SAM SPEAD A SAILOR.

He Accosts a Number of Chicagoans on a Street Car.

Car No. 84 on the south side cable stopped a moment on Walnut avenue at the corner of Randolph street and took on board a tall, straight old man, whose long gray beard swept almost to his waist, but whose bright eye and upright bearing spoke the man of maturity, not decrepitude. At State street, as the car rounded into the loop, a second old man, evidently a farmer, stepped on board and took a seat by the ancient of days. As the train passed on around into Wabash avenue again perhaps a dozen others got on the car, all well dressed and clearly moving in an element aside from that of the two strange characters who sat side by side. The old man moved up to his farmer companion and the two fell to talking until Havlin's theatre was reached. The car stopped and several persons got out to join the crowd pressing into the foyer.

BAD VISITED THE THEATRES.

"Lots of folks going in there who can't pay their rent," said the ancient. "Lots of 'em don't own the clo's on their back. Got to take them home to-morrow and pay rent on 'em."

"Did you ever visit a theatre?" asked the farmer in an effort to be agreeable.

"Yes," said Longboard, and then after a pause he added: "I've been to a theatre in Hong Kong." He shifted his legs, and bent his eyes kindly on the farmer as a man who knew he had struck hard and was willing to give the victim time to recover.

"Hong Kong in Japan?" asked the farmer, dazed a little, yet hoping his companion meant some city near home.

"No, Hong Kong ain't in Japan; it's in China," said the other. "And I've been to a theatre in Tokio, too, that's in Japan; and in Calcutta."

"Well, you've traveled," said the farmer.

"Yes, I've been to shows in Paris and London and Liverpool and Leghorn and Alexandria; and I've been to shows—not theatres, but the best they had—on the east coast of Africa, and in Melbourne, Australia and Honodulu, Sandwich Islands, and I've seen the shows in the Chinese quarter in San Francisco.

Several gentlemen bent forward and fired questions at the old man. He was in no wise disturbed; he looked calmly, kindly on them all, and met every thrust with a precision which showed, "rocky" as he looked, that he had either been over the ground or had studied his story wonderfully well.

"On what ship did you sail to Paris?" asked one of the first.

"Paris ain't no seaport," said the ancient. "I travele? there in 1800 in a diligence. We call 'em omnibuses."

"How old are you?"

"Seventy-nine. I was born in 1810 in Wilton, a little town in New York state, on the edge of an Indian reservation.

In May, 1815, my father's brother, who was a sailor, took me for a walk in the woods, and I didn't get back till 1835. He carried me to New York and put me on board a vessel to Liverpool, that he had shipped on for a three years' voyage.

We never reached New York for seven years, and then I had a good chance to ship again and went off without getting home. But I always recollected my folks and where I used to live, and how old I was when uncle took me away.

I learned to read on shipboard and used to get books and read about strange countries. Then I would talk to sailors, and when a voyage was over I would ship on some craft going where I wanted to go. That way I learned pretty near all languages. Any of you talk French?"

The lady did, and he proved to her his claim to a mastery of that tongue.

"Anybody talk Russian, or Spanish, or German?"

The lady tried him in Spanish and a gentleman approved his German. The other languages had to be taken on trust, but the passengers exchanged glances eloquent of faith in the ancient.

ONE OF MEACHAM'S HEIRS.

"In 1837," he continued, "I drifted down to New Orleans, and old man Meacham there' a rich old slave dealer—you've all read about him—was getting up a crew for the slave trade, and I shipped with him. He wanted only choice men and he got 'em. He paid everyone the best wages for able seamen, and besides that arranged that each one who stayed with him five years should get $2,000 from his estate when he died.

"Old Meacham died three years after he hired his crew, and only two fellows stayed in his service till the five years were up. They had got good pay for their work, and got good offers to ship again; and they left and went. I stayed the five years, and got the $200,000 he left me in his will. I went into business for myself then—built a boat for $100,000 and carried passengers to France and England. I wouldn't carry a ton of freight for no money, and my packet was the finest thing that ever floated out of New Orleans. Passengers had to pay for it, though, and I made a heap of money. In 1844 I built the first ironclad boat that ever put up in Boston. It was before the day of metal bottoms, but I spent $47,000 in iron plates half an inch thick on that boat. She run all right, but she run into an iceberg in a fog bank off Newfoundland in 1846, and was sunk with crew, passengers and cargo.

"I've built many a vessel in my time, and made a heap of money. I was in the Red sea trade till I lost a square rigged ship there. I've lost one ship in the Atlantic, two in the Pacific, one in the Red sea and three in the Mississippi river.

"Where do you live now?" asked one of the gentlemen.

"Benton Harbor, Mich. Nice town, too. Just drifted there. Got some money left, but I've lost a heap."

The end of the trip had been reached. The lady had left the car some blocks back, and only three gentlemen stood beside him. The old man turned to go.

"I'm stopping till Tuesday at 2726 Calumet avenue. You can find out there I'm telling the truth. But you young men look here," and he grasped the two nearest him with a vigor that would have done credit to half his years, "I'm old enough to be your grandfather, and I never drank, chewed nor smoked, but I've seen more life in more lands, had more fun and more trouble than all three of you'll ever know about. But take my advice and don't drift.

BEGIN the work of trimming the trees after the leaves fall. Such work may be done any time from Nov. to April, but it is best to begin as soon as the weather becomes cold.

The electric current has recently been employed in welding materials and tempering steel springs. An American electrician has also devised a method of expanding hoops and wheel-tires by heating them with the current. It is claimed for the new process that the heat is more uniformly distributed than with gas-furnaces or piles of embers. The current is brought by wires connected to opposite points on the tire, and divides equally through each half of the ring.

An expedition under the command of Mr. H. H. Johnston, who has but recently returned from the Congo, will set out in March to explore the snow-capped peak Mount Kilimanjaro, in Eastern Equatorial Africa.

FARM NOTES.

PESTS OF THE POULTRY HOUSE.—It is easier to shut out cats and dogs from winter chickens than from those in summer coops, but they are always to be feared in brooding houses. The writers experience makes her dread rats as powerful foes, countless, cruel and endlessly greedy. If there is a Satan in the world of poultry, he surely must take the form of Bishop Hatto's executioners. Of course they can be defeated, but it is difficult to guard against enemies which are such engineers at sawing and tunneling. They are responsible for many crimes charged to minks, often killing half-grown pullets when hungrier than usual. Once on moving to a farm with old outbuildings fifty baby chicks were taken by rats before they could be protected and then after the brooding house was occupied, cats, regarded as allies, got in at the windows and killed twenty more.

Fine wire netting is a safeguard against rats, which after all are not really reasoning beings. It bewilders them by its transparency and toughness. A width of it fastened over the angle where wall and floor join is a great protection, because that is where they are most apt to gnaw, but put not too much trust in this defense, for their wicked, bright eyes may appear in the middle of the floor. Brick foundations help in keeping them out of buildings, but the cost is often too great. The creatures may easily be poisoned in their holes, but if they die in unreachable places, the odor they make poisons the wee chickens. Well-trained cats are capital guardians of brooding houses, but must themselves be watched, lest they yield to a sudden temptation.

PREPARING FOR WINTER.—As a "late Autumn hint," the *Country Gentleman* suggests that farm and garden tools should be put in thorough order before they are stowed away for the Winter. The iron and steel portions should be cleaned and rubbed bright, and then receive a thin coat of grafting wax, tallow, or any substance that will prevent rusting. The parts made of wood will be rendered more durable by a copious application of petroleum if unpainted, or if the paint has worn off; and afterwards one or two coats of paint will complete the work of protection.

THE LOCATION OF BARNS.—It is not well to build barns too near the road, observes a recent writer, and we endorse his further criticism on the subject. It looks bad to see the road used for a barn-yard, with a lot of old drays, wagons, and ploughs standing by the fence, and hay and straw scattered in front. This is not the worst objection, for when threshing barns are near the road it is often the case that horse power or engine is placed in the road and travel obstructed for two or three days. Barns should be from six to a dozen rods from the highway.

POP-CORN FOR HENS.—Let the boys and girls read this and then divide their pop-corn with the biddies, or at least give them the poorest or unpopable kernels. It is said that the grains of pop-corn that slightly char instead of popping are excellent feed for hens. Charred corn is at times beneficial to all kinds of stock, and pop-corn, even of the best, will not show every grain expanded into the light white ball of starch that has such a charm for the Winter fireside. The dryness and hardness of these unpopped grains especially adapt them as food for fowls during the coldest weather, when soft and wet food is sometimes injurious.

POULTRY keeping on a large scale is not impossible, but circumstances make it impracticable in most cases. Those who have means enough to undertake it have not the inclination, while most of those who have the inclination and are "full of it," lack the means and the requisite skill. Many things may be learned in a modest-sized establishment and our advice is try what can be done in a small way first, and let the business grow by natural degrees.

AS TO PACKING EGGS.—Fanny Field, the wide-awake poultry writer for the *Prairie Farmer*, emphatically declares that all the talk about "the secrets of success" in packing eggs is just bosh. She says there are no secrets about it. Exclusion of air is the main thing, and when you do that by some means that will not affect the taste of the eggs, and keep them in a cell place where the temperature is even, they will keep good for a reasonable length of time—as long as there is any need of keeping them. No one wants to keep eggs for a year unless for experiment.

ONE of the best methods of storing the droppings is to use hogsheads, as barrels are unhandy, and a number of them will take up too much room. If the weather is cold the droppings will need no dirt or other substance, but they should be scattered on the ground as soon as spring opens. No fertilizer loses its ammonia sooner than poultry droppings, and for that reason they do not give good results always. As the hens eat a large amount of lime, gravel etc., there is quite a proportion of silica in the droppings, which cause them to become very hard and insoluble, especially if very dry, quite a long time being required for the droppings to decompose and become soluble after being applied to the soil.

ONE cannot learn too much about dairying. There are many details, and it is very easy to make a mistake. The best dairymen succeed only by giving the business close attention and study. Each individual animal requires particular management, and success depends upon a faithful observance of every requirement.

WHEN crossing for improvement of the stock the male should always be pure breed. When a graded male is used the tendency is to retard improvement. It requires but two or three seasons to effect a marked improvement on the farm stock if careful consideration be given the selection of males.

PUMPKINS contain 11 per cent. of solid matter. They are excellent for cows that are changed from pasture to dry food. Many dairy men advise that the seeds be removed, as they act on the kidneys. Pumpkins should be sliced and a little bran, slightly salted, sprinkled over the pieces.

HERE AND THERE.—A flour barrel made of cotton duck has been patented by a Georgia genius who claims that it is not only lighter and cheaper than a wooden barrel, but can be pressed into small space when empty. It is waterproof and impervious to the weather.

An interesting feat (recorded in "*St. Stephen's Review*") has just been accomplished by the Hon. Ralph Abercromby, who has succeeded in measuring the height of ocean waves by floating a sensitive anerold barometer on the surface, and in gauging their width and velocity by timing their passages with a chronograph. As a result of these experiments, he supports Admiral Fitzroy in the conclusion that waves occasionally reach an altitude of 60 feet. The highest wave measured by Mr. Aberchromby was 46 feet high, 765 feet from crest to crest, and had a velocity of 47 miles per hour.

Red used on a railway signifies danger, and says "Stop!" It is the same thing displayed on a man's nose.

ALL ABOUT RACCOONS.

The One Animal You Can't Catch in a Trap.

"Did you ever hear any one say he had trapped a coon?" said P. B. Eyler of Pittsburg, who has been spending a few days at Lake Keuka, and says that if there is anything he knows all about it's coons. "If any one ever told you he trapped a coon in the woods, he told you what never happened. Coons can't be trapped except in one way, and I never found a coon hunter yet who knew how it was done. I've made a study of coons from the time I was a barefoot youngster, and I know what I'm talking about. The old coon hunters of Western Pennsylvania first put me up to trying to trap a coon, and I tried it for years before I discovered the only way it could be done.

"The coon leaves the coldest scent behind it of any animal that lives, but it carries the keenest scent in front of it of any animal. You may track a coon to his home in the crevice of some rock, which is a favoratly retreat for him. You may place your trap in front of the hole, and disguise it as you may, cover it with leaves a foot deep, if you like, but the coon will never leave that hole as long as that trap is there. He will starve to death first, as I have proved on more than one occasion. He can smell the iron of that trap, and he seems to know the danger it threatens him with. He knows it will be death to leave the hole, and he prefers death by starvation to being trapped. I have tried iron traps and snares and all sorts of devices, but could not succeed in fooling one of these wise little animals into getting caught by me until one day a new idea struck me. It isn't often you see a coon in the daytime, unless you know where to look for them. If there is a creek in your vicinity in which crawfish are plentiful, you will be likely to discover some epicurean coon fishing for them, if you hide at the side of the creek and keep very quiet.

"The coon is particularly fond of crawfish. The way he fishes for them is to wade in the creek, generally going down stream. The crawfish live under the stones on the bottom. The coon feels under each stone he comes to with his fore paws' thrusting one under on one side and the other on the other side. It is a comical sight to see a coon fishing for crawfish. He keeps his head high in the air, moving it up and down and to and fro, his eyes evidently gazing at nothing, every sense seeming to be concentrated on the business beneath the water. You can tell in a second when he has fastened on a crawfish, for the expression on his face changes instantly from the dull, vacant stare to one of brightness and animation. He draws the crawfish out of the water, and, standing on his hind feet, rolls it smartly between his paws. This crushes the shell and claws of the crawfish and makes the sweet meat more accessible. The coon eats his capture with great relish, and then begins the search for another one.

"While watching a coon fishing in this way one day I got the new idea of trapping for coons. I thought that by placing a steel trap under water in the creek where the coons did their fishing they could be deceived and more than likely caught. I tried the experiment. I sank two traps at different places on a favorite crawfishing route for coons, and the same afternoon found a coon in each trap. And that is the only way you can trap a coon.

"Coons are very fond of corn, and so are squirrels. Farmers often charge damage done to their corn to coons when it is done by squirrels, and vice versa. There should be no mistaking the work of a coon in a cornfield. He is a most wantonly destructive pest. He will strip an ear, eat a portion of it, tear it from the stalk and so on until he is satisfied. He destroys five-fold more than he eats. Squirrels are not one-tenth as destructive as coons. The farmer may tell what kind of squirrel has been helping himself to his corn if he is observant. The gray and black squirrel eat the whole of the grain, while the saucy red squirrel nips out the heart and throws the rest away.

"I often heard hunters talk about smoking coons out of hollow trees where they have been located. If they say they have done the smoking by burning straw or leaves or substances of that kind, I don't believe them. Coon hunters in Western Pennsylvania know by long experience that there is only one thing the smoke of which will force a coon to beat a hasty retreat from his hollow tree. You may burn leaves or straw till the cows come home, but you won't get your coon. You can hear him sneezing every little while like a man with the hay fever, but that is all the effect the smoke will have on him. If you want to get your coon by smoking him out of the tree, you must take what we call a sulphur match in Western Pennsylvania. The coon-hunting sulphur match is made by melting down a quantity of sulphur in a saucer and saturating a strip of muslin a few inches long and an inch or two wide in it. When you run your coon into a hollow tree all you've got to do is to put your sulphur match at the bottom of the hole and light it. It won't be burning ten seconds before Mr. Coon will pop out of his hollow as if he'd been shot from a catapult, and then if you don't get him it's your fault.

"I never read anything about the habits of the coon yet that didn't say that the animal lays up stores to subsist on during the winter. I never met any one who professed to know anything about coons that didn't hold the same thing. A coon depends on stores it collects to see it through winter, just about as much as the bear does, and everybody knows that the bear goes to sleep in his hole when the weather drives him in, and doesn't generally wake up until spring, and so he can't eat much. The coon does the same thing, except that he will wake up now and then on some fine day and take a little stroll through the country. When he goes to his winter home he rolls himself with his nose between his hind legs, and very close to his hams, at that, and gives himself up to oblivion. When he comes out in the spring he's as thin as a shadow. I've cut down dozen of coon trees in the winter, and always found the coons in that rolled-up position, with not a vestige of anything to eat in the hole. If a coon comes out on a winter's day and the ground is all covered with snow, he will accept the inevitable and walk on the snow to his destination, but if the snow is in patches, or lies in scattered banks, the coon will follow the leading of the bare ground around the patches of snow, keeping shy of all contact with them, although such a course may lead him miles out of his way. The coon is an interesting creature, and is worthy of a good deal of study.

Dr. Augustus Weller, of the Hospital School, has recently made a number of experiments, showing that it is possible to detect, by existing electrical instruments, the electric currents generated at each beat of the heart. Two people holding each other by the hand, and connecting with a capillary electrometer, give evidence of electrical shocks through each other. The hands of a single subject, dipped into two basins of water in connection with the electrometer, give a deflection of the instrument at every beat of the pulse.

A correspondent of the *Parm Zeitung* tells another correspondent that benzoic acid and camphor can be made into a pill mass by means of powdered soap, six parts; water, one part; and calcined magnesia, q. s.

HOUSEHOLD.

MASHED POTATOES (BROWNED). Fill the dish you intend to serve the potatoes in with mashed potatoes, and after smoothing the top and besprinkling with good butter put on the shelf of a hot oven till browned, and then serve.

BAKED SMELTS.—Wash and dry the fish thoroughly in a cloth, and arrange them nicely in a flat baking dish. Cover them with fine bread-crumbs, and place little pieces of butter over them. Season and bake for fifteen minutes. Just before serving add a squeeze of lemon-juice, and garnish with fried parsley and cut lemon.

SWEET SAUCE.—Two cupfuls of water, two teaspoonfuls of flour well mixed with a little water, which must be stirred in while boiling; after it is well boiled, add a cupful of sugar, butter the size of an English walnut and salt. Add nutmeg after it is taken off.

SALMON SALAD.—If canned salmon be used, drain it dry, and pick into flakes with a silver fork; mix some celery and boiled beet-root together in quantities, and mix with salad dressing an hour before required; cut a crisp lettuce finely, and add the last thing. Garnish with slices of hard boiled eggs.

LEMON PIE.—One teacupful of powdered sugar, one tablespoonful of butter, one egg, juice and grated rind of one lemon, one teacup of boiling water, one tablespoonful of corn starch, mixed in a little cold wate; cream, butter and sugar together, and pour the hot mixture over them. When cold add the lemon and beaten egg. Bake.

MINCE PIE.—Take five pounds of beef; boil, chop fine with three pounds of suet; seed four pounds of raisins, wash four pounds of currants, slice a pound of citron, chop four quarts of apples. Put in a sauce-pan with cinnamon, cloves, ginger, nutmeg, the juice of two lemons, one teaspoonful of pepper and two pounds of sugar. Pour over all a quart of cider, one pint of molasses and a teacup of melted butter. Bake in a rich crust without tops, then bake a crust of puff paste and lay on.

BAKED VEAL CUTLETS.—Remove all skin from the edge, wash and wipe dry, sprinkle with salt and pepper, place a sheet of white paper in the bottom of a shallow baking tin, butter it well, lay the meat on it, place bits of butter on top of the meat and very thin slices of onion, place in moderate oven, baste frequently with butter, bake until a nice brown; remove from the pan, place on a hot platter, pour over it a little tomato sauce and garnish with sliced lemon.

PUMPKIN PIE.—One quart stewed pumpkin pressed through a sieve; nine eggs, whites and yelks beaten separately; two quarts milk, one teaspoonful mace, one of cinnamon and one of nutmeg; one and one-half cups of white sugar. Beat all well together, and take in crust without cover.

ROAST SPARE RIB.—Take a nice spare rib with part of the tenderloin left in; season with salt and a little pepper; sprinkle with summer savory; put in a pan with a little water; baste often and roast until nicely browned and thoroughly well done.

TWO RECIPES FOR COCOANUT CAKE.—One-half pound of flour, one-half pound of sugar, one teacupful of sour cream or milk, small teaspoonful of saleratus; flavor with rind of lemon; four eggs; bake in pans one and a half inches thick; one grated cocoanut. 2. Two cups of butter, three of sugar, one of milk, one-half teaspoonful of saleratus, four eggs, four cups of flour, one cocoanut grated and put in lightly at the last; bake in two loaves.

PLAIN BUNS.—To three pounds of flour add a quarter of a pound of butter, one ounce of sifted sugar, a pinch of salt, one ounce of yeast and two egs; mix with enough new milk to make a light dough; set the mixture to rise for some hours, and, when light, divide into small buns. Let them stand on a hot plate to warm for a few minutes before baking in a quick oven. To be eaten buttered, either hot or cold. The rolls, a day old, are delicious for making sandwiches.

CAROLINA QUEEN CAKE.—Work a quarter of a pound of butter to a cream, dredge in it half a pound of flour, and a quarter of a pound sifted sugar and a quarter of a pound of currants; whisk two eggs and mix with half a teacupful of thin cream and a few drops of lemon essence; stir this into the flour, and then add a teaspoonful of baking powder; beat the paste well for ten minutes, then bake in small buttered tins for from a quarter to half an hour. The mixture should be stiff and doughy. This amount is enough to make a dozen cakes.

ROAST TURKEY.—Kill the night before cooking; prepare a dressing of bread crumbs with butter, pepper, salt and herbs; add ten dozen chopped oysters; fill the body with dressing, dredge with flour; lay in a deep pan on a wire rest or small blocks; cook with butter; roast a rich brown. Stew the giblets in a little water, which may be added to the gravy in the pan; thicken with a little corn starch, and serve in a gravy-boat. Garnish the turkey with fried oysters and serve with cranberry sauce.

TO PRESERVE BUTTER.—There are two very good ways of keeping butter for winter use. I will give you both, and after trial you can decide for yourself which you prefer. In both cases the butter without additional salt must be packed smoothly and tightly into stone jars, using an ordinary wooden potato-masher for pressing it down. For one jar cut a piece of new muslin sufficiently large to entirely cover the butter. Make a solution of salt and water, dip the muslin in this brine, cover it over the butter, and sprinkle on top of it salt to the thickness of one inch. Cover the top of the jar with two thicknesses of tissue paper neatly pasted down, and keep over this a tin or wooden cover. For the second jar stir enough salt into two quarts of water to make a saturated solution; that is, until the water has dissolved all the salt that it can possibly take up; add a quarter teaspoonful of saltpetre and a quarter pound of granulated sugar; strain this over the butter, and cover the jar the same as directed above.

The recent production of chemical sugar by Drs. Fischer and Tatel, in the laboratory of the University of Wurzburg, is regarded as a feat of much scientific interest, if not immediate commercial value. Glycerine was used in the starting point of the experiments. After decomposition and treatment with various reagents, a colorless syrup was obtained, which—unlike saccharine—appears to be genuine sugar, acting in every respect like ordinary natural sugar except in being incapable of rotating a beam of polarized light. The discoverers expect soon to give even the lacking optical activity to the new product, which is provisionally named acrose.

Captain Moeraeis, of the French army, has devised an instrument which he calls the "phonotelemetre," and which is intended to be used in estimating distances from the time taken by sound to travel. The instrument consists essentially in a stop-watch, fitted with a second dial at the back, which dial is marked in kilometres and seconds. In addition, there is a measuring wheel at the rim of the watch, connected with a second hand or index. The front dial contains distances marked on two concentric circles from 1 to 20 kilometres and 1 to 15 kilometres, which correspond to the two ordinance maps of France, drawn to scales of one in 100,000 and one in 80,000 respectively. To ascertain the distance from the map it is only necessary to set the index to zero and run the measuring wheel along the route on the map between the two points the distance of which is required. The distance can then be read off on the front dial. For purposes of orientation a small compass is put into the winding knob of the watch. To use the watch for ascertaining the distance by sound, the second hand is started at the moment when the flash of a gun is seen, and is stopped when the sound reaches the observer. He can then read off the distance in kilometres, and fractions of a kilometre, on the back dial of the watch.

A study of the action of light on water colors has been made by Dr. Russell and Capt. Abney. They find that blue light has the greatest effect, green less and red rays the minimum influence. Dampness hastens fading, but heat does not appear to affect it, and all pigments are permanent in a vacuum. Mineral colors are far more stable than vegetable. Of thirty-nine single colors examined, twelve were not acted upon by light, viz: Yellow ochre, Indian red, Venetian red, burnt sienna, chrome yellow, lemon yellow, raw sienna, terra verte, chromium oxide, Prussian blue, cobalt, French blue and ultra-marine ash—all except Prussian blue being purely mineral pigments. Permanent mixtures were: Raw sienna and Venetian red, raw sienna and Antwerp blue, cobalt and Indian red, Carmine, crimson and scarlet lake. Payne's gray and Naples yellow were the most fugitive of the colors examined.

A new feature in furnace-building is to be introduced at the power house being erected in Alleghany City by the Pleasant Valley Street Railway Company. The novelty consists of a smokeless furnace. It is a contrivance by which the fuel is automatically dumped into the furnaces, causing regular combustion, proper feed of air, and, it is claimed, an economy of 20 per cent. in fuel. Last of all, this very economy in the burning of the fuel makes the furnace practically smokeless. There will be six stokers placed in the new plant, and it is estimated that it will save the labor of four men. This is the first machine of its kind to be put into practical use in this section, although it has been introduced with great success in the West.

A soft alloy which attaches itself so firmly to the surface of metals, glass and porcelain that it can be employed to solder articles that will not bear high temperature can, as the Pharmacental Record asserts, be made as follows: Copper dust obtained by precipitation from a solution of the sulphate by means of zinc is put in a cast-iron or porcelain lined mortar and mixed with strong sulphuric acid, specific gravity, 1.85. From 20 to 30 or 36 parts of the dust are taken, according to the hardness desired. To the cake formed of acid and copper there is added, under constant stirring, 70 parts of mercury. When well mixed the amalgam is carefully rinsed with warm water to remove all the acid, and then set aside to cool. In 10 or 12 hours it is hard enough to scratch tin. If it is to be used now it is to be heated so that when worked over and braved in a mortar it becomes as soft as wax. In this ductile form it can be spread out on any surface, to which it adheres with great tenacity when it gets cold and hard.

During the course of a paper by the Hon. Ralph Abercromby, on the explanation of certain weather prognostications, read before the Royal Meteorological Society, London, the author explains about 44 well-known indications belonging to the following groups: (1) Diurnal; (2) sun, moon and stars; (3) sky; (4) rain, snow and hail, and (5) wells, springs and coal mines by referring them to the isobaric conditions in which they were observed. By this means he is able to indicate the circumstances under which any prognostic fails, as well as those under which it succeeds.

You may sing of the beauty of springtime
That glows on the cheek of the young,
But I sing of beauty that's rarer
Than any of which you have sung.
The beauty that's seen in the faces
Of women whose summer is over,
The autumn like beauty that charms us
Far more than the beauty of yore.

But this beauty is seen too rarely. The faces of most women lose the beauty of youth too soon. Female disorders are like frosts which come to nip the flowers which betoken good health, without which there can be no real beauty. If our American women would fortify themselves against the approach of the terrible disorders so prevalent among them, by using Dr. Pierce's Favorite Prescription, their good looks would be retained to a "sweet old age." This remedy is a *guaranteed* cure for all the distressing weaknesses and derangements peculiar to women.

Dr. Pierce's Pellets, one a dose. Cure headache, constipation and indigestion.

In the newly-made tea plantations of Assam a red spider has suddenly appeared, and threatens serious injury to the plants.

WOMEN are ships and must be manned.

A Pleasing Sense

Of health and strength renewed and of ease and comfort follows the use of Syrup of Figs, as it acts in harmony with nature to effectually cleanse the system when costive or bilious. For sale in 50c and $1.00 bottles by all leading druggists.

Winter wrappings promise to be long and ample, and large y trimmed with fur, while for these Mattelasse goods and heavy figured cloth will be much in vogue.

Cann's Kidney Cure for Dropsy, Gravel, Diabetes, Bright's, Heart, Urinary or Liver Diseases, Nervousness, &c. Cure guaranteed. 831 Arch Street, Philad'a. $1 a bottle, 6 for $5, or druggist. 1000 certificates of cures. Try it.

Sage tea mixed with a little bay rum is an excellent wash for the hair and prevents its falling out.

Millions of women use Dobbins' Electric Soap daily, and say it is the best and cheapest. If they are right, you ought to use it. If wrong, *one trial* only will show you. Buy a bar of your grocer and try it next Monday.

The handwriting of educated women a generation ago was far more legible than it is at the present time.

FITS: All Fits stopped free by Dr. Kline's Great Nerve Restorer. No Fits after first day's use. Marvelous cures. Treatise and $2.00 trial bottle free to Fit cases. Send to Dr. Kline, 931 Arch St. Phila., Pa.

Black ribbon colors are worn on light-hued dresses, and are fastened with small Rhinestone buckles.

Oregon, the Paradise of Farmers.

Mild, equable climate, no rain and abundant crops. Best fruit, grain, grass and dock country in the world. Full information free. Address Gen Oregon Immigration Board, Portland, Oregon.

A little thing that feels big in a tight place is a corn.

The smoker's delight—"Tansill's Punch."

Consistency is rare.

Stranger (driving past the foot of a mountain, to driver)—Anything remarkable about this mountain?

Driver—There is nothing peculiar about the hill itself, but there's a queer story connected with it.

Stranger—What is that?

Driver—A young lady and gentleman went out for a walk on this hill; they ascended higher and higher and—never came back again.

Stranger—Dear me! What, then, became of the unhappy pair?

Driver they went down on the other side.

Jones, having sent a stupid servant to do an errand, was greatly annoyed on finding that he had done exactly the opposite of what he had been ordered.

"Why, you haven't common sense," he remonstrated.

"But, sir——"

"Shut up! I should have remembered that you were an idiot. When I'm tempted to send a fool on an errand again I'll not ask you—I'll go myself."

Crushed.—Mr. Banklurk (at the close of the game)—What do you think of me as ball player, Miss Minnie?

Miss Minnie—I think you'd make a splendid swimmer.

Mr. Banklurk—A swimmer? why so?

Miss Minnie—You strike out so beautifully, you know.

Young Authoress (with bundle of manuscript)—Would you like a story of a pair of young lovers who separated and each married some one else, and years after, when his wife was dead and her husband was dead, the two met again and the old love rekindled?

Experienced publisher—Um; I'm afraid that wouldn't be a success nowadays, but if you'll rewrite the story and have the man's wife and the woman's husband both alive when the two meet again and the old love rekindles it would sell like hot cakes.

Lady Visitor (to little boy whose mother has been ill)—Georgie, is your mother any better?

Georgie—Yes, ma'am; but she can't walk around above a whisper

A City Nimrod.—First Hunter—You missed that rabbit by about ten feet.

Second Hunter—Well, you see the truth is, a fellow gets tired of slaughtering them all the time. I did that to break the monotony.

Hotel Proprietor (rummaging in the ruins of his house, which has been burned to the ground)—"Here, what's this?"

Clerk (picking up an iron plate, reading)—"This hotel is strictly fire-proof! Gulliver Munchausen, Inspector of Buildings."

"Don't you think," said a youth, after working his vocal cords with intense vigor beside the hotel piano, "that I ought to go on the stage?"

"Yes," replied Miss Pepperton, who doesn't like him very well, anyhow; "I certainly do. There is one that leaves for the station just an hour and a half from now."

Dr. Austin Meldon, of Dublin, has invented an electro-motor, which is said to create the largest amount of driving power with the least expenditure of electrical energy. The armature is formed by joining together two fifteen-inch solid pulley wheels with seven flat bars of iron, each bar being 24 inches long by 3 inches wide and 1.5 inches thick, and the bars are laid upon gutta percha, copper bolts being used to fasten them to the wheels. A shaft of 1.5-inch steel passes through the centre, and the whole is supported by a hard-wood frame stayed with iron. Each side of the frame where the shaft emerges therefrom is supplied with an ivory commutator, the one on the right having three and the other four brushes, each of which communicate with a magnet. Attached to the frame are seven electro magnets, the larger ones being made of 2-inch soft iron, and wound with No. 14-wire without bobbins, and the other four of 1.5-inch iron and wound with No. 11 wire. The total weight is a little over three hundred-weight.

Eve was the only woman who never threatened to go and live with mamma; Adam was the only man who never tantalized his wife about "the way mother used to cook."

The difference between honor and discretion is that honor tells you not to hit a man when he's down, and discretion warns you to be careful about hitting him when he isn't down.

A Family Gathering

Have you a father? Have you a mother? Have you a son or daughter, sister or a brother who has not yet taken Kemp's Balsam for the Throat and Lungs, the guaranteed remedy for the cure of Coughs, Colds, Asthma, Croup and all Throat and Lung troubles? If so, why? when a sample bottle is gladly given to you *free* by any druggist and the large size costs only 50c. and $1.

Mrs. Livermore, at the time of "Uncle Tom's Cabin," had a book half written upon the same general theme.

Deafness Can't be Cured

by local applications, as they cannot reach the diseased portion of the ear. There is only one way to cure Deafness, and that is by constitutional remedies. Deafness is caused by an inflamed condition of the mucous lining of the Eustachian Tube. When this tube gets inflamed you have a rumbling sound or imperfect hearing, and when it is entirely closed Deafness is the result, and unless the inflammation can be taken out and this tube restored to its normal condition, hearing will be destroyed forever; nine cases out of ten are caused by catarrh, which is nothing but an inflamed condition of the mucous surfaces.

We will give One Hundred Dollars for any case of Deafness (caused by Catarrh) that we can not cure by taking Hall's Catarrh Cure. Send for circulars, free.

F. J. CHENEY & CO., Toledo, O.

Sold by Druggists, 75c.

Russian winter scenes depicted on the covers of a triplicate mirror make a handsome manifestation of artistic etching.

There is more experience, time, and brain work represented in the preparation of Hood's Sarsaparilla than in any other medicine. It is this which makes Hood's Sarsaparilla peculiar in its curative power, and in the remarkable cures it effects. Give it a trial.

A fox's head, with emerald eyes, held between two shanks, representing the legs of the animal, is an innovation in silver rings.

Frazer Axle Grease.

The Frazer Axle Grease received medals at the Centennial, North Carolina State Fair, Paris Exposition, American Institute, New York, and others.

Garnet jewelry of American manufacture is rapidly attaining the place in public esteem so long occupied by imported goods.

Rupture cure guaranteed by Dr. J. B. Mayer, 831 Arch St., Phil'a, Pa. Ease at once, no operation or delay from business, attested by thousands of cures after others fail, advice free, send for circular.

WELL-CURED hay is nearly as concentrated as grain in proportion to weight. Corn contains about 10 per cent. of moisture and hay 15 per cent., but hay contains three times as much mineral matter as corn and more nitrogen. Hay, however, contains ten times as much crude fibre as corn and less fat.

Nature like man, begins her fall by painting things red.

Rheumatism

According to recent investigations is caused by excess of lactic acid in the blood. This acid attacks the fibrous tissues, particularly in the joints, and causes the local manifestations of the disease, pains and aches in the back and shoulders, and in the joints at the knees, ankles, hips and wrists. Thousands of people have found in Hood's Sarsaparilla a positive and permanent cure for rheumatism. This medicine, by its purifying and vitalizing action, neutralizes the acidity of the blood, and also builds up and strengthens the whole body.

"I was laid up for six months with rheumatism, and used many kinds of medicines without good result till one of my neighbors told me to take Hood's Sarsaparilla. When I had used half a bottle I felt better, and after taking two bottles I think I was entirely cured as I have not had an attack of rheumatism since." EUGENE H. DIXON, Rossville, Staten Island, N. Y.

Hood's Sarsaparilla

Sold by all druggists. $1; six for $5. Prepared only by C. I. HOOD & CO., Apothecaries, Lowell, Mass.

100 Doses One Dollar.

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50 Cts. COLD IN HEAD

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