the horse and then slide down on its back. He soon learns to reach down from the saddle and pick up things from the ground while the horse is in motion.

One day, starting out to shoot ducks in the State of Durango, I was followed by a native boy about seven years old on horseback, who went to pick up the game.

It was almost as much sport to see him get the ducks as it was to shoot them. Through mud, water, brush, and among rocks, he rode at a gallop with about equal ease, always reaching down from the saddle to pick up a duck, and coming back with it like the wind.

Sometimes when the water was very deep he made his horse swim out to the duck; and if the mud were too deep along the edge of the pond he threw his lasso over the duck out in the water, and pulled it in to where he could reach it without getting his horse fast in the mud.

Learning to ride so early, and spending much of his time on the horse, the Mexican boy becomes a wonderful rider. He would not make a very graceful appearance in Central Park in New York, but there is no monkey in the museum there that can cling to a prancing horse more firmly than he can. And yet generally he rides without clinging at all. He does not press the horse with his knees or legs, but maintains

his position simply by keeping his balance. The most common plaything of the boy of Mexico, and the one he enjoys above all else, is the lasso, or riata. It takes the place of pea-shooters, popguns, slings, bows and arrows, and nearly all else but the horse, and is a plaything of which he seldom tires.

He begins to throw his mother's clothes-line as soon as he is able to make a noose in the end of it and coil it. With this he practises until he can throw it quite easily over a post, or the head of his younger brother. As soon as he begins to tire of this, for the reason that it does not show enough skill, he tries to catch the domestic animals as they run. To do this well requires a great deal of practice ; but at last he becomes so skilful that he can cast the noose over any foot of an animal in full run, and soon afterward learns to do the same from the back of a horse while in full gallop.

Most of his early practice is upon the dog or cat, or some member of the family, or upon the goat or pig in the yard. Very soon the dogs and donkeys in the street begin to suffer ; but when donkeys are scarce, and the dogs have all taken to their holes, the boys practise upon one another, taking turns in running past their comrades, and trying in all possible ways to avoid the noose with their feet.

Many of the dogs in Mexico have been lassoed so often that they will run for cover at the sight of a rope in a boy's hands ; while others have become so hardened that they will stand and watch the rope with cool indifference, and spoil the boy's fun by not running at all.

This is a harmless amusement, for the rope is so light that it does not hurt, and animals learn to stop the moment the rope is fast around them. It is an amusement that might well be practised, under proper guidance, by boys in our own country ; for the ability to coil a rope, and cast a noose over an object forty feet away in less than half a minute, is an accomplishment that may be useful in many ways before one is done with this world.

Mexican children are very seldom rude or saucy. They

are taught to be polite under all circumstances and to all people. Some parents would rather have their boy be almost anything else than a "grosero," or rude person. For this reason one hears little quarrelling or rough talk among children playing, and sees hardly any fighting or bullying of little boys by larger ones.

For the same reason Mexican boys are not as mischievous in many ways as the children of some other countries. The glass would stay for years in the windows of an empty house in Mexico, and one is never in danger of being tripped by a string stretched across the pavement.

Many of the children brought up away from the cities in Mexico never go to school, and never learn to read or write. On the great farms, or "haciendas," thousands of children are born, grow old and die without seeing or knowing anything of the great outside world. Some of these farms are larger than certain whole counties in the United States, and some of them have hundreds of laborers, all of whom, from father to son, are born, live and die on the same farm.

T. S. VanDyke.

The Sea of the Discovery.

The Bahama Sea is perhaps the most beautiful of all waters. Columbus beheld it and its islands with a poet's eye.

"It only needed the singing of the nightingale," said the joyful mariner, "to make it like Andalusia in April;" and to his mind Andalusia was the loveliest place on earth. In sailing among these gardens of the seas in the serene and transparent autumn days after the great discovery, the soul of Columbus was at times overwhelmed and entranced by a sense of the beauty of everything in it and about it. Life seemed, as it were, a spiritual vision.

"I know not," said the discoverer, "where first to go; nor are my eyes ever weary of gazing on the beautiful verdure. The singing of the birds is such that it seems as if one would never desire to depart hence."

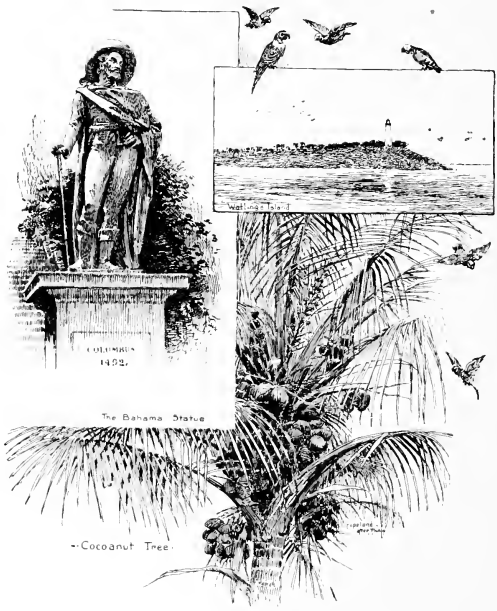
He speaks in a poet's phrases of the odorous trees, and of the clouds of parrots whose bright wings obscured the sun. His descriptions of the sea and its gardens are full of glowing and sympathetic colorings, and all things to him had a spiritual meaning.

"God," he said, on reviewing his first voyage over these Western waters, "God made me the messenger of the new heavens and earth, and told me where to find them. Charts, maps and mathematical knowledge had nothing to do with the case."

On announcing his discovery on his return, he breaks forth into the following highly poetic exhortation: "Let processions be formed, let festivals be held, let lauds be sung. Let Christ rejoice on earth!"

Columbus was a student of the Greek and Latin poets, and of the poetry of the Hebrew Scriptures. The visions of Isaiah were familiar to him, and he thought that Isaiah himself at one time appeared to him in a vision. He loved nature. To

him the outer world was a garment of the Invisible; and it was before his great soul had suffered disappointment that he saw the sun-flooded waters of the Bahama Sea and the purple



splendors of the Antilles. There is scarcely an adjective in the picturesque report of Columbus in regard to this sea and these islands that is not now as appropriate and fitting as in the days when its glowing words delighted Isabella four hundred years ago.

I recently passed from the sea of Watling's Island, the

probable "San Salvador," to the point of Cuba discovered on the 28th of October, 1492, and to the coast of Haiti, the Hispaniola of Columbus, and the scene of the first settlement in the New World. I had studied the descriptions of Columbus, and almost every hour of the voyage brought them to mind like so many pictures.

Watling's Island was probably the first landfall of Columbus, and the scene of the dramatic events of the elevation of the cross, the singing of the Te Deum, and the unfurling of the banner of the double crowns of Leon and Castile on the red morning of October 12, 1492.

The San Salvador of the old maps, or Cat Island, a place now of some four thousand inhabitants, was not really the scene of Columbus's landing.

Watling's Island lies far out in the sea. It is cooled by waving palms, and is full of singing birds. It has a tall lighthouse tower painted white, which rises nobly over the water. Its light can be seen nearly twenty miles. As one sees it one recalls the fact that no friendly light except the night fagots of the Indians guided the eye of Columbus.

Watling's Island has a population of less than seven hundred souls, and is not often visited by large steamers. I secured some fine specimens of "sargasso," or gulfweed, in passing through this sea.

Over these waters continually drift fields of this peculiar seaweed. It is of a bright yellow color; it shines brilliantly in the sun, and at a distance presents a scene of dazzling splendor. The "berries," which sailors say are poisonous to certain kinds of fish, are very salt. The weed seems always to move west before the trade-winds.

Over these fields of shining drift, land birds came singing to the ships of the adventurers; and on one of the matted beds a land crab appeared — a sure indication of a near shore.

The crews of Columbus feared to enter the Sargasso Sea. They had been told that in sailing west they would come to a sea of monsters, and they feared that these ocean meadows might cover hidden foes and perils. The peculiar beauty of

the Bahama Sea is its clearness and deep purple color. This dark purple color is said to be the result of the "shadow of deep waters," though whether this is a scientific view I do not know. Under a cloudless sky the sea is luminous purple.

A cloud shadow changes this royal hue into emerald. One gazes down into deeps unknown, and sees the pairs of dolphins as clearly as the white-winged birds overhead. One's eye follows the flying-fishes as clearly when they go down as when they dart into the open air. One here dreams of coral gardens, of sea-nymphs, and recalls the ancient poets' conceptions of Oceanus and Neptune. All fancies seem possible to the creative imagination here.

On the islands of the Greater and Lesser Antilles, or the Columbian Seas, grow the most abundant cocoanut groves in the world. The trees are graceful and lofty, and as a rule are slanted by the winds. They bear a solid burden of fruit.

"I have counted from forty to fifty cocoanuts on a single tree!" I said to an officer of my steamer, in surprise.

"I have counted a hundred," was his answer.

It seems unaccountable that so slender a trunk can hold aloft in the air such a weight of fruit.

The nuts are not only numerous on a single palm, but of great size. A single nut often yields a pitcher of cocoanut water, or two goblets, as we might say. The palms of all the islands must be as fruitful to-day as when the first voyagers saw them.

Columbus speaks of flocks of parrots that "darkened the sun." Such flocks do not appear now, but in every port of the Antilles there is a parrot market. The natives love their parrots, and the cool trees and drinking-stands of the parrot market make a popular place of resort.

As a rule, the birds are not confined in cages. They are left to climb about on the booths in which cocoanut water and cool drinks are sold. The people extend their hands to them, and the birds walk into them for the sake of gifts, caresses and admiration.

Women kiss these parrots, and hold their heads close to

their lips when talking to them. The birds are usually jealous and ungrateful, and have but little to commend them but their art of begging and their beauty.

Nearly all cities in Latin America have statues to Colon, or Columbus. One of the most beautiful of these is in the Paseo of the City of Mexico. These statues usually represent the great mariner as of most distinguished appearance; lofty, chivalrous, poetic.

The statue to Columbus in Nassau in the Bahamas is quite a different conception. We find in it the sturdy and traditional English tar. It is what Columbus might have been had he been born an Englishman. As England herself has been in effect transported to Nassau, New Providence, so has art here been made to take on her type and expression.

The glory of the Bahama Sea is the night. A sudden hush falls upon the purple serenity; the sunset flames, and the day is done. The roof of heaven seems low, and the stars come out like silver suns.

One does not need to look upward to see the stars, but down. The heavens are below as well as above; the sky is in the sea.

The shadowy forms of pairs of dolphins pass under the transparent waters almost as distinctly as by day. The atmosphere, sky and sea all blend as one world.

Amid such unimagined brilliancy and splendor the soul becomes a revelation to herself in the consciousness of beauty-worship, and thought takes wings.

One recalls the pictures that Columbus gives of the expansion of his own soul. One here feels a longing to attain larger knowledge and all that is best in life, and wonders what new discoveries may await the spiritual faculties in wider horizons than these. Wherever he may go, the tourist will ever return in memory to the Sea of the Great Discovery. It is the paradise of the ocean world; the temple gate of the West.

H. Butterworth.

Housekeeping on a Desert Island.

It was once my lot to keep house for a fortnight or so on a desert island among the Bahamas; a gentleman having been good enough to place his vacant house on one of the "out islands" at our disposal.

The island was some six miles long, with several surrounding "cays," as islets are termed in those regions, which belonged to the same proprietor. This property lay some thirty miles south of Nassau, the capital of the Bahamas, and as no ships ever went there we hired a steamer to take us and our belongings to our new abode.

The belongings were considerable on the occasion, for the house was unfurnished, and there was no shop or store within thirty miles of it. So we had to take bedding, tables and chairs, pots and pans, eatables and drinkables, household necessaries of all sorts, as well as three children, a governess, three servants, a goat to give us milk, a monkey, a parrot and two little ground doves.

We anchored in a little harbor formed by some sheltering rocks; our luggage and furniture were lowered into a boat and landed in a heap on the sandy beach. There every one shouldered whatever he could, and under a burning sun we toiled up to the house, which stood on the top of a hill and was about a quarter of a mile off.

I was laden with part of a paraffin stove. The children insisted on dragging along the largest boxes and bundles they could find. The servants and sailors brought up the rear with the remainder of our possessions.

We found a negro and his family in charge of the house. On our arrival they moved into a hut close by, and we proceeded to settle down for the night as best we could.

The house was of good size, and divided into rooms by partitions that only went half-way up to the roof, so as to give

free circulation. It was thatched with palm-leaves, and had a wide veranda running all around it. Furniture there was none except two tables and a bench or two.

While supper was preparing we spread out our mattresses and made arrangements for the night. It was not possible to hang up mosquito curtains for the first night, and indeed we

On the Beach.

did not particularly care to do so, for we had been told that sand-flies and mosquitoes were unknown on Highbourne Cay.

We were speedily undeceived. Our first night there was an awful experience. Millions of sand-flies and swarms of mosquitoes made life unbearable and night hideous. We were all very tired, but no one slept at all. As everything was open our moans and revilings were audible to all, and we compared our miseries.

Finally I got up and, wearied and woebegone, wandered up and down the veranda, longing for day and wondering if life on a desert island were worth living. At last the welcome dawn restored us to cheerfulness.

Instead of the ordinary tub in one's bedroom, a dip in the warm, clear, blue sea was delicious of a morning. As we had the island to ourselves, we donned our bathing-dresses in the house and walked down in them to the shore, a large palm-leaf doing duty as a sunshade.

The path to the beach lay through the bush. Most of the shrubs were in flower, and waxy-white blossoms of an unknown species filled the air with a delicious scent. Near to the strand great trails of snow-white passion-flowers stretched out their graceful length, and masses of orchids with sprays four or five feet high, of old-gold, purple and brown flowers swung gently to and fro in the breeze.

When we lay down on the coral sand, soft as satin, the tiny waves rippling gently over us, while little silvery fishes swam lazily around, the miseries of the past night were forgotten, and it seemed as though the world could offer nothing more delightful than existence on a desert island.

Our breakfast, if in the orthodox style in such places, ought to have consisted of turtles' eggs, breadfruit and cocoanut milk; but the island afforded none of those dainties, and we had to content ourselves with eggs supplied by the caretaker's hens and the contents of mundane tins from cooperative stores.

The only incident of an unusual nature connected with the meal was that my little girl, while milking the goat, was observed to have a large centipede taking its morning stroll over her hair. The creature was knocked off and killed by the trusty negro caretaker before it did any mischief.

We had sent down a small sailing-boat from Nassau, so as to be able to communicate with civilization if necessary. The sailor belonging to it acted as our cook.

After the experience of our first night we took precautions against our tormentors, and afterward slept in comparative

peace. Large fires were lighted around the house. All doors and windows were tightly closed before sunset, and not opened till the moon was well up, when we crept under the mosquito nets and set our winged foes at defiance.

We still had midnight visitors, but of a more agreeable kind. Large fire-beetles flew in at the unglazed windows, lighting up the rooms with living fairy-lights. Small birds twittered on the rafters; little crabs rattled gaily over the floor; friendly geckoes croaked from the roof, or busied themselves with an attack on the winged pests.

Geckoes are lizards six or seven inches long, of a pale yellowish color, mottled with brown, with rings of brown on the tail. They are generally found in sheds and the roofs of houses. They are harmless, useful, and are easily tamed, becoming full of confidence when unmolested.

After some days our meals of poultry and tinned meats became monotonous; and hearing that iguanas were found on a neighboring cay, my husband sailed over to procure some. The iguana is a lizard which feeds on fruits and vegetables. It grows to three or four feet in length, and its flesh is considered delicate eating.

The cay where creatures of this sort were found was flat and rocky, and the iguanas had their strongholds in the numerous fissures and cracks. Long search had not been made before an iguana was seen to retreat into a cavity. A

fire was lighted at the entrance to smoke him out. When the poor animal could stand the smoke no longer, a scurry was heard and out he rushed through the smoldering embers, only to be shot.

As soon as a sufficient number had been taken to supply our present needs, one was secured alive and brought back to me. It was about two feet long — a thick, heavy, blackish lizard with a crest down the back of his neck. We put a cord round his body and tied him to a tree near the veranda. If one went near him he snapped viciously and sometimes ran at one and seized anything on which he could lay hold in his mouth, just like a wicked dog.

His companions, whom we tried in the form of a pie, had delicate white flesh resembling chicken or veal.

When the stock of vegetables which we brought with us was exhausted, the caretaker produced another edible novelty in the shape of a head of "mountain cabbage." This is supplied by a palm-tree, a portion of the trunk of which is edible. These palms grow abundantly on Highbourne and the neighboring cays. Wild hogs, numerous on some of the latter, lived almost solely on these palms, tearing down the smaller trees and ripping them open with their tusks to get at the succulent heart.

The cabbage palm brought on this occasion to us was not a good specimen. When cooked it looked like huge and very stringy sugar-cane, and tasted like succulent wood.

I have often since eaten mountain cabbage. When of the proper kind it is extremely good. Eaten raw it has a nutty flavor, and makes an excellent salad. When cooked it looks rather like very white cabbage, but the flavor is much finer and more delicate.

Sometimes we went out fishing for our dinner, or collected great pink conch-shells in the shallow water by the shore. The fish in them made a capital soup.

Our days glided by in delightful monotony. All our meals were served on the veranda, and there we spent the heat of the day, busy at our various occupations.

To the full we tasted on our desert island that pleasure unknown to dwellers in cities, and rarely experienced in northern climes — the pleasure of mere existence.

Hammocks hung from the beams, and a swing in one was very agreeable. The view all around was charming. An undulating foreground of thick bush, composed of silver palmettos; lignum vitæ covered with bunches of azure flowers; seven-year apples with star-like white blossoms having a delicious fragrance, and trees and shrubs innumerable, of unknown names and beautiful foliage — sloped down to a turquoise sea stretching far as the eye could reach, and dotted with little gray and green islands.

Between the bush and the sea lay a band of coral beach, shimmering in the sunshine like a broad silken ribbon; in the foreground grew some fine "wild rose apples," as they are locally termed; their botanical name I have forgotten. The foliage is very dark green, and the branches bear clusters of brilliant scarlet flowers. On the backs of the large, leathery leaves beautiful little iridescent green and blue beetles make their home.

The wing-cases of these beetles are clear and like glass, the beautiful colors showing through the glassy substance, but disappearing on the death of the insect.

The air was full of perfume, the eye feasted with harmonious forms and glowing colors, the body refreshed by cool yet balmy breezes; and we drank in health and strength from an open-air life, unhampered by conventionalities and unembittered by the struggle for existence.

LADY BLAKE.

A Trip to Santo Domingo.

Would you like to get on board a steamship for a voyage to the island of Santo Domingo? It may be only a dream steamship to you, but it is the image of one in which I did make that voyage, some time ago.

Let us suppose that I have you all on board, the anchor weighed, and the harbor of New York fading in the distance.

Your first hour on board will probably be passed in putting your books and clothes into something like order. While you are about this, dinner will be announced, but if the wind happens to be ahead, the rolling and pitching of the vessel may make you think of something very different, viz., your bed, and how to get into it. You try to do this, and everything seems to be against you.

Your books come tumbling down from the upper berth, in which you had laid them. Your travelling bag rolls over upon your feet and hurts them. Your portable inkstand, which you imprudently got out in order to write down your last impressions of New York, falls out of the rack into the wash-basin, and sprinkles the premises with ink.

You feel very ill, and it makes you worse to hear the vessel strain in the sea, with doleful noises, as if her wooden sides were in pain.

At last, with the help of steward or stewardess, you are properly undressed, and your dizzy head is glad to rest upon a hard, rather damp pillow.

Rock, rock, rock. If you are not very ill, the motion soon lulls you to sleep, and in the darkness of the night you only hear the boatswain's whistle, piping, shrill and sweet, and the heavy steps of the sailors who come up on deck and go below when the watch is changed.

But we will suppose that these rough days are past, and that our ship is now carried smoothly over the tropical sea by

a favorable wind. The seasick folk are all up and dressed, though not in their best clothes. They begin to laugh at their late misfortunes.

How bright the sky is, and how warm is the sunshine! The thought of dinner becomes a pleasant one, as the sea air gives the recovered patients a keen appetite.

If you look over the side of the vessel, you will see quantities of gulfweed, yellow sprays that look almost golden in the blue water. You may fish for this, if you will, with a long string and a large pin bent to serve as a hook.

When you have caught a bit of it, and have drawn it on board, you will find it a coarse, common seaweed, not worth preserving.

You will see here and there, too, the Portuguese man-of-war. This is a shell-fish called a nautilus, which looks as if it carried a tiny sail on the surface of the water.

Shoals of flying-fish dart out of the sea, and fall back into it. If a few should be caught on deck, they will be found very nice when fried.

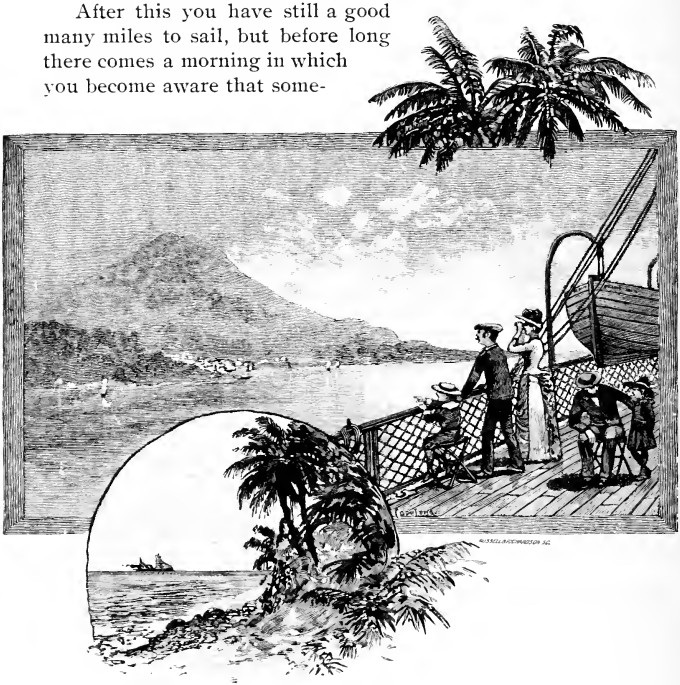
Meantime the weather grows very warm. It is perhaps only four days since you came on board wrapped in your winter furs and wadded coat. Now you find summer clothing very comfortable, and a broad shade hat indispensable, for the glare of the light upon the water is very trying to the eyes.

At sunset you see such wonderful clouds of every shape! There is one which looks like a party of ladies with queer bonnets, which melt and change as fashions really do. There is a lion galloping after a dog. Now the dog changes to a lizard, and the lion to a whale. There is a group of fiery, untamed horses, which presently take the shape of a monstrous giant, who loses his head, and in turn melts into something else equally strange and unsubstantial.

As night comes on, the sky seems to turn into black velvet, studded with diamond stars. You can stay on deck until bedtime without danger, and when you bid your friends good-night, even the voices of dear ones sound sweeter in the soft, tropical air than elsewhere.

On one of these nights you pass a distant light which looks almost like a star very near its setting. They tell you that this is Turk's Island light, and your heart is cheered by the sight of something that is really on land.

After this you have still a good many miles to sail, but before long there comes a morning in which you become aware that some-



thing has caused new excitement and activity on board the steamer. Then comes a knock at your door, and the cry :—

"Porto Plata is in sight! Come out and have a look at Mount Isabel!"

You run out, wondering if this can be true, and are astonished to see the lofty mountain, rising sharp and sheer against the cloudless sky. At its base lies the pretty, thriving little town whose name you have just heard.

The ship is just steaming into the harbor. Presently she comes to anchor in the roadstead. Boats rowed by negroes come alongside, and the health and customs officers come on board.

There is much shaking of hands and chattering in Spanish and in English. You walk carefully down the companion-way, and the boats soon land you at the long wooden causeway, which in turn soon brings you to "terra firma." No matter how well you may like the sea, it is a great pleasure to find yourself on land again.

The steamer stays but one day at Porto Plata, but this gives you time to see much that is new and amusing. In the first place, you will look at the little carts, drawn each by one bullock, which are driven down into the shallow water to receive the goods brought from the steamer in large boats called lighters.

Then you will like to walk through the streets and to look at the shops, which display many curious things.

Among other commodities, the fruits of the country will interest you. Passing by the market, you will see heaps of golden oranges, which are offered you by the thousand. Bananas are sold in huge bunches. You can buy one of these bunches for twenty-five cents. It would cost you five dollars in New York or Boston. Then there are sapodillas, with russet skin and orange pulp surrounding a large polished stone; and arimoyas, purple in color and full of milky juice; and sour-sop, or guanabana, of which the juice only is used. This latter fruit looks like a soft, green pine-apple. Its flavor resembles a combination of pine-apple and strawberry. You can squeeze it to obtain juice, but if you attempt to bite into it, you will find nothing but a tough fibre, which is quite uneatable.

In these warm climates, people usually rise very early and

take a long nap in the middle of the day. So you will find that the little town seems to go to sleep between twelve and one o'clock and to remain very quiet for about three hours. You will feel drowsiness stealing over you, and will do well to follow the general custom and to take what is called a "siesta." You can do this best at the hotel, a bare and barn-like building, in whose upper story you will easily find a cot-bed with a mosquito-netting hung over it. There are no glass windows here, or anywhere else in the tropics, but the stout wooden shutters will make the room dark enough.

It may be nearly four o'clock when you wake from your slumber, and find the town waking up, too. A fresh breeze now blows from the sea, and the atmosphere is comfortably cool. The horses' hoofs rattle on the pavement, and if you look out you will see the pretty little animals going along very swiftly, and so smoothly that their riders are scarcely stirred in the saddle.

If you walk a little out of the town, you will find plenty of ferns and wild flowers, and you will see numbers of curious yellow land-crabs crawling about on the road.

But at nightfall you will be warned to go on board your steamer. Returning, and clambering up the sides, you may find the sailors amusing themselves by throwing bits of pork to the sharks, whose ugly pinkish heads are every now and then thrust up out of the water, expecting a choice morsel. You now understand why it is better to be on board before dark, as the boat which brings you might upset, in which case these sea-monsters would be very ready to make a hasty meal, without distinction of persons.

In the early, early morning, while you are still sleeping soundly, the anchor is weighed and the steamer starts for Samana, which will be our next stopping-place.

Julia Ward Howe.

SKETCHES OF THE ORIENT.

A Street in Pekin.

In Chinese Streets.

Although the streets of Chinese cities are narrow and crowded, yet traders of almost every kind gather on each side and narrow the way still more with articles spread out for sale. Barbers, fortune-tellers, public scribes and physicians are also there, for the Chinese think nothing of sitting down in the street and having their heads shaved, or any other private matter attended to.

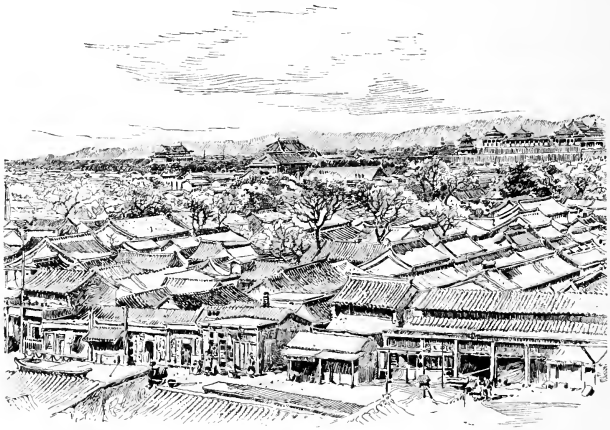
Then, too, in China the best men in a trade are as likely to travel from place to place as to keep shop in one town. Their apparatus is easily moved, and after a travelling barber, fortune-teller or physician has exhausted the cash and patronage of the dwellers in one street, he packs his things on his back, to another part of the town.

The fortune-teller gets money, perhaps, more easily than any of his fellow rice-winners, for while they really exert themselves by shouting their wares, he quietly sits behind his table with his ink, paper and instruments spread before him, and the people come to him one by one. The Chinese all believe in this crafty old rogue, and listen to his wonderful tales of the future with the greatest interest.

They always consult him before a wedding or any great event, letting him select the lucky day. He is also a public scribe, and foretells the effect of his customer's letter, whether it concerns love, law or commerce. He claims skill as an oculist, too. The wise and learned man! — how bright and watchful are his own black eyes behind his large, round spectacles!

The barber must be a man who is skilful with his fingers, and has a firm, steady hand, for his business is not only to shave the head and chin, but to trim the eyebrows and eyelashes, to clean and dress the eyelids and to manipulate a few other organs, in a way that causes one's blood to run cold.

The Chinese are fond of eating, and the makers of sweetmeats, cakes, tea and soup are kept busy most of the time. Their prices are very low. A cup of tea and a sweet rice-cake cost about ten cash — one cent — and a bowlful of hot soup only five cash. Some of the cakes they have for sale are far from tempting to a foreigner — their colors are so very brilliant.

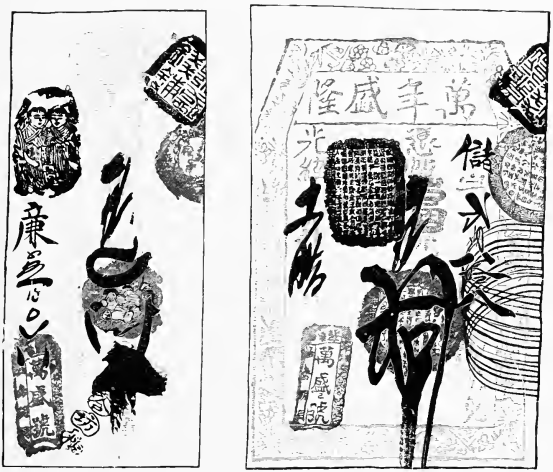


General View of Pekin.

The seller of hot shell-fish, by calling Fortune to his aid, induces people to buy. He shakes a jar full of sticks and in high, metallic tones calls out, "Come try your luck! only five cash, and who knows what may happen?" Then some innocent Chinaman draws near, and full of excitement pulls out one of the sticks.

"Not much luck this time," says the seller, as he examines the number of the stick. "Never mind; the fish are good, and fresh from the rocks this morning." Then he ladles eight revolting-looking objects into a bowl, from a mess of steaming soup by his side.

The peep and puppet shows are very cleverly managed. The peep show is a large box with a series of lenses at one end, through which the curious individual looks, as the showman causes the pictures to come and go at the other end by pulling a number of cords. These pictures have movable



Chinese Bank-notes.

figures, and some of them are of foreign places. The showman delivers a running commentary on each as it passes the spectator's vision.

The puppet show is very much like our Punch and Judy show, only the puppets are worked by the man's fingers. He uses his forefinger with a clay head on it, and his thumb and second finger for arms, to make an animated succession of characters, for he quickly changes the heads and gowns of his actors and as quickly changes his voice to suit their sex.

Chinese girls patronize the flower-venders, buying sweet-scented flowers to put in their hair; old women patronize the seller of herbs, for medicine to cure their ailments; and everybody patronizes the fruit-seller for his cooling fruits. Oranges, bananas, grape-fruit, mangos, lychees, mangostines, custard apples, persimmons, plums and figs, each in its season, are temptingly spread out in a way which parched throats cannot resist.

Indulgent papas and mammas will let their children hear the blind funny man who imitates the cries of animals so well. They will also give them a few cash, for which the clever man with the colored paste and bamboo sticks will make anything they ask him to model, from a monkey to a "foreign devil."

Beside these are dentists with strings of extracted teeth for advertisements; money-changers with piles of cash and scales to weigh the silver pieces; menders of umbrellas, broken china and locks; knife and razor sharpeners; basket-weavers, bronze merchants, public readers of the drama, story-tellers and ballad-singers, jewellers, bird-sellers, book-sellers and many others.

All are interesting, all are amusing in these queer streets except the beggars. They, with their dirty, ragged garments, force upon you the fact that they have lost a hand, a foot, an ear, or even a nose. They hold you responsible for part payment of the damages. Try to forget them if you can as you saunter along the street,— they will not forget you,— for beside their constant pleading they will occasionally remind you of their presence by a pull at your sleeve.

But beware of throwing them some cash, for then they will never leave you. If you go into a shop they will patiently wait for your reappearance, and then, having summoned all their family and friends, will escort you in a vast body to your home.

A. O. Huntington.

Dining with a Mandarin.

Dorothy and I, after cruising along the shores of the "Morning Lands," found ourselves in Tientsin for the winter months, and there Dorothy had her first Chinese dinner. It was given in her father's honor by a mandarin in the "Old City," which is two miles or more from the large, handsome European settlement known to foreigners as Tientsin.

This "Old City" is surrounded by an ancient wall so thick that daylight is dim and dusky under the quaint arched gateways, though an intense yellow sunlight shines always over that part of China. With its throngs of dark, suffering, ignorant faces, its booths, its curio shops, old Tientsin is well worth seeing, though not a pleasant spectacle in every respect. But our evening with the mandarin was gorgeous with wealth and Eastern hospitality.

Our invitation was written, I might say "brushed," on a big card of bright red paper, such as the Chinese and Koreans use for visiting-cards. The invitation was of the most ceremonious; it was in the manner considered most elegant, in the form used in addressing persons of the highest official rank. I will give the translation:

"On the 10th instant I will wash my cups and await your coming to dinner at seven o'clock. My card is enclosed."

The huge red invitation and the huge red card were enclosed in a huge red envelope addressed to "Great Man." An assurance that the cups will be washed has its attractions, coming from a Chinese host.

Dorothy flew into a dancing delight when she found that the "Great Man's" daughter was included in this glowing invitation from the mandarin. Still she limited her anticipations to looking on at the queer feast. She declared positively that she would not be induced to taste any of "the heathenish food."

Our mandarin kindly sent his own sedan chairs for us. They were lined throughout with the daintiest white fur, and liberally supplied with fluffy white fur rugs. In each was a

Chinese Salutations.

comforting little foot-stove of carved brass. It was an exquisite way to travel. We set out on a bright moonlight night. Our party was large, and our chair-bearers were constantly calling and yelling to clear the narrow streets for our procession. They were the more crowded because it was the night of the "Feast of Lanterns."

All was bustle and hubbub around us, and Dorothy had her nose flattened against the windows of her palanquin most of the way, trying to see everything that passed.

The lanterns were very beautiful, and in every form that the most fantastic imagination could devise — temples, pagodas, roosters, birds, fishes, frogs, and curiously cut imitations of blocks of ice. The shops and houses were illuminated with them, and children and grown people were carrying them through the streets.

At the end of an hour our sedan chairs were set down before the high, blank, gray wall surrounding the mandarin's house. A double row of servants awaited us at the entrance. They held silk lanterns which seemed colossal soap-bubbles.

Between the two rows of servants we passed into a large courtyard, brilliantly illuminated with lanterns of a size and beauty which I have never seen equalled out of China.

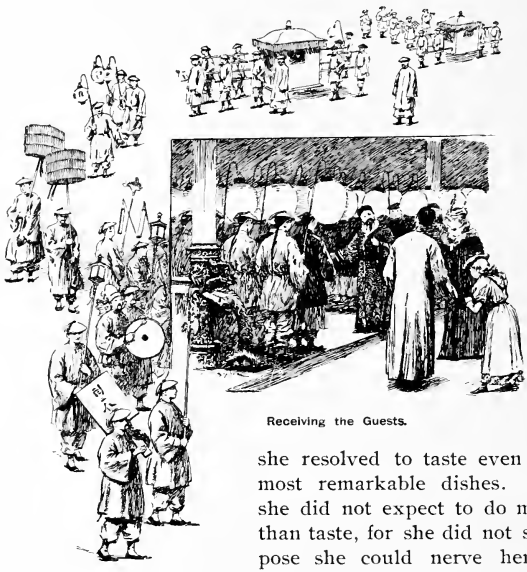
Here we were received and welcomed by our host, who was magnificent in a satin fur-lined gown of rich color, and a cap tipped with the button of his rank.

We were then ushered into a room near the entrance, to remove our wraps. Around the walls were fur-covered divans, and several painted folding screens. In the middle of the room was a table, spread with caviare, anchovies, buttered bread and sherry, of which we were asked to partake.

After a little nibbling and sipping we crossed the courtyard, and entered a long, large room with small tables laid for dinner. At each table were seats for seven persons.

Across the end of the room was a platform, slightly raised from the floor, on which were lamps upheld by substantial tables of richly carved black wood. On the platform and at intervals down one side of the room were big, carved, high-seated, low-armed black chairs, divans, rugs and long mirrors. Few Chinese houses contain so handsomely furnished an apartment. The palace of the viceroy has none better in ordinary use, for his rare carvings, embroideries and paintings are packed away except when displayed on festival occasions. The three tables were pretty, with small glass dishes piled

with sugared fruits, delicious compotes, and nuts glace. The Chinese are fond of sweets, excel in making them and eat them before and throughout the dinner at pleasure. Dorothy's appetite came back when she saw the attractive tables, and



Receiving the Guests.

she resolved to taste even the most remarkable dishes. But she did not expect to do more than taste, for she did not suppose she could nerve herself to swallow even one mouthful. We had a "menu," but as it was in Chinese we were no wiser for it. For this ignorance we were thankful afterward, when the bill was translated for our benefit.

Our implements were ivory chopsticks; large silver spoons with a round bowl; and long, thin, two-pronged silver forks that resembled a hairpin too closely to be quite agreeable. For plates, we had small, deep saucers, each standing on a sort of little pedestal.

Each course was served in a bowl, and placed in the middle of the table that every guest might help himself with his own spoon or chopsticks. With the soups and spoons we were tolerably tidy; but our efforts to get the solids to our lips with chopsticks sometimes made sad work with the tablecloth.

Our first attack was upon preserved eggs, the greatest of delicacies to a Chinese epicure. These are boiled, and kept underground for months and years, before being brought to table in a sort of sweet pickle, as a luxury. They are as black as mud, and it required all our nerve to undertake them.

Dorothy summoned the bravery that she calls up for the photographer and dentist, closed her eyes, held her breath, and nobly made her bite. To my astonishment and relief, she kept it in her mouth. I cannot say that any of our party liked the preserved eggs, but their flavor was not so disagreeable as their appearance.

After that Dorothy hesitated at nothing. Shark's fins, sheep's eyes, antique eggs — she devoured all. Fortunately for her enjoyment she did not know what she was eating. Long afterward she learned just how heroic she had been.

There was one notable exception to the array of unknown dishes. We all recognized the edible bird's nests; if we had not known what they were, we should have believed we were eating a very delicious vermicelli soup.

Silverfish were good little things, fried whole, like whitebait; pigeons' eggs were beauties, gleaming through a smooth coat of pink jelly; the lotus seeds looked like boiled chestnuts stewed in sugar, and tasted as chestnuts might taste under such insipid circumstances. As for the "fowl," "undercut" and "tame duck," they were disguised beyond recognition.

The viands, take them for all in all, were not suited to our palates. In our hungriest moments we shall never think longingly of our Chinese dinner.

After the feast we were invited into the opium smoking-room — not to smoke, but to look on. Evidently it was the pet room of the mandarin's friends. It was luxurious in hangings, low couches, tables and smoking utensils.

Jugglers were brought in to entertain us when we returned to the dining-room. They produced immense bowls of water as if from vacant air; flowers grew up and blossomed before our bewildered eyes, and there were marvellous acrobatic feats by very small boys. Poor little creatures! They worked desperately hard and made painful contortions.

Soon a wizard-looking Chinaman informed us in a jovial manner that his head was full of wooden toothpicks. Taking it for granted that we doubted his statement, he proceeded to convince us. He winked vigorously, and toothpicks seemed to stick out from the corners of his eyes. He pushed them back again with his thumb, sneezed one partly out of his nose, and then sniffed it back again.

This was a mere preliminary. Presently he sneezed at frequent intervals, and each sneeze sent from his nostrils, first from one side, then from the other, the half-length of a toothpick. Drawing it out with his long-nailed fingers, he would exhibit it triumphantly. In this deliberate manner he sneezed and pulled out ten or twelve toothpicks from each nostril!

Pitiable Dorothy! She had gone through the dinner with fortitude, but the toothpicks were too much! She said that never, never could she use a wooden toothpick again.

The juggling was followed by a grand display of fireworks in the courtyard, and in this blaze of glory we departed. On reaching our house in the settlement, we sat down with relish to a banquet of cold roast beef and bread and butter.

ALETHE LOWBER CRAIG.

Corea and its Army.

The newest country, to us, of the far East is Corea. Not many years ago it was practically unknown to the civilized world, and it was as late as 1882 that Admiral Shufeldt, of the United States Navy, acting as ambassador, made our first treaty with its king. It was through this treaty that Western civilization was first introduced into the Hermit Kingdom.

Since then embassies have been sent from the Corean court to some of the greater powers of the world, and a few years ago their strange-looking representatives, clad in bright-colored silk gowns and wearing great horsehair hats on the crowns of their heads, surprised Washington.

Before this a party of the Corean nobility had travelled throughout this country and Europe, and since then many noble Coreans have gone abroad and brought back new ideas to the king and his people. Not long ago the king bought a steam-launch, and he can now sail from his capital to his seaport in a few hours on the great river Han. He has introduced electric lights into his royal palace, and the business of the court, which always takes place at night, is done under the rays furnished by the inventive genius of Mr. Edison.

The king is doing all he can to advance his people in the new civilization, and in order that he may understand what is going on in this new world, he takes American and English

newspapers, and has them translated for him. During my visit to his capital he was having a volume of international law translated into the Corean.

A few years ago the King of Corea resolved to reorganize his army. Being very friendly with the United States, and admiring the Americans greatly, he sent ambassadors to Washington to select four army officers, and promised them large salaries if they would come to his capital, start a military school, and make American soldiers out of the Coreans.

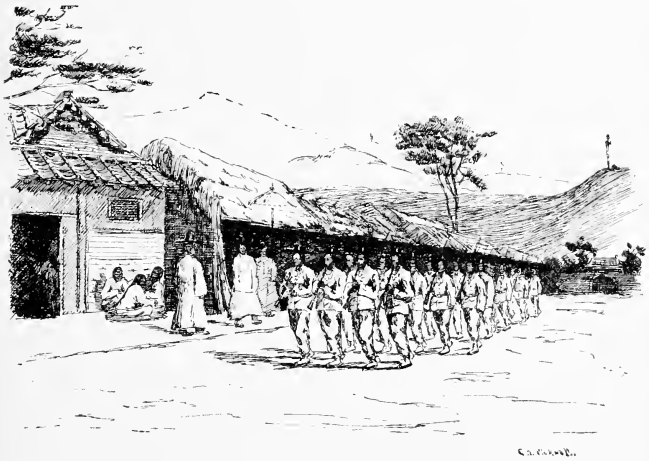
The chief of the officers engaged was General William McE. Dye, who had served with honor in the late Civil War, and who had been employed by the Khedive of Egypt in the organization of the Egyptian forces.

The Corean army, prior to this time, had been drilled after the Chinese plan. The only arms used were old matchlocks. There were very few cannon, and the matchlocks and bows and arrows were the principal weapons. The army consisted of about eight thousand men, about four thousand of whom were at the capital, Seoul. Picked troops were kept about the royal palace, and were used to guard the body of the king.

The uniform of these soldiers consisted of long gowns, and the officers were gorgeously apparelled in gowns of silk, the sleeves of which were blood-red, this color being emblematic of the old fashion of wiping bloody swords upon sleeves. Each army officer of note wore a great embroidered square on his back and breast containing the picture of a tiger, whose wide-open jaws glared at the enemy.

General Dye first attempted to remodel the dress of the common soldier. There is a strong anti-foreign faction in Corea, and he had to work very slowly, as this faction was opposed to any change in army matters. He at last got the sleeves cut down from their bag-like shape to the width of a rather full party-dress sleeve of an American lady, cut off the skirt so that it was made into a kind of blouse, and took out four-fifths of the cloth which the Corean soldiers had formerly worn in their pantaloons. He did not attempt to make them change their hats, but armed them with good guns.

He organized a royal military school, but had as much trouble to induce the young nobles to adopt a soldier-like dress as Professor Bunker has to get them to study without the assistance of their servants. The young noblemen thought they would lose caste in changing their costume. As they were so high in rank, it was almost impossible to punish them, and the American officers have had hard work to make



The Corean Army.

progress. The colors used in the new Corean uniform are different from those of any of the armies of Christendom. The shirt-like waists are of purple cotton, faced with red; the hats are black, and there is a bright red band about them. The pantaloons are purple, and the feet are swathed in great white boots of padded cotton.

During my stay at the Corean capital the native General-in-Chief invited me to attend a review of the troops. I rode in a chair borne by four big-hatted Coreans to the drill

grounds at the edge of the palace, and saw four hundred soldiers go through all sorts of evolutions, most of which seemed to be those of the gymnasium rather than those set down in military tactics.

The General would give a command, and every soldier would lift his leg and hold it at right angles to his body until another word brought it to the ground again. There was the raising of the arm, the throwing out of the fists, and other exercises which many school children of the United States practise daily.

There was also some very pretty marching, and the men handled their guns with no little skill.

After the review was over, I accompanied the General-in-Chief to an audience with the king, and was much amused at the state of this military man. Two servants walked with him, one on each side, holding up his arms, and a whole retinue went in front with a band of music, shouting to the people to clear the road, for the great general and the foreign dignitaries were coming.

In battle Corean generals are always accompanied by their servants. When he rides on horseback, a general has a servant on each side of his war-horse to hold him in position, and a third stands at the horse's head to hold the animal during the fight, or to lead it to the advance or retreat.

These servants accompanied General Han to the gate of the king's audience hall. They left him there, and he walked alone across the yard, with his head bent and his sword-hilt toward the ground. He walked softly up the steps at the left leading into the room in which his majesty stood, bent down on all fours, and bumped his head before him as a sign of the reverence he felt for his king.

Then, rising, he stood with his sword uplifted, at the right of the king, while my audience took place. At the close of it he backed out from the king's presence with bended head, and so continued till outside the gate, where he again sprang into greatness, and had a whole host of servants to do him homage.

This Oriental formality runs through all ranks of the Corean army. It is, says General Dye, the ruin of the service. He thinks that Corea will never have good soldiers until the officers learn military tactics by the same hard knocks that our officers do, and until they put themselves more on a level with their troops, and work with them.

The soldiers of Corea act as the police of the capital. The city of Seoul contains about two hundred and fifty thousand people, most of whom live in one-story thatched huts. A great wall runs around the city, climbing the mountains and crossing the valleys which surround it; and this wall has a number of gates.

At sundown a band of soldiers, with music much like that of the Scotch bagpipe, marches out of the palace and closes the gates of the city, which, after this, cannot be opened until the morning. At this time the king's military signal corps springs into life on the mountain-tops about the city. Watch-fires built upon them tell him, by means of an elaborate code, whether there is trouble or peace in the different parts of his realm.

This system of watch-fires acts as a sort of telegraph line, reaching from the capital to the remotest districts, and at this hour every night fire after fire appears on the hilltops throughout Corea.

FRANK G. CARPENTER.

A Cherry Blossom Party.

A Japanese Garden Party.

"Will you come to my father-in-law's place to-morrow afternoon to see the cherry blossoms and some old-fashioned Japanese riding? It is an informal affair, so do not trouble yourself to reply to this, and do not bother with your 'frock coat' or 'high hat.'—Yours sincerely, X."

The garden is in the Shinagawa suburb of Tokyo, on high land which overlooks, toward the northeast, the harbor, and is separated toward the west from what we should call suburban villa residences by a railway cutting. The sloping hillsides across the railway were one mass of cherry blossoms, save for the breaks made by clusters of feathery bamboos, or by patches of cultivated ground, which increased the loveliness of the whole scene.

Modern things rarely come into that lovely garden. It contains about ten acres, and belongs to a wealthy man, who keeps it solely for the recreation of himself and his friends.

There is nothing stiff or formal about the place. The house, almost hidden behind a hedge as one comes up from the main gate, is a fair-sized building of one story. But a Japanese house, with its open sides and absence of furniture, seems to be cold and empty,—although it is not so, in fact,—and we did not go inside.

The owner does not live here. Indeed, he does not often spend the night in this house. The caretaker had been permitted to raise a few vegetables in some of the out-of-the-way corners, where they were not at all obtrusive.

There were tea shrubs, but they did not look as if they were very carefully cultivated. Certainly no preparations had been made to pick the fresh, new leaves, just in their prime, and there were no "pans" or appliances for drying the leaves, as must be done before they can be used to make merchantable tea. The true use which my friend's garden serves is to give

him and his friends good health; and the excellent effect of exercise and recreation is shown in the owner of the garden — a hale, hearty old gentleman, seventy-six years of age.

He accepts the changed conditions of affairs in his country as something inevitable; but I am sure he sometimes looks back longingly to the quiet days of Old Japan.

Much has been written about the cherry blossoms of this country, and the great fondness of the people for making up picnic parties in the spring to spend the whole day in one of the many places that are famous for "Sakura-no-hana." There is probably not another country in the world whose inhabitants will travel hundreds of miles to spend a day or two under blossoming fruit trees, and where so much poetry is written in praise of the beauty of the flowers and about the lofty sentiment which they inspire.

There are many cherry-trees in my friend's garden. Some are set in rows, and others are planted alone. All are so carefully trained and so skilfully trimmed that, instead of growing upward to a great height, they spread out like umbrellas. Thus the eye readily takes in all their glorious beauty.

When covered with their double flowers, and before the new leaves have burst their buds, they make one think of snowbanks just tinged a faint pink by the feeble rays of the setting sun.

Usually, in Japan, when one goes to entertainments given by a native gentleman, the host, or his representative, meets the guests at the gate. But on this occasion there was no such ceremony.

The "mom-ban" (gatekeeper) opened the gate for us and asked our names. Then, apparently satisfied that we were the guests of whom his master had spoken, he waved his hand over the whole garden and said, "Go where you like, the place is yours; my master is riding his horses up yonder!"

He pointed along the principal drive. So we went in that direction, stopping often to admire some particularly handsome tree, or to take in the whole effect of the many and different features of the landscape. By and by we came to the place

where the old-fashioned riding was going on. Here we found several Japanese gentlemen, dressed, excepting for their hats and style of wearing their hair, in strictly native costume. They wore the curious "hakama" — a lower garment which is divided like a pair of very flowing Turkish trousers and which is worn over the ordinary long gown. It used to be the badge of the Samurai — the old-time soldiers — and of higher classes, and was designed originally to permit mounting a horse without uncovering the legs.

The course where they rode was a straight one, about two hundred yards long. The ground was soft, and it did not appear that great speed was desired. On the contrary, it was evident that a high trotting action was what the riders sought to show in their steeds.

The trappings were all of the old style. The cheek-straps were either broad pieces of brocaded silk material, or narrow strips of leather ornamented with silk embroidery. The throat latchets were of brocade, and had pretty pendant tassels on each side.

The bits were like an ordinary snaffle, except that the rings to which the reins were fastened were much larger than those we use. The reins were made of silk cloth, and very short, so that the rider's hands extended well forward on each side of the horse's neck.

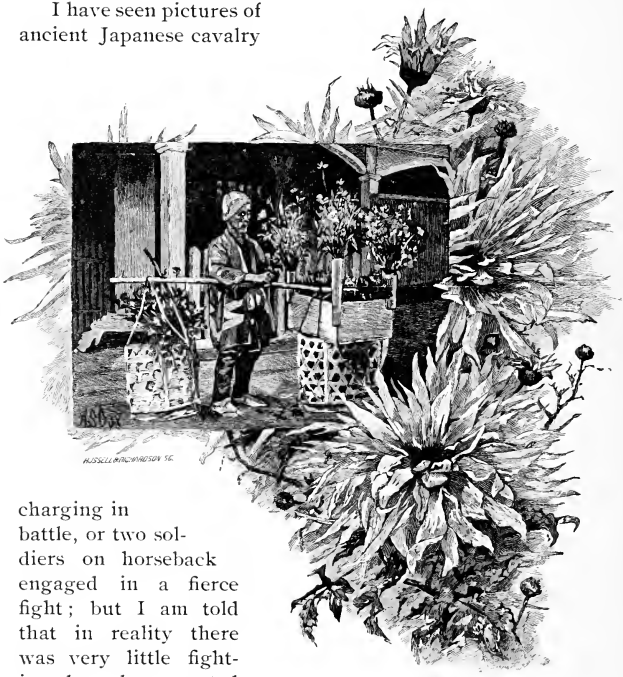
The saddles were very large, and to us clumsy, for they stood up very high, and were so thickly padded that it must have been almost impossible for the rider to get anything like a firm grip with his knees. To do so was made still more difficult by the large, heavy housings required to protect the flowing garments of the rider.

The wooden stirrups were broad and turned up to catch the toes after the form of a Turkish shoe, while the leathers were drawn up quite short.

Altogether it seemed as if it must be a difficult matter for the rider to keep his seat on anything like a frisky horse. That this was indeed the fact was shown by the narrow escape of several horsemen from going over the head of their mounts

when the pony stopped abruptly at the end of the course. But in olden times the Japanese horse was seldom ridden at a faster pace than a walk, and there was always a "betto" (horse-boy) at his head.

I have seen pictures of ancient Japanese cavalry charging in battle, or two soldiers on horseback engaged in a fierce fight; but I am told that in reality there was very little fighting done by mounted troops. In an actual encounter, they usually dismounted in order to have both hands free. My friends say that it used to be considered very undignified for a person on horseback to go faster than a walk.

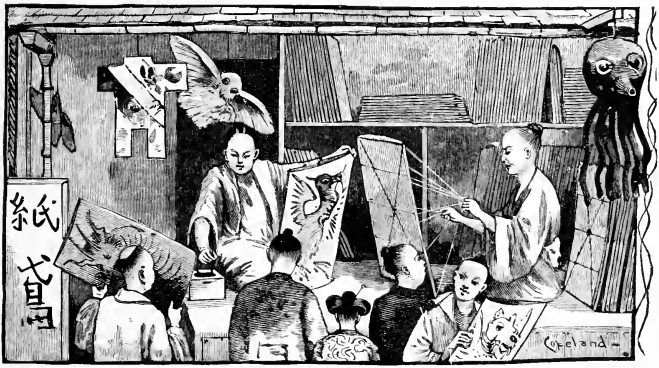


The Flowers of Japan.

Catching sight of us, our host came to bid us welcome,

and showed us to seats in a small pavilion by the side of the riding-track. Sweetmeats and Japanese tea in tiny cups were served, and small braziers of lighted charcoal were brought with which to light our tobacco, in whatever form we might prefer to smoke it.

Presently the owner of the garden came to greet us. When his son-in-law introduced us, he seemed somewhat surprised to find that some of us could speak with him in polite Japanese.



Japanese Kite-Makers.

I told him that we hoped to have the pleasure of seeing him ride. This appeared to flatter him, and being an enthusiastic old horseman, he mounted the prettiest, gentlest beast of the lot, and ambled up and down a few times, attended by two grooms.

The pony lifted his feet very high, and put them down as carefully as if he knew who was on his back, while the old gentleman was evidently much pleased with himself, and with the opportunity to show the foreigners what the old men of Japan can do.

After we had watched the riding for some time, our host invited us to stroll about the garden for a while, most considerately giving up the riding, which he enjoyed greatly, to attend the pleasure of his foreign guests.

At a short distance to the rear of the riding-place we came to a good-sized playground, where boys were playing at base-ball, cricket and tennis, and some girls at "tag" or battledore and shuttlecock. These boys were nearly all dressed in Western fashion, unlike the ladies and girls whom we met, all of whom were dressed in their own beautiful costume.

Without seeming to guide us in any particular direction, our host brought us to a narrow pathway leading through a grove of azalea and japonica bushes, where we found ourselves in front of a lovely little summer-house. On the clean, white mats was seated a very handsome Japanese lady, whom our host introduced as "my wife."

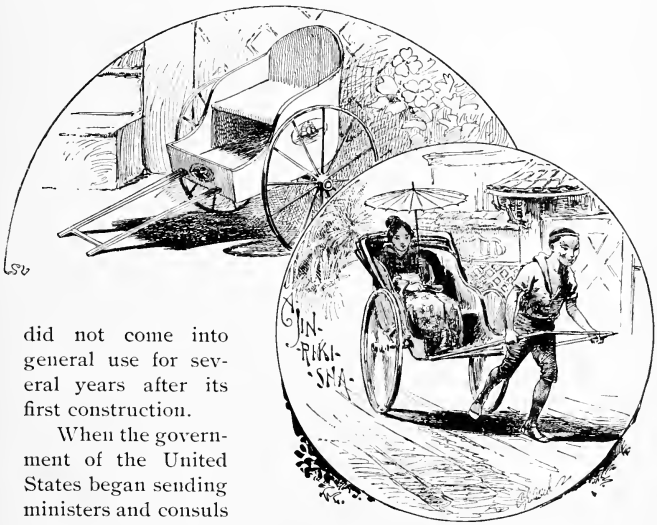
She presided over trays of sandwiches and cakes, and at her bidding two or three maid-servants served us with Chinese tea or coffee or chocolate. The pleasure of our little feast was much increased by the fact that from where we were seated we looked over the suburb of Shinagawa, across the bay toward the heart of the city of Tokyo, and our host told us of some of his experiences in the War of the Restoration, in 1867 and 1868.

Some of the boys, finding that, as a good American, I understood the game of baseball, appealed to me to teach them something more than they knew of the rules; but by the time we had finished our "go-chiss"—honorable feast—it was time to make our way homeward. We could not think of hurrying through all the loveliness of the spring evening, and from Shinagawa to Akasaka, in the centre of Tokyo, is quite a long Sabbath day's journey.

JOSEPH KING GOODRICH.

The Jinrikisha of Japan.

The curious little jinrikisha — "man-drawn carriage" is the literal translation of the term — is now a very common conveyance in Japan; but it is quite a modern invention, and



The Jinrikisha.

did not come into general use for several years after its first construction.

When the government of the United States began sending ministers and consuls to Japan, no one in that country had ever used a wheeled vehicle as a mode of travel except the adored Mikado. When this great personage, half-potentate, half-pontiff, visited his temple as high priest to offer prayers for all his people, he rode in a two-wheeled cart, closely screened by a rich silken canopy and drawn by a sacred white ox.

The wheeled carriage was considered, throughout the whole empire, sacred to the person of the "god Mikado," and none of his subjects would ever have presumed to move about in such a manner. Even the grandest Daimios, or noblemen of the realm, always used the "norimon"—a sort of sedan chair, lined, cushioned and curtained with rich silk, and carried on poles upon the shoulders of bearers. The common people used in the same way the plain "kangos" and open bamboo chairs.

At about the period of the beginning of the revolution in Japan which changed the system of government, a new member was added to the family of a United States consul at Kanagawa in the person of a little fair-haired daughter. For this child the need of a baby-carriage was felt, but such a thing was then an unattainable object in that far-off land. If the baby was to have a carriage, something must be invented.

The consul looked about, and was so fortunate as to find a pair of light iron wheels in the shop of a blacksmith in Yokohama, to whom they had been given by the captain of a trading vessel, who had noticed the smith's eager curiosity concerning them. A carpenter was next commissioned to make a carriage body—after a pattern given him—to set upon the wheels.

At the time, the United States ship "Wyoming" was stationed in the port of Kanagawa. Commander McDougall, of this ship, took an interest in the construction of the baby-carriage; and when the carpenter had satisfactorily completed his work he caused the vehicle to be taken on board the "Wyoming," where it was prettily painted and decorated. On the dashboard was a representation of the American shield, with the eagle holding the darts in his claws, and on each side and at the back was a pretty sea view.

Then the cart was brought on shore and put to its intended use. The little American lady took delighted daily airings in it, and it proved more than a nine days' wonder to the curious native eyes that had never before seen any one so conveyed.

When the little one for whom it had been constructed left

Japan to accompany her parents to their native land, the curious little man-power carriage was given to the carpenter who had so ingeniously done his part in its construction.

About this time the hitherto unseen Mikado came forth from his sacred seclusion and isolation. No longer assuming divine attributes, he appeared as a man before his people, to rule as emperor, seeing and understanding his people and their needs. The sacred white ox was no more harnessed to the two-wheeled sacred car, to be sacredly used by the Mikado, but both at once fell into disuse.

The carpenter perceived that it would no longer be deemed a profanation to set up in the business of jinrikisha-making. Taking as a model the vehicle which had been so cleverly invented for the pretty American baby, the man set at work making "man-drawn carriages." But he made the seat of each vehicle wide enough for two grown people to sit upon, and lowered the high front so that it would be easy to step in and out.

The new mode of riding became very popular. The little low, open carriage had a great advantage over the old-fashioned Japanese sedan chairs in point of comfort to the occupant and of ease to the runner. This was quickly perceived by the carried and the carriers, and in a short time the demand for the new vehicles was so great that the business of their manufacture became an important industry, and is now extending rapidly throughout the empire.

The clever Japanese carpenter who made the first baby-carriage jinrikisha ever used in Japan has become possessed of a comfortable fortune, which enables him to enjoy his old age in peace and competence.

MARTHA C. M. FISHER.

A Japanese Home.

One day Mrs. Takamino, who had been calling at our house, asked me if I would not spend the next day with her. I accepted her invitation at once, as there was nothing I enjoyed so much as spending a day or taking any meal at a real Japanese home. Mrs. Takamino was an intimate friend of ours, so I told her I should go early and help her with her housework.

I started the next morning directly after breakfast, going in a quaint little carriage called a jinrikisha.

This carriage is something like an old-fashioned baby-carriage, having only two wheels, but is much larger; the jinrikisha man jumped in between the shafts, and away we went at a lively rate.

It was a pretty drive to Mrs. Takamino's, for after going through one or two busy streets, we turned off on a road leading to the country, where everything was quiet and peaceful. We met little children on their way to school, with their books done up in a big cotton handkerchief and hung over their backs. Some of the farmers were bringing in their vegetables to the markets, others going to work in the rice-fields. Here and there you would see a woman, with her baby strapped on her back, opening her little shop; for while the men are away the women are also earning a little at home by having a few trifles for sale: some kind of candy or cake, a few toys, bright-colored hairpins; such little objects, indeed, as would attract people's eyes as they were passing by.

I reached Mrs. Takamino's at last. She heard me coming,

and was at the door all ready to receive me. After I said good morning, I sat down on the steps to take off my boots, for in Japan no one ever enters a house with his shoes on.

The house is not large, only five or six rooms, these opening into each other; for you never see shut-up rooms in Japan, as you do in our country, but one can look right through the house. The front of this house opened into a pretty little garden, while from the back you looked far away over the rice-fields, with here and there a picturesque farmhouse.

Mrs. Takamino could not speak a word of English, so with what little Japanese I knew, we had a funny time getting along. I watched her do her housework, which consisted of sweeping the rooms, dusting a little, and one thing in particular that I remember well, was a dress she washed. This was ripped to pieces, and after being washed was stretched on a board and put in the sun to dry. This is not the way they wash all their dresses, only the nicer ones; those of cotton are washed as we wash ours.

About one o'clock the son and daughter came home from school; they both spoke English very well, so it made it much pleasanter for me. We had a very merry dinner, all sitting on the floor, with our trays in front of us. On each one of the trays were four little dishes, having in them rice, fish, soup and vegetables. I had learned how to use chopsticks, and so

got on very nicely and enjoyed my dinner very much. After dinner the daughter played for me on her samisen, an instrument something like a guitar. I asked her if she would not teach me some little tune, but I made such poor work of it that I soon gave up the attempt. After putting her samisen away she brought out her fancy work, which interested me very much. She was making raised figures out of crape. She let me try it, but it was slow work for me, though I made one very pretty flower and had it all done by supper-time.

The Samisen.

After supper we played some Japanese games; two of them I remember well, one being battledore and shuttlecock, which is very much like our game, and the other like our jackstones, only in Japan they play with little crape bags filled with rice. This game is much more elaborate than ours, having much more to go through with before the game is finished.

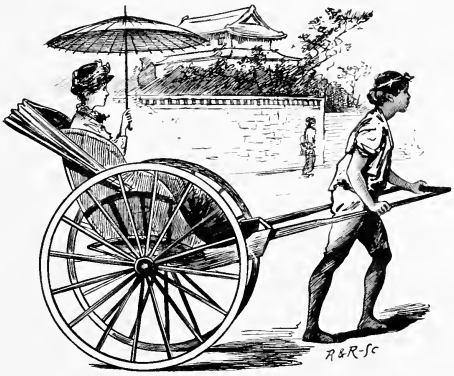
My jinrikisha man came for me only too early, I thought, but as it was growing dark I had to say good-by to my kind friends who had made the day so pleasant for me, and with promises that I would come again very soon, I started off.

My ride home was very different from the one in the morning, for then everything was bright and cheerful, and now it was dark, so dark we could hardly see our way along, and so quiet were the streets there seemed to be a hush over everything.

Here and there you could see into a house, where a dim light was burning, with one or two people sitting round it; but most all the houses were dark. It being a hot night, every one was out-of-doors, sitting in front of their houses, some asleep, tired out with their day's labor, while others

were talking; once in a while the stillness would be broken by the sound of some one playing on a musical instrument.

I soon reached the busy streets, where things looked much more lively. All the shops were lighted, and all along the way were hucksters, sitting on the ground with their wares displayed before them. Some had little shows and games, and a crowd of little eager faces gathered around them; others had fruit, flowers, shoes, hardware, old pottery, and all sorts of things. And yet among this large crowd there was



In the Jinrikisha.

no loud talking and laughing, no pushing and shoving to be the first to see this or that. Everything was quiet and peaceful, and I, a foreigner, riding among them, was treated in the most courteous way. No one laughed at me or called me names. Many of them turned to look at me, some of the girls smiling so pleasantly.

No one need ever be afraid to go through the streets of that great city of Tokyo at any time, night or day.

E. O. Morse.

A White Elephant.

Siam and its Royal White Elephant.

Fifty years ago little more was known in America of the Kingdom of Siam beyond the fact that it was the native land of the Siamese twins, and in a vague way we had heard that the people of Siam worshipped white elephants.

But after the Sepoy Rebellion in India, English civilization made its way through India, on to Burmah, and opened the closely sealed ports of Siam and Cochin China. We then began to learn something of the "Heart of Farther India." Now the flood of Europeans pouring into the South Pacific Islands is day by day carrying Western manners and ideas into the shut-in kingdom, and the wise policy of the young king, Chulalongkorn,— Royal Hair Pin, as the name means in Siamese,—is encouraging the inundation.

The late king, Maha Mongkut, having learned of England's power and greatness from his neighbor, Hindostan, chose an Englishman for one of his counsellors, and imported an Englishwoman as governess in his harem. It is owing doubtless to the influence of these officials that the new king, though refusing to change the State religion, has not only opened the door of the kingdom for English education, but is encouraging the schools by royal gifts and patronage.

Siam has an exquisite flora. There the citron and cocoanut are fairest of fruit. Yet with all its wondrous vegetation it has not the tropical heat that annuls the beauty of India. The climate is delicious. The Bay of Bengal on the one side and the Gulf of Siam on the other keep this kingdom refreshed with sea-breezes.

Bangkok, the capital, built out into the river Menam, which is the great artery of the country, is called the Venice of the East. Indeed, it is even more of a water city than the Queen of the Adriatic, for while Venice has its foundations on solid ground, Bangkok actually floats on the water. Huge

bamboo rafts are constructed, and lashed together with enormous chains, and on these the houses, shops, and even the gardens are built.

We chanced to arrive at Bangkok on a feast-day. The river up which we sailed to reach the city makes so many sharp turns that, although the distance was not far, the time that we occupied in sailing it was long, and it was night when, in making a long tack that carried us past a point, the glories of the floating city burst upon us.

A marvellous panorama, an illuminated world, seemed spread out before us. Thousands of fire globes shed their brilliant light over the broad bosom of the water; and on either side, as far as the eye could reach, there was an endless succession of lights, of every imaginable color, shade and shape, forming an illumination such as only Eastern ingenuity can devise.

Every floating house was decorated with the twinkling eyes; the yards and masts of every ship and even the tiniest boat sparkled with the brilliant, colored fire, while the more distant pagodas, palaces and minarets were a blaze of glory. It was the great annual festival of Siam — the Feast of Lanterns — and had we arrived one day later we should have missed this fairy-land spectacle.

The batis, or temples, of which there are one hundred in the city, are built on the river-bank. Here also stand the king's palaces, the houses of the foreign consuls, and the residences of the nobility of the kingdom. During the last century the capital of Siam stood on the river-bank above the position of the present capital; but the annual overflow of the river caused such a deposit of mud that the miasma from it at low tide made terrible havoc among the dense population, and frightful epidemics of cholera occurred every year.

So the present city was built lower down the river on rafts bound together. These rafts are arranged in groups, each containing five or six rafts, and are moored to great poles driven in the bed of the river. The change of location has effectually relieved the people of Bangkok of the presence of

the cholera, but they have only exchanged one disease for another, for the dampness of the city creates rheumatic fever. Of any appliances for curing disease the inhabitants are pitifully ignorant, and our medical missionaries are doing a great work for them, in that respect, especially, of course, among the poorer class.

The houses, even the few that are on the bank, and of course the floating ones, have no communication with each other by land, not even by a footway, as in Venice, so all the travelling about the city is done by boat. The thousands of little canoes used for carrying people about are each managed by one person, generally a young girl, for the Siamese, unlike other Eastern nations, do not shut up their women, and they present an interesting sight.

Almost every conceivable commodity is borne in these little boats — rice, fish, fruit, flowers — and every sort of handicraft is carried on in them. Here you may see a Chinese manufacturing rich soup over a hissing kettle and delivering it to his customers; another person is baking bread; another, under his gaily striped awning, is weaving gold thread into embroidery, while a mite of a child manages the little boat. The scenes in the water streets are always new and interesting.

There is a queer sense of insecurity in "shopping" in these floating bazaars which gives an added zest to the picking up of "antikas," as the natives call curios of all sorts.

Yet, though Western ideas are flooding the country, and Christian missionaries there come and go freely, except among the lower classes these agents of enlightenment have had no effect upon the established religion of Siam, which religion is a kind of Buddhism — or rather Pantheism, for it is Buddhism without a god. The last incarnation of Buddha, Gautama, was, they say, absorbed into the bosom of nature more than five hundred years before Christ.

Sir Edwin Arnold has told us of the "Light of Asia," and in pleased recognition of what the English poet has done to make known to the world the god of Siam, the king has conferred on him the distinction known as the Order of the

White Elephant. The sanctity which the Siamese attach to the white elephant is not difficult to understand, when we remember that the doctrine of the transmigration of souls is one of the most vital points in the Buddhistic religion, and that the white elephants are supposed to be tenanted by the souls of their dead kings. The king may well pay great attention to any white elephant that he is fortunate enough to secure — the animal is very rare — for he thinks that he is taking care of his future home.

We read in ancient history of how eagerly the white bull Apis was sought by the Egyptians, and what feasting and rejoicing they made when he was found. There are much the same demonstrations of joy in Siam when a white elephant is captured.

One of the most splendid temples near the city is set apart for his highness, the Royal White Elephant. It stands in a garden of palms, in which grow thickly the tuberose, honeysuckle, passion-flower, and the chempa, the national flower of Siam. In this garden, at the time of my visit to it, a dozen priests, dressed in gamboge-dyed robes, were weaving wreaths and chanting praises to the great white beast, which stood lazily waving his trunk, and helping himself to leaves and branches from the giant heaps placed before him, but paying no attention to the homage heaped upon him.

He seemed to me to be second in size only to Barnum's mammoth Jumbo, and his skin was white, smooth and spotless, with a large scarlet rim around each of his eyes.

His stall was a large, high room, with windows around the top; the floor was covered with a mat-work wrought of pure chased gold, each interwoven plait being about half an inch broad and as thick as a five-dollar gold-piece. On this costly carpet the unwieldy animal stood and stamped his great feet, with no more care for its magnificence than if it had been his native green turf, "wearing out," as some one said, "as much gold in a year as many hard-working people gain in ten."

Several priests were constantly engaged in cleaning the floor, in piling up fresh herbage for his majesty to feast on,

and in polishing the tarnished spots. Other persons, professional goldsmiths, were taking the worn strips out of the golden carpet, and replacing them with new, shining ones.

"Oh," said one of the party, "if we only had that gold for our mission work!"

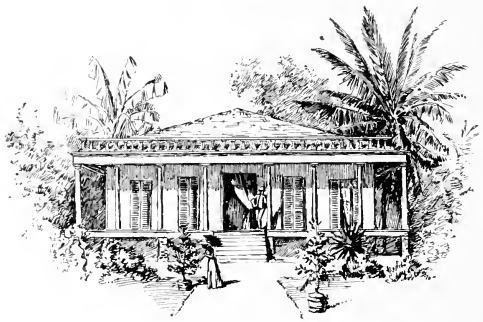
The man who was so fortunate as to entrap this sacred animal was rewarded with a hereditary pension of one thousand ticals, and was raised to a very high office in the kingdom — that of water-carrier to the elephant. The jars in which the water is transported, and the troughs from which the sacred animal drinks, are of pure gold, covered with filigree work.

As a god, the white elephant is horrible, but regarded merely as a royal toy, each monarch to his taste. The sovereigns of the civilized world spend vast sums of money in pomps and vanities, and in the gratification of sensual appetites. Tiberius had his Capri, Napoleon his ambition, to which he sacrificed millions of treasure and uncounted human lives, and why should not the King of Siam as well have his elephant?

SARA LEE.

Housekeeping in East India.

There are so many points of difference between a house in Peepulpore, Bengal Presidency, and a house in — Boston, Massachusetts, for example, that I quite expect to have some trouble in making you feel at home in this article. Neither up-stairs nor down-stairs nor in my lady's chamber is there any familiar corner where I might install the reader



while I explain the rest to him. Yet certainly there are chairs in the drawing-room, wicker chairs — we have not acquired the Oriental habit of sitting on the floor. I can ask you to take one.

There is even a rocking-chair, said to be American; but it has a straight back and a narrow seat, and only about six inches of "rock" altogether; and the yellow bow on the upper left hand corner does not make up for these things. It never saw America; it was made in England, where they understand umbrellas better, perhaps.

The others have all come from the China bazaar. They

are coarsely woven of cane, and the Chinaman who obtained a dollar apiece for them to begin with, cheated me. Any one of them will bear you if you are not too heavy, but I do not like to see the commissioner, who weighs one hundred and eighty pounds, imperil the dignity of the government of India upon them.

Under one or two I observe from where I sit little piles of sawdust dropped on the floor. That is the work of the beetles. And the white ants are reported from behind the bookcase and the red ants have been clearing out the sideboard, and last night a cockroach of refined tastes ate three fingers of my last and longest pair of evening gloves.

These things would worry one in America; one would arrive, perhaps, at the heroic remedy of kerosene. Here it is not the custom to worry—besides, nobody has the energy. It is the custom to call the house-bearer, who has charge of the bookcase, and the khansamah, who has charge of the sideboard, and the ayah, who has charge of the gloves, and say to them in the vernacular, "What kind of work is this, O poor-sort-of-person?"

If after that the ants and the cockroaches continued, it would be proper to address the bearer as a man without shame, and the khansamah as the son of an owl, and the ayah as a thriftless one, and to fine them all three cents of their

wages, which would linger longer in their memories than any form of vituperation. If thereafter they did not mend their ways, the bearer and the khansamah and the ayah would all get "chute," which is permission to depart; and before the sun went down behind the banians their places would be taken by others worthier than they.

The doors stand open all day long when it is not too hot, from room to room, from house to garden.

For privacy they are hung with what we call portieres in civilization, and "purdahs" in India, of such stuff as one can afford. Some people, who believe in encouraging native industries, have green and purple stripes; but I think that is being rather unnecessarily public-spirited. I have Japanese bamboo and bead screens in the drawing-room instead; but then I, being guided and governed by a pink wall cut in two by a green grape-vine, am not fairly typical.

There is matting on the floor, greeny-brown matting woven in great stripes by cross-legged Bengalis in a hut in the bazaar; and there are palms in the corner and orchids in the windows and photographs of home upon the wall.

A long, narrow board, with a broad flounce to it like a lady's petticoat, hangs from the roof across the middle beams. That is the punkah, put up last week, for it is almost the first of April and the "ghurrumka-din" ("days of heat") are upon us. The punkah-wallah—the native who operates this great fan—sits in the veranda and pulls the rope, which goes through a hole in the wall.

The dining-room is matted and holds six chairs, a table, a Burmese carved sideboard and another punkah. It is a large and lofty room, and sometimes it seems, figuratively speaking, to yawn for want of furniture.

But it is a housekeeping ideal in India to possess as little furniture as possible. Dust hides in the hangings, spiders as big as an American dollar live in the cornices, the moth enters into the sofas, and the rust corrupts everything that is corruptible.

The "memsahib" (mistress) is a person from whom orders

proceed. Her business in life is to know what pleases her, to praise or to rebuke. She is not at all necessary to the domestic machine; it may run a little more or less smoothly for her presence, but it is self-running.

Her servants understand their business much better than she does. She may dismiss, but she is not qualified to interfere.

What could you do, pray, with a live fowl and some tropical vegetables and a handful of charcoal embers and an order for breakfast in half an hour, with the temperature at one hundred and six degrees in the cook-room? The real government is the sahib. The mem-sahib is his secretary and representative; and there are two departments, each with its head. Even domestic affairs in India are arranged on an official basis.

The department of the table, with all that appertains to it, is under the khansamah. The department of the house is directed by the bearer.

The khansamah, always a Mussulman, is official chief to the kitmutgars, the mussalchi, and the cook. He is head butler; the kitmutgars are waiters — one to each member of the family. His subordinates find it well to be on good terms with the khansamah, and a person with whom it is well to be on good terms soon grows rich in India.

Besides, he generally does the "bazaar," the memsahib's marketing, bringing in a daily account; and the result of that is that he sometimes invests his little savings in house property in Calcutta, bringing in four hundred rupees a month. This

is an anomaly, in view of the fact that his own pay is about twelve, until one comes to India and studies it in the light of dusturi.

Dusturi means commission, and the commission you are expected to pay varies with your income. I grieve to think of the price extorted from the wife of the commissioner for a saddle of mutton. The commissioner is the "burra sahib" (chief sahib), and the burra sahib should pay more for his saddles of mutton than anybody else in the station, not because he gets better ones, but because he is the burra sahib and it is suitable.

The bearer is an influential person too. He dusts and trims the lamps, and cleans the shoes, and is responsible for the general well-being of the household. He would be outraged if you asked him to sweep. His servant, the mater, does that, and all the other menial work. The memsahib is not supposed to know of the existence of the mater, and if she values the respect of her establishment she must never speak to him or take anything from his hand. And strange as it may seem to any one who does not know the far-reaching operation of caste, we in India find it wiser to submit to this custom, as to many others.

The bearer calls his duster a jharrun, and a large part of the amount every memsahib intends to save at the end of the month disappears in jharruns. What becomes of the jharruns is an Aryan problem yet unsolved.

The bearer can account for the using up of at least a dozen a month without casting any light on it. He says they all go for daily use and that he has given three to the groom. The memsahib's imagination is supposed to explain the rest; and while it is at work, the bearer would like one rupee and six annas to pay for some new jharruns.

When I have watched the operation of the mater's brush, which is only a bunch of split cane, and of the bearer's jharrun, I sometimes feel an acute longing for a stout American broom and a large-minded duster, and the opportunity of turning both of these unoffending domestics out. For the mater's duty is done when he has raised as much dust from under the matting as possible, and picked up a torn envelope from the floor. The bearer has accomplished his when he has flicked every article in the room once or twice with his jharrun; and it is not of particular consequence to either of them which does his work first! But you know the uncompromising character of the American broom. What an awkward piece of luggage it would be, and how unlikely it would seem to be fundamentally connected with one's happiness in Peepulpore! So when I went to India I didn't take one.

Very seldom does the memsahib make or mend. There is a useful functionary, called a durzie, who relieves her of that.

The durzie is usually a lean and venerable little Mohammedan, wearing a long white coat, a small round white cap, and a pair of spectacles. Invariably the durzie carries an umbrella — an old brown umbrella, with its fullness tied in with a shoelace.

I have never seen a durzie with his umbrella up in the daytime; but at night, especially on a bright, fine moonlight night, he opens it to keep off fever and the dew. A procession of durzies going home from their work on such a night as this is one of the queer things of Peepulpore.

The durzie's pay is from three to four dollars a month, and like all the other servants, he feeds himself. His whole services are at your disposal for this sum; his personal attendance from ten to five, and his great toe, which is of no insignificant assistance in long seams. All he asks is a yard of matting to sit on in the veranda, something to mend or something to copy.

A pair of trousers for the sahib, a tennis-blouse for the memsahib, a night-dress for the baby — nothing is beyond his imitation, provided he has an original; but it would be a daring person who would appear in garments which the durzie had been allowed to evolve out of his own imagination.

Sara Jeannette Duncan.

A Morning in Benares.

Benares, on the Ganges, India, is said to be the oldest known habitation of man in the world, and time and tradition have sanctified the city in the Hindoo mind down even to its very dust. It has ever been the headquarters of religion, even before the great reformer, Buddha, preached to the Hindoos, hundreds of years before our era.

There existed at that time a form of worship, combined with caste, — a monstrous superstition and idolatry, — a religion evolved out of the cries of early humanity to something external to itself. Buddha broke down all this. He destroyed caste, set aside the priesthood, abolished sacrifice and empty forms, and, appealing only to man's intellect and conscience, set up his great principle of absorption into the Deity, instead of promising a heaven of conscious souls.

Buddhism once numbered more followers than any other religion in the world; but though Benares was the cradle into which it was born, and from which it spread all over India, and thence eastward even to Japan, it has been expelled from the land which gave it birth, and Brahminism, with all its disgusting practices, has resumed its ancient place and authority.

When one probes beneath the surface of this mystic religion, one finds a reality rotten to the core. The glowing poetry and sublime imagery of the Vedas, and the prehistoric sacred works of India, should be sources of the highest aspirations and a deeply religious life. But of the millions of natives who profess to follow those teachings, and of the millions of pilgrims who journey to Benares, hardly one seems to have a true conception of what was ideal, spiritual, or religious in the ancient belief. Little is left of this ennobling creed but the ignoble ruins of a ceremonial, a superstition, and an idolatry, confined, rigorous, and hopeless as the tomb.

One day — it was a great festival — we went at sunrise to

the Ganges to see the pilgrims bathe in its holy waters. This surely is one of the most startling and wondrous sights in the world! The city as we entered was illumined with a soft, rosy light, the streets were thronged with natives streaming down to the river in thousands through the dusty streets and under dust-laden trees. The dress of the pilgrims consisted of the lightest drapery, of most beautiful colors, loosely worn.

Many of the pilgrims, no doubt, came from homes far away in the remote parts of India. What a strength of faith — irrational faith to be sure — was there! How wildly their hearts were throbbing! for they had been waiting and longing for this day for a long time, perhaps for all their lives.

Every day came the pilgrims in crowds to this sacred city, to become purified by bathing in the sacred waters of the Ganges. Out of a population of three hundred thousand, half of them are pilgrims, ever shifting.

We leave our carriage as we near the river and make our way through the dense crowds of pilgrims, not one of whom evinces the slightest interest in our presence. Here and there some fine-featured girl who stays our admiration may, perhaps, look a second time, but all interest quickly fades from her eye.

Reaching the river, we take a boat and are rowed up the stream. We see the city stretching along its banks for miles. Flights of high steps line the river, and at their top rise temples, palaces and towers, and in the midst of them the superb mosque, with its two towering minarets, erected by the Emperor Aurungzebe, in the seventeenth century.

The steps are like a grand stand on a race-course, thronged with natives of all ages, down to even little children, pressing into the waters as far as they can get. Rich and poor, well, ill, and dying, are either in the water or waiting their turn to enter it, to wash away their sins, to pray, and to throw into it innumerable garlands of little yellow flowers. Every conceivable kind of colored drapery is here, and in folds as beautiful as if nature had arranged it.

The morning sun is now well up and brilliantly shining

over the river, which is here about a third of a mile across, and flooding all the animated scene in a rich and mellow golden light. Floating down this great river, we gaze bewildered at these multitudes at their devotions, washing, drinking, and throwing in their flowers as offerings to the

Pilgrims bathing in the Ganges.

goddess whose water it is supposed to be. The drapery of the women is of beautifully toned colors, dyed in simple but lovely hues, and all different.

All are bathing and washing. Some remain in the water for hours together, wrapped in the deepest thought and religious contemplation, all seeming most earnest in their devotions. Even the sparkling-eyed little children, like black cupids, wade into the water and mutter their little prayers with all the solemnity of their elders.

We float down almost amongst them. We might as well

be invisible, for we attract no notice. Here and there dotted about amongst the crowd on the steps are immense umbrellas made of matting and nearly flat; under these are the priests. They look for all the world like fat betting-men under their umbrellas at a race-course, and they must be gathering in the money fast, for they seem very busy. When the bathers have finished their devotions in the river, they go to these priests to have painted on their foreheads a small spot of a sticky-looking substance, for which the priests exact a high price.

The British Government has put a stop to practices which used formerly to be common here, practices which were not discouraged by the priests, and which were done in the name of religion. From all parts of India pilgrims would come here to drown themselves in the river. They would be tied between two large earthenware pots, and would then wade out into deep water, being kept afloat by the empty jars. These they gradually filled with water, till they sank with them from the gaze of the approving multitude on the banks.

Other practices, which have been also stopped, were the burying alive of lepers, and the burning of widows with their dead husbands, unless they preferred to be buried alive.

Cases occasionally occur even now of fanatics burying themselves alive.

In Benares there are said to be five thousand temples, and in all of them are repulsive-looking idols covered with rice and flowers, and dripping with the sacred water thrown upon them by persons coming from the river.

The temples are crowded with worshippers, and the floors are covered, considerably over the soles of one's boots, with slush of water, rice, and trampled flowers, the heat and smell being nearly overpowering. Little niches in the walls of the streets have each their hideous idols, and they too are deluged with water, rice and flowers.

Everything in Benares is worshipped, even pebbles from the river and dust from the streets. One temple we visited is sacred to the Brahmin bulls. There were many bulls there of huge size, fat, content, and garlanded with flowers.

There are also many wells, all most sacred. One to which we went, the well of knowledge, the water of which the pilgrims drink, is nearly filled up with the flowers which the worshippers have thrown in as offerings. The smell from these wells is absolutely choking in its offensiveness, and the slush about them nearly ankle-deep.

All we saw, excepting from a picturesque point of view, was painful in the extreme. It must be almost impossible to eradicate superstitions so inrooted as are those of the Brahmins. True religion, science and education alone can reach and cleanse these morally pestilent spots.

HUGH WILKINSON.

An Indian Juggler.

The Fire-Worshippers.

Many persons are familiar with the fervid lines of Moore's splendid poem called the "Fire-Worshippers." The farewell scene between Hafed and Hinda is one of the most affecting passages in the early poetry of this century. It has been so widely read and has produced so deep an impression that there are many whose only idea of the prevalent religion of Persia is derived from a perusal of that poem; and often has the question been asked me whether there is any other religion practised in that country beside that of the worship of fire.

The facts are that out of a population of nine millions, that empire now numbers only a few thousand genuine worshippers of fire. With the exception of about eighty-six thousand Armenians, Jews, and Nestorians, the remainder of the Persian people are Mohammedans.

It was soon after the rise of Mohammed that his fanatical hosts assailed the frontiers of Persia. Yezdejird III., who proved to be the last of his line, was at that time sovereign of Iran. His army was defeated in the decisive battle of Kadisiya, he himself was slain two years later, and the Persians were forced to accept Mohammedanism or the sword.

Those who refused to abandon the old faith of Zoroaster for that of Mohammed were persecuted, and mostly slain or driven from the country. Those who fled from Persia sought refuge in India, where they form, in our time, an intelligent and flourishing community, known by the name of Parsees, or Persians. It is amid these struggles of an ancient race against the domination of a new religion and dynasty that Moore has laid the scene of his "Fire-Worshippers."

Notwithstanding these long persecutions, which have continued over one thousand years, and only now are beginning to relax, and permit the Fire-Worshippers of Persia to live there unmolested, yet a small, steadfast band has always

remained in that land, preserving the faith of their fathers and their rites and ceremonials unchanged. In Persia they are called Guebres. This is simply a corruption of the Arabic term Kafir, which means a heretic, an unbeliever. In time it has become a word of contumely and scorn.

Although so few in numbers, yet the Guebres are a most interesting community, for in them we see the old Persian stock of the days of Cyrus and Xerxes unmixed with any other race; while the religion they practise is that which was introduced into Persia or perfected by the famous Zoroaster, or Zerdusiht, who lived at least twenty-five centuries ago.

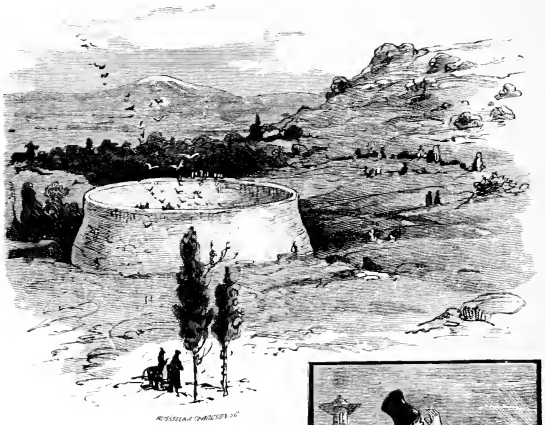
Zoroaster was born in the northern province called both then and now Adarbaijan; this name means the region of fire, and it may have been so called because the religion whose distinctive doctrine is supposed to be the worship of fire had its origin there. It is only just to state that intelligent Guebres repudiate this doctrine. They assert that it is a mistake to call them Fire-Worshippers. They say that fire is to them not an object of worship, but only a symbol of the beneficent Ormuzd, or good God, who is clear and radiant and pure, like the glow of the rising sun or the flames of fire, and that it is through the symbol that they adore the good Spirit.

This may be true of the more intelligent followers of the doctrines of Zoroaster, but there is no doubt that the ignorant classes believe that light and fire are real emanations of God, and worship them as such. Fire is by them held so sacred that they never smoke tobacco, and for that reason it is not by them considered courteous to use the weed in the presence of a host or guest who is a Guebre.

In every household of the Guebres fire kindled from the sacred flame at the new year is kept burning the entire year. That is the purpose they follow, but whether they always succeed in preventing the fire from being extinguished is doubtful.

The Guebres have many peculiar doctrines and customs. One of these is the use of yellow in their garb; another concerns the theory of immortality. They maintain that there

are two principles, the good and the evil, which they call Ormuszdao and Ahrimasdao. The ancient Greeks corrupted these names to Ormusd and Ahriman. These two principles,



or influences, fight for the mastery through the ages, seeking to win possession of the soul of man.

When a Guebre dies at Teheran, his corpse is taken to the lonely cemetery five miles south of the city, situated on a lone rocky eminence that overlooks the vast plains quivering with mirage. It resembles a white watch-tower, being built in the shape of a round hill-fort. It is white, and has no apparent way of entrance.

The walls are built of cargel, or mud smeared with plaster

that preserves it from the weather. Winding slowly over the plain and up the barren height, the procession of mourners, outcasts in a land they once ruled, bear the dead to his last resting-place. A hole is made in the wall of the cemetery, through which the corpse is taken to its grave.

Strange to say, the grave is not dug in the earth. The surface of the ground within this unroofed enclosure is divided by raised lines of brick into numerous oblong cells of uniform size, much like the parterres of a garden. The corpse is laid in one of these, dressed, and left there exposed to the elements. Vultures and buzzards hover over the cemetery in flocks; they know full well what is taking place in the desolate spot. Then the mourners retire to a little distance up the hillside, to watch the birds of prey swoop down to devour the dead.

They have a reason for thus keenly observing, for they believe that the destiny of the departed soul is revealed by the acts of the birds. If they devour the right eye first, the soul is in heaven; but if the left eye is first attacked, then the mourners go away sorrowful, for sad is the doom of their departed friends.

But the Guebres have other and more cheerful customs than this. Their new year is called the No Rooz, or New Day. It comes at the time when the sun crosses the line in March. Their traditions state that this festival was ordained by their great legendary king, Shah Jemschid. Although most of the Persians are now Mohammedans, yet they all accept the period for the commencement of the new year established in their country long ages before the camel-driver of the desert sent his armies to force them to his creed; and thus, at the No Rooz, Guebres and Mussulmans alike rejoice. The latter pretend that they celebrate the occasion because it is the birth anniversary of their Prophet, but this is a mere flimsy excuse, concocted in order to show their disdain for the Guebres. But in a hundred ways the Persians show that in their celebration of this annual festival they are following the traditions of their fire-worshipping ancestors.

Nowhere is the new year celebrated with more mysticism

and pomp and universal rejoicing than in Persia. For weeks before it arrives the people begin their preparations for the occasion. Every one seeks to raise money to purchase the new suit of clothes he is expected to wear at the time, and the confectionery and provisions for the ten days of feasting, as, during that period, the shops are mostly closed. So important is it to be properly prepared for the No Rooz, that articles of price that are family heirlooms are often sacrificed in order to provide the needed money.

When the new moon of that month appears, devout Persians look to the east, then covering the face with their hands, they are slowly turned until, on withdrawing the hands, the gleaming sickle of the new moon is seen directly in front. Perhaps our superstition about discovering the new moon over the right shoulder is suggested by this Persian custom.

The eve before No Rooz is also the occasion for a curious ceremony, evidently suggested by the mystical meaning the Guebres attach to fire and light. The common people leap over heaps of burning brushwood laid in rows. It is possible the heathenish custom alluded to in Scripture of "passing children through the fire" may be a form of this ceremony.

As the hour approaches for the sun to cross the line, the Shah assembles in the great audience-chamber of the palace, with the high spiritual and temporal dignitaries of the kingdom. Money is distributed to all for good luck on the commencement of the New Year. At the moment the astrologers announce the No Rooz, the Shah gravely exclaims, "Mambarek bashed!" (May it be propitious to you.) A sacred song of rejoicing is then sung by a mollah, or priest; after this each courtier, according to his rank, offers his obeisance to the Shah, and receives from the royal hand a present.

S. G. W. Benjamin.

Some Little Egyptians.

When I sailed up the Nile from Cairo to the First Cataract, I saw little Egyptians of many different types among the youngsters who crowded about the boat at a landing-place, or ran after one's donkey. Some had skins hardly darker

than an Italian's, and straight noses; others beautiful bronze-colored skins, and softly-outlined, handsome features; others again were black as a coal, with funny flat noses, thick lips, and dazzling white teeth.

The donkey-boys were my especial favorites. Everybody rides on donkeys in Egypt, and every donkey has a donkey-boy to run after him and poke him with a stick, and shout, "Ha-a-a-a! Ha-a-a-a!" They are the jolliest, most impudent set of little rascals I ever saw, quick at learning English, and ready at all sorts of pranks.

They can run for miles behind their galloping donkeys carrying the wraps, sketch-books, or camera of the rider, never getting out of breath, giving a bright smile every time one looks at them, and keeping up a continual chatter, trying

Donkeys and their Drivers.

to learn new English sentences and teaching Arabic ones in exchange. The donkeys are clipped in fancy patterns about the legs and neck, and have bright red saddle-cloths, and beautiful bead necklaces ornamented with little gilt coins which jingle merrily as they go. The donkey-boys generally wear blue gowns, and have bright-colored handkerchiefs wound round their heads by way of turbans, but sometimes they are all in white, which is very becoming to their dark skins.

They name their donkeys to suit the occasion. If they suppose you an American they will tell you, "Donkey name, Yankee Doodle — very good donkey;" or, "Dis donkey California Jack; gallop all time." But if they think you English, the same donkey is "John Bull," or the "Prince of Wales," and so on through all the nations.

Several times my donkey-boy asked me, after I had been riding awhile, "Very good donkey?" If I answered "Yes," he would go on:

"Very good donkey-boy?"

"Yes."

"Very good saddle?"

"Yes."

"Then very good 'bakshish!'" which meant that I should pay him handsomely at the end of the ride.

Up at the Tombs of the Kings, among the great Sand Mountains and dark caves where the royal mummies had been buried, I made a great friend of a little water-carrier, ten or eleven years old. She wore a long blue cotton gown, open at the throat and hanging down loose to her brown ankles. Over her head hung a soft, clinging black veil.

Around her neck were two necklaces of shells and beads, yellow and red and green. In one ear was a large gold hoop. Silver bangles jingled on her arms and legs. She carried her water jug, or "goolah," poised gracefully on her small head.

without the help of her hands, and ran alongside of my donkey for miles, ready to offer me a drink whenever the hot sun and the dusty ride made me thirsty.

As she trotted along she kept up chattering in her bird-like voice, her face lit up with the most bewitching smiles.

Instead of holding babies in their arms, as American babies are carried, Egyptian women set them up astride one shoulder, even when they are only a month or two old. The tiny things soon learn to hang on by clutching their mothers' necks, or the tops of their head-dresses. Thus the women can carry bundles in their hands or busy themselves about domestic affairs, while the babies "sit up aloft," looking on gravely, and rarely crying. One never goes out to walk in Egypt without meeting a number of babies riding on their mothers' shoulders in this way.

Whenever we anchored for the night along the Nile, all the children of the neighborhood would crowd around the boat, in their blue or white gowns and shirts, crying to us for "bakshish," which they had done nothing to earn. Dozens of half-naked boys would plunge into the river for the oranges and copper coins flung in to induce them to dive. Such crowding, pushing, dancing, singing, yelling, laughing, rolling down embankments and climbing up again, we never had seen before.

When we rode out to see ruins a swarm of children surrounded us, and they usually seemed happy, although sometimes they would hop along on one foot, as if lame, or twist their perfectly well-formed little fingers over on the backs of their hands, and hold up these imitation deformities, as they cried out piteously:

"Mesquine! Mesquine!" (Miserable.)

But if I laughed at their pretence they joined in heartily.

Once a large number of boys and girls came toward us, leaping and dancing, and playing on rude musical instruments of reeds bound together, with strings drawn across them, over which they scraped a bow or stick. The music was wild, queer and pretty. But the song was the everlasting "bakshish."

Few go to school, except in Cairo and Alexandria, and in some of the American mission schools up the Nile. As I was riding through the palm-shaded streets of Edfou a big fellow of eighteen or twenty came out of the dark doorway of a whitewashed house with a copybook in his hand, and said, proudly and distinctly:

"I am a scholar of the American Mission."

Then he thrust his copybook between my donkey's ears and my nose, and I read:

Twinkle, twinkle, little star,
How I wonder what you are!

In the few native schools the children are taught little but verses from the Koran, their sacred book. They sit in circles on the stone or marble floor of some mosque, with the teacher in the centre, all rocking backward and forward like so many pendulums, and buzzing away in a monotonous low singsong.

But I think my dear little Egyptians learn more by driving donkeys, talking to travellers, picking up crumbs of wisdom from everything and everybody, and stocking their quick brains with lessons of common sense and experience, than they ever learn in the mosques.

There was a funny little boy who followed me about at Philæ, waving a palm-leaf switch and repeating, "I you boy. I boy for you. Keep flies off you."

EDITH R. CROSBY.

Makers and Sellers of Sweetmeats.

Oriental Sweetmeats.

The food of the people is always an interesting study in foreign lands, especially in the cities of the far East, where every teeming, narrow street displays the queer things that are eaten by the dark-skinned people who live behind its windowless walls and mysterious courts.

There is evidence everywhere that in Oriental mouths the "sweet tooth" is highly developed, for of the heaps of eatables piled in open booths, in street stalls, in bazaars, and wheeled on salvers through the streets, nine-tenths are, to our palates, sickeningly sweet.

Curious they are, and usually quite different from our sweets. To inspect, buy and taste these strange concoctions was one of my amusements. The result in many cases was agreeable, but upon the whole the bonbons of France and the "candies" of America are far superior to the sugared mixtures of the Orient.

Sweetened arrowroot, pistachio-nut and the paste known as "Turkish delight," with quarts of rose-water flavor, are the elements of hundreds of other sweetmeats, the foundation from which nearly all are made.

"Turkish delight" should come first in a description of Eastern dainties, for it is everywhere in the Orient the most frequently seen and largely consumed. When fresh and well made it is the most palatable of Eastern sweetmeats. "Rakat-Sakoume" it is called by the Turks and Arabs.

It is made of arrowroot flour, boiled with sugar and water into a thick but flexible paste, and highly flavored with rose-water. It is then turned into buttered dishes to cool, dusted with finely powdered sugar, and cut into long strips. Chopped nuts of almond or pistachio are often added, and it is variously colored, red, white and yellow.

The making of Oriental sweetmeats is not a secret. Much

of it is done in the public streets for all to see. In cities like Damascus one fairly stumbles over great bowls of sugar, beaten eggs, cooling arrowroot and the chopped nuts and seeds used in their construction.

On every side one is greeted by the odor of boiling honey and sugar, and by the sound of the sizzling fat, into which are dropped the sweet fritters so commonly eaten.

These fritters of puff paste, usually very greasy, are in every Oriental sweetmeat bazaar. They are made in small shapes with sweet pastes of different colors and kinds sandwiched between them. Most often the sandwiched stuff consists of pounded pistachio-nuts made very sweet. Over the top are strewn layers of mashed pomegranate seeds and sugar.

No more brilliant pictures can be seen than in the lanes where these comfits are made. Swarthy men and boys, clad in flowing robes, with gay sashes and turbans, are framed in the open booths, their brown arms deeply buried in great bowls of the whites of eggs which they churn to foaming masses with their hands. Dishes of semi-liquid sugar stand near, and beside them various receptacles containing the arrowroot, pastes, honey, fruits and colors ready to be mixed for use.

Charcoal fires, over which the sweets are boiling and bubbling, light up the interior; and on tables in front are trays, bowls, slabs and jars filled with the countless jumbles of brilliantly colored goodies.

There are lumps formed of cocoanut and honey; sugared peas, balls of pink sugar on sticks, or festooned on strings; flat red wheels with nuts; triangles of white semi-transparent paste with layers of pistachio between; balls of dark fruit paste stuck full of blanched nuts; sections of melon or citron boiled in sugar and dried. This last is one of the best of the Oriental sweets.

There are great lumps looking like broken greenish sandstone, which prove to be made of the ever present sweetened pistachio pounded into a compact mass and allowed

to harden. There are candied apricots, dates and figs into which hazelnuts and almonds have been thrust. There are round pieces of sweet gum, of rose and yellow, as long as one's arm and nearly as thick, in the centre of which is a pith of blanched nuts. This is cut into slices, and forms pretty rings.

There are rows of small white bowls set along the stalls to cool, containing what looks like our blanc-mange. It is made of sweetened rice flour, or arrowroot, scented with rose-water, sprinkled over the top with chopped pistachio-nuts. Over this is poured cream of goat's or ewe's milk.

This dish is often iced or cooled with snow, and is very popular, the little bowls being quickly emptied by the passers-by. For a few piastres you can have one of the bowls placed before you; but though the dish looked inviting on those hot Syrian days, suggesting our ice-cream, I was unable to eat mine, owing to the intense cloying sweetness and strong flavor of rose.

This scent, so much liked in the East, pervades everything. Even the hotels for strangers use it for cakes and puddings. In Jerusalem we ate quince jelly flavored with it, and found it rather a pleasing admixture.

Swinging above every stall and bazaar of eatables are long, brown, glossy ribbons, or bands, which puzzled us not a little. The frequency of these in every Oriental city led me to test this dainty, which seemed of such importance. It is composed of ripe apricots mashed and rolled into thin sheets. Dried in long bands it keeps a long time, and is one of the staple commodities of Eastern shops. The natives eat it after moistening it, or they boil it with water and dip their bread into it.

Amid the confusion of unknown goodies heaped everywhere, there are two articles which seem familiar. One is our "rock candy" dangling upon long strings before the bazaars. Another is the "sugar-plum" of our childhood; but when we bite into it we find it more often made of the pistachio-nut than of the familiar old almond. On the same counters with

the sweetmeats are always dishes filled with dried pumpkin seeds, salted nuts, and bowls full of round seeds resembling our dried peas, all of which are eaten in large quantities.

In the spring and early summer dishes of green almonds are also displayed on the stalls, appearing to our eyes like huge platters of green peaches and resembling them in taste.

The Arabs consider them a great dainty, eaten with salt. My inability to eat the double handful which my Arab groom, thinking to please and surprise me, had stolen from an almond orchard through which we passed, almost gained me his permanent ill will.

Important articles are the flat cakes of various kinds. Piles of them lie like great white wheels, made into thin, flat sheets, and smeared with funny little tracks of boiled honey or fruit syrup.

Often they are round cakes slightly sweetened with honey, and plentifully strewn with sesame seeds, resembling our canary seeds. This is the sesame and honey cake of the Arabian Nights' tales.

There are huge piles of large, crisp hoops of unsweetened dough, baked very brown and sprinkled with these same seeds. They somewhat resemble German pretzels, and are called "simites." In Constantinople there are stalls devoted entirely to the sale of them. The piles of crisp, round rings, with the picturesque simite merchants behind them, form one of the most curious and frequent sights of that city.

During the Fast of Ramadan, corresponding somewhat to our Christian Lent, the Moslems fast from sunrise to sunset, after which they spend the night in eating. It is at this season that the sweetmeats are devoured in largest quantities.

Eleanor Hodgens.

OLD OCEAN.

Under the Shadow of the Berg.

About Icebergs.

The birthplace of icebergs is on the coasts of Greenland. This great land-mass stretches away twelve hundred miles toward the Pole. It might be named a continent, since it has an estimated area of five hundred and twelve thousand square miles, and thirty-four hundred miles of coast line.

The whole interior of Greenland is covered by an immense ice-cap, many hundred feet in thickness. The sun's rays, falling on the snow at the summits of the mountains, partially melt it into a granular mass. The valleys receive the drainage from these granular snow-fields, and the cold converts it into a solid mass of ice — a glacier.

The great weight of snow acts as a propelling power from behind, and forces the icy stream constantly onward toward the coast, which it lines with an enormous crystal precipice.

At last the front of the glacier is forced by the propelling power behind it into the sea, and into deeper and still deeper water. It begins to feel the action of the waves and tides which wear away its base; and great cliffs of ice overhang the ocean.

Now let us witness the birth of an iceberg. A lofty cliff of ice, thus overhanging the water, has been for some time showing signs of insecurity. Great caverns have been excavated in its base; deep fissures are discernible in its face. Suddenly, with a roar far louder than thunder, the ice-mountain snaps asunder, and the detached mass comes grinding, crashing down.

A cloud of spray dashes high into the air, and the young iceberg is born.

It dives as it touches the waves, rises slowly, sways and tumbles to and fro, but at last secures its balance. Its front is one hundred and fifty feet above the waves, but there is eight times as much bulk beneath as above the surface; so

The Birth of an Iceberg.

that its weight may be millions of tons. The berg is scarcely launched into life before it begins to feel the influence of the great Arctic current that is rushing southward through Baffin's Bay and Davis Strait. Borne on the bosom of this stream, it starts on its long voyage of six or possibly twelve months.

At last our berg reaches southern latitudes and a warmer clime. What the fury of tempests and the blows of the billows could not accomplish, the silent rays of the sun and the action of the warmer air begin slowly to effect.

The iceberg becomes relaxed in the joints. Streamlets are trickling down its sides. Its constitution is shaken. Great crags ever and anon fall from it, with a sullen plunge into the ocean.

Now it becomes top-heavy, reels and turns over. Woe to the vessel that is near when this takes place! Rocky fragments embedded in its now upturned base are exposed to the light. The berg presents a completely new front and summit, which have been sculptured by the waves, and is no longer recognizable as the same towering monster that left the portals of the north months before.

It is now in a state of unstable equilibrium, and frequently turns over with a hoarse roar. All sailors know the dangers of icebergs in this condition. They call them "growlers," and give them a wide berth.

Shorn of its glories, and greatly reduced in size, the berg still holds on its course and approaches the Banks of Newfoundland. Now it enters the warm water of the Gulf Stream, and its dissolution is at hand. Cascades are streaming down its sides. Caverns are worn right through its centre. Small lakes are formed on its summit. Rents and fissures are constantly widening.

Finally it bursts, with an explosion like thunder. Its shattered remains are scattered far and wide, and speedily melt in the warm waters. The berg is no more.

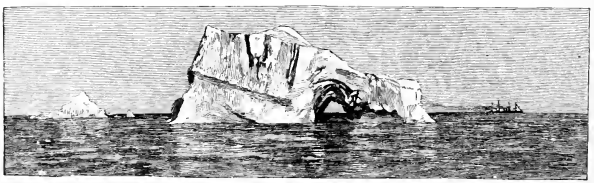
Such is the life-history of an iceberg. When it reaches a certain stage, and its cohesive powers are relaxed,—when it becomes "rotten," as the sailors say,—it is especially

dangerous. Then a slight cause will make it explode, and it bursts into ten thousand fragments, raising huge billows which might swamp a vessel.

The concussion of the air from the firing of a gun, or even the noise made by a steamer, has been known to cause such an explosion.

Sometimes a berg has projections, or spurs, underneath the water, stretching far out from its base. A vessel that ventures too near may strike on one of these unseen ice-reefs.

Such an event happened in July, 1890. A steamer with tourists on board, who were anxious to have a near view of a large berg, approached so close that she struck on one of its



An Iceberg at Sea.

jutting spurs. The shock and the weight of the heavily-laden vessel broke off the spur, and at the same time a huge cliff of the berg, many hundreds of tons in weight, fell into the water with a fearful roar, behind the steamer.

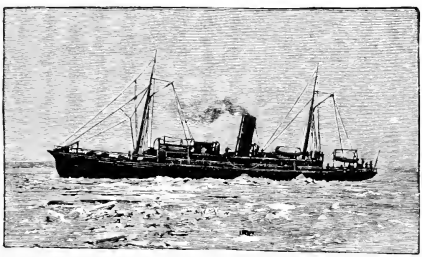
A great wave lifted her stern, and with a violent plunge she seemed to be going down to the bottom. It was a trying moment for those on board, but the good ship slowly came up, her deck covered with ice-fragments, and cataracts of water streaming from her on all sides. After a few convulsive tossings on the disturbed waters she righted, and managed to get out of that dangerous neighborhood. It was an extremely narrow escape.

There are many berg-producing glaciers on the Greenland coast. The largest known,—the Humboldt,—was reported

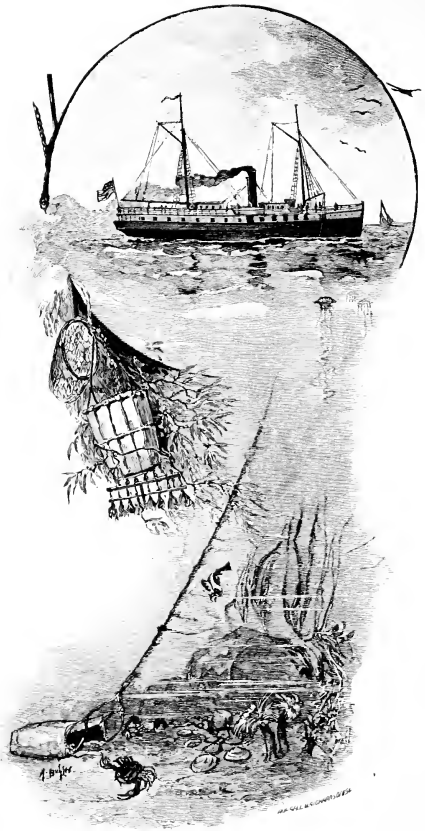
by Doctor Kane as extending forty miles along the coast, and presenting a perpendicular front three hundred feet high. The glacier, which has been measured most carefully, is eighteen hundred feet wide and nine hundred feet thick, and it advances at a rate of forty-seven feet a day.

Sir John Ross once saw a berg two and one-fifth miles broad, two and one-half miles long, and one hundred and fifty-three feet high. He calculated that the entire mass weighed fifteen hundred million tons. In the Southern Hemisphere much larger bergs have been seen, towering seven hundred to eight hundred feet above the waves. It must not be forgotten that in estimating the size of an iceberg the visible portion is only one-ninth part of the real bulk of the whole mass. Off the Newfoundland coast it is quite common to meet bergs one hundred feet high; so that the lowest peak of one of these may be eight hundred feet below the waves.

M. HARVEY.



An Ice Jam.



The Gulf Stream.

The Gulf Stream.

What is the Gulf Stream? Whence does it come? Where does it cease to flow? To what cause is it due? These questions have been asked from the time when Columbus made his great voyage of discovery four hundred years ago, down to the present day, and even now some of them have not been satisfactorily answered.

Lieutenant Maury began his description of this wonderful phenomenon with the expression, "There is a river in the ocean." The phrase explains in few words exactly what the Gulf Stream is. It flows along the coast of North America from the lower extremity of Florida to Cape Hatteras, and thence crosses the Atlantic toward the shores of Europe. Like land rivers, it has its source, the Gulf of Mexico, which is fed from the Caribbean Sea. This in turn receives its water from the eastern Atlantic Ocean, into which the Gulf Stream itself pours its own supply, so that there is, in reality, a grand circular movement of the whole ocean, of which the Gulf Stream is a portion.

Our ocean river does not run dry, like those on land, nor does it do much harm when, like the Mississippi, it overflows its banks, because its banks are water, and can easily be pressed aside. It always flows in about the same place over the bottom, too, and when it does change its position it is only in accordance with a law, which makes it return to its original position after a regular time as certain as that spring follows winter. It does not always flow on the surface of the sea, for occasionally it dashes along below the waves; but the same law guides it, and after awhile it is sure to rise again to the light of day.

This river is very warm, because it comes from the Gulf of Mexico and the Caribbean Sea, where the sun has been heating it for a long time. Of course, after it has left its

southern home, and is making its journey across the Atlantic, it is gradually becoming cooler; but, nevertheless, it maintains to the shores of Europe, even well up toward the Arctic regions, a much higher temperature than that of the surrounding air or water.

It has its own finny inhabitants and other animal life; curious little fish and crabs that make nests in the floating sea-weed; beautiful little jelly-fish called thimble-fish, floating

Beneath the Surface.

or swimming near its surface in such countless numbers that at times the waters are brown with them; and the graceful flying-fish, which dart out of the water in schools; and countless myriads of minute animal life floating about, so that, when the sun is shining high in the heavens, the water seems

to be filled with motes. These little things, dying, sink to the bottom, and their diminutive skeletons or shells go to form an ooze, which if exposed to the air and to pressure, resembles chalk.

This ocean river is quite unlike the rivers of the land in point of size. The Mississippi, at a point below its lowest tributary, is about two thousand feet wide and one hundred feet deep. At places it is wider than this, but there it is shallower. The Gulf Stream, at its narrowest point in the Strait of Florida, is more than two thousand feet deep, and over forty miles wide.

In point of speed, but few navigable rivers in the world equal the Gulf Stream. It hurries along three, four, five, and sometimes over six miles an hour. Even three miles is fast enough to delay or assist in a great degree, in the course of twenty-four hours, any vessel which happens to be in its influence.

The water is a beautiful deep blue, and so clear that one may look far into its depths. On the edge nearest the coast, where it presses against the colder shore water, its line of meeting with the shore water is frequently so sharply defined that at one end of the vessel you may have the clear warm water from the south, while at the other end is the cold murky water from the north.

Nature is always wonderful, and one can hardly fail to be impressed by the grandeur of high mountains, lofty precipices, immense forests, glaciers and waterfalls, but the Gulf Stream is the greatest of all of nature's wonders on this earth. It is impossible to realize the immensity of it, because it does not appeal to the eye, and the mind can hardly grasp its magnitude by the aid of an array of figures.

We all know that the sea water is salt. Contained in every thousand pounds of water there are thirty-five pounds of saline matter. Now if you could stand on the shore of Florida, and could take all of this saline matter out of the water of the Gulf Stream as it flowed past, during only one minute of time, all the vessels in the world at the present time would

not be enough to carry the load. When Columbus crossed the ocean to America for the first time in 1492, he discovered the existence of the current which enters the Caribbean Sea, and helps to form our Gulf Stream. All the old Spanish navigators noticed this current, and wondered what could be its cause.

Columbus gave a reason which was generally accepted as correct for many years. He saw that the heavenly bodies appeared to rise in the east, and go down in the west; that the winds in the tropics always blow from the east, and the currents of the ocean move in the same direction. So he concluded that the fluid and gaseous elements on the earth's surface, the air and the water, simply partook of the motion of the sky, and all went around the earth together.

The Gulf Stream itself was not discovered until the famous Ponce de Leon went to search for the Fountain of Youth. The natives told of a wonderful well or spring on the Island of Bimini, and the Spaniards, who were always on the lookout for remarkable or valuable objects, fitted out this expedition of discovery.

They did not know where Bimini was, except that it was somewhere northwest of Porto Rico; but they set out, hoping to find the means of cheating time, and making the old young again. They sailed along the eastern side of the Bahama Islands, and finally reached the coast of Florida. Then they turned south, and sailed against the current for several hundred miles, all the time wondering where the water came from without exhausting the supply, and where it went to without filling up some other place.

After several years it was concluded by many persons that all the water of the sea was moving; that it reached a hole in the earth and went down, and at some other point, a great distance away, returned again to the surface at the starting-point of that or some other current.

In quite recent years the government has started out to ascertain the laws of this river. A steamer is anchored in the ocean, and from it the speed and direction of the water, as it

flows past, is measured directly, not only on the surface, but hundreds of feet below. Steamers have already anchored in water nearly two miles and a half deep, and probably there is no spot in the ocean at which we shall not be able, before long, to observe the currents.

Instead of employing a chain, as vessels ordinarily do when anchoring in harbors, these steamers use a long, steel wire rope, which is lowered, pulled in, and wound up on a large iron spool, by steam-engines.

In this way we have learned that this great river is governed by laws such as those which govern the tides. You will remember that the tides rise and fall generally twice each day, the greatest rise and fall during the month coming about the time of the new and full moon.

In the same way the Gulf Stream's current varies in strength every day, and at different times in the month, depending upon the position of the moon in the heavens. It varies in temperature according to the season, and in position, too, a little; but the grand stream is not erratic. All its movements are fixed by laws that do not change.

It is maintained by some, that the current moved so far to the northward a few years ago that it bathed the shores of Nantucket and Long Island, causing the weather in New England to be warmer than usual. This conclusion was based upon the fact that sea-captains found the warm water farther north than usual, and on the finding of a floating sea-weed, peculiar to warm waters, much nearer the shore than customary. But as we have seen, the temperature is a poor guide as to the limits of the current; and the same wind and waves that can carry the water can also carry the small fragments of floating weed.

Then, too, if the current did reach the shores, it could hardly temper the climate far inland unless the wind carried the heated air; and this the wind can do about as well from the regular position of the current as from any position to which it may have moved.

The month of December, 1889, was very warm for the

season of the year, and the cause was assigned by many to the erratic movement of the Gulf Stream. East of the Rocky Mountains the United States Signal Service had eighty-six signal stations, and at sixty-five of these stations, many of them over a thousand miles from the sea, the temperature for the month was many degrees above normal.

At Cape Hatteras the stream is always, winter and summer, very near,— indeed, it is just outside the shoals,— and yet here the temperature was more than six degrees warmer than the normal.

For the cause of this we must look to the air, and not the water. As it happened during December, the air pressure as shown by the barometer was higher than usual in the vicinity of the Gulf of Mexico and the Southern States, and much lower toward Canada, so that the general movement of air was from the warmer toward the colder parts of the continent. The Gulf of Mexico and the Gulf Stream are warm, and the heated air, rising from them, was carried north, and so tempered the weather for the month.

Now what is the cause of the Gulf Stream? Some say that the water in the tropics, being heated, and consequently lighter than the cold, heavy polar water, flows northward on the surface, and the other water southward, underneath. Others say that the Trade Winds, always blowing in one direction toward the west, blow the water along, too, and so begin and afterward keep up the movement. Both are, perhaps, right to a certain extent, as to currents in general, but the Gulf Stream is probably almost wholly due to the wind and the waves alone. The water is pushed by the wind, and thrown by the waves into the Caribbean Sea, from the western end of which the accumulation of water runs into the Gulf of Mexico, and from there it escapes through the Strait of Florida into the Atlantic Ocean.

J. E. Pillsbury.

The Kuro Siwo.

Those of our readers who study geography, and especially physical geography, will hardly have failed to notice the remarkable difference between the climate of the eastern, or Atlantic coast of North America and that of the western, or Pacific coast in the same latitude.

Take, for example, the shores of Newfoundland, Labrador and Greenland, as compared with those of Vancouver's Island, Queen Charlotte Islands and Alaska. On the Atlantic coast are found icebergs, icefields, frozen bays, stunted shrubs, and only the most hardy of plants and grasses, while on the Pacific coast are noble forests, luxuriant grasses, and a generally equable climate throughout the year.

Juneau and Sitka in Alaska are but three degrees farther south than Cape Farewell, the southern point of Greenland, and they are ten degrees farther north than the southern part of Newfoundland. But at Juneau herd's-grass may be seen growing seven feet in height, and the flourishing kitchen gardens are untouched by frost till late in September.

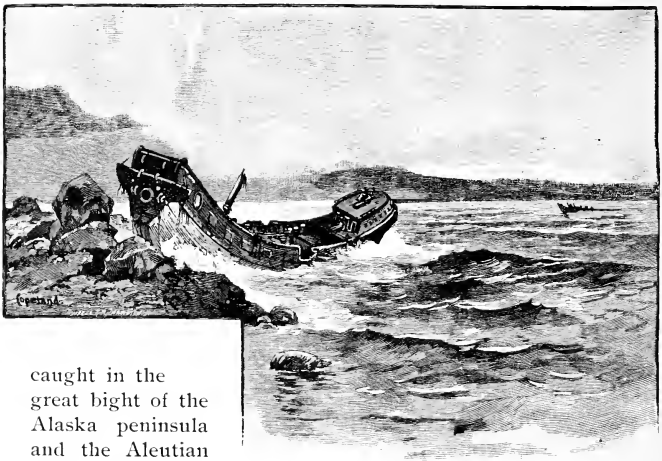
About Sitka are grand old woods, where firs and hemlocks grow to a great size. The cedars of the Queen Charlotte Islands also attain an enormous size, larger even than the famous cedars of scripturally classic Lebanon. From these great cedar trunks the Haida Indians excavate immense canoes, often sixty feet in length by six or eight in breadth,—which are capable of carrying a party of forty or fifty warriors.

We are so accustomed to regard climate as regulated by the distance from the equator, that these facts seem strange, and we are led to inquire the cause. Why does the west coast have so much the milder and better climate? The answer is in two words:

"Kuro Siwo."

These two words are from the Japanese language and

signify "Black Stream." The Kuro Siwo — so called from the tint of the water within its limits — is a northeasterly deflection of the great ocean current which flows north from the equatorial seas and renders the climate of the Japan Islands so equable and fruitful. A part of this warm stream in the ocean crosses the Pacific from the coasts of Asia, and,



Drifted by the Kuro Siwo.

caught in the great bight of the Alaska peninsula and the Aleutian islets, flows in and out among all those hundreds of islands, from Sitka southward to Vancouver, and gives to this whole coast its moist, mild winter.

But not alone has the Kuro Siwo brought warmth and moisture to the northwest coast; it is now credited, by some scientific men, with having borne the first human inhabitants to America.

Eighty-five years ago, while the Russians were still in possession of Alaska,— or Russian America, as it was then called,— the attention of the good people of Sitka was attracted

one morning to a strange-looking craft, which had apparently come ashore during the night on one of the hundred little, rocky, wooded islands that lie about the harbor — the islet which to-day bears the name of Japonskoi.

Boats were manned, and those who approached the stranger found it to be the dismasted, half water-logged and unmanageable hull of a Japanese junk. Strange to say, there were ten or twelve Japanese on board, nearly dead from exposure, disease and famine.

The junk had been dismasted in a tempest, while on a voyage from one Japanese port to another, and, beyond the power of the hapless crew to prevent it, had drifted steadily northeastward in the Kuro Siwo, which sets constantly and quite strongly from the coasts of China and Japan across the Pacific toward America.

Thus we have it demonstrated that even within the present century the Kuro Siwo has borne human beings from Asia, the "great mother of the human race," to America. There are also traditions that, on two former occasions, Japanese or Chinese junks have drifted to the coast of America farther southward. How many times these significant accidents may have occurred in the great unwritten past of our continent no one knows, and who shall attempt to say?

Many ethnologists believe that the aboriginal Indian tribes of America are of the same race and origin as the early people of Siberia and Japan. Did the Kuro Siwo bring them?

There have been many theories as to how America was first peopled: one, that the earliest inhabitants came hither from the mythic sunken continent of Atlantis; another, that they were the far-wandering "lost tribes" of Israel, and still another that they crossed Bering's Straits on the ice from Asia.

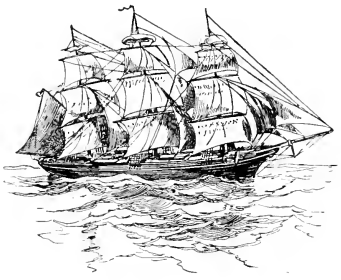
This last theory, suggested by the Japanese junk borne to Sitka by the Kuro Siwo, may bear examination, but, like other speculations of the class, it is incapable of proof — and not of other than strictly scientific value, even if it could be proved true.

C. A. Stephens.

The Trade Winds.

Most people have heard or read of the Trade Winds — or simply "The Trades," as they are called by sailors — but probably it is not generally known what causes these winds and where they are found.

It is easy to understand that a wind which is steady in force and constant in direction is of great benefit to sailing vessels, and it is from this advantage to navigators — and hence to trade — that the Trade Winds take their name.



A Fair Wind.

These winds are permanent over both the land and water, prevailing in, and often beyond, the torrid zone. As the air within this zone receives a greater amount of heat than the air outside, it rises, and its place is supplied by the colder air which rushes in from beyond the tropics.

If the earth were at rest, it is evident that a north wind would blow in the northern half of the torrid zone, and a south wind in the southern half. But the earth, instead of being at rest, revolves on its axis from west to east. A little reflection will enable any one to understand that the greatest velocity resulting from this rotation must be found at the Equator, and that as one recedes from the Equator, the velocity diminishes until the pole is reached, where it is nothing.

The wind which is rushing toward the Equator has continually a less velocity than that of the surface over which it

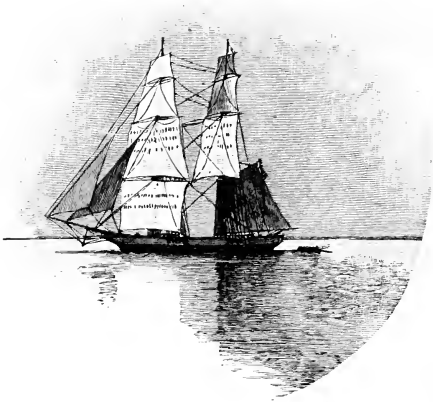
passes, and so falls behind more and more as the Equator is approached. This gives it a direction opposite to the earth's rotation, in other words, a direction from the east to the west, which, combined with the motion from the north and south, before mentioned, gives as a result the northeast Trades in the Northern Hemisphere, and the southeast Trades in the Southern Hemisphere.

Speaking roughly, the limits of the Trades are thirty degrees north latitude and thirty degrees south latitude, between the two being a band of calms and light, variable airs. This belt is called "The Doldrums," perhaps from the old Spanish word "dolorosa,"—signifying tormenting, which a region of calms and variables undoubtedly is to a sailing vessel. The Doldrums are the meeting ground of the northeast and the southeast Trades, and at this meeting point they have a neutralizing effect on each other. Here rains are heavy and frequent.

The limits of the Trades are constantly changing, varying with the season of the year. Following the motion of the sun in the heavens, in the summer they extend perhaps two or three hundred miles farther toward the north, and in winter they recede toward the south. It will be understood from this that the belt of Equatorial calms is variable in position as it also is in width. In spring its centre is found about one hundred miles north of the Equator, while in summer it extends five hundred miles higher in latitude. Its width is ordinarily three hundred miles, but sometimes it is thrice as wide, and then again there is occasionally no dividing line between the Trades, and vessels are fortunate enough to run directly from one into the other.

To come now from the Trades in general to the Trades of the Atlantic. These have been known for centuries. Columbus probably noted the northeast Trades on his first voyage of discovery. When not interrupted by hurricanes, which are uncommon, except in August, September and October, this northeast Trade Wind region is a veritable summer sea, so much so, indeed, that it was called "The Lady's Gulf" by

the old Spanish navigators. It extends from the Doldrums to the Horse Latitudes, which is a belt of calms and variable winds found between thirty degrees and thirty-five degrees north latitude, according to the season of the year, and takes its peculiar name from the fact that in early days, ships



Becalmed.

engaged in carrying cargoes of horses from Europe to the West Indies frequently found it necessary to throw them overboard, owing to the frequent changes — rains, thunder, lightning, puffs, and calms following each other in rapid succession in this perplexing region.

Both the northeast and southeast Trades of the Atlantic blow over a wider extent on the African than on the American side, but, on the other hand, the Doldrums are much broader on the eastern side, making it a part of the ocean to be avoided, if possible. The southeast Trades are much stronger and constant than the northeast, which are, in fact, somewhat capricious, frequently showing breaks in their regularity

which it is hard to account for. I have, after experiencing very fair southeast Trades, steamed entirely across the northeast Trade Wind region, in the month of May, without finding any wind at all to speak of.

It is hard to explain why, on a given day, a vessel in this region should find good, steady Trades, while on the

In a Gale.

same day, another vessel, a few miles east or west of the first, should encounter nothing but calms.

The Trade Wind regions are a delight to the mariner. Fogs are seldom experienced, and gales rarely occur. The weather is pleasant and the air dry. The wind being constant, the captain and officers have very little anxiety, and the sailors still less, of the usual and monotonous work of setting and taking in sail, reefing, and bracing yards. In fact, vessels sometimes "run down the Trades" under all sail, and for days together there is no necessity of touching a rope.

E. B. Underwood.

The Mariners' Compass.

"Do not speak to the man at the wheel" is printed on the wheelhouse of many sea-going steamers. Why must the man at the wheel not be spoken to?

Because, during his two hours' turn, his attention ought to be fixed upon his compass. Let him turn to a passenger to answer a question, and the vessel will depart slightly from her course. Time will be lost, force will be wasted, and the steersman will hear a short, sharp word from the officer of the deck, calling him back to his duty.

The compass is the very eye of the ship. A skilful seaman, using the knowledge which the compass has already given him, could navigate a vessel across the Atlantic — in time. It is the compass that enables the captain to shoot his arrowy steamer over the trackless sea in less than a week, through fog, darkness and storm, without swerving from his course.

Man possesses few instruments more valuable than this, and yet no one knows who invented it. If we ask the Chinese, the people who invented so many useful things, they point to some obscure passages in their ancient books, which do not prove their claim. If the Chinese had the compass, why did they not use it? From time immemorial their lumbering junks hugged the shore, and rarely ventured farther out to sea than to Japan, which is only a few miles from the coast of Asia.

If we ask the Greeks, we begin to get a little light on the subject, for the Greeks at least knew something of the attractive power of the magnet.

They tell us, in their mythological way, that a shepherd named Magnes, while pasturing his flock upon Mount Ida, found one day that the iron at the end of his staff adhered to the ground, and to the nails upon his shoes. He picked up some of the dark-colored stones under his feet, brought them

home with him, and thus gave to mankind a knowledge of the magnet, which was named after him. The Greeks were great story-tellers. They had their legends about everything, and this about Magnes is one of them, from which we can at least learn that they were acquainted with the magnet's power of attraction; but they knew nothing of that valuable quality which it imparts to the needle of the compass. They knew

A Chinese Junk.

no method of steering vessels in the open sea except by the stars, the flight of birds, and glimpses of the distant headlands.

Nor did the Romans. The Roman writers were lost in wonder at the magnet's attractive power, but there their knowledge of it ended. The elder Pliny speaks of it with the simple amusement of a little child.

"What is there in existence," he asks, "more inert than

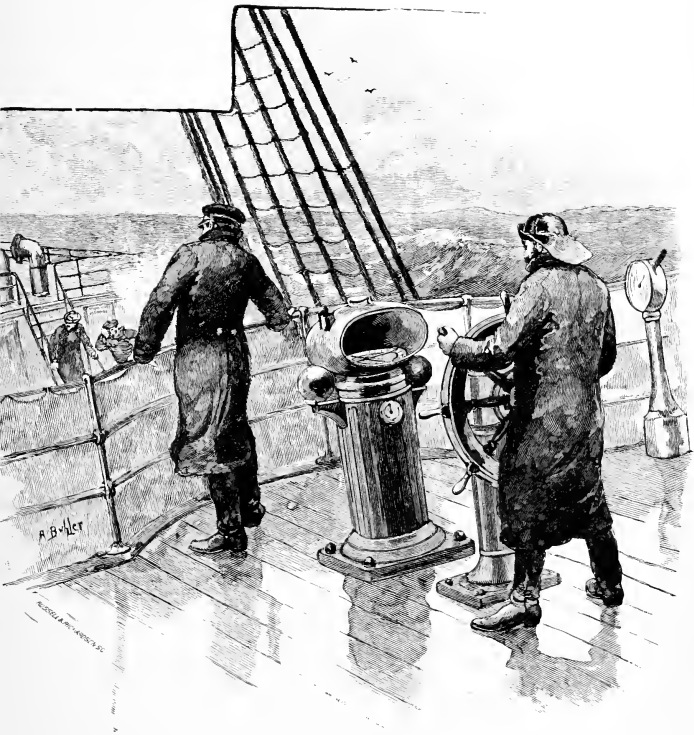
a piece of rigid stone? And yet, behold! Nature has here endowed stone with both sense and hands. What is there more stubborn than hard iron? Nature has in this instance bestowed upon it both feet and intelligence. It allows itself, in fact, to be attracted by the magnet. . . . The moment the metal comes near it, it springs toward the magnet, and, as it clasps it, is held fast in the magnet's embraces."

This was written about the year seventy of our era, and there is no proof that any one in the world had yet detected the marvellous power of the magnet to impart to a piece of iron the propensity to point to the north. The passage in the New Testament which describes the eventful voyage and shipwreck of St. Paul speaks (Acts 28: 13) of "fetching a compass," but the new version gives a better translation, "we made a circuit, and came to Rhegium." No Mediterranean pilot in the time of St. Paul steered his bark by the aid of the magnetic needle.

It was at some time near the end of the twelfth century of the Christian era that the mysterious power of the magnet upon the needle became known to a few of the learned men of Europe. Probably the knowledge of it was brought to them by the Crusaders returning from the Holy Land, and there is much reason to believe that this power of the magnet was first observed by the Arabs, an ingenious race, and the most skilful travellers in the Middle Ages, whether on land or sea. The Crusaders began to return home in numbers about A. D. 1100, and the knowledge of the magnetic needle gradually spread over the north of Europe. The bold Norwegians seem to have been the first to use the needle in navigating the sea.

In the year 1258, a learned Italian, named Brunetto Latini, who was afterwards tutor to the poet Dante, travelled in England, and visited at Oxford Friar Roger Bacon, a man devoted to the pursuit of science.

Latini wrote letters home to his friends, in one of which he says that Friar Bacon showed him, among other things, "a black, ugly stone called a magnet, which has the surprising property of drawing iron to it, and upon which, if a needle be



On the Bridge of an Ocean Steamship.

rubbed and afterwards fastened to a straw, so that it shall swim upon water, the needle will instantly turn toward the Pole Star; so that, be the night ever so dark, neither moon nor star visible, yet shall the mariner be able, by the help of this needle, to steer his vessel aright."

Here we have the fact plainly stated, as it had been known to a few persons in England and France for many years. Friar Bacon imparted this knowledge to the Italian traveller as a dreadful secret, perilous to disclose to the common people, and still more perilous to make known to the ordinary priests of the age. Latini explains the reason, and in truth, Roger Bacon passed ten years of his life a prisoner, partly because he knew a little too much of the secrets of nature, and partly because he advocated the reform of the church.

"This discovery," continues Latini, "which appears useful in so great a degree to all who travel by sea, must remain concealed until other times; because no master-mariner dares to use it, lest he should fall under the supposition of being a magician; nor would even the sailors venture themselves out to sea under his command, if he took with him an instrument which carries so great an appearance of being constructed under the influence of some infernal spirit."

These two learned men conversed upon this wondrous quality of the magnet, and they looked forward to some happier time, when men should be more enlightened, and not afraid to make researches in natural science. Then, said Latini, mankind will reap the benefit of the labors of such men as Friar Bacon, and bestow honor upon them "instead of obloquy and reproach."

Neither Bacon nor Latini lived to see that better time for which they hoped. When they had been dead a hundred and fifty years, the Portuguese, under Prince Henry, the Navigator, were using the compass in their voyages down the African coast. In a few years the Madeiras and the other Atlantic groups were discovered by its assistance.

The Cape of Good Hope was turned, and India reached by sea. One of the mariners formed in the school of Prince

Henry was a man destined to put the compass to the sublime use of discovering a new world.

Seamen did not long employ so awkward an instrument as a needle floating in a straw on a basin of water. About the year 1300 an Italian navigator, named Flavio Gioja, there is good reason to believe, constructed the compass such as we now commonly have, a needle mounted upon a pivot, and enclosed in a box.

The Italian word for compass is bossola, which signifies box; and from this the French word for compass is derived, boussole, which also means box.

These were admirable improvements, and made such an impression that the improver is frequently spoken of as the inventor of the compass. The true inventor was the unknown man — when did he live, and where did he live? no one can tell — who first observed that a needle, rubbed by the magnet, has an inclination to point to the north.

One curious fact remains to be mentioned. The modern compasses, those used in the naval services of Europe and America, as well as by the Atlantic steamships, resemble in principle the needle and floating straw mentioned by Roger Bacon.

Ritchie's "liquid compass" has the needle enclosed in a thin, round metal case, air-tight, which floats upon liquid, and has also the support of a pivot. The needle, being thus upheld by the liquid, can be heavier, and thus have a more powerful directing force.

This we may call a return to first principles. So much for the history of the compass, which has doubled the area of civilization, and brought the two great continents within easy visiting distance of one another. A needle in a straw, afloat in a basin of water! A charm hanging at a lady's watch! A box with a card in it, suspended upon a pivot! What a little thing to be of such immeasurable value!

JAMES PARTON.

Minot's Ledge Light.

"There she towers! Spray clean over!"

Our party stood on the rough bit of New England shore which belongs to the government, and serves for "the base of supplies" to this, the most noted of American lights.

Minot's Ledge Light indeed deserves to rank with the first three or four in the world. Perhaps in point of peril in building, difficulty of construction, tragic history, cost, usefulness, picturesque beauty as a feature of the landscape, or the silent heroism of its attending, no light is its superior, not even the far-famed Eddystone, so inseparably connected with the name of its ingenious and daring builder, John Smeaton.

It was a dull-clouded, harsh midwinter's day. The merciless winds came in from the full Atlantic. The sea ran high in the protected bay hard by where we stood. Far out where the bluestone light was breasting the waves, the rush of the sea must have been tremendous against that moveless citadel of a beneficent government's watch and care for the sailor.

Behind us were the cottages where reside the families of the keeper and his two assistants. The children of the hardy men came timidly about us, bright and pretty. Plainly, though neatly, clad women showed faces at the cottage doors, and courteously directed us "up on the lookout hill" or "Beacon Hill," as another called it, whence the best possible shore view of the light could be obtained. As we clambered up the stones we asked all sorts of questions.

"You can signal from here out to your father on the light?"

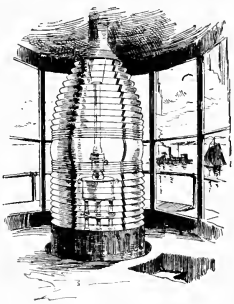
"Yes."

"You often pass back and forth your signs, when the sea is heavy?"

"Yes. When any one is sick on shore father is informed of hopes or fears, how fares the sick one, by the dip of a lantern or the motions of a flag." Sometimes the father was

not well when it came his turn to go back to duty, and then the oldest boy would climb up every morning to Beacon Hill, to catch, with his strong young eyes and a glass, the faint, far signal from the light; "just to quiet mother," as he explained.

The lusty little chap seemed to think it was quite absurd to suppose such a father as his could be very sick out there, or die in his little round tower in full sight of home, though inaccessible to men at times, still more so to wife or child.



The Lantern.

The light stands upon a mere thumb of rock, which was hardly exposed even at low tide and smooth water, yet it was a couchant lion in the way of vessels entering or departing from Boston harbor.

Eighty-eight feet high the tower now springs up from the very midst of the waters. To debark from the boat on the light is never a simple task, generally perilous, and many days wholly impossible. The task of provisioning, in pleasantest summer weather, is one of great skill; of course everything, from a drop of water to a lump of coal or bottle of medicine, must be stored in the summer-time for the long, stormy New England winter.

In the centre of the tower is a well filled with fresh water, a gigantic cooler which, in the warmest weather, is delightfully efficient.

Not unfrequently the most skilful handling of a boat cannot prevent spilling provisions, and even the men, into this rushing, turbulent sea. A rope's end saves the bold keeper, and they pull him in and high up to the door, but the provisions must be replaced.

Two of the keepers, at least, are always on duty, while one is ashore taking a respite.

The men stay three weeks on the light out of every month; this gives each man one week with his family out of every

Minot's Ledge Lighthouse.

four, provided the weather is such as to admit transfers to be made. On the light one man is always awake and watching the great lantern.

A perfect meteorological and hydrographic record is kept; the wind, temperature, passing sails and their direction, floating wreckage, or any marine incident whatsoever. The writing of this "log," with necessary observation, is a welcome occupation to the lonely prisoners of duty.

Comfortable circular rooms occur in succession, one beneath another, from the lantern down to the solid base courses of stone. A fifth of the tower, from the rock, is dovetailed blocks of blue granite. Rooms are especially set apart for provisions, sleeping, cooking, charts and the like. Of course no exercise, except in a very limited degree, is possible in such narrow quarters.

The pay is not large. It varies somewhat under different administrations. The head keeper has never received over twelve hundred dollars per year; often he has less. Yet faithful men are never lacking who wish the situation — generally retired shipmasters who are able thus to eke out "the salt money" by such added earnings.

The assistants each receive much less than the head keeper. I asked a brother of a former keeper about life on the light. He said that a heavy sea was most trying at half-tide.

As the gigantic mid-ocean breakers strike downward on the ledge at the base of the tower, the shock is often tremendous. It may cause the stove-lid to rattle out of place, for instance, and makes the entire structure shudder.

The trembling gives a sickening sensation to one who is not accustomed to it, and is quite capable of taxing the strongest nerves. The recollection of the two brave keepers who perished when the previous light was swept out to sea must come to their adventurous successors.

My informant thought, however, that only two possible causes could occasion an overthrow of the lighthouse. Earthquake, or any disturbance of the foundation rock, would cause speedy ruin; so also, possibly, might a wreck coming

from the northeast at half-tide in a gale, the vessel being a gigantic battering-ram.

No rush of the sea, no storm of wind, no cloud of spray, often practically covering the entire structure for a moment—none of these poetic terrors of the ocean had any menace for the intelligent keeper.

There is a huge bell for fogs set in horizontally, in whose throat and across whose brazen lips a most curious and melancholy music is made by a gale of wind. The effect of the continual groaning and moaning of this unearthly voice, in deepest diapason, my informant mentioned as exasperatingly trying to the nerves at times.

He told me that the keepers are lovers of the sea, and always interested in the sublimity of that never dull point of prospect. Hours together they sit dreaming on old ocean, and communing with that great nature whom we all regard with wonder, but few of us see in such wonderful moods.

EMORY J. HAYNES.

Buoys.

All who have visited the approaches to a seaport town have noticed the numerous buoys and marks which are placed there as aids to navigation.

Tugging and jerking at their chains as the tide sucks in around them, or lying quietly upon the placid waters of some sheltered bay, are black buoys and red buoys, buoys with horizontal black and red stripes, buoys with black and white vertical stripes, and ding-donging bell- and whistling-buoys. Well out to sea lie much larger buoys, called mammoth buoys, gripping the sand with their iron claws.

Though these marks and buoys may seem to have been put haphazard here and there, each has a meaning. The place that each shall occupy is carefully chosen for it, and its arrangement is governed by a careful system.

These aids to navigation, which are called "day marks" in contradistinction to the lights and beacons, fall under the jurisdiction of the Lighthouse Board.

The coast of the United States, including the lakes and navigable rivers, is divided into sixteen districts. A naval officer is in charge of each. Under his direction all the buoys in his district are placed.

In all the districts similar buoys mean the same thing, and a buoy that has a particular distinguishing color on the coast of Maine has the same significance if in the Bay of Mobile or off the coast of Oregon. So the mariner who sails into Boston Harbor is guided and directed exactly in the same way as he who enters the Golden Gate.

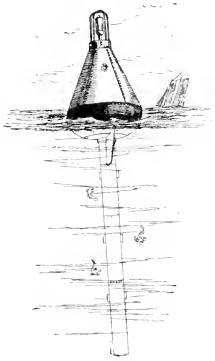
Not only are the colors and positions of the buoys given on the Coast Survey Charts, but the Lighthouse Board publishes a yearly list, which is distributed gratuitously for the benefit of commerce, in which each of its about five thousand buoys is located and described.

Coming into port from sea, the first buoy that we pass may be a mammoth buoy. I say "may be," because these buoys are only used in special cases, such as to mark the approaches to channels over bars or shoals that lie at a considerable distance from the coast. The entrances to most harbors do not require any such special marks.

The buoys that designate the channel, and which lie on either side of it, are red and black. The red buoys, which all have even numbers, must be left on the starboard or right hand in passing in from sea, while the black buoys, always with odd numbers, must be left on the port hand.

In case there are two or more channels, they are distinguished by a difference either in the size or shape of the buoys.

If there should chance to be an isolated rock, wreck or any obstruction which has a channel on either side of it, it is shown by a buoy painted with red and black horizontal stripes.



The Whistling Buoy.

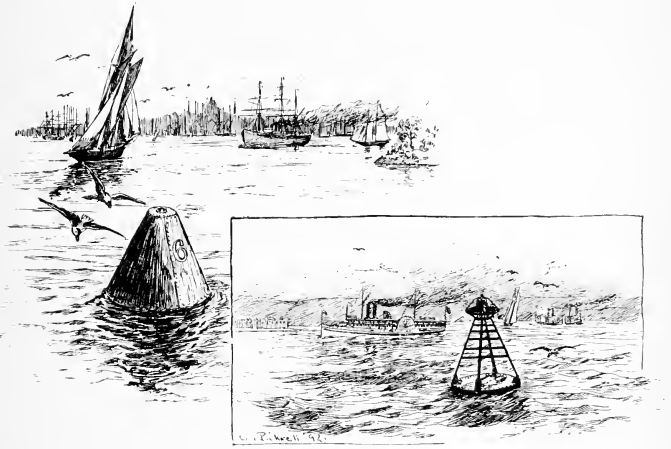
Buoys with white and black perpendicular stripes lie in mid channel, and indicate that they must be passed close to avoid danger.

Finally, buoys surmounted by triangles, cages, and so forth, are an indication that there is a turning-point in the channel.

There are, in addition to the buoys already mentioned, two other kinds which are also fog signals, namely, the whistling buoy and the bell buoy.

Whistling buoys are more complicated affairs. They are only seen at harbor entrances, or off some prominent point. What one sees in coming upon a whistling buoy is an object that looks much like a big red pear, afloat upon the waves. But a closer view shows that the pear is of the size of a hogshead, and that

at its upper end is fixed a whistle, connected with the pear bulb by a tube. Now if one could see down into this painted bulb, the big stem which runs through it and down into the sea for about thirty feet would be found to be nearly a foot in diameter.



This long pipe is open at the bottom and closed at the top. As it sits in the water, therefore, there is a water-line inside the pipe, just as there is outside. The buoy may dance up and down as much as it pleases, but the big column of water inside the pipe does not dance, but remains perfectly still, because there are no waves down below, where it enters, to affect it. As the buoy goes up on a wave, pulling the pipe up with it, it leaves, of course, a longer space of pipe above the water-column, and a consequent partial vacuum. When the buoy falls, the air above the water is compressed again.

Perhaps the simplest explanation of this movement is to say that the water-column and the rising and falling pipe round it are piston-rod and cylinder, and their motive power

is the restless Atlantic swell. There is an air-tube connecting above with the pipe, and when the rise on a wave makes the vacuum within, the outer air hastens to fill it. Then, as the pipe goes down, making the air press down on the resisting water, an outlet is provided for it in a small middle tube, which runs up from the pipe directly into the whistle fastened atop, high and dry above the waves. The rushing upward air that follows every plunge of the buoy is like the breath from the lips of some great strong sea-giant blown into the whistle.

The blasts, of course, vary greatly with the kind of sea. After a storm that creates a heavy swell, the buoy rises and falls very slowly, and the whistle sounds with a long and mournful wail. But in a brisk breeze, the buoy bobs merrily up and down on the quick, choppy waves, and the whistle goes with a cheery "Toot! toot! toot!" not at all suggestive of shipwreck and disaster.

They are not pleasant neighbors. Their sound is frequently heard at a distance of ten miles, and under very favorable circumstances it has been heard fifteen miles.

The bell buoy consists of the bottom section of a buoy floating in the water, on which is mounted a framework bearing a bell which, instead of the ordinary tongue and clapper, has a small cannon-ball supported on a platform just underneath the bell's mouth. This ball rolls to and fro with every motion of the sea.

These buoys are used in harbors and rivers where the water is smoother than in the roadsteads, and where it is not necessary that their sound shall be heard a great distance. Ordinary buoys, not of the whistling or bell variety, are made of either iron or wood. Those of iron are hollow, with air-tight compartments, and are of three shapes, called respectively nun, can and ice buoys.

The nun buoy is almost conical in shape; the can buoy approaches the cylindrical form, and the ice buoy is very long and narrow, and resembles the spar buoy in form.

The wooden, or spar buoys, are sticks ranging in length

from twelve to sixty feet, and painted according to the uses to which they are to be put. The lower end is fitted for a mooring chain.

A buoy has many vicissitudes, and is exposed to many dangers. Passing steamers run down the iron buoys and rip them open, or cut off big pieces of spar buoys with their sharp propeller blades.

As the iron buoys are made in compartments, they are seldom sunk by such collisions, but their line of flotation is often so lowered that they have to be replaced.

Again, despite the fact that the United States laws punish by a fine of one thousand dollars any one who is convicted of unlawfully injuring any work for the improvement of navigation, — and this in addition to other penalties provided for by the different states, — the very people for whose benefit these buoys are laid often unlawfully make fast their vessels to them, and drag them out of position.

Again, the ice, floating down in masses, parts the mooring chain, or tears the mooring anchor from its hold and carries the buoy far out to sea, to break upon the horizon of some astonished mariner there.

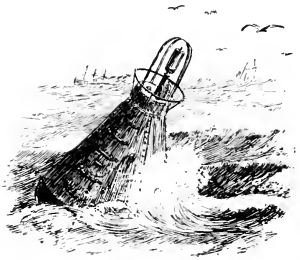
There is now, or was until recently, a buoy anchored off the coast of Ireland which made the journey there from New York harbor in six weeks. When it was picked up off the Irish coast, the Irish Lighthouse Establishment reported the fact to our Lighthouse Board. Then it was presented to the Irish Board, who thereupon added their characteristic marks to those already upon it, and moored it near the spot where it was found. Few persons realize the enormous extent of our coast-line along which lighthouses and buoys have to be placed for the benefit of commerce. Under the head of the "General Seacoast of the United States" there are, on the Atlantic Ocean, more than two thousand statute miles; on the Gulf of Mexico more than eighteen hundred, and on the Pacific Ocean an almost similar extent; while Alaska has nearly forty-eight hundred miles of seacoast.

Including the islands, bays, rivers, etc., to the head of

tide-water, there are on the coasts of the Atlantic Ocean nearly thirty-seven thousand statute miles; on the Gulf of Mexico nineteen thousand; on the Pacific Ocean nine thousand, and in Alaska twenty-seven thousand.

Add to this three thousand miles of lake coast and five thousand miles of navigable rivers, and we have a grand total of nearly one hundred and ten thousand miles of coast which has to be looked out for, and guarded in some degree.

W. F. Low.



The Pilot-Boat.

Most people who have traversed Massachusetts Bay in summer recognize as pilot-boats the jaunty craft distinguished by a black number painted in bold relief against their sails; but few have a correct idea of the duties of these boats, or how they are performed.

Boston Harbor, a portion of Massachusetts Bay, has, strictly speaking, a mouth about three and three-fourths miles in width, extending from Deer Island to Point Allerton. But the true approaches to this harbor are five channels, one of which, the main ship channel, is used by almost all incoming vessels. It has its least width at a point called the Narrows, situated not far from the mouth, and marked by a lighthouse.

Though this passage is well marked with lights by night and buoys by day, the captain of a vessel with a precious cargo of freight and passengers is seldom willing to take the chances of running his craft upon some hidden ledge or bar. He generally prefers that a regularly licensed pilot shall take charge, and bring his vessel safely into port.

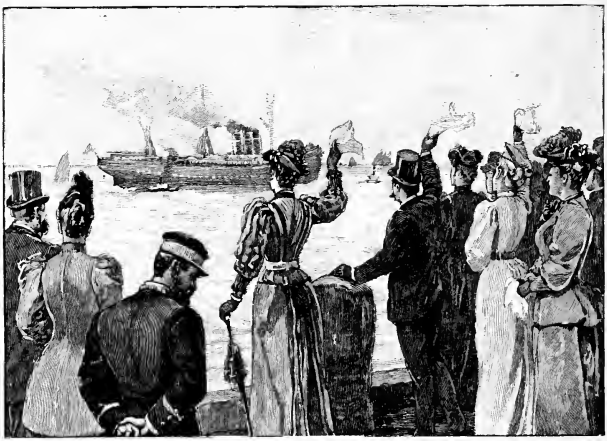
The United Colonies early recognized the need for pilots, and passed stringent laws for their support and regulations for their guidance. The earliest pilots put out in small rowboats from Pollock's and Brewster's Islands, boarding the small vessels of early days with comparative ease and safety; but as steam supplanted sail, the rowboat developed into the swift and stanch schooners of to-day, which often go two hundred or three hundred miles out, and even to Halifax.

Before the pilot of the present day can be entrusted with his warrant to perform the duties incumbent upon him, he must serve a long period in the pilot-boats as a sailor, or "boat-keeper." After he has served this apprenticeship for a sufficient term, he applies for a commission.

If his employers, the pilots, recommend him, and he can

pass an examination before the Pilot Commissioners appointed by the government, a warrant is given to him which entitles him to take into port vessels which draw a limited number of feet aft. Later, if he has performed his duties satisfactorily, he receives his full commission to act as pilot upon vessels of any size.

The pilot is paid by the owners of the vessel at a fixed rate of so much a foot for every foot the vessel sinks into the water



Outward Bound.

at the stern. He does not pocket the amount, but puts it into the common fund of the earnings of all the pilots attached to the boat to which he belongs. This fund is used, first, to pay the expenses of running the boat, and all that remains is divided equally. The boat may be owned by the pilots or by outside parties.

Vessels take a pilot out as well as in, usually from the same boat from which the inward pilot was taken. To take

the outgoing pilot off the vessel, a boat is always on duty at what is called the Inner or Hull Station, which is within certain defined lines outside of Boston and inside of Minot's Light.

The boats perform this duty in regular order, according to their numbers, and remain on duty here one week at a time, from Monday noon until Monday noon.

The boat on station flies a flag at the masthead by day, and at night carries a white light and no side lights. The station boat cannot board vessels outside of station limits, and is obliged to take pilots out of all outgoing vessels.

The number so conspicuously displayed on a pilot-boat's mainsail is worn in obedience to law. Its purpose is to inform captains that the boat is a licensed pilot-boat.

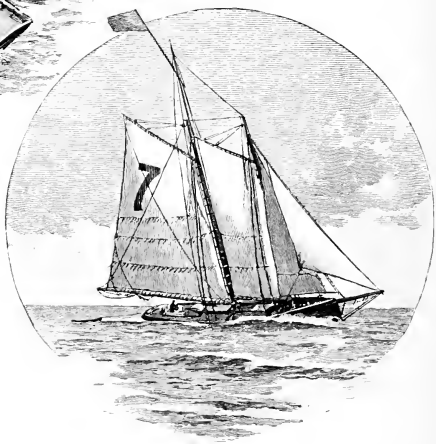
Besides the Hull station, there is another at Cape Cod, to which each boat goes from the Hull station after coming to the city to refit.

When not upon station duty the boats are free to go where they will, and the pilots show rare judgment in selecting a spot where ocean travellers are likely to come into view. Their sight is trained to wonderful keenness.

Coastwise vessels, both sail and steam, are not required to take a pilot, but all vessels from foreign parts must pay pilotage dues, whether they take on a pilot or not. Incoming steamships are watched for eagerly in all weathers, and often boarded far out at sea. The first sign of smoke is noted, and while the landsman is trying to steady the glass so that it will not hit the zenith or the sea, as the boat jumps, the pilot is often telling the name of the coming ship. Then the horizon is swept for rival pilot-boats. Every tiny speck of white is scanned and noted, for although the pilots of each boat act in accord, the boats compete with one another, and have many exciting races for ships.

The crew of a pilot-boat, when she leaves Boston on a cruise, consists of her pilots, four boat-keepers and a steward. The pilots occupy the cabin, and the one whom the rotation has designated to be the first one to board a ship takes

Boarding a Vessel.



The Pilot-Boat.

command. As soon as the boat passes Boston Light he sets a constant watch, which is kept day and night. The other pilots read, play cards and sleep; but this one whose turn it is to go may be required on deck day and night.

The four boat-keepers stand regular watches and perform the duties of a sailor, handing, reefing and steering.

The boat is sailed to what is thought to be the spot where an incoming steamer is most likely to be met; and if no other boat is in sight, she is hove to — that is, kept swinging as on a pivot, her head sails aback, and the rudder turned against them. If nothing comes in sight another place is sought; and the vigil is not relaxed by day or night. Meanwhile, the watch is busy at the many bits of work always needed.

Perhaps after a long, monotonous wait the cry is raised, "Smoke to east'ard!" Then all is excitement. Pilots and crew are alike astir. The flag is set, and if another boat is near, a race as exciting to its participants as an international regatta ensues — a race for money and for home.

Perhaps the pilot in charge exclaims in a disappointed tone, "Haul down your flag!" What does it mean? Simply that he has discovered a flag aft on the steamer, and knows that she has been boarded by a pilot. But if this does not occur, and his boat wins the race, he keeps on until close to the great steamer. Then the command is given, "Get your canoe ready!" On each side of the pilot-boat's fore hatch is kept a rowboat, which is called in Boston a "canoe," and in New York a "yawl."

The lee canoe is righted and shoved over the low rail. Two boat-keepers and the pilot get in; and as the pilot-boat, which is now in charge of the second man to go out, passes the steamer, the canoe is let go and speeds away.

The pilot climbs up the steamer's towering side by a spider-like ladder, the canoe drops astern, and the pilot-boat is rounded to and picks it up.

The process of seeking vessels and putting pilots aboard them is repeated until every pilot has gone. When the last pilot has departed, the boat is perhaps one hundred and fifty

miles at sea, but at all times its position, the distance to Boston Light and its direction are known. The position is kept by "dead reckoning" when the weather prevents daily observations from being made.

When the last pilot is out, the first boat-keeper takes command, and brings the boat back to Boston as speedily as he may, to take its own pilots on board again and begin another cruise.

As the first boat-keeper has command in all weathers, and as his boat draws from twelve to fifteen feet, he soon learns to be both a good sailor and an experienced pilot. When a pilot boards a ship the master of the vessel yields all responsibility to him, and follows his instructions.

This is the pilot's life. Like all others, it has its bright and dark side. He is away upon the ocean, he enjoys refreshing breezes in hot weather, and on the whole lives a healthful life, which, in the summer, may be delightful.

But he is exposed to many dangers, to fatigue, to cold and terrible winter storms. He has long and tedious waits both on shore and at sea, and many disappointments. In thick weather he is in the track of steamers, and in danger of being run down; in winter his boat is covered with ice, and he has to trust himself to a cockle-shell, and perform perhaps an extremely dangerous task in boarding a vessel.

Some of the pilot-boats have been dismasted. All have lost booms and split sails. Sometimes they are crippled, and drift for days covered with ice, until they resemble small icebergs; but they are stanch boats, and seldom go down.

In winter, when the howling northwest gale or driving snow-storm roars in our ears, and we incline to grumble at our lot, it may be well to remember that out upon the angry ocean many a little pilot-boat may be tossing and plunging, braving all danger in the duty of aiding fellow-mariners to avoid the perils of our coasts.

W. Eustis Barker.

An Ocean Guide-Post.

The island of Nantucket, twenty-five miles south of the southeastern corner of Cape Cod, is surrounded by shoals, the most extensive and among the most dangerous along the Atlantic coast of the United States. These shoals extend from the east and south sides of the island for a distance varying from ten to twenty miles. At some places they rise almost to the surface of the sea, but in most instances they are far enough under water to allow a vessel of ordinary size to run some little distance upon them before striking.

Formerly vessels were pounded to pieces on these shoals every year. Now vessels are seldom wrecked there, partly for the reason that light-ships have been stationed at the most dangerous points in the ordinary tracks of shipping, and partly because the shoals are more accurately laid down on the later charts.

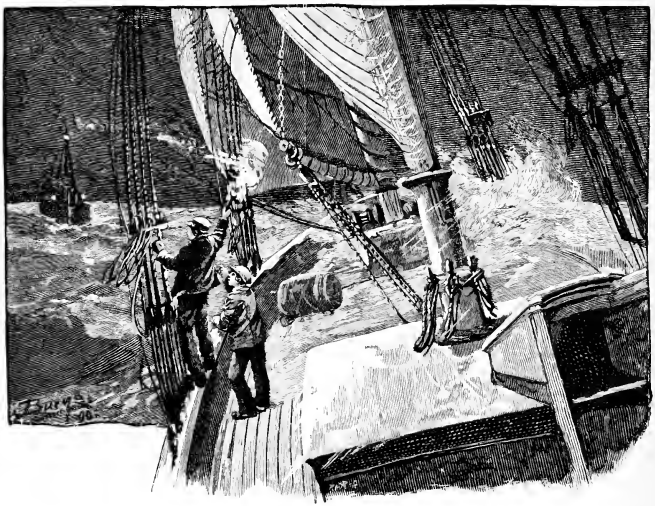
The most southeasterly of these shoals lies in the track of the great transatlantic steamers plying between New York and the ports of Great Britain, Germany and France. Part of this group is known as Davis's New South Shoals. Just at the outer edge of them — twenty-four miles from Siasconset, the nearest point of Nantucket, and something over fifty miles in a straight line from the mainland — is anchored the South Shoal light-ship.

This ship heads for no port, makes no harbor, nor seeks the protection of a lee shore, no matter how hard the storm, how fierce the gale. It is perhaps the loneliest habitation in the world, and the crew are more isolated than any body of men on all the wide ocean.

Year after year they are tossed and beaten by immense ocean waves, a living guide-post on the trackless sea. All day and all night, day after day, year after year, this little body of nine hardy seamen keep watch, lest some ship come

too near them and meet its doom. Often they are forced to warn others to keep away, when their own hearts are yearning for news of the world and their homes.

During the summer the government lighthouse tender visits the ship occasionally to carry supplies. When she steams into the harbor of Nantucket and announces that she



Signalling the Light-Ship.

is going to the South Shoal, the news spreads rapidly over the little town. Many letters and greetings are hurried to the steamer that will carry them to the anxious husbands and fathers on the light-ship. At that season the weather is nearly always calm, and passing vessels are often spoken by the crew of the light-ship, who sometimes send out a boat with letters for their friends ashore.

These letters may be carried from almost within sight of

their destination to some port hundreds of miles away, and thence returned by the regular mail to Nantucket. In some instances they have been carried as far as Baltimore.

Another remarkable fact is that none but foreigners ever speak the light-ship. American vessels pass by unheeding. Perhaps the captain never reflects that some cheering attention is fairly due to the men who may at some time save his vessel from destruction and himself from a watery grave.

Foreign ships if hailed always lie to, and give what news they can to the crew. About the first of December the last trip for the winter is made by the tender. Then begins for the light-ship's crew a dreary, long period, varied only by the sea washing over the ship more to-day than yesterday, or the compass shifting more speedily as the ship heaves and tugs at the great chain cable, and circles around her monstrous anchor of three and a half tons' weight.

When the long winter, with its snow and ice and storm, passes and the sun of spring once more warms the air, the tender again starts out to visit the vessel, and carry to the crew the first news which they have had from the rest of the world for months.

The South Shoal light-ship is not a large vessel. She is only one hundred and five feet long over all, and twenty-four feet across the widest part amidships. Her depth is but twelve feet. The distance between decks, which is the living space for the crew, is much less.

She is rigged with two short masts. Near the top of each is a circular beacon to mark her as a light-ship by day; at night a large octagonal lantern is hoisted up on each mast.

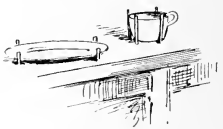
These lanterns hold eight powerful lamps each, with reflectors so placed that they completely encircle the mast, which passes through the centre of the lantern. So strong is this light that it can be seen eleven miles away in clear weather. The duty of the crew is to clean, trim and fill these lamps every day, and to keep them burning at night.

From a little house on deck called the lantern-house those of the crew who are on duty watch the lamps all night. In

the storms of winter they are obliged to keep brushing the snow from the glass fronts of the lanterns, which in very cold weather must be lowered at short intervals that the ice may be broken off in order that the lights may not become obscured or the lanterns frozen to the mast.

The hull of the light-ship is built double for extra strength, and is constructed on principles best calculated to resist the eternal beating of the waves. A ship which sails the sea gives way in some degree to the force of the swell, as it rises and falls with the motion of the water; but the anchored light-ship must meet unyieldingly the pressure of every wave. As each roller strikes and the anchor chain tightens with a jerk, the shock is terrible. The pitching is so great all the time that the bunks in which the men sleep are deep canvas bags slung between two high wooden sides, in order that the sleeper shall not be thrown out.

Everything has to be fastened securely in its place. Cooking utensils are chained on the stove. Plates and dishes are confined to the table by pegs, which are driven around them, and even the men's shoes, when taken off at night, must be tied to something or they will be hurled all over the cabin.

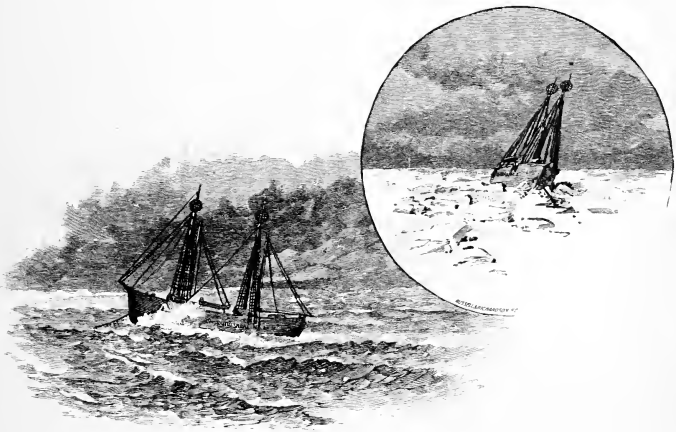


Sometimes the vessel rolls so much that the boats, which hang on davits over the sides higher than a man's head above the deck, are submerged, and come up full of water.

There are nine men in the crew, including the captain, mate and cook. The captain and mate are known as the keeper and assistant keeper.

In summer, when half the crew by turns come ashore for a rest, a tenth man is added, so that there are always four men and one officer aboard. This force is not enough to handle the ship in times of danger. Five men can barely handle the great anchor chain, which is a little over six hundred feet long, each link weighing twenty-five pounds.

The cheerless life of these stationary mariners is seldom given a thought by those who are returning from abroad in the great ocean palaces; and yet perhaps they owe their very lives to these men at the South Shoal. Often in the darkness of a stormy night a big steamer, with hundreds of passengers aboard, plows her way through the trackless deep when all



In Storm, and Winter.

the fury of the ocean seems directed toward her destruction, and a single touch upon these hidden shoals would seal the fate of every soul she carries.

But as she approaches the danger two twinkling lights warn her off, and she is guided safely past. Not always, however, do ships pass the shoals in safety. Sometimes the fog is so thick that the lights cannot be seen nor the fog bell heard. At other times, for one reason or another, a vessel cannot be controlled.

Often the only tidings of the disaster which the world receives are pieces of wreckage seen afterward by other

vessels, or picked up at Nantucket. Others, though wrecked, are more fortunate. Many rescues have been made by the light-ship men from vessels which went down within their view.

Sometimes the storms are so severe that even the light-ship parts her cable of two-inch iron, and drifts away. This is the time of the crew's greatest danger. Such sail as circumstances will permit must be set, and the strictest watch kept until some haven is reached. The vessel is not built for sailing, and can do little better than run before the wind, in the effort to reach some port.

Eight times within the twenty years during which the present captain has been aboard, she has been adrift. Fortunately the gale was every time from such a direction that the crew were able to run for Martha's Vineyard, and get under the protection of Gay Head. When the storm is over the tender takes her back to the great can buoy which marks her station.

Should the light-ship break away under the force of a wind which will drive her upon the shoals, the wreckage on Nantucket's shore will tell the news that she has gone down with all her men, how or when, no living soul would ever know.

For a quarter of a century the crew of the South Shoal light-ship have employed their leisure moments in making a peculiar kind of basket, known to those who visit Nantucket as light-ship baskets. Some are made on shore by men who have served aboard the ship, but these are few compared with those made on the ship.

The baskets originated many years ago when Nantucket was full of busy ropewalks. These establishments used great quantities of manilla, which came in bundles tied with strips of rattan. Some one began to use the strips to make baskets in imitation of those which returning whalers often brought from some of the islands of the Pacific Ocean.

They were probably the first rattan baskets ever made in America, and being, perhaps, the only kind made at Nantucket,

were naturally the kind worked at by the light-ship men when they began to divert themselves with basket-making. At first but one or two of the crew worked at them, and their products were very rough when compared with the neat baskets made to-day. Now every man aboard is an expert basket-maker, and about five hundred are sold by the stores in Nantucket each summer for the crew.

Although the proximity of the Gulf Stream equalizes the temperature so that it is several degrees cooler in summer and warmer in winter at the South Shoal than at Nantucket town, on the north side of the island, there are times when nothing is visible around the vessel but a continuous field of drifting ice. On this ice multitudes of seals are sometimes seen, but they perceive danger quickly and disappear before coming too near the crew.

Making Baskets.

A few winters ago, no water was seen for more than a month — nothing but a solid pack of great white cakes of ice, which rose and fell with the swell of the ocean, as they slowly drifted past, day after day. As if to compensate for such utter loneliness, there are occasional days when a mirage forms, and the crew can see the shores of Nantucket as plainly as if they were only a few miles away. Sometimes they can make out clearly the little village of Siasconset, the headlands and gullies, and even the dories on the beach. There is great joy among the crew when this occurs, for it is almost like good news from home.

HARRY PLATT.

An Ocean Observatory.

There is no sight more common in New York harbor, unless it is the ordinary passage of a Brooklyn or Jersey ferryboat, than that of puffing tugs or large-decked excursion steamers, carrying noisy and expectant crowds to meet an incoming ocean steamer. Every day, dinners of welcome are prepared, or carriages ordered at the dock, in readiness for the arrival of friends or distinguished guests from across the Atlantic.

How is the near approach of the steamer made known to those ashore? How is it that New York is aware, seven hours before she gets in, of the coming of an Atlantic liner, no matter whether her passage has been a quick one or a slow one? One would think that owing to the uncertainties of tide and winds, the arrival of the vessel could not be computed within two or three days; and yet persons as far distant from New York as Philadelphia or Albany are apprised of the near approach of a certain ocean steamer, and may arrive in season to welcome incoming friends.

The matter is easily explained. The first strip of American coast sighted by the majority of incoming steamers is Fire Island, which is about forty miles from New York City. It is not, in spite of its name, an island; but it is the end of a long and narrow strip of land which lies between the ocean and the great south bay, on the southern coast of Long Island. The beauty of its scenery and the attractions of the shore have made Fire Island a popular seaside resort.

For nearly ten years it has served as a place for marine observations. From the top of the large Surf Hotel a magnificent and far-reaching view of the ocean is obtained.

Such good results were obtained from this point of vantage, in the sighting of distant vessels, that a more extensive and systematic use of the ground was suggested. There was

ultimately erected near the beach, by the Western Union Telegraph Company, a high wooden tower, from whose top observations can be made to a distance of more than twenty-five miles from shore. The structure was suitably arranged as a dwelling-place for the observer, and instruments and the latest modern facilities for watching and reporting of vessels were brought into use. Telegraphic and telephonic communication was also employed.

The observatory is a wooden building about forty feet high. It lies back from the beach about two hundred feet, and all about it is a waste of sand. The tower is pyramidal, and has a row of windows on each face. The lower floors are used for dwelling purposes, while the topmost room serves as the observatory proper.

Windows open on all four sides of this small room, and lookout apertures face oceanward. A telegraph instrument stands in this apartment, and is connected by wire direct with the principal office of the Telegraph Company in New York City.

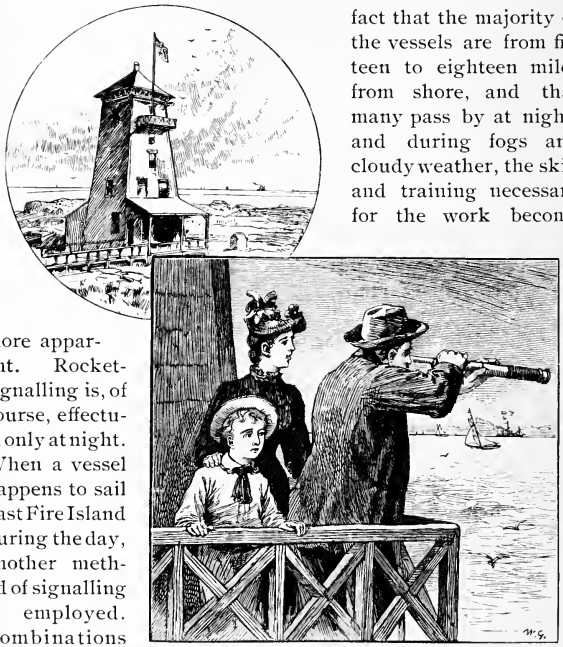
Upon the walls of the room are pictures of all the best known ocean steamers. These pictures, it might be supposed, would assist the observer in making out the vessels which come in sight. It is a remarkable fact, however, that the observer in charge has never been on board any of these steamers, and can distinguish them only at long range.

From his knowledge of a steamer's average rate of speed the watcher approximates her hour of arrival, and thus fixes the time when he should be on the lookout. He has special means of distinguishing them at night. Upon arriving opposite Fire Island, each steamer sends up a rocket as a signal. Each line of steamers has its peculiar system of signalling. The Cunard steamers, for instance, burn two Roman candles, showing six blue balls. The Inman line signals with two blue and red lights, followed by a rocket showing blue and red stars.

Of course these signals indicate only to what line the steamer belongs. To distinguish a particular vessel, it is necessary to observe carefully the side and stern light. As

soon as the steamer comes in sight, the observer must fix his gaze steadily on the lights until the signals are sent up; and he must know these very well.

The work of observing passing steamers, and telegraphing the name of each to New York, may seem quite easy; but when one considers the fact that the majority of the vessels are from fifteen to eighteen miles from shore, and that many pass by at night, and during fogs and cloudy weather, the skill and training necessary for the work become more apparent. Rocket-signalling is, of course, effectual only at night. When a vessel happens to sail past Fire Island during the day, another method of signalling is employed. Combinations of colored flags are hoisted by different lines of steamships. But, as color is distinguishable only at a comparatively short distance, this method fails at times; and then the observer must fall back upon his trained



An Ocean Observatory.

sharpness of sight, and his knowledge of the peculiarities of different steamers. Thus the general outlines of the vessel, the position of its smoke-stack, the number and positions of its life-boats, the shape and number of the sails, and many other individual marks are depended upon for a correct determination of the name of the vessel.

Upon the smoke-stack of the steamer "Servia," for instance, is painted a square white mark, while on a certain other vessel of the Cunard fleet, the corresponding mark is oblong. Certain vessels are recognized by their peculiar fashion of carrying their sails.

Sometimes the watcher distinguishes a vessel by the color of the smoke arising from her stack. One line of steamers burns a certain kind of soft coal, the smoke from which is unlike that made by any other coal. In such a case, the approach of the steamer is known before any portion of the vessel itself is above the horizon. Indeed, the sharp-eyed observer often astonishes his visitors by informing them that he has already seen and telegraphed to New York the near arrival of the vessel, when no trace of the approach of the steamer has been perceived by them.

Each line of steamers has its own course. Thus the angle of observation used by the observer, in watching from the port-hole of the tower, often tells him to which line an incoming steamer belongs. From one port-hole in the lookout room the observer catches his first sight of a steamer of the Guion line; from another, a vessel of the White Star line, and so on.

Life at Fire Island during the long winter months is exceedingly lonely. Communication with Bay Shore, about ten miles distant, the nearest point on the main land, is had only a few times a week. The keeper of the neighboring lighthouse, with his family, and the life-saving crew, are the only neighbors the observer has.

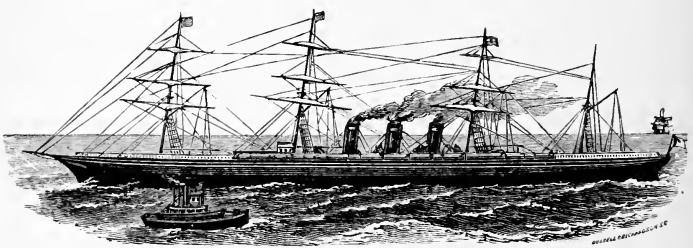
This isolation is compensated for by an abundance of company during the summer months, when the observatory is one of the chief attractions at Fire Island. The visitors at the hotel flock to this snug lookout retreat, and avail themselves

of the opportunity to look far out to sea. When the observer takes a leave of absence, which is very seldom, the observatory is closed. There is no one else who possesses the special training necessary to make the reports accurately. Serious complications might result from the wrong reporting of a vessel. The present observer has made but one error, and that was when a new steamer on a German line had been despatched to take the place of another, without the watcher's knowledge. He reported the new vessel under the name of the old one.

The desire of the captains of the fast lines to make as quick a passage as possible leads them to sail the straightest course for New York. This takes them farther away from Fire Island, and increases the difficulty of observing them.

From the Fire Island tower came the first report of the "Oregon" disaster, which occurred in March, 1886. The ill-fated vessel was observed about nineteen miles from shore, behaving strangely. The observer, supposing that something was wrong, telegraphed his conjectures to New York at six o'clock in the morning. Soon thereafter the steamship "Fulda" signalled him, by means of flags, this message: "Steamer 'Oregon' sunk. Passengers all on board the 'Fulda.' All well." This was the first definite information to reach New York.

H. F. Gunnison.



Anchor Line Steamship "City of Rome."

The U. S. Life-Saving Service.

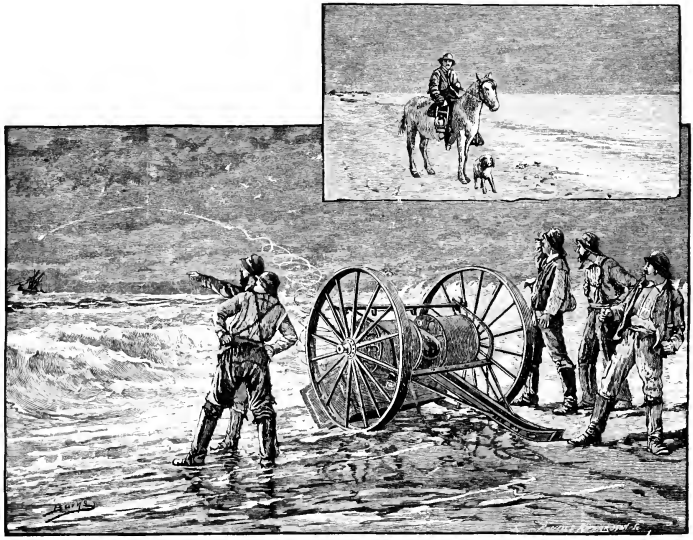
Ever since the times of antiquity, more or less attention has been given to the saving of life from the perils of the sea. The Chinese, centuries ago, formed the first humane society for this purpose, and to-day these institutions can be found throughout the whole of civilized Europe.

In our own country as early as 1785 steps for the preservation of the shipwrecked were taken by a number of benevolent gentlemen in Boston, who formed the Massachusetts Humane Society, and built huts of refuge and several stations equipped with life-boats on the desolate portions of the coast of that State.

The development of the United States Life-Saving Service covers about forty years. Beginning in 1848, the government erected some twenty or more houses, furnished with appliances for rescuing life, on the exposed shores of New Jersey and Rhode Island, though it was not until 1871 that the present elaborate system of relief, which has grown to be the most perfect of its kind in the world, was introduced.

There are now upon the ocean and lake coasts of the United States about two hundred and forty-four life-saving stations. They are picturesque, two-story pine houses with gable roofs, and are fitted for the comfortable accommodation of the crews, and the reception of the life-saving apparatus. On many portions of the Atlantic coast they are not more than five miles apart, and are located at dangerous and exposed points. These are manned from September 1st to April 30th, the season of most inclement weather; in the lake region the stations are kept open during the continuance of navigation.

The keeper captains a crew of from six to eight surfmen. His position is one of grave responsibility, requiring sound judgment, a cool head, and unflinching courage. He must be a man well-trained in his vocation, of correct habits, and



Beginning the Rescue

able at all times to command the utmost respect and obedience of his men.

Both keeper and crew are chosen from among the sturdy fishermen that dwell on the shores in the vicinity of the station, and who have lived from childhood within sound of the surf. A lifetime experience on the beaches and adjacent waters inures them to the perils and hardships which obtain along the coast, and makes them thoroughly familiar with the bordering currents, tides and places of danger. From occupation they are necessarily skilled and fearless surf-boatmen, and all possess an excellent knowledge of every part of a ship, largely acquired through wreck operations.

In the day a strict lookout is kept seaward for distressed craft, and during the interval of night between sunset and dawn, the patrolman maintains a steady vigil along the beach. At the beginning of their watch two surfmen go forth in either direction, and follow the shore until they meet the patrolmen from the adjacent stations. Of course, when the latter are remote from each other this scheme is not practicable, and the limit of the beat is then otherwise regulated. Thus it will be seen that along almost the entire stretch of seacoast, a faithful line of sentinels is strung out steadily tramping the surf-washed sands on the watch for imperilled vessels.

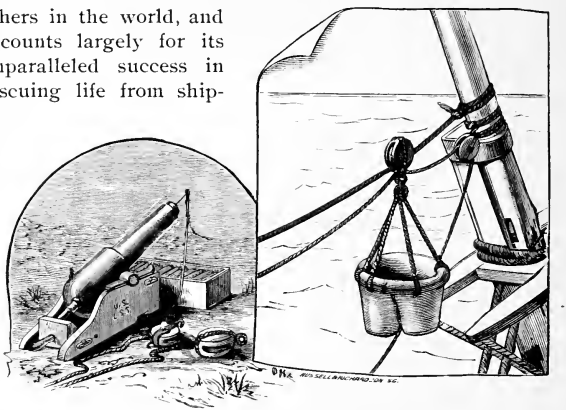
Each man carries a Coston signal which, when exploded by percussion, emits a red flame that flashes far out over the water and warns the unwary ship, approaching too near the breakers and outlying shoals, of impending danger, and to stand off, or assures the shipwrecked that help is close at hand.

The duty of the beach patrolman is always arduous and often terrible. A solitary tramp on the dreary beaches is a task at any time. What is it then in the worst conditions of wind and weather, against cutting sand-blasts, in drenching rain and flooding tides, surrounded by darkness, and deafened by the roar of the storm, with quicksands and pitfalls along the path?

Not unfrequently the weary marcher becomes exhausted and bewildered in his journey, and many times cannot stand

up at all against the fury of the tempest. Yet it is wonderful how these undaunted men plod and struggle on from a sense of duty, seldom faltering, and never once giving up unless from sheer lack of vital energy.

The beach patrol system by which stranded vessels are so promptly discovered is a feature that distinguishes the United States service from all others in the world, and accounts largely for its unparalleled success in rescuing life from ship-



The Lyle Gun and Breeches-Buoy.

wreck. At certain stations where the shores are of such a nature that operations can be facilitated by the use of horses these animals are supplied, and the patrolmen on extended beats often go mounted.

There are five principal appliances that are used for saving life from shipwreck. The first of these is the cedar six-oared surf-boat, which is the only boat that has yet been found suitable to launch from flat beaches through the shoaling waters of the Atlantic and Gulf coasts. It is provided with air-cases which make it insubmergible. This boat being comparatively light can be hauled long distances on its carriage abreast of wrecks. Its action in the hands of expert oarsmen

is often marvellous, and although easily capsized there are not many instances on record in the service where it has been upset with fatal results while passing through the surf.

Another contrivance is the self-righting and self-bailing English life-boat, which embodies the best elements of the boatmaker's skill. It is of great strength and stability, though heavy and cumbersome, and is only adapted to use along steep shores, or where it can be launched directly into deep water.

When boat service is impracticable, resort is had to wreck ordnance. A small bronze smooth-bore gun, named for the inventor, Captain Lyle of the army, is the appliance now in general use. By means of this piece a line is fired over the vessel, and the proper gear hauled off. Communication is then effected either by the life-car or breeches-buoy.

The life-car is made of galvanized sheet iron, and is shaped like a covered boat. It is capable of carrying five or six adults at a time, and is used when a large number of people are to be saved. It has frequently been employed with marked success, and at its first trial two hundred and one persons were rescued from the wreck of the "Ayrshire," on the New Jersey coast, when no other means could have possibly availed.

The breeches-buoy, on account of its being much lighter and easier to transport and handle is, however, more commonly used, as the greater number of vessels now stranding on our coast are manned by crews of from six to ten men.

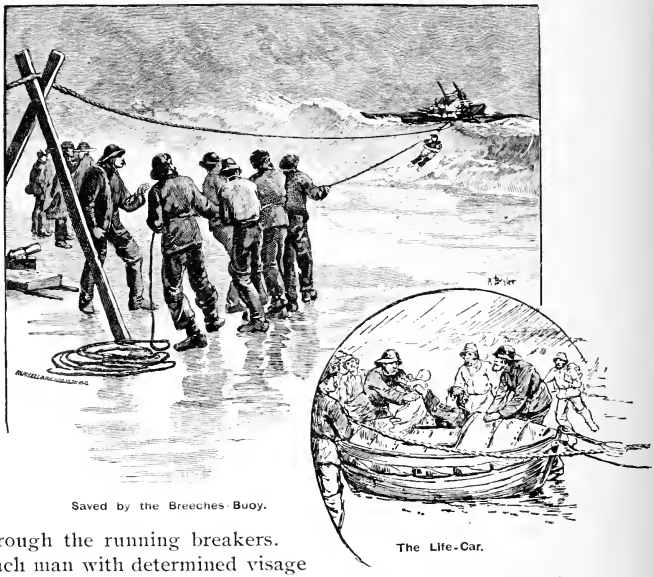
This contrivance is nothing more than a circular life-preserver of cork to which short, canvas breeches are attached; it is large enough to hold two persons, and is operated similarly to the life-car by being suspended from a hawser, and drawn back and forth with lines.

When the beach patrol at night or station lookout in the day discovers a vessel ashore, he takes instant measures to alarm the crew. The condition of the weather and surf will always indicate to the keeper whether a rescue should be attempted by the use of a boat, the life-car or breeches-buoy.

Perhaps the boat must be hauled by the men on its carriage

through the soft, yielding sand many miles, a task that frequently requires the most arduous and persevering toil. There is always the difficulty and danger of making a launch through the treacherous seas that tumble and burst along the beach with such resistless force.

This struggle over, the height of human skill and courage is required to guide the buoyant craft on its errand of mercy



Saved by the Breeches-Buoy.

The Life-Car.

through the running breakers. Each man with determined visage watches the keeper standing at the steering oar, and is responsive to his every movement and gesture. Many trials may have to be made before the vessel is finally reached, and then comes the adroit manœuvre to prevent collision with the hull or injury from floating wreckage and falling spars. The imperilled people, often driven by the raging seas to the

refuge of the rigging, clinging there, perhaps, benumbed and exhausted, are taken off as chance offers, and with a heavily laden boat, the run is made for the shore on the top of swift-rolling combers.

In case the seas are such that the ill-fated craft cannot be reached with a boat, the mortar cart is ordered out. The surfmen must either trudge with it over the flooded beaches, or else pick out a road back of the sand-hills, not unfrequently having to hew their way through brushwood and tangled thickets to the scene of the wreck.

Arrived on the spot the gear is quickly got in readiness for action, each man promptly performing the duty assigned him. The line is then fired to the vessel, and soon, if nothing hinders the operations, the breeches-buoy or life-car is travelling with its passengers to and fro between ship and shore.

At another time countless obstacles may have to be overcome. The ropes, as they are sent out, may snarl or tangle in the surf or current, or the roll of the vessel snap them asunder; the imperilled crew may bunglingly do their share of the work, or something else may unexpectedly happen to tax the resources at hand, and put the patience and courage of the surfmen to the severest test.

The annals of the Life-Saving Service are replete with splendid deeds of fearless daring. Each day's record adds to the roll of honor. When the life-savers went off through a violent sea to rescue the people of the German ship "Elizabeth," which stranded on the Virginia coast in January, 1887, all but two of the boat's crew perished, together with the entire ship's company, numbering twenty-two officers and men.

The Emperor of Germany ordered a generous gift of money to be equally divided among the families of the five surfmen who were drowned, and a gold watch, embellished with his likeness and monogram, to be presented to each of the survivors.

A notable rescue was recently achieved by the crew of the Ship-Canal Station, Lake Superior. Two vessels, a steamer and her consort, ran ashore six miles east of Marquette,

Michigan, during the prevalence of a stormy northeast blow and thick weather which developed into the severest gale known in that vicinity for years. The sea raged with such fury that an ordinary boat could not live in it.

The life-savers were telegraphed for, and, putting their apparatus on a special train, rode over the rails a winning race of more than a hundred miles, and after almost superhuman efforts, launching and pulling their ice-sheathed boat through prodigious breakers, rescued in a blinding snowstorm both crews, numbering twenty-four men, when had relief been delayed an hour longer all might have perished.

The Life-Saving Service of the United States is the only governmental establishment of its kind in the world, all other life-saving institutions being maintained wholly or in part by voluntary contribution. Since the introduction of the present system in 1871 to June 30, 1893,—a period of twenty-two years,—property to the value of nearly one hundred and thirteen millions of dollars has been saved within the scope of station operations. The total number of persons saved is fifty-six thousand one hundred and sixty-two, or an average of two thousand five hundred and fifty-two a year, while ten thousand five hundred and sixty-three distressed people have been succored at various times at the stations.

Where can be found a more brilliant record in the cause of humanity? Yet it must not be forgotten that these results have only been attained after years of active work and intelligent organization.

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