

THE DIPHTHERIA CURE.

Public Subscriptions in France and Germany So That Poor People May Benefit.

The remarkable discovery of Dr. Roux, the devoted collaborator of Pasteur, for the prevention and cure of that most fatal of infantile diseases, diphtheria, is now attracting attention.

The remedy consists of subcutaneous injections of serum of the blood of animals inoculated with the poison of the diphtheria bacillus.

The success which has attended the employment of the serum has



DRAWING THE BLOOD FROM A HORSE.

been so great that it is being generally adopted in France and Germany, where public subscriptions have been opened, so as to place the saving fluid, which is necessarily expensive, within reach of the poor as well as the rich.

In the majority of cases children suffering from the disease do not succumb to asphyxiation, as is commonly supposed, but to the poison secreted in the throat by the microbes, which contaminates the blood more or less speedily, according to the virulence of the attack. The injection of the anti-diphtheric serum confers immediate immunity, but does not act as a counter-poison until some

mitting no one to enter the premises but known friends, and frequently having to face desperate, drunken rioters, who were searching for Mme. Lecayo everywhere.

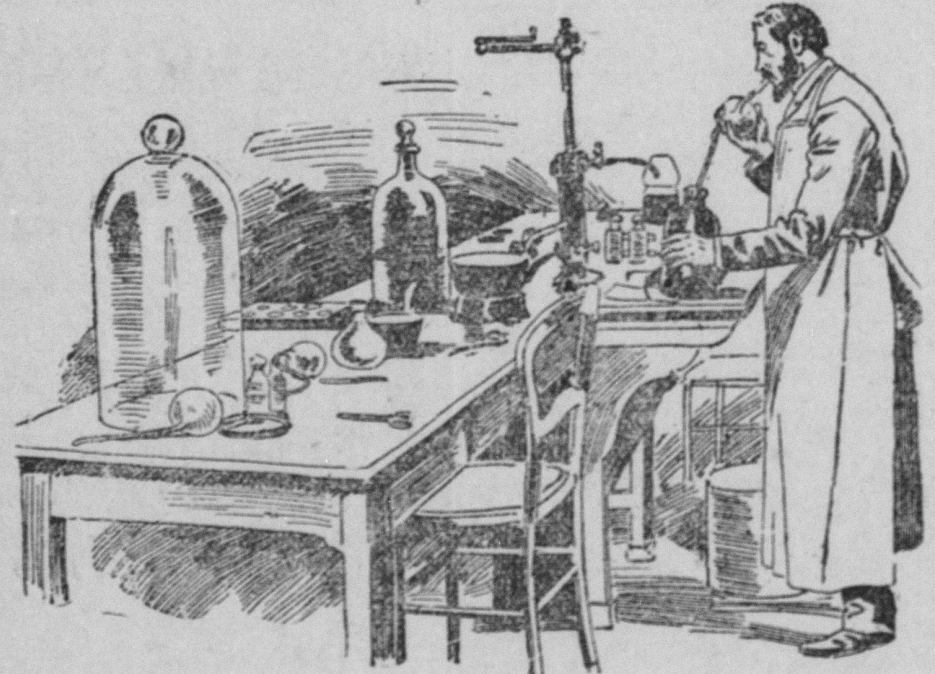
When order was restored and it was safe for the ladies to reappear, Mr. Peugnet evidently found that the close association of three days with the pretty young donna had sealed his fate, and he proposed and was accepted upon the raising of the state of siege. There were paternal and maternal consents and blessings to be secured both in Nicaragua and Missouri, but the gallantry of Peugnet's defense of the ladies in the one place and his father's pride in the young man's pluck and endurance in the other made all this mere formula.

The new Mrs. Peugnet comes of one of the oldest and wealthiest Central American families. She is an heiress, and is connected in that carefully guarded line of the "gente fine" with most of the Spanish-American aristocracy between the City of Mexico and Bogota. She was educated in New York, at Paris and at Madrid, and besides the usual accomplishments which young ladies of her station have, she is a finished linguist and a highly trained musician.

Louis D. Peugnet bears a name equally well known in St. Louis and New York. His great-grandfather was an officer in the Imperial Guard of Napoleon, and fought under the Emperor up to the crash at Waterloo.

Chinese Politeness.

Whether or not the Chinese put a term insulting to Japan in their declaration of war against that country, they seem to be, under ordinary circumstances, the politest people on earth. A German traveler who has just returned from China, and who has been publishing his impressions of the Chinese people, declares that



MANUFACTURE OF THE SERUM

hours later. In cases, therefore, where the ravages of the poison are too advanced the serum is non-effective. Neither has it any influence upon other maladies by which diphtheria is often complicated, such as measles, broncho-pneumonia, etc. But it is a certain cure for cases of diphtheria pure and simple, if taken in time, and will thus be the means of preserving many a little life which the methods hitherto employed would fail to save.

Experiments have shown that horses furnish the best and largest quantities of serum. The blood is tapped from the jugular and furnishes a serum of perfect limpidity. The operation causes no pain whatever to the horse, and is performed once a month, when about four quarts of blood are procured, the loss of which does not weaken the animal excessively. The horses operated upon in Paris are young and perfectly healthy animals, but are mostly unfit for harnessing, owing to defects in the legs.

The treatment of a case of diphtheria requires fifty centilitres of serum, which is injected by means of a small syringe fitted with a needle at the point. The operation is so simple that in case of necessity any person could attempt it. The liquid causes a swelling about the size of a walnut, which, however, subsides in ten minutes, and the patient experiences no pain beyond the prick of the needle.

ROMANCE FROM NICARAGUA.

How an American Saved a Girl and Then Married Her.

A very romantic wedding was solemnized at Bluefields, in Nicaragua, recently in which a St. Louis boy widely known in the best circles in the town, Louis D. Peugnet, was married to a young lady whose life and whose sister's life he had gallantly protected during the worst time in the recent revolution in Nicaragua, says the St. Louis Globe-Democrat.

Mr. Peugnet went to Bluefields some time previous to the uprising, and was engaged in business for St. Louis houses throughout the isthmus. When the trouble came on and the rioters seized the town, young Peugnet and several other Americans armed themselves to protect the ladies, who were exposed to the most appalling perils. General Lecayo, who commanded the Nicaraguan troops, left his wife and her sister in the village, not anticipating any emeute, and it was these hapless women who fell to young Peugnet's charge. He got them safely into a stone house, with a large, well guarded cellar, on one of the side streets, and there during the whole of the sack and the fighting he kept guard over them, gun in hand, pre-

paring a letter to a perfect stranger a Chinaman calls his correspondent "my elder brother." The latter begins with such a phrase as "May all the blessings of life be showered upon you, such is the wish of your imbecile junior."

In speaking of his own family the writer says: "We ants." The address from the top of the letter is, "From my humble cabin to the glorious Palace of Pearls of my elder brother," and the preamble is, "To my excellent and benevolent elder brother, who ascends the staircase of honors." At the end is the form, "The undersigned, your most obedient monkey, raises his hands in supplication to Your Excellency in order that Your Excellency may deign to approach the miserable ruins of our house." Finally, as a further token of humility, the signature of the writer is so small as to be almost illegible.

Slept and Died in a Coffin.

An interesting and original person, named Vaszary Kovacs, died in Hungary on Wednesday. He had been in Honved in 1848, and then became a popular comic actor. When too old to go on the boards he discovered a strange occupation, which harmonized with the hobbies he entertained all his life. For a small fee he carried the wooden cross customary in Hungary in all the funeral processions of the capital. The last time he was noticed in this part, which (our correspondent says) he played like a true actor, was at Kossuth's funeral. With his snow-white beard and flowing white hair, the wooden cross in his right hand, and the left on his sword, he was a conspicuous and dramatic figure. For the last twenty years of his life he slept in his coffin, which, with his own hand, he had painted in the national colors of Hungary. He died in the coffin, and his last wish was that the lid should be merely nailed down over him, and that no one should touch his dead body.—[London News.]

Chinese Street Paving.

The street-paving in Canton was of loose granite slabs laid crosswise, about nine inches through, and as long as the street was wide. Although presenting a somewhat irregular surface, the face of each slab is generally worn smooth by the treading of unshod feet. A drain ran down the center of each street, under the granite slabs, into which, between the joints, percolated rain-water, fluid refuse, and house slops. These liquids ran out into the main-tidal canals which intersected the city, and when they did not run, as was not infrequent, the slabs were raised, and the drains cleaned out.—[Century.]

MIGRATION OF BIRDS.

Mysterious Instinct That Leads Them Through Vast Distances.

The instinct which guides a young bird, without either experience or the help of its parents, across vast expanses of land and water to the winter quarters of its species has been described by the greatest naturalist and sage of modern times as "the unknown power." While the necessity of obtaining an adequate amount of food is, undoubtedly, an important factor in the cause of migration, it can only have a partial operation, inasmuch as the spring journey northward is commenced from a country teeming in many cases with desirable supplies. Another inexplicable phenomenon, which proves conclusively that neither food supplies nor climatic difficulties create the impulse for change, is furnished by the cross-migration which goes on regularly during the autumn between this country and the continent among birds of the same species.

Some idea of the great power underlying the impulse to migrate may be gained when it is mentioned that swallows have been known to perish rather than forsake their young in a fire, yet they leave their second callow brood in obedience to this mysterious instinct. The force that is stronger than the devotion of motherhood must indeed be great. There is no evidence to prove that any of our summer visitors breed in their winter quarters with the exception of the sand martin, so that doubtless the mere desire to perpetuate the species governs the flight north. This theory is based upon the fact, that while the flight south is led by young birds of the year, the journey north in the spring is led by old ones that have already known the joys and cares of parenthood.

Marked swifts have been known to build in the same chimney seven years in succession. Birds have a marvellous faculty for calculating time, as is proved by the fact that some species arrive and take their departure to a day, and this without reference to the weather, although it has been ascertained that they dislike a following wind as much as a head wind, on account of the disarrangement it causes among their flying and steering feathers. Why the kinglet sometimes migrates singly and at others in flocks is as inexplicable as the local limitations of the nightingale. The latter bird does not extend its range further west than the valley of the Eze, nor much further north than York. Birds are wonderfully conservative in their migratory routes, the quails pursuing the same course to-day as when they "came up and covered the camp of the Israelites." These great aerial highways are neither the nearest nor the safest to and from their winter resorts, according to man's judgment, but there is strong geological authority for supposing that their far-distant progenitors flew over narrow necks of land where water now exists. In clear weather birds perform their migratory flights at immense altitudes, but in dull weather, when neither moon nor star is visible, they fly low, and their ranks are thinned by enormous losses.—[London Speaker.]

Acute Vision of Birds.

Birds have very acute vision, perhaps the most acute of any creature, and the sense is almost more widely diffused over the retina than is the case with man; consequently a bird can see sidewise as well as objects in front of it. A bird sees—showing great uneasiness in consequence—a hawk long before it is visible to man; so too fowls and pigeons find minute scraps of food, distinguishing them from what appear to us exactly pieces of earth or gravel. Young chickens are also able to find their own food, knowing its position and how distant it is as soon as they are hatched, whereas a child only very gradually learns either to see or to understand the distance of objects. Several birds—apparently the young of all those that nest on the ground—can see quite well directly they come out of the shell, but the young of birds that nest in trees or on rocks are born blind, and have to be fed.—[Boston Cultivator.]

Popularity of Science.

As scientific research has so much to do with our daily life, our comforts, our health and happiness, as contributing so beneficially to our commercial profit and safety, it is not at all surprising that, not only the scientist, but the "average man," is constantly on the alert for everything pertaining to scientific affairs. Illustrative of this modern trend we find that the number of science schools in England has nearly doubled in the past ten years; the number of pupils has also more than doubled, and the payments to science schools on the results of the examinations have increased by more than \$30,000 since last year. This country being more progressive than England, there has doubtless been a much greater advance. In fact, technical, industrial and manual training schools have been opened in every important city, and the demand for such practical education is constantly increasing.—[Atlanta Constitution.]

"Torpedo Scissors."

"Torpedo scissors," a new form of torpedo net cutters invented by a Danish naval officer, have proved successful, it is said, in recent tests. They are fixed to the head of the torpedo and fall apart on striking the net, cutting it so as to let the torpedo pass through and strike the ship.—[New York Dispatch.]

JAPANESE AT HOME.

ROOMS MADE ANY SIZE TO SUIT AT A MOMENT'S NOTICE.

In Some Fine Homes Chairs and Tables Are Entirely Unknown--The Guests at Dinner Squat on the Floor--The Beauty of the Women and Their Beautiful Surroundings--A Description in Verse.

The Japanese home has been well described as a sort of dolly's house magnified to a thousand diameters. "All wood and wicker and white paper!"

Almost every house in Japan, however humble, has a garden. Some of these gardens are very beautiful, with huge leaved palms, shady maples, bending bamboos and bright colored shrubs and flowers. Bumblebees, broad-winged butterflies, half-tamed crows and sweet humming birds enliven the scene.

The entrance hall is a platform raised a couple of feet above the ground. Here the foreigner removes his boots and the Japanese his sandals. The divisions of the rooms are sliding panels, ingeniously arranged in the grooves to inclose a space at the pleasure of the house-



A JAPANESE VILLA IN THE EARLY MORNING.

holder. A large room can therefore be converted into a number of smaller rooms, and, as almost by magic touch, the room in which you have been sitting becomes divided into a number of sleeping chambers. Chairs and tables are almost unknown. The posture of repose is a "squat." At mealtimes you squat anywhere and your food is placed before you. When you are tired you throw yourself anywhere on the floor, with no fear of spoiling your white clothes. When evening comes you do not seek your chamber, but simply make it by sliding the wall round the spot you have chosen for your slumbers. In the morning you take a bath, and when you return bed and bedroom alike have disappeared! The panels have been removed. The bath is a great institution in Japan. A great tub of water, with a stovepipe running up inside of it filled with red-hot charcoal. There you sit until the pores are opened, and the cold douche follows!

The Japanese dinner is excellent. The dishes are endless. They usually begin with a dish of soup and another of fish brought in upon a lacquer tray. You drink the soup out of a bowl, and eat the fish with your chopsticks. After the dish comes another lacquer dish with four or five heaps of food. A small bird or wild fowl, some roasted chestnuts, a few boiled lily roots, and some stewed seaweed. Wine is always



GOING TO MAKE A CALL.

served with a good Japanese dinner, and the waiting girls take care that your cup is full. Still the dishes come in. Raw fish, green salads and sweet sauce. When you have well eaten and drunk to the full, then tea is served with small cakes, and the Japanese pipe follows. The Japanese householder is a social being. The festive meal is prolonged by a thousand jokes, roars of merry laughter and endless conversation.

In the houses of the wealthy the girl musicians and dancers entertain the guests during the dinner hour or immediately after. While you are sipping your tea, perhaps, you hear a flap of bare feet on the polished floor. It is the geisha or dancer. She twines herself round the corner, and at the threshold falls upon her hands and knees and bows her head to the floor in salutation to the guests.

Japanese dancing is chiefly posturing, with special attention to the management of the fan. The dance-

or interweaves her paces with but slight grace. Her steps are made upon the flat of the foot, the toes not being used more than in walking. Still, in the undulations of the body, the serpentine movements of the hands and arms, and in her complete pantomimic skill, the Japanese danseuse shows marvelous agility and skill.

The Japanese lady is a dream. Even so sober a judge of feminine beauty as the Rev. Mr. Simpson, of New York, author of "Larger Outlooks on Missionary Lands," writes:

"A Japanese woman is a pretty study. She is almost always small. Indeed, they all seemed to us like girls of 13 or 14. Their dress is very like that of the men—a loose robe, with immense sleeves that hang down like wings. This robe is folded around her person, left quite too open at the bosom, and fastened around the waist with a sash, which terminates over her loins in a great square bow like a butterfly. Her face is round and full and always pretty. Her complexion is generally rosy, her eyes small and almond-shaped, but bright and playful; her expression kind, frank and refined. Her hair is black as a coal, and usually combed up in front in a sort of pompadour fashion, and tied behind

From beneath her red jupon's elaborate sweep,
And a halp'n of tortoise shell, daintily to see,
On her brow place a circlet of gilt filigree.

Curious Property of Aluminum.

Charles Margot, preparator at the physical laboratory of the University of Geneva, has recently made a curious discovery concerning aluminum. He has found that if glass be rubbed with a piece of this metal, very brilliant markings will be obtained that no amount of washing will cause to disappear. This property of aluminum of adhering firmly to glass, and to silicious substances in general, is especially manifested when the rubbed surface is wet with water or simply covered with a stratum of aqueous vapor.

Mr. Margot has constructed a small aluminum wheel which revolves very rapidly and with which he makes designs upon glass after the manner of ordinary engravers. The designs are metallic, chatoyant and brilliant, and, by burnishing with a steel tool, they may be even made to have the appearance of metallic inlaid work. The adhesion is absolute. But it is necessary to see that the glass as well as the aluminum point are perfectly clean.

This property of aluminum permits of immediately distinguishing the diamond from strass. While, in fact, aluminum leaves a very apparent trace upon crystals of the latter, it has no action whatever on the diamond.—[Scientific American.]

Electrical Fishes.

Much work has recently been done on electrical fishes, of which there are about fifty species, though the electrical organs of only five or six species have been studied in detail. There are, besides the electrical eel, the torpedo and other rays, and the rasher, or thunderer, fish of the Arabs, which lives in the Nile, Niger, Senegal and other African rivers. The Nile is rich in these fishes, several kinds, more or less pike-like, having electrical organs, which have recently been examined by Fritsch. There are two distinct types of electrical organs. One is closely related in structure to muscle (torpedo eel and ray), while the other is more like a secreted gland, as in the thunderer fish. Both types comprise a great number of microscopic elements, each supplied with a nerve fibre, which pass out from the spinal cord or brain, and originate from large special nerve cells. The electricity is generated in the electric organ, but is only produced so as to give a "shock" when it is set in motion by nervous impulses transmitted to it from the electric centers by the electric nerve.—[New York Independent.]

The Modern Cowboy.

"The cowboy of the story writers, if he has ever existed, is practically extinct," says A. R. Frenzell, of Texas, at the Gibson. "I have been among them under all circumstances, and as a rule they differ but little from farm hands elsewhere. They wear sombreros as a protection from the sun, and these give them the picturesque appearance, but beyond a pistol and a knife in their belt, made necessary by the nature of their work, there is nothing ferocious looking about them. When they go to town, as they seldom do, most of them perform their errands and go home as meekly as a farmer in Ohio. A few of them will get drunk, but you can find much wilder characters in a city than you can among these much-talked about men of the plains. They usually drink quietly and go to sleep in a chair, remain there until morning and go home. There have been cases where men have terrorized Western towns and they are invariably reported as cowboys, when as a matter of fact they seldom, if ever, are."—[Cincinnati Enquirer.]

How to Air Apartments.

It is the general practice to open only the lower part of the windows of a room in ventilating it, whereas if the upper part were also opened, the object would be more speedily effected. The air in an apartment is usually heated to a higher temperature than the outer air, and it is thus rendered lighter, and as the outer air rushes in, the warmer and lighter air is forced upward, and finding no outlet, remains in the room. If a candle be held in the doorway near the floor it will be found that the flame will be blown inward; but, if it be raised nearly to the top of the doorway, it will go outward; the warm air flowing out at the top, while the cold air flows in at the bottom. A current of warm air from the room is generally rushing up the flue of the chimney, if the flue be open, even though there should be no fire in the stove; therefore open fireplaces are the best ventilators we can have for a chamber, with an opening arranged in the chimney near the ceiling.—[New York Times.]

Languages of the World.

It is estimated that the chief languages of the world are spoken by the following numbers of people: Chinese, by over 400,000,000; Hindustani, by over 100,000,000; English, about 100,000,000; Russian, 72,000,000; German, over 60,000,000; Spanish, 43,000,000; French, 46,000,000; Japanese, over 40,000,000; Italian, over 36,000,000; Turkish, over 25,000,000.—[St. Louis Star-Sayings.]

It has been computed that the death rate of the globe is ninety-eight per cent.