RAMBLES IN JAPAN.

PECULIARITIES OF TRAVEL AND THE SURROUNDING SCENES.

Too Much Company at Bath—Packmen vs. Horses—Oriental Bicycling—Festival of Dolls.

[RECORD-UNION Correspondence.]

OTSU, March 23, 1887.

The Tokaido is one of the most famous highways of Japan, and has its beginning at the Japan bridge in Tokio, and extending 325 miles to Kioto, at which point I began my trip overland to Yokohama. Not being in the best humor this morning in Otsu, they having annoyed me by keeping my passport and trying to override me in regard to my *kuruma* fare, I paid my bill in most solemn silence, and arose with all the dignity I possess, but alas, not taking into consideration the low ceiling of a Japanese house, my dignity was drenched in a shower of petroleum and broken glass from the hanging lamp with which I had come in contact. I finally got started with my new *kuruma* man, Obuchi Dikichi, who has been recommended highly in regard to legs. He is to take me to Yokohama, about 300 miles, for $10, and to-day has kept his word as far as Seki in Ise, a distance of 43 miles, between the hours of 8 A. M. and 4 P. M., with a rest by the way. For the first time I saw the old style

JAPANESE TRAVELING-CART IN USE.

There are two clumsy wheels, and the body of the cart, about six feet in length, rests directly upon the axle-tree, and is carpeted with matting. A screen and roof of straw or fine bamboo cloth completes the vehicle. I saw a party of six good-sized people, with considerable luggage, being drawn in one of these by two small boys, and another drawn by two women, in blue cotton tights, contained a man and three women sound asleep. Every native traveler carries a gourd full (and often emptied) of some kind of liquor, these natural bottles are of many shapes and sizes, one being in the exact form of a duck. Pheasants with beautiful plumage are hanging up at most of the hostelries. A most desperate climb up one of the nearest to perpendicular roads I know of brought me my, now tandem, equipage to Tsuchiyama. The road, here descending, is so steep as to make it necessary to go a-foot, but I found a short cut through the grounds of a temple where new fern fronds and the close-clinging ficus quite covered the rocks. This district is noted for its tea, and the green cushions and long velvety lounge-like hedges add a special charm to the landscape.

TAKING A BATH UNDER DIFFICULTIES.

While about to take my bath at the hotel, and when just touching the tips of my toes to the boiling hot water prepared for me, the whole family, father, mother and three daughters, came to wish me a pleasant bath. Before I thought I ducked under the water, but I stood it till they left, although it did seem as though they would never cease bowing and paying compliments, all of which I returned, enveloped like some of the people in Fox's "Book of Martyrs" in a blinding steam. They did go at last, and I jumped out as red as a lobster and I feel red even now.

My dinner consisted of clam soup, shrimps with a piquant sauce, a finely-baked fish, beef stew with onions, and another dish unknown, sake, tea and sweet preserve. All served in Satsuma ware.

ALONG THE WAY.

MARCH 24th—This morning the *shoji* were opened by a little boy in the next room, whom I had heard talking about the foreigner ever since I arrived; he kneeled down and wished me good morning with the self-possession of an old man. His undergown was purple and his outer of brocaded pea-green, faced with orange.

I dined upon spiced pheasant and went on my way rattling over a fine road. The camellias are in bloom, like drops of blood amid the dazzling green of the leaves, the trees being taller than our oaks at home. The many women in their doorways (many of the poorer houses, built of mud, have no *shoji*) spinning with frail wheels of bamboo surrounded by their children, was a pretty sight in every village street.

The red mail-carts, drawn by men, passed often, for the mail arrangements, as also the telegraph, are admirably well conducted.

It is interesting to note the different styles of English used in Japan. Here it quite savors of the sea, and the landlord addresses me as "passenger," and speaks of my small luggage as "cargo." With kuruma, man, "cargo" and self, I crossed the Bay of Owari to Miya in a wretched little steamer, a distance of twenty-five miles. It was refreshing to see the water; the reach of yellow beach, in sunlight, divided from the distant, sharply-cut ridges by a line of black-green trees, and, farther yet beyond, masses of blue mountains showed the white crown of Fudo-yama, looking as great as the monarch of Surnga.

TOO MUCH LATE COMPANY.

My room at Miya is with a lovely outlook, but I have just killed the first flea of the season, as it hopped on my paper. If you were to fire a pea at any hole in a Japanese wall you would be pretty sure, if it went through, to put out somebody's eye; as a matter of politeness I always bow, and say "good night" toward every peep-hole. This evening I had not been in my room ten minutes when the girl brought me a card, on which a name was scrawled in English, and the words, "Come out, will i tell with you." I thought that with so much English language more English manners were fitting, so I sent word that if anybody wanted to "tell" with me they might come to me. All difficulties were, however, at once removed by the girl moving the wall aside, and thus making it unnecessary for either of us to come or go. With a stock of about ten words we "told" with each other until I was tired, and closed the conversation and the wall. There are three servant girls in this hotel, and each has but one eye; being in Asia, and with the story of the three callendars of the "Arabian Nights" in my mind, there is something mysteriously uncanny about these single-eyed hand-maidens.

A NEW MERIT FOR MATRIMONY.

MARCH 25th.—The day has been a comparatively dull one, the route lying over a level tract of country, with little save the overflowed rice fields, in which the stubble of last year still shows. There is a railway running from Miya to Nagoya, a city of considerable importance, having near 400,000 inhabitants. It is the center for much of the tea shipments to Yokohama. Passed a temple, where, long ago, while a maiden was praying, a rain-storm came, and as the statue of the god was exposed she took off her hat and covered it. A certain great nobleman happening to pass quite opportunely, saw this good act, and took the girl home and married her. It is a good story; but the best part of it is, that even to this day the girls keep putting hats on the image, knowing the saying that "history repeats itself." The ruined castles of the old Daimios stand out as the only relief in the landscape; it hardly seems that it can be only twenty years since these were deserted, they have fallen away so utterly. Save in a few of the towns,

POVERTY IS EVERYWHERE VISIBLE.

It is not the picturesque poverty which would please an artist; it is the dry, dusty, rattling poverty, parched and barren. I am hard enough of heart to enjoy the pictures of moist poverty, where the moss and lichen cling to the thatch, and noisy streams talk among ferns and tangled vines; but where the sun-baked earth is cracked, and the blades of grass at the door-stone brown and dead, I feel a twinge of pain. Beggars, of course, abound; the most abject I have ever seen—even China cannot show worse. Actually throwing themselves before you in the dust, they moan and cry in most agonizingly pitiful tones, begging for what you will give them. My man says it is all acting, and I fear it is, but am glad that, after all, it is not real. So I pass them all with closed purse and leave them lying flat, in a double sense. The similarity of

JAPANESE AND CALIFORNIAN FLORA

Has been the subject of many letters by scientists, and it is quite proven that the Black Current carries from Asia the seeds brought to it by the rivers and in time deposits them on our shores or in the Sandwich Islands; logs and drift of all kinds are constantly coming to America, and have been for ages. Even the great resemblance of the Indian and Japanese bear to each other is accounted for in this manner. I have been much interested in this subject; others who care to learn concerning it can find much in C. W. Brooks' article in the *Evening Bulletin* of March 2, 1875; also in the "Mikado's Empire."

Under a cloudless sky to Toyohashi, on the broad Toyo river, with a burning sun which made me grateful to my umbrella, gave little but rice fields to amuse me.

INCIDENTS OF THE TRIP.

MARCH 26TH.—Over a very rough road to-day to the hamlet of Shinjo, where we went aboard a little steamer to cross the Bay of Hamana. This bay was a lake until 1499, when an earthquake broke down the barrier which separated it from the sea, and thus changed its character. It is a lovely little bit of water, but not so little that the steamer crosses it in a short time, and one needs a good amount of patience. But I helped the little vessel along by spreading my umbrella to the wind. We were—or at least I was—greatly disappointed when, upon at last leaving the steamer, we were transferred to a Japanese towboat and dragged drearily along for several miles further to Hamamatsu. The cabin of the boat was but three feet high, and of course all the passengers sat upon the matted floor and smoked.

Among the passengers was a husband and wife and their child of about three years of age; he was tall enough to bump his head upon the roof beams of the cabin, and could talk well, so I suppose he was fully that old, yet this youngster did not disdain to draw sustenance from nature's fount (I am told that children six years old take mother's milk), and then to my great amusement he turned to his father, and taking that good man's cigarette had several whiffs, as if to show attention to both sides of the house. I have never before seen milk and tobacco taken by a three-year-old, but the show helped to pass the weary hours.

JAPAN IS NOT RICH IN BIRDS,

But this afternoon I saw many of the little yellow and brown birds such as we have at home and many white-collared sparrows. Crows are over-abundant, hawks and eagles are daily seen and the beautiful, graceful heron and stork, which occur so often in native pictures, are often adding their stately forms to some pretty landscape.

The Ten-sin river, which I crossed by a bridge nearly 4,000 feet long, is the largest river of the Yokaido and comes from Fuji-Tama. I am glad to be again under the influence of Fuji; it was my first love in Japan, and I have always greeted the glorious mountain from sea or shore with a special thrill of pleasure.

THE FESTIVAL OF DOLLS.

MARCH 27th.—In crossing the Oigawa, the river which divides Totomi from Surnga, I noticed long baskets of strong bamboo filled with large stones and laid close together along the banks, as a protection even stronger than a stone wall. A toll bridge crosses the river. It is the festival of dolls, and in every house as I pass I can see a range of shelves, where rows of dolls are placed with flowers and sweetmeats before them. The principal dolls represent the Mikado and the Empress in ancient court dress. (I can imagine what "guys" they would be if dressed in the court costume of to-day), and gods and heroes of Japanese story; also the little waxen baby dolls we know so well. Many of these dolls are very old, and are treasured in families for generations, but only brought out on this festival. Every girl has two dolls given her when she is in her first year. As she keeps those for life and each of her daughters has a pair, the show at some of the houses is quite elaborate. One little girl I met had a tiny bottle of *sake*, which she told me was for the dolls.

AN ORIENTAL BICYCLE CRAZE.

There seems to be a bicycle epidemic in the towns along the road. I counted up to one hundred, and after that saw many more. Hundreds of the old style and worn-out velocipedes have been sent here from America, and bring about five *yen* each. Mr. Stevens stopped at this hotel, where I am, on his bicycle tour round the world, and the youth of Shidznoka have caught the fever, and they will have a hard time of it with the rusty affairs which have been sent them.

To-day my old friends from home, whom I met here, were golden mustard—a wasp with a sting, and a house-fly—while this evening I hear mosquitoes at the *shoji*, buzzing as they used to outside the nets at the Golden Eagle, when I was a little boy spending my first night in Sacramento.

In the city is a most magnificent wall and broad moat, which formerly surrounded the castle of the Daimio. Some distance from here is the public garden, which was once the grounds of a temple. The temples still stand, and, indeed, are equal to those of Nikko in beauty, though their number is less. The glorious clouds of pink and white fruit-flowers in these gardens, showing out in most perfect loveliness against the evergreen-covered hillsides, the variegated camellia and bridal wreath, gave an idea of the wealth of nature in this land.

The sun had just gone down as I stood upon the hill; to the right lay fields of barley of a vivid green and then waves of misty hills. To the left a sight too grand for words; the lower part of Fuji of a purple color blended with the mists, a cloud was upon its summit, below which the streaks of snow in the canyons reached out like fingers or rays from a star. The cloud was golden or shining and the snow streaks of crimson. I looked till the last tints faded away and then I waited even longer for the white peak shown in the starlight.

I have grown to like the custom of removing the shoes on entering a house, it gives such complete rest. I shall never again endure wearing heavy shoes all day since I have learned the delight of moving one's toes about as freely as the fingers.

RIVER AND MOUNTAIN.

MARCH 28th.—Crossing the Fugi river, not by the bridge but on foot over the dry part of the bed, and by a ferry across the two swift streams which flow near the center, was exciting and exceedingly interesting. The river is the swiftest in Japan, and as the flat boats were quite lose from cable or any contrivance, but depended entirely upon the bending bamboo poles held by the two men to keep them from going pell-mell over the rapids, the struggle between muscle and water-power was worth seeing.

From here and the Yoshiwara village the view of the famous mountain is the best to be had, as it stands, without obstruction, in one clean sweep, up from the base to summit, wonderful in its symmetry. The wind had blown away the snow from the most prominent ridges, and the whole upper part streaked with snow and rock reminded me of Mount Shasta.

PACK MEN VS. HORSES.

To-night I lie at Mishima in the comfortable Sagami Hotel, where I am in doubt whether to cross the Hakone Pass, which must be done on foot or in a *kago* (basket chair), or whether to go around by Atami along the wild coast. Dikichi, like most Japanese, I fear, is what is called slippery, and I have constant care to see that he keeps to his contract. I think I shall manage to get through without being robbed of more than $6. I have reckoned up the rate at which this has been going on for the last days and think $6 will make the total. It does no good to complain, for one is sure to get tangled up in the verbs and have to say it is all right, and ask to be pardoned for doubting the honesty of a hard-handed son of toil. I have often wished that horses had the intelligence of men, but I don't now. It is very comfortable to tell your horse where to go and to have him go there, and then not only help you out of your carriage, but bring in your luggage, dust your clothes and get his own dinner, but such a horse costs you more in "squeezes" than two footmen would. No; I have changed my mind, and wish that instead of a horse having the intelligence of a man that a man when he takes a horse's place between the shafts would also take a little of the horse's honesty.

SURROUNDED BY BEAUTIFUL SCENERY.

MARCH 29th.—I solved the difficulty in which I was last night with, I think, the wisdom of a Solomon, for I divided forces and sent my luggage in the *kuruma* with Dickichi over the Atami pass, and came afoot through the Hakone. The road is paved and broad, but steep, and the stones have been worn to such a state of smoothness that my boots could scarce find hold, though crowds of people with empty crates on their backs were going along easily, wearing the usual straw sandals. The scenery became grander as I ascended, valleys and villages on everyside, and the 13,000-feet altitude of Fujisan was from all points visible. A two-hours' hard climbing brought me to the Pass and highest point of the Tokaido—3,000 feet nearly above the valley—and then plunging into the depth of a solemn forest, I soon had glimpses between the dark trees of the blue lake of Hakone, almost indigo in its blueness, and finally the whole lake lay before me, wonderfully placed, without a ripple save those made by a tiny row boat pulling away from the shore.

On the veranda of the Hafuya hotel, for the first time in a week, I sat upon a chair; it was delightful to lapse again into European barbarism, and at a broad table drink my beer from a whole-souled, wide-mouthed goblet. On the right, built upon a small peninsula, is a huge, barn-like edifice of wood, ugly enough, but so much superior to the usual Japanese modern house as to attract a second look; it is a summer palace of H. I. M. If it suits *him* I suppose it is all right, but it is certainly as great a blot upon nature as its owner is.

ANOTHER RUGGED TRIP.

Fuji's top just shows above gray Mikuni, but I cannot stay to enjoy it, for there are more mountains to be crossed before night ought to be met at Odawara. I intended to leave the main road and strike off to Miyanoshita by the Ashinoyu Springs, but having been directed wrong, and intentionally so, I walked several miles before I learned the mistake at Hata. A ragged wood-cutter whom I spoke to told me that there was a narrow trail leading up to the top of a high mountain which rose before me threateningly. But I could see several waterfalls pouring over its sides, and here and there broad fern-covered spots, so I knew there would be even more than a far-reaching view to repay a climb, and I started, after giving my stalwart but seedy informer three copper cents. He told me the trail would be difficult to follow, and I could not well tell where to take the right branch to Miyanoshita, and he would go along and show me. I offered him ten cents if he would go far enough to point out the turn, but he refused, saying it was not enough; so I left him and went alone. Once in the Tyrolese Alps a poor man guided me for ten miles over a snow-covered pass, and refused my proffered reward of several florins, saying with honest pride that he could do kindnesses to a stranger for the pleasure. The difference is very marked between these two cases; the Japanese refused to walk, one mile only, for a good reward, while the Tyrolese mountaineer walked ten times the distance and refused the pay. Each day of my intercourse with these people dawns with a darker cloud upon my first enthusiastic admiration for that superficial show, which I in ignorance took for kindliness. Despite the woodcutter's predictions, I found no difficulty, as the path, though steep and up the face of a mountain, was made of stone steps, which wound about zigzag with ever-pleasing views of wooded or volcanic, lava-covered hills. I passed several people going wearily along in chairs, and did not envy them their

CRAMPED AND DIZZY POSITIONS.

Near the top I turned by a well-trodden path to the right and at last saw far below me the picturesque hamlet and springs of Miyanoshita. I buttoned up my jacket and ran the two miles down hill over rustic bridges, along canyon sides and past hundreds of pretty cascades embosomed in mosses and luxuriant ferns. Just tired enough to enjoy a rest, I found myself at that model house, Fuji-ya. Truly the scenery at Miyanoshita surpassed any I saw this day. An easy descent to Yamoto springs brought me again to Tokaido, and thence a few miles to Odawara on the Gulf of Sagami brought me within one day of the end of my journey.

AT YOKOHAMA.

MARCH 30th—Leaving at 6:30 A. M., the distance of thirty-seven miles was made by 2:30 P. M., over a very dull road. The police stopped me as my *kuruma* was just crossing the last bridge and ordered the terrified Dikichi to put on more clothes, but the style and amount of my clothing was evidently satisfactory for they ordered no changes in it. Yokohama at last, the best of all Japan, with its hundreds of ships and steamers coming from all the world. I love to sit upon the doorsteps of a country and watch these visitors coming and going. Again the home-like Club Hotel, again my pictures and my books about me, and a hundred new and happy memories to be with me forever.

CHARLES A. GUNNISON.

HOW TO PRESERVE THE HAIR.—A good supply of oxygen is necessary for the healthy growth of hair; the head should be well aired. The hat has made sad havoc with many a caput. Endeavor to go bareheaded as often as possible. When walking lift the hat from off the head frequently; and, if the sun is too strong, hold the hat in your hand awhile. The blue-coat school-boys formerly of Christ Church, London, who wear the costume of Edward VI., go bareheaded the year round. They wear no hats in the coldest days of winter. They are remarkably healthy, and have a redundant crop of hair, which lasts them a lifetime. If we must wear a hat let it be light in texture and well ventilated from the top. One reason that women keep their hair longer than men is that their headgear allows of better ventilation. Business men sometimes wear their hats in their office, or have a special hat which they put on. This is very injurious. The brokers of Wall street are noted for wearing their hats indoors as well as outdoors. They are notorious for having bald heads. This may account for it. When the head is well shorn of its locks this does not apply.—*New York Medical Journal.*

A CLOAK OF GOLD FEATHERS.—At the coronation of King Kalakaua in 1833, writes a correspondent from Honolulu, he wore the royal mantle of Kamehameha I., one of the most superb emblems of royalty ever worn by King or Kaiser. As may be supposed, it is carefully kept at the palace. It is a semi-circular cloak about four feet in length, covering an area of twenty-five square feet when spread out, and it is made of the small golden-hued feathers of the O-o. These feathers, each about the size of one's little finger nail, are fastened to a fine network of fiber, made from the bark of the olona, overlaying each other. There are at least five thousand of these feathers used in the cloak; there are but two taken from each bird, which have to be snared in the dense woods, the feathers plucked and the birds released. It was a crime to kill them. The birds are by no means abundant, necessarily the value of the cloak is very great, and the keeping of it an endless task. The mantle is worn only by the reigning sovereign. There are shorter capes and cloaks worn by Alies or chiefs, their length being regulated by the rank of the wearer.

THE DEEPEST WELL IN AMERICA.—Belding Brothers of Rockville, Mass., silk manufacturers, have a branch at Northampton, and about two years ago began sinking an artesian well there. It has now reached a depth of 3,440 feet. All but 200 feet of the boring has been through sandstone. The Northampton *Herald* says of the work: "When the sandstone was first reached it was thought that at a depth of 750 feet that would be the last of it, but when this depth had been attained and the sandstone still ontinued, it was then predicted that by the time the drill had gone down 1,250 feet it would be through this stratum, but not so; and again another prediction was in order, and 1,509 feet was the depth named. But now the best geologists are at a loss what to say. The well is now the deepest in the country, and, with one or two exceptions, the deepest in the world."

SWEET OIL TO PREVENT SCARS.—In the healing of burns and scalds, where there is danger of contracting scars, rub the new skin several times a day with good sweet oil. Persist in this rubbing until the skin is soft and flexible.

What is liberty without wisdom and without virtue? Such liberty is the greatest of all possible evils, for it is vice and folly and madness, without wisdom and without restraint.—*Burke.*

FERTILIZERS.

NATURE'S WAY OF ENRICHING, AND ITS LABORATORY.

The Elements and Benefits of Barnyard Manure—Other Fertilizers—Rotation of Crops.

Following are the remarks on the use and value of fertilizers, by Hon. J. H. Gregory, at a meeting of the Massachusetts Farmers' Club:

Now, Nature's way of manuring is how, is what? She drops her leaves, her twigs, her bark and her decaying vegetation anywhere she pleases on the surface of the earth. These are decomposed, and the rocks below them are decomposed also by the action of the elements and all plant food is made in that way. Well, now, if we are going back to Nature's primitive—original way—we must go a good way back of where we are now. I speak of our present farming methods. Everything that is put on in the shape of manures is different from Nature's way. It is artificial. We do not drop things on the surface of the earth to have them decompose slowly, and to have them find the crops or not, just as it happens, but we apply manures to the soil and work them in with harrows and cultivators. We put on so much for this crop and so much for that crop. We say that such ground is adapted to such a crop, and such to another. That is our way of farming and it is artificial. Our way of manuring is artificial. If our fertilizers are artificial, so is the form of barnyard manure. It is a departure from the natural way of feeding plants. If the fertilizer man is cornered in this way, he can turn around and show them that they are cornered in the same manner.

BARNYARD MANURE AN ADVANCE STEP.

Now the use of barnyard manure is one step in advance of the natural method. Decomposition in it is carried further than it is by the natural method. It is a quicker process and more concentrated than the natural process, and plant feeding by fertilizers is one more step in advance along the same line of progress. What are the elements of barnyard manure? The same as you find in these plants which nature makes. Barnyard manure is made by the animals eating these plants, and in that manure is found the elements of the plants. What are fertilizers? Fertilizers have in them the same elements that barnyard manure has in it, only in a more concentrated form. Barnyard manure, in turn, is more concentrated that Nature's way of decomposing the various plants on the surface of the earth.

THE COW'S STOMACH A LABORATORY.

Now we talk about fertilizers as being the product of the laboratory and an artificial thing. Did you ever think of a cow's stomach as a laboratory? It is, and the digestive process is going on as if the food were in the laboratory. The manure is the product of chemical processes, they are not more such products than is barnyard manure, which has passed through the laboratory of the cow. There is a wonderful arrangement of the digestive organs of cows, horses, sheep and oxen, and in them chemistry does its work. The process is the same in both cases, only we have more bulk in case of the animal product, and less bulk in case of the fertilizers. The difference is simply a matter of bulk. And when you take into consideration the elements in barnyard manure, and the elements in fertilizers, they are the same precisely. The essential elements are the same in all their variety, but one is merely more concentrated, and that is all the difference there is in them. You can take barnyard manure, and from it manufacture commercial fertilizer. It can all be changed by a simple process. You can get from the manure nitrogen and phosphoric acid and potash, as well as from the phosphate rock of South Carolina, or from the bones or flesh of animals, or from any other source whatever.

BONES AND FLESH.

When you come to look at it you find that the bones and flesh are made from the very same food that makes the manure. In one case the matter takes one form, and in the other it takes another. The commercial fertilizer manufacturer takes the bones and flesh of your animals to get plant food from. What difference does it make to your plants whether it comes from the animal or from the fertilizer? They both come from the same source. So, as a matter of reason, fertilizer and its use is on the same line of progress that we were on when we advanced from Nature's way to the use of barnyard manure. Now one great difference between barnyard manure and fertilizer, is that everything is available in the fertilizer for the crop. How do you know what the crop needs? You know by analyzing it. How do you know what a house is made of? You take the different parts and see. So you can see what your crop is made of.

DIFFERENCE BETWEEN BARNYARD MANURE AND FERTILIZERS.

In using barnyard manure you find that there is a difference between that and fertilizer in this respect, that it has the same elements as the fertilizer, but they are not in the same condition. Some of the elements are latent. The nitrogen is almost wholly latent, and is not ready to be taken up until it undergoes some changes. But nitrogen in the form of sulphate of ammonia and nitrate of soda is all ready to be take up by the plants. From the fact that the nitrogen in the barnyard manure is not ready to be taken up by the plants at first, and undergoes change slowly, you have got to put a good deal more on in order to give the plant enough to take up. So there is leakage in barnyard manure, because that element is not in suitable form for the plants. It is not so with the potash and phosphoric acid, because the plants will immediately receive benefit from them. Ammonia, as soon as it gets free, leaches down into the soil and wastes in the drainage of the soil.

Now, then, suppose a man says that he will let all the nitrogen go, that he will put on phosphoric acid and potash, and if the plants don't find it this year next year's crop will. This is not the way that you put money at interest. It would be like putting money into a bank without getting any interest upon it for a year. You would not call that a wise investment. You would want to get your interest on it from the time you put in. Now, take that as an illustration of the use of fertilizers. The question comes, shall you apply fertilizer or barnyard manure. You are not going to put on what will not be profitable. But if you put on manure you must let a great deal of it lie over till next year, and thus lose a year's interest. If you put on fertilizers it is not so. The crop takes it up the first year, and you can regulate the food according to the plants.

ROTATION OF CROPS.

From this follows one result as a corollary, and that is that where you use fertilizers, you do not need the system of rotation of crops. It strikes at the foundation of that. There are certain chemical changes in the soil by which certain kinds of plant food are set free. The great reason for rotation is that the plants we put on one year take out certain elements and leave others. If we put on another crop the second year, it will find some of these others. So we go on for three or four years in rotation. But with commercial fertilizers we put on what the crop needs and it takes it up at once. There is nothing left for another crop. We are not obliged to put in anything for a second year. We put in just what the crop wants, and not trouble ourselves about any future crops.

BARNYARD MANURE.

Now, in regard to barnyard manure, it strikes me that there is not too much emphasis to be put upon the fact that you cannot get all the elements the first year. The percentage is about one-half per cent. of nitrogen, one-half per cent. of potash. You cannot always find what the crop wants of these elements without giving it too much. Crops need different amounts of food. It is not necessary to go the whole length of the Stockbridge theory in order to admit this. Some need more ammonia, and some more potash. I use the words ammonia and nitrogen interchangeably. They are about the same thing, except that ammonia has one-half per cent. of nitrogen, so that in ammonia there is one-fifth more of plant food than there is to be obtained in nitrogen. Therefore I say that, if you want to feed a crop a great deal of nitrogen, you must put on a great deal more phosphoric acid and potash in barn manure than you want in order to get enough of potash. There is one weakness in the barnyard manure. You have to get a great deal more of one element in order to get enough of another. It would be like ordering the same proportions of materials for building different kinds of houses. It would be like having so many boards and bricks to build a wooden house, where you want the bricks for nothing but chimneys as for a brick house. The wise man will see that he has bricks and boards for each house according to his needs. That is the principle of fertilizers. You give the plants the elements they want, just as a man would adapt his quantity of bricks and boards to the different houses. He would give few bricks to the house where they were wanted only for a chimney, and make his supply of boards large in proportion. So much for a few general remarks.

I have made this subject somewhat prominent, because I am myself using a great many tons of fertilizers yearly. People come to see me, as I should go to them in like case, to ask this question and that question, and to have me make suggestions as to their use. I find that a good many have not got beyond the idea that a fertilizer is a stimulus, and that it is an artificial food anyway, an unnatural food, a costly food, a fancy food, a purely sentimental food, born in the laboratory. So they treat it not as a real practical thing, something that is natural in the progressive development of agriculture, but as an exotic, a whim and caprice, that theorists are endeavoring to engraft on the healthy, old-fashioned, stable manure, in addition to other things which the theorists talk about, but will not be of any practical benefit, which have got to have their run, but which will not pay to have very much to do with. They do not think that they are a real benefit to agriculture in the same way that manure is of advantage to crops.

SUNDAY EASY-CHAIR.

IN SILENCE.

In the hush of the valley of silence
I dream all the songs that I sing;
And the music floats down the dim valley,
Till each finds a word for a wing,
That to hearts, like the dove of the deluge,
A message of peace they may bring.

But far on the deep there are billows
That never shall break on the beach;
And I have heard songs in the silence
That never shall float into speech;
And I have had dreams in the valley
Too lofty for language to reach.

And I have seen thoughts in the valley—
Ah me! how my spirit was stirred!
And they wear holy veils on their faces—
Their footsteps can scarcely be heard;
They pass through the valley like virgins,
Too pure for the touch of a word.

Do you ask me the place of the valley?
Ye hearts that are harrowed by care?
It lieth afar between mountains,
And God and his angels are there;
One is the dark mountain of sorrow,
And one the bright mountain of prayer.

—*Father Ryan.*

Cheerful looks make every dish a feast.—*Massinger.*

All the way to heaven is heaven.—*Canon Farrar.*

Evil often triumphs, but never conquers.—*Joseph Roux.*

It is well to think well; it is divine to act well.—*Horace Mann.*

He that hath no bridle to his tongue hath no grace in his heart.—*Jerome.*

The silent man may be overlooked now, but he will get a hearing by-and-by.

Reputation is what men and women think of us; character is what God knows of us.

The heart that is fullest of good works has in it the least room for the temptations of the enemy.

He who is most slow in making a promise, is the most faithful in the performance of it.—*Rousseau.*

God has two dwellings—one in heaven and the other in a meek and thankful heart.—*Izaak Walton.*

The most delicate, the most sensible of all pleasures consists in promoting the pleasures of others.—*La Bruyere.*

The art of exalting lowliness and giving greatness to little things is one of the noblest functions of genius.—*Palgrave.*

Let us help the fallen still, though they never pay us, and let us lend, without exacting the usury of gratitude.—*Thackeray.*

"Some days must be dark and dreary," but no day need be wholly so, upon which shines the light of God's love.—*Frederic R. Marvin.*

Pleasure must first have the warrant that it is without sin; then, the measure that it is without excess.—*H. G. Adams.*

The real things are inside. The real world is the inside world. God is not up nor down, but in the midst.—*Mrs. A. D. F. Whitney.*

He that knows himself knows others, and he that is ignorant of himself cannot write a very perfect lecture on other men's heads.—*Colton.*

All the doors that lead inward to the secret place of the Most High are doors outward—out of self, out of smallness, out of wrong.—*Geo. Macdonald.*

Let patience have her perfect work and bring forth her celestial fruits. Trust to God to weave your thread into the great web, though the pattern shows it not yet.—*George Macdonald.*

Every man takes care that his neighbor shall not cheat him. But a day comes when he begins to care that he does not cheat his neighbor. Then all goes well. He has changed his market-cart into a chariot of the sun.—*Emerson.*

A marble-cutter, with his chisel and hammer, was changing a stone into a statue. The minister, looking on, said: "I wish I could deal such changing blows on stony hearts." The smiling workman replied: "Maybe you could if your worked like me, upon your knees."

Depend upon it, in the midst of all the science about the world and its ways, and all the ignorance of God and His greatness, the man or woman who can say, "Thy will be done," with true heart forgiving us, is nearer the secret of things than the geologist and theologian.—*George Macdonald.*

It is not possible for us to be faultless; it is possible for us to be blameless. I do not think there is a more contemptible heresy than that of perfection in this life. It belittles sin. Paul, in writing to the Philippians, said: "Not as though I had already attained, either were already perfect." We cannot be faultless now; but we may be blameless.—*Dr. John Hall.*

Sheridan's Ride.

General Rosser writes very frankly in regard to General Sheridan's proposed jusketing ride through the Shenandoah valley, and he has not written a word amiss. The people of the valley have given cordial welcome in late years to Federal veterans who have revisited the scenes of their former battles, and have united with them in doing honor to comrades buried at Winchester and elsewhere. In these demonstrations the Confederate veterans have borne a conspicuous part.

There is no lingering trace of enmity in their hearts toward men who fought honorably and bravely on the opposite side of the great war. But the line should be drawn behind the soldiers. There is no occasion for honoring any bummer or incendiary who followed the Federal armies or who led them. Brutal and savage in his conduct in the war, Sheridan has shown himself to be no less brutal and savage since it ended, and the people of the valley of Virginia should not fail to emphasize in every proper way the utter detestation in which his character and shameful deeds are held, and will ever be held, by the whole people of the South.

General Rosser's suggestion is pointed and singularly pertinent. It was once the boast of the Federal Bashi-bazouk that where his evil presence had blasted the face of nature among the fair Virginia hills, a crow could not follow without carrying its rations with it. It is meet and proper that he should now be compelled to carry his own rations along the same route, in the midst of peace and plenty, and with only such greeting as the crows shall give him.—*Charleston News and Courier.*

A LOST OPPORTUNITY.—George Washington Cole, of Chicago, didn't come home one evening at the usual time, nor the next day, and Mrs. Cole, becoming alarmed, began search for him. She was not successful, and after several days, as a last resort, visited the morgue. The keeper listened to her description, and then said he thought he had a subject that answered to it. The wife desired to look at the body, and she was shown into the dead-house. After viewing the subject pointed out to her very intently for several minutes, Mrs. Cole burst into tears, and declared that the body was that of her husband. But in order to assure herself that she had made no mistake, she requested the keeper of the morgue to turn the body over, and see if there was a large scar of the back of the neck. As he proceeded to do so, a set of false teeth fell out of the mouth of the corpse upon the marble slab. "Stop!" exclaimed Mrs. Cole, wiping away her tears; "George never wore false teeth." "You blamed fool!" growled the keeper of the morgue, addressing the corpse, as he roughly threw it back in place and picked up the false teeth; "if you had only kept your mouth shut you might have had a decent burial."—*American Magazine.*

A man without earnestness is a mournful and perplexing spectacle. But it is a consolation to believe as we must of such a one, that he is in the most effectual and compulsive of all schools.—*Sterling.*

PROFIT SHARING.

ANOTHER INSTANCE OF DIVIDING THE RESULTS OF LABOR.

First Annual Assemblage for Dividing the Surplus—Highly Satisfactory Results.

The shoe factory of Ara Cushman & Co., in the city of Auburn, Me., is one of the largest in New England, no less than seven hundred men, women and children being employed throughout the year. There are several partners in the business, all of whom are actively at work upon the ground, and by thorough acquaintance with all the details of this most important industry, they have established a valuable plant in a community where the manufacture of shoes has been pre-eminently the most extensive business of the town. The head of the firm, Ara Cushman, enjoys the esteem and confidence not only of his employes, but of his fellow-workmen generally, and is actively identified with the social, business and intellectual concerns of the city where the venture of his youth has grown to the large proportions indicated. He is a man of generous impulses, a wide reader and a careful student of economic problems, a useful member of the church, of hospitable nature and cordial manner, and in the conduct of the industry which bears his name there has always been less of friction between master and men than in many other shoe factories of New England. One year ago, on the 27th of March, 1886, his operatives assembled in a public hall to listen to a carefully prepared address from Mr. Cushman, in which he proposed

A PLAN OF PROFIT SHARING

For the ensuing year on the following basis: A fair amount to be allowed for interest on capital invested, management of the business, and for risks, depreciation and other contingencies; if then any profit remained it was to be divided between employers and their help in the proportion that labor bears to the rest of the cost of goods. The control of the business was to remain in the hands of the firm, while three of the employes were to be selected as representatives with whom the firm might arrange the details of the plan, and who were to be sufficiently informed in regard to the condition and results of business, so that at the end of the year they could report whether the conditions agreed upon had been faithfully carried out. It is needless to remark that Mr. Cushman's proposition was received with varying degrees of favor. Many were pronounced in its support; some were doubtful of its expediency; others of the employes looked upon it with suspicion. The general public, unacquainted with co-operative enterprises in either Lewiston or Auburn, twin sisters geographically, but of widely contrasted industrial activities, held aloof either from approval or condemnation. It was not generally believed that the plan would be a striking success at the close of the first year, and of late, as the time drew near for the announcement of its working, some of the operatives, utterly faithless, sold their right to dividends for sums that were merely nominal.

WHAT IS THE RESULT?

Friday evening, April 29th, the employees, between 700 and 800 in number, met in Auburn Hall, where they had gathered but little more than one year ago, in a quiver of excitement to hear the returns of their employers and to listen to the report of their own committee. The first speaker, a representative mechanic, and one of the number appointed to see that conditions stipulated at the beginning of the year had been observed, began his address by rebuking the incredulity and suspicion with which many received the proposition of the firm; and he continued by advising his fellow-workmen that only confidence and good-will toward their employers could make profit-sharing a still grander success during the year upon which they had entered. On behalf of the committee the speaker then announced that, in addition to wages received, fully as high as the market rate would allow, the firm had declared

A DIVIDEND OF FOUR PER CENT.

Instantly vociferous cheers, oft repeated, shook the hall, and handkerchiefs fluttered in the air, exclamations of delight were everywhere heard, while from the center of the hall popped up a gray-haired man, who shouted, "Three cheers more for Ara Cushman!" The scene was indescribable, and only when the enthusiasm had somewhat abated could the speaker proceed to state some interesting facts, among which are the following: The business of the year had reached the sum of $1,269,262; there was paid out for labor alone $288,244 67, and of this amount the employes received each week the earnings of the previous week; the dividend disbursed among men, women and children reached a total of nearly $12,000, in a business larger than that of any previous year by more than $150,000. It was then declared by their representative that in all probability

THE DIVIDEND MIGHT HAVE BEEN LARGER,

If only the operatives had learned to be more careful and economical in the use of materials, and he asserted that he had seen ten cents' worth of value wasted in a single day. In closing, all present were advised not to be governed by the passions and prejudices of ill-informed agitators, but to be loyal to the business and their employers, as the only means of securing future prosperity. As an appeal to workingmen by workingmen, the report of the committee was admirable for its candor, common-sense and knowledge of perils still besetting the enterprise so happily inaugurated.

Mr. Cushman was then most enthusiastically welcomed by the audience, to whom he talked for more than half an hour on the present industrial situation, bringing home to the average understanding many of the plainest economic truths overlooked in much of the current labor literature. It may be said, in general, of this successful experiment in profit-sharing, that it

PROVES THE SOUNDNESS AND PRACTICALITY OF THE PRINCIPLE

Under given conditions. In a well-established business, conducted by men trained to management, where working people are willing to depute to chosen and capable representatives of their own class the custody of their interests, without an itching desire to examine the books every day for themselves, profit-sharing is wholly feasible. And, as in the present case, every year of success is an additional tie that binds employer and employe more closely together.