

ELECTRICITY AT HOME.

HOUSEKEEPING THAT IS DONE BY PUSHING BUTTONS.

A New Yorker's Amazing Combination of Electrical Devices to Do the Work of Servants—Elevators, Doors, and Lights That Act in Response to Distant Hands.

The nearest approach to the fairyland of the fable exists in New York city. It is the home of the President of one of the large exchanges. In this house it is almost impossible to do a stroke of work or perform a series of concerted actions. Everything is done for you, apparently by magic, though really by electricity. It is probably the most elaborate electrically equipped residence in the world. Everything is done by the current, and it is necessary only to reach out your finger to have it done. It would seem as if the family of the owner must die of lassitude and the servants grow so lazy as never to be fit for work. Most of the servants are figureheads anyhow; they have so little to do.

The occupants of the house seldom or never walk up stairs. An electric elevator carries them from floor to floor and even up to the private roof garden fitted out with electrical devices. No attendant is required to work this elevator. It is the perfection of automatic action. A single push button on each landing controls it. No matter if the car is above or below your floor, a pressure of the button will call it to you. This is, of course, possible because of the

AUTOMATIC ACTION

of the pole-changers and switches which are placed at every floor and are worked by the car itself. Once a certain push button has been pressed, the car passes under the control of the person who pressed the button, and no matter how much the other buttons are pressed they will not act until the first one is released. This is done by means of a commutator which throws all of the other buttons out of circuit; for if two persons on different floors should attempt to work the car at one and the same time it might prove fatal to human life. The car door also is automatic, and the car cannot be moved until the door is shut and locked. This elevator is lighted by tiny but brilliant electric lamps, and there is a flexible tube telephone in the car which enables one to speak to any part of the house.

Such a thing as the ordinary opening and shutting of a door never occurs in this house. Near every door there is a push button. Press this and the door slides into the wall or vice versa. The pressure of another button locks or unlocks the door. Sometimes it is not necessary to be near the door in order to open or close it. Hanging down beside the beds are what is known in electrical circles as "flexible"—bifurcated cords with wooden knobs or handles on the ends. In each handle are four buttons, marked successively Asleep, Awake, Shut and Locked. The pressure of the first two buttons sends a signal to various parts of the house that the master or mistress is asleep or awake. The bedroom is approached by a long hall or entry way. Lying in bed the occupant of the house can shut and lock or unlock and open the door at the end of the fifty foot passage by merely pressing the proper buttons. Hanging near the bed is another flexible button which means all kinds of qualified summons to the house servants.

There is no such thing as groping in the dark in this house. Every room can be lighted before entering by

PRESSING A BUTTON

in the hall approaching it. Furthermore, you can light at will one or a dozen or every light in the room and there is also one switch which enables every lamp in the house to be lighted at once. Dark closets are unknown in the house. The very act of opening a closet door automatically turns on the current and the interior is lighted up. All of the table lamps are electric and in several cases they are marble statues holding incandescent lamps, small patterns, as it were, of Edison's famous statue of the Triumph of Electric Light. The roof of the house with its electrically lighted garden presents a beautiful sight from a distance, just as the distance is beautiful when viewed from the roof. Here the family passes its evenings when home in the summer time. In the kitchen all the cooking is done by the current, and so much of it is done according to new methods that the cook would be practically useless in an old-fashioned kitchen. When a chicken has been prepared and placed in an electric oven it is only necessary to press a button and watch the clock. As the heat is obtained from over-charged wires it is distributed evenly all around the bird. Basting is, therefore, not necessary, and the expertness of cooking becomes a mere question of time allowance. A leg of lamb, for instance, will require just one hour and ten minutes to cook. Left in the oven three minutes longer than this and it would be over done. It is not necessary to look in the meantime.

The dining room of this house is exquisite in tone, the lights shedding a gentle radiance down from the ceiling. It is said that the owner even contemplated an electric table which would sink out of sight and its place be taken by another after each course had been eaten, much after the Roman fashion of table removal. The nearest approach in this case, however, is an

ELECTRIC DUMBWAITER.

large enough to carry a whole dinner course. It is but one remove from the other idea. The dining table abounds in call bells. The master of the house can give a private signal through the floor by means of a foot push button. The current used in this plant is all generated on the premises. The house is not situated along the line of a street current. The owner had therefore to install his own plant. Storage batteries supply the current to the house. The cells themselves are stored by a dynamo,

which is worked in its turn by a gas engine. This entails no trouble, however, because the switches on the elaborate switchboard are worked automatically by a side current from the cells. A colored man servant keeps his eye on the machinery, and an experienced electrical man pays the house a visit at intervals of one or two months. This in a measure proves the feasibility of electric lighting for country residences.

In fact, everything seems to be done at a touch of a button in this house, and the inhabitants have become thoroughly used to it. The owner has tried to enjoy some of the delights of ordinary activity by becoming a photographer, but here the modern destiny of the mansion has pursued him, and his private studio is "electric." Arc concentrating lamps enable the owner to take pictures day and night, and there are electric developing processes on which he experiments. He has even had wires run underground from his cellar plant to the houses of his business partners and for his father-in-law on the next street. He supplies them with lighting current. It is not apparent that there are any electric hair curlers or electric cigar lighters in the house, but there is no reason why they should not have been concealed in some out of the way corner. In short, if there is a genius of domestic electricity abroad it would probably select this house for its residence.

LONDON BARGES.

Interest seems in the Quiet Reaches of the Thames.

In the weird light of the smoky evening half a dozen barges, some already under jury masts, are making their way on the top of the flood into London. They form a long perspective as they approach the Tower Bridge and are lost sight of in the yellow mist of the setting sun. They are loaded down to their hatches, and some of them have sailed far up the coast, perhaps in half a gale of wind, to deposit their cargoes in the quiet reaches of the dreamy Upper Thames. Others hailed from the Medway—"the other river," as they call it on the Thames—and those who know Rochester and Strood Bridge will be familiar enough with the sight of them here. On Monday morning—time, to the bargemen, always waiting upon tide—the Medway fleets gets under way. It is worth seeing this on a bright morning, when the wind is fair, each vessel beating up out of its own river, and coming about into the Thames, adds something to the interest of the scene.

Standing on the Essex side, one can on a clear day see some way up the Medway, now thick with sail, and follow the fleet along the Isle of Grain opposite, and far up the Thames beyond the long, low line of Canvey, disappearing at last as it bears northward up the Lower Hope. Thus toward evening, in company with their various seagoing companions, these Medway craft enter the gloom and haze of London, each one as much at home in this crowded thoroughfare as in the lower reaches or along the coast north and south of the Thames estuary.

Here, while some taken in hand by the free waterman, "sweep" up on the floodtide, their long oars or "sweeps" serving to help their dangerous passage under the arches of the bridges, others are taken in tow by one of the tugs—the Vixen, the Scorcher or the Storm King, perhaps—and soon a long, black string of deeply laden hulks, often lashed together two by two, go steaming past the Nine Elms, Chelsea and Hammersmith to find a peaceful berth possibly behind the eyots of Isleworth Richmond, until once more they are freighted outward to their own river or to face the open sea.

AN HOUR'S STROLL.

Would You Believe That You Can Walk 85,253 Miles an Hour?

Have you ever thought of the distance you travel while you are out on an hour's stroll? Possibly you walk three miles within the hour, but that does not by any means represent the distance you travel. The earth turns on its axis every 24 hours. For the sake of round figures we will call the earth's circumference 24,000 miles, and so you must have traveled during the hour's stroll 1,000 miles in the axial turn of the earth.

But this is not all. The earth makes a journey around the sun every year, and a long but rapid trip it is. The distance of our planet from the sun we will put at 92,000,000 miles. This is the radius of the earth's orbit—half the diameter of the circle, as we call it. The whole diameter is therefore 184,000,000 miles, and the circumference being the diameter multiplied by 3.1416, is about 578,000,000.

This amazing distance the earth travels in its yearly journey, and dividing it by 365 we find the daily speed about 1,586,000. Then, to get the distance you rode around the sun during your hour's walk, divide again by 24, and the result is about 66,000 miles. But this is not the end of your hour's trip. The sun, with its entire brood of planets, is moving in space at the rate of 160,000,000 miles in a year. This is at the rate of a little more than 438,000 miles a day, or 18,250 miles an hour.

So, adding your three miles of leg travel to the hour's axial movement of the earth, this to the earth's orbital journey, and that, again, to the earth's excursion with the sun, and you find you have traveled, in the hour, 85,253 miles.

NOVEL LABOR INSURANCE.

Insurance against non-employment is an accomplished fact in Cologne. Workingmen who have resided two years in that city and are over 18 years old can join the society. The dues are 6c per week. If no employment can be procured for a member during the dull season, 50c per day are paid to him if married, 38c if single. The city has started a guaranty fund for the society, with \$6,000, to which \$14,500 have been added by subscription among employers. The society hopes to enroll enough members to meet all liabilities likely to occur.

YOUNG FOLKS.

BABY MAY'S PIE.

On a stool before the dresser, Looking wondrous sweet and wise, Baby May is busy—bless her! Helping mamma make her pies.

Sleeves rolled to the dimpled elbows, Smooch of flour on her nose, Clothes-pin serves her for a roller, This is how her wee pie grows:

First she rolls and rolls and rolls it, Dropping flour here and there, Then quite carefully she folds it Till her apple she can pare.

Now she's ready for the filling— Sugar, apple, much of spice, Mamma thinks it's somewhat mussy, Baby thinks it's very nice.

When 'tis baked, she proudly shows it, While we wonder who will get May's first pie, and when we ask her, "'Tis for papa," says our pet.

Papa views it o'er with wonder, This queer pie beside his plate, Kisses May and kindly tells her, "It shall be my paperweight."

OLD PERT.

BY AUNT HETTIE.

When I was a small girl, perhaps seven years old, I lived with my parents on a large farm. We were a mile or more from neighbors, and, as I had no brothers or sisters, I was obliged to make playfellows of the dumb creatures about me, and many lessons I learned from them, but my favorite pet was a hen, and this was the way it came about.

One morning there came up to our kitchen door a proud old mother hen with ten downy little chicks eagerly tumbling after her. I was delighted with the dainty little creatures, and obtained permission to care for them. The old mother hen we put in a coop, but the chickens ran at large, and they grew and thrived on their diet of meal dough as only chickens know how. But the prosperity of the little family did not endure many weeks. One morning as I called them to their breakfast, one of my favorites did not respond, and my search revealed her doubled up with her head under her wing, in a very sad condition. Whether she had been seized by a rat, or in what way the accident occurred we never knew, but the skin was torn from the back of her head down to the wings and to the crop on either side. Taking up the poor trembling little thing I ran to mother, and she, disliking to lose one of her fine Hamburg brood, resolved to save the chicken if possible. She cut a piece of cloth the size of the wound, and spreading one side with salve, applied it to the quivering flesh. Telling me to watch it carefully that the other chickens might not annoy it, she gave it to me, and I put it in the coop with its mother. To our surprise it lived. The cloth on its back not being so elastic as the skin would have been, it could not get its head down to eat the dough like the others, so I fed it from my hand. The weeks came and went; still that plaster adhered to the injured parts, until one morning when it came for its breakfast the plaster was gone, and in its place was new skin with black and white feathers just pricking through. By fall there was not a handsomer pullet on the farm than our little cripple of the spring before. I named her Pretty, and the name was most appropriate, but too much petting and indulgence had much the same effect on my hen that they often do upon children. She was very proud and selfish. When the corn or dough was placed in the dish and the hens gathered around to eat, Pretty would march straight into the middle of the largest dish, pick out what best suited her taste, and woe to any hen who dared allow her head to get in the way. According to the general advice of the family I changed her name from Pretty to Pert, and that was the title she ever afterwards bore.

During the following winter I longed for someone to share with me the pleasures of coasting. I first tried the cut, but she very emphatically refused the invitation, and I had a badly scratched hand into the bargain. I next endeavored to persuade the dog, but after being forcibly held upon the sled during the first trip, he resolutely refused to try the second, and when I attempted to urge the matter, a row of glistening white teeth and a determined growl settled that question. As a last resort, concluded to try Pert. Going to the hen house, I took her under my arm, then tucking her under my arm, and with sled rope in my hand, I started for the top of the hill. Arrived there, I placed her upon the rope in front. She looked calmly about her over the white snow, then up at me. Finally smoothing down her ruffled feathers, she settled down as contentedly as one could wish. I seated myself behind her, gave the sled a gentle push and away we sped down the hill. At first she seemed somewhat surprised at the sudden turn affairs had taken, looked around at me and chirruped inquiringly, but did not offer to stir off the sled. Before we reached the foot of the hill she was talking away to me in her hen-language, which, according to my interpretation, meant that this was precisely what she had long desired, and was grateful for her pleasure. So delighted was I with my new playmate, the trip was repeated again and again, for as she remained upon the sled after I got off I could draw her about as much as I pleased.

As a matter of fact this was not the last of our good times together, but through all that winter and in those that followed, until school and study took the place of out-of-door play, Pert was my companion on such coasting expeditions, and they really did seem to afford her as much pleasure as they did me. I could draw the sled into the midst of the flock, place her upon it and away we would go. On our return she always waited for me to take her off the sled.

Although a great favorite with us

all, she was anything but beloved in the hen house. She was very lordly among the other hens, and ordered them about in a more forcible than agreeable manner. One day, in return for her interference, she received a vicious peck in the eye from some offended hen. For weeks afterwards we nursed her carefully and she finally recovered, but she ever afterwards lived the life of a one-eyed hen.

Her adventures were too numerous to relate. Once after she had been missing nearly a week, she was found wedged in between a barrel and the side of the hen house. She was too weak to stand when we first took her out, but after a day or two she was as lively as before. She fell into the cistern, and when in all haste we went to her rescue we found her floating about on the surface of the water just as unconscious as if on the softest nest we could have prepared for her.

One cold winter morning we found our poor old Pert dead in the wood-house. She had died of cold and of old age. We buried her in the garden, and we all missed her when she no longer responded to our call with her peculiar chirrup. She was nearly twelve years old.

Children, this is no fairy tale. It is true in every detail, and I could tell you much more about our interesting pet, but let this little story of what one poor hen can become through love and kindness teach you to be kind to all dumb creatures. Their mute appreciation and loving, confiding trust will more than repay you.

THE SALT TAX.

It Is the Only Direct Revenue Paid By East Indians.

Since its discontinuance in France in 1789, the salt tax has ceased to be an excise or internal tax in European countries, with the exception of Italy, and which finds its warrant and justification at the present time in India in the fact, that, apart from the land tax, there is no other method so practical and economic of compelling the masses of the people to directly contribute anything for the support of the Government, inasmuch as the consumption of salt is a necessity for every individual. A very large proportion of the salt required for Indian consumption is imported—chiefly from England—and the total amount on which the taxes are collected is about 500,000 tons, or 3,000,000 barrels. The rate of tax is two and a half silver rupees (nominally \$) per maund of 82-28 pounds. Previous to 1879-80 the Government maintained, at great expense and popular annoyance, a customs line 2,500 miles in length, to keep salt produced in the states under native rule from entering into British territory without the payment of a heavy duty.

This barbarous system, necessitating the constant employment of a large force of native constables, known as chuprassies, invested with inquisitorial powers, was abolished at the time above named, by entering into treaties with the native states possessing salt sources, in virtue of which British officials are permitted to supervise their salt works and tax their product before it left them. But this could only be accomplished by paying the states concerned a satisfactory compensation for this concession. The receipts of the imperial (Indian) revenue from the salt tax from 1894 were 8,228,000 Rs. (tens of rupees) or nominally about \$41,000,000. The present average annual consumption of tax-paid salt by the people of India has been officially estimated at about 10 3-4 pound per head, and the average annual burden of the tax on each Indian family of five persons at one rupee and a quarter, or 5d. (ten cents); and in considering this tax, it is desirable to bear in mind that there is no direct taxation in India either on tobacco or sugar, so that the salt tax is the only direct tax that the Indian peasant need pay, unless he indulges in alcohol or narcotics—the land assessment being regarded as in the nature of rent.

RAILROAD MAN'S PRAYER.

Oh, Lord, now that I have flagged thee, lift my feet off the rough road of life and plant them safely on the deck of the train to salvation; let me use the safety lamp known as Providence, make all the couplings in the train with the strong link of thy love and let my hand lamp be the Bible. Heavenly Father, keep all the switches closed that lead off to the siding, especially those with a blind end. O Lord, if it be thy pleasure, have every semaphore block along the line show the white light of hope, that I may make the run of my life without stopping, and Lord, give us the Ten Commandments as a schedule and when I have finished my run and have, on schedule time, pulled into the dark station of Death, may thou, the Superintendent of the Universe, say with a smile, "Well done, thou good and faithful servant, come and sign the pay-roll and receive your check for eternal happiness."

HOW ELECTRICITY KILLS.

Experiments have been made by a French scientist upon dogs in order to determine the cause of death in electric shock. The conclusion reached is that for a given animal in normal condition as to health a definite amount of electrical energy will produce fatal results. It is thought that the action of the electrical discharge is to contract the arteries and increase the pressure of the blood, and that death is due to inability on the part of the heart to sustain the increased pressure of the blood so produced. Post-mortem examinations seem to show that the passage of the current does not cause any anatomical disintegration.

COFFEE A BRAIN STIMULANT.

Good coffee, by means of its marvelously stimulating influence on the brain, is the antidote of alcohol. At Rio Janeiro, where the population numbers 850,000, drunkenness is almost unknown, and coffee is largely used. Emigrants, who frequently take with them a love of alcohol, end by preferring the coffee which the Brazilians know so well how to prepare.

TERRIBLE MOSQUITOES.

THEY CARRY BACILLI INTO THE BLOOD OF HUMANS.

Then the Poison Microbes Breed Death—Recent Important Discovery by a German Scientist.

Prof. Kratzjan, of Berlin, has just discovered a covert method by which bacilli are introduced into the human anatomy, where they do irreparable damage. They are carried into the blood on the tiny bills of mosquitoes, and there propagate their species innumerable and in many cases kill the poor victim. At first sight this appears incredible, but only so on account of the meagerness of our knowledge of the bacillus and the great family of the bacteria.

Only recently have we been permitted to know anything worth knowing about the great army of microbes offensively arrayed against the inhabitants of earth, and as yet our information as to their life powers and facilities for mischief are very limited, but whatever order we can bring out of this chaos should be sought and found with as much certainty and alacrity as are possible. With Prof. Kratzjan, it is time to believe that there is danger in delay.

It is found that when all forms of bacteria that have as yet been seen are carefully mustered, they fall into one of three classes, spheroidal, rod-like and spiral. Additional subdivisions of these classes have been made and generic and specific names attached to

MANY HUNDREDS OF FORMS.

But these need not be specially enumerated. How they look and what they do is of more importance than the names scientists have attached to them. Through the ordinary microscope the bacteria look like little balls and straight or spiral rods, but we find when we use the most powerful lenses that they consist of a minute mass of granular protoplasm, surrounded by a thin, structureless membrane.

When they are given food enough, and placed under favorable conditions for growth, they may be seen to divide across the middle, each portion soon becoming larger, and again dividing, so it has been calculated that a single germ, if kept under favorable conditions, might at the end of two days have added to the number of the world's living beings the enormous sum of 283,000,000,000 new individual bacteria! This is Prof. Kratzjan's estimate, and he is of the opinion that if this sort of thing were to go on for just one season unhindered there would be very little room left on the earth's surface for any other form of life, and all the carbon, hydrogen, oxygen and nitrogen now available for the purposes of human vitality would be used up. In the stuff which makes life there would be a corner, and even the great master of the planet, man, would be forced to the wall and constrained to become the victim of his insatiable fellow worker, the bacterium.

BUT NATURE PROVIDES.

Fortunately this sort of thing does not go on. The food grows scanty, or the temperature becomes hot, and the sun is a sore enemy of the growing bacterium, or, as it grows and feeds, the germ gives off various chemical substances which often poison itself. So the proportion is preserved by such a fine balance of the natural forces that the bacteria in the long run are held closely within bounds the world over, till they get into the fat pastures of the human blood, where they carry the havoc of disease in more forms than are embraced in the nomenclature of the schools, and finally vitiate the whole volume of that upon which they feed.

A SPORTING FAMILY.

A Traveller's Reception at a Western Cabin.

A man who was making a tour of the west on horseback rode up to a cabin one afternoon, seeking refreshment for himself and horse. A boy of about 14 came out to the cabin in response to the traveller's call.

"Hello!" he said.

"Your father at home?" asked the stranger.

"Naw; he's went over to Sagetown to a slugging match."

"Is your mother at home?"

"Naw; she's went down to Paw-paw Town to a pigeon shooters' match."

"Well, is there any one here who could get me up a dinner?"

"Naw; I dunno as there is. Sister Lib has jess went to the baseball game down to the cross roads an' Sister Louisy has went off with her beau to the hoss race over at Peevy Mills. Brother Jim's went to a rooster fight over at Hi Simpson's, and Dan's gone to a dawg fight. If gran' ma'am was here she'd jerk a chicken an' fry it for you."

"Where is your grandmother?"

"Her an' gran' dad's went to a shoot-in' match."

"Well, you're rather a smart looking boy; couldn't you get me up something? I'm most starved."

"Sorry, mister, but I reely ain't time. I'm jess off to a new race an' I've got ten cents up on Bill Jimson's old white mawl an' I want to be thar to see 'im win. Got to go to right off. Good-bye!"

A LOAD REMOVED.

Carrott—Say, old man, you are looking a hundred per cent. better than you were a year ago.

Barrett—Yes, I was worrying about my debts then.

All paid up now, eh?

No. They have grown so that I know there is no use in trying to pay. It is a great load off my mind.

WILLING.

He led her into the beechen grove where they had carved their initials on a tree years before. The letters had grown together and formed a knot. Shall we not follow their example? he asked in anxious tone.

She blushed and answered: I will knot—if you will.