Berman Woman Encounters Lad by

Chance in Railway Station

In London

London.—A; well-known German, who is married to an English man, had a curious experience in

it was her intention to get her sor

and take him to France to study

She reached England in the first

days of the mobilization. As she got

out of her train at Victoria station

she saw a procession of naval cadets

pass along the platform. She stopped

Why, we are being mobilized,"

"Tell me, is Cadet X with you?"

The mother rushed over there

train, and she had only a few mi

soon found her son. He and his fel-lows were about to board an outgoing

to be with him. Then he left for a

seaport, and was put on a warship and commissioned a midshipman.

GANGRENE MICROBE IS FOUND

American Ambulance Service Bur

geons in France Make Discovery of Greatest Importance.

Paris.-A microbe causing gangrene

in bullet and shrapnel wounds has

been discovered by Drs. James Scar-

lett and Georges Designding of the

Previously initial cultures all were

impure, leading to the belief of scien-

tists that the disease was caused no

by a single germ, but by a combination

of germs. After much research and

experimentation on horses and guines

pigs, a single bacillus has been discov-

ered and isolated and the serum is

being prepared by Dr. Henri Weisberg

The discovery is expected in medical

circles to have world-wide importance

The serum is being injected into pa

tients on the battlefield in the early

stages of infection, obviating amputa-

tions and preventing a great loss of

GERMANY IS ALWAYS READY

Chicago Man Relates an Incident Illus-

trating Germany's Prepared

ness for War.

about the preparedness of the Ger-

mans for war. A Chicago man related

More than two years ago a subor-

dinate German officer of the army

was showing an American some things

about the German way of being al-

ways ready to mobolize. They came

upon an army wagon fully loaded.

Horseshoes were dangling from be-

"Where are your horses?" asked

"For this particular wagon," replied

the German, "one of the horses is at

John Smith's farm, the other at the

farm of John Jones. The shoes that

you see here have been fitted to those

Chicago.-Much has been

this incident:

neath the wagon.

the American.

of the Pasteur institute.

American ambulance service.

"I believe he is on the other side

the warships?" she demanded.

"That's what they say."

ed! You are not going to

one of the youngsters.

was the reply.

of the station."



By ALBERT S. GRAY, M. D.

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RIGG'S DISEASE AND VITALITY.

Next in frequency to the most prev alent human disease, carles, or tooth decay comes one very closely assoclated with it, known in dental literpyorrhoea alveolorais, or Rigg's disduring mastication, looseness of the teeth and pulp sensitiveness, or even pain on the ingestion of hot or cold root. The gum is swollen and soft, the tooth may be raised in its socket, and pressure brings relief. There is: a discharge of pus from between the tooth and gum on pressure, the teeth come loose, and, in course of time as the disease progresses and the al-veolar process (the tooth socket) is destroyed, they fall out.

Efficient mastication is, of course, impossible; hence not only is food bolted partly chewed and more or less mixed with pus, but the tissues in and around the teeth are deprived of exercise necessary to give them an adequate blood supply and they are thereby rendered less resistant to at-Tooth after tooth is involved and there is established another of those numerous vicious cycles that continually operate to drag us down.

Pyorrhoea is not a new disease: it gators, but it has become more prevalent during the last 50 years and it is find patients with more or less periodontitis. The disease is not confined lent among domestic animals.

A class of serious disorders has long trition could be named as the immediate antecedent in the case and in which it has vaguely been assumed that the diet must be at fault. Probably the most generally familiar of these diseases is sourcy. Scurvy has species, the bacillus anthracis. always been associated with a diet. The micro-organism bacterius always been associated with a diet The micro-organism, bacterium au-containing an excess of salted, smoked, thracis, gives rise to an infectious and or canned foodstuff, a monotonous dist devoid of fresh vegetables such as cabbage, onions, carrots, potatoes and these fresh vegetables have been credited with some power to ward off or at last to mitigate the disease, and limes and lemons are universally recognized as anti-scorbutics (scurvy preven-

Victims of scurvy suffer from severe gums and looseness of the teeth, and, of course, this opens the way to bacterial invasion and periodontitis. When we note that, as all observers agree. Improvement or intensification of the mouth diseases synchronizes with the individual, it is reasonable to suspect that the disease is not a strictly local infection resulting from local irritation or injury. It does not come from injuries received in chewing grit and sand or from soft food accumulating about the teeth; it comes as the re sult of lowered vitality from the lack of those organic compounds other than the proteins which Casimir Funk and other investigators prove to be presin fresh vegetables and and other juices, small quantities of which are absolutely essential to normal growth and continued health. The name given these compounds by Funk is well chosen in view of its root meaning: Vitamines. An "amine" is a nitrogenous compound of a certain type, and a vitamine is obviously such nitrogenous compound absolutely necessary to vitality.

The principles of evolution are universal and constantly at work, even in the minds of men, and we are slowly evolving out of the old idea of The investiga-'cause" and "cure." tions of Soddy in the chemistry of the radio-elements, of Twort, Penfold. Mme. Henri and others in the mutations of bacteria, make it quite clear that if medicine ever takes a place among the sciences it can come only as the result of a general habit of mind such as is found in the advanced sciences. In astronomy and in physics in general scientists have banished the term "cause" and have ceased to look for specific causes, because there are no such things. What scientific laws do is to state the functional relations between certain events at certain carefully refrain from dogmatism.

Electric Brush for Polishing Floors. | a letter, and asked, as a friend might ishing wood floors uses an electric mo- "To my mother," was the soldier's retor at the top and a large round flat ply. 'Ah! Give the letter to me," said brush underneath the motor, says the the king, "I will see it posted." And so Scientific American. To keep the mo- he did. Indeed, it is not the first time tor from turning about along with the that he has done so, for he calls his brush, there is used a steadying de- troops "comrades," and he means what vice in the shape of a pair of square he says. - Dundee Advertiser. shaped flat brushes at the sides of the central one. Each square brush is mounted on the end of a shaft projecting from the middle casing and is geared up so that the shaft works in involved." and out as a plunger, so as to produce a to-and-fro movement of the side and at the same time allows of moving the whole very readily over the floor by means of the long handle.

King Albert's Kindness,

A little anecdote of King Albert of Belgium is told in an Englishwoman's letter from Ghent. She says King Al- wear, parson, bert is not only a brave man, he is kind and thoughtful for others. He clothes, Sam. dresses like a simple soldier and goes about among his troops. Some days recognize his shirt and Bre'r Simpsot ago he noticed one of his men sealing his umbrelia!—Puck.

times and certain other events at

We know, for example, that sun beams are the ultimate cause of the revolving of a windmill, but no man can state the origin of the particular puff of air that causes a wheel to re-volve at a certain speed at a certain time. Neither is it possible to put one's finger on the exact point at which we enter or leave the vital current of life. The wise man takes no chances and simply sticks close to This means eating simple, properly prepared, unprocessed foods.

CHANGES IN BACTERIA AND DIS-EASE.

The universal property of irritability, which is simply the power to respond to stimuli, makes all organisms the result of the interaction of two sets of factors-the factors of inheritauce and the factors of environment.

The factors of inheritance cover all ature as periodontitis, better known as the complex association of properties or capacities transmitted from the parease. This disease, characterized by ents which make up the specific inheri-a more or less general infection of tance characteristic of each individual; the membranes within the tooth sock- the factor of environment on the other et, is indicated by a slight tenderness hand covers all those conditions which are capable of influencing the differentiation, growth and behavior, or, in other words, the general metabolism, drinks because of the exposure of the cementum, the external shell of the be compared to everything that leads of the organism. The inheritance may up to the production of a blank phonograph disk; the environment and stimuli may be compared to everything acting through the needle which cuts the dots and dashes into the surface of the disk. Obviously the final result, or the individual, must be the product of these two sets of factors and in exact accordance with the quality and capacity of the disk, the hardness or softness of the needle and the amount of power behind it.

Since the germs of disease are living organisms they also must be subject to the laws of evolution, and in this fact we have proof of the assertion that every man makes his own disease; because no two can be exactly alike, they must vary widely in space and time. Not only does each individual human being vary, but each species of bacteria varies from time was recognized by the early investi- to time, so that the well-known diseases cannot be the same in different localities or in different generations. the rule rather than the exception to Proof of this has recently been furnished in the work of Twort and Penfold, who have "educated" the typhoid to man, but is also extremely preva- fever bacillus to ferment sugar, which ordinarily it does not do. Revis has obtained varieties of the bacillus coli been known in which failure of nu- structurally and physiologically different from the parent by prolonged cul-ture in various media. Very recently Madam Victor Henri has produced marked mutations in a particularly well defined and stable bacterial

usually fatal bacterial disease in animals, especially in cattle and sheep, characterized by ulcerations of the the like. As the result of experience, skin, enlargement of the spicen and general collapse, a disease generally known as spienic fever. Man occasionally contracts the disease by inoculation from the animal. Carbuncle, malignant pustule and wool sorters' disease are caused by the anthrax bacteria. The normal bacterium is a long physical exhaustion, soreness of the rod shaped micro-organism having marked and characteristic reactions. Mme. Henri has modified the organism with the ultra-violet light. The method employed was to expose an aqueous (water) suspension of anthrax spores in a quartz tube to ultra violet radiarise and fall of general health in the tions for times varying from one to forty minutes and afterward growing cultures from these mixtures.

The majority of the organisms were killed by this treatment because the ultra-violet rays were markedly bactericidal, but a few survived and acording to the conditions and the length of the exposure the bacilus underwent modifications and showed characteristics decidedly different from the typical anthrax bacillus. The principal of these were a c and a thin filamentous form. These two forms constitute two new types which Mme. Henri has isolated, and they remain stable for about three months. They produce anthrax which has characteristics distinct from those of the anthrax produced by the nor mal bacillus.

The normal anthrax microbe lique fles gelatin, curdles milk and takes definite stains. The filamentous form does not liquefy gelatin, curdle milk or take the same stains, and it produces an infection different from the anthrax on inoculation. This form re mained absolutely fixed and stable after a daily subculture for more than eighty days; but though stable in the incubator after passage through an animal coccold forms taking a stain similar to normal anthrax bacteria appeared and, after subculture in broth a certain number of bacillary forms approximating the typical anthrax were obtained.

Inasmuch as all the above points clearly to the fact that diseases are only relative conditions, we should

An improved electric brush for pol- ask another: "To whom do you write?"

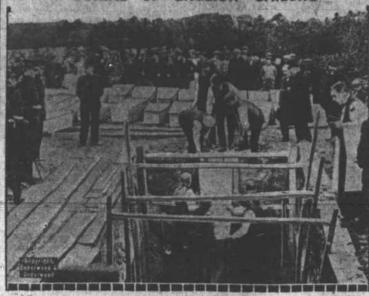
"I must confess that I con't under stand Henry James. His style is so

"I'll tell you how to go about read ing him. First run over a life in brushes. This steadies the whole set ance policy. After that Henry James will seem lucid and clear."-Kansas City Star.

> Unsuitable Garments. Parson Johnson-Why don't yo come to church, Sam? Sam Shinn-Notain' suitable to

> Parson-The Lord won't notice yo Sam-No; but Deacon Butts might

BURIAL OF ENGLISH SAILORS



Scene at the burial of forty-three English sailors whose bodies drifted ashore at Gravenzande (Heok of Holland). The men were members of the crews of the Gressy and other British vessels sunk by the Germans.

IN AIR MARKS DIRIGIBLE'S ENI

How "Republique" Went to Her **End Graphically Described** by Writer.

BOMBS DROP FROM CLOUDS

Terror-Stricken Citizens See French Machine Burst Into Flames After, Spectacular Fight, Then Go Out in Darkness and Night.

The following word picture portraying a phantom night battle between airships, and the terror of a municipality under an aerial bomb attack, comes from Berlin, aithough it was written on the scene described herein. Owing to the strict European censorship, however, the correspondent was not permitted to give the name of the town about which he writes so graphically.

Berlin.-The little French town is ying asleep. It can do so in safety, because the patrols are awake. But on the other side of the mountain there is no sleep. The place is humming like a beehive. But there is perfect order. Every one is at his place. They are preparing for the march.

Patrols have returned with the report that the plain is free from the enemy. The little town is the place they mean to march to. They think the town is empty. The fact that the French had come in had not been made known. They came out of the forest, through which they marched during the night; and early in the morning they marched in, hidden by the vineyards.

Now the town is a small camp Every house a fortress. The superior officers have taken up their quarters in the city hall. All lights are out. The mayor asks: "Why?

"Because the Germans have airships. The mayor makes the sign of the

He has heard of the Zeppelin. "But we also have airships," the layor says.

The French captain nods: "One of them will go up this night It will fly over the hills to visit them

over there." At night the officers are entertained by the town. All townfolks of distinction are present. The notary makes a passionate speech about the brave cries; walls fall into ruins; the people army. The colonel thanks him in the are bewildered. name of his comrades. He speaks highly of the town and its hospitality. Two hours later, only the men on

guard are still on their legs. But the mayor did not go to bed; also, the clergymen and notary are waiting. What for? For the Republique.

This is the famous aeroplane of which the captain spoke. Night Dark and Windy.

The sky is dark and overcast with thick clouds. Only from time to time he dim light of the moon steals through these dense masses. But quickly it grows dark again. The wind whistles through the forest and through the vineyards into the town, banging shutters and doors.

Where is the Republique? The townsfolk have been waiting now for an hour, with their eyes fixed on the dark sky-but nothing-noth-

Now they hear a peculiar noise re ounding through the darkness from above. They stretch their necks. But their eyes are unable to penetrate the farkness. They listen intently.

The humming and buzzing become more distinct. It sounds as if a gigantic bird were rapidly moving forward on his wings. Now they see some-thing-or do they only believe they see it?-floating through the air like a torpedo. The French mayor would like to shout for Joy, "Vive la Republique!"

Now the buzzing has turned into rattling and crackling. It seems to the mayor as if he saw small lights, flickering, extinguishing and flaring Now all has disappeared again in the darkness; only the buz- night!

French and Germans Engage in Pleas

in Fighting.

antries in Trenches During Lulls

Paris.-Despite the horrors and dis-

comforts of the situation the French

and German soldiers who have been

facing each other for many weeks in the trenches on the banks of the Aisne

zing still is heard—the heavy stroke

of the wings of the gigantic bird.

But behind the mountain the Germans are on the lookout. The guards at the aviation post don't know sleep The eyes of the officer at the tele graph are as bright-now as at noon. Now a spark and the writing lever splutters dashes dots.

He has sighted the Republique! A shrill whistled signal gives the alarm

The Republique must not pass ove the mountain. They will try to catch her or drive her back at least. Brief commands are given—precise instructions. A few minutes later a heavy biplane stands ready to start. A short examination of the wire

and supports, then the pilot and observer take their places. The motor is started, the apparatus staggers in vide jumps over the ground, and suddenly it shoots up with a last power ful pull. It disappears into the dark The compass needle shows the way. They fly higher and higher; ridges of the mountain become visi-ble as a long, dark strip. Now the biplane passes over them in smooth flight. It keeps in the dark. The wind blows against it. The apparatus goes still higher. Now the moon breaks through the clouds for a mo nent, giving a quickly disappearing track of light, enough to show the

The enemy is discovered. Now caution and courage are needed. Perhaps the French airmen have likewise seen the German. Then there will be a life and death struggle.

Republique at a distance.

But as a matter of fact the Republique has no warning of the approach of the German biplane, which is flying as wift as an arrow, going higher an ever faster.

Like two birds of prey swooping upon one another they come. The bl plane is more easily handled. The ob sarver looks into the darkness with sharp eyes; the apparatus moves for ward in roaring and rushing flight. Where is the Republique?

Hurls Bombs on Town.

Another hour passes. Then the German biplane is directed earthward. Below lies the little town like a dot. The apparatus descends lower and lower. The searchlight sends a flash over the ground like lightning.

The mayor, who has not yet gone to bed, hastens to the window. Another flash of light. He fooks up, sees only a shadow. But they in the aeroplane have seen enough-men and guns And now something falls down from the height, like a stone, not aimed. but yet a hit. The missile bursts, a fire sheaf throws up sparks; splinters, cracking. The mayor starts back thunderstruck, cries, rushes out. Flames break out on the market; more

Soldiers receive commands. Now shots go whizzing up toward the German biplane.

Another bomb is thrown to the ground, causing death and destruct officers of the regiment. tion, and leaving paralyzing horror.

The German biplane, however, has disappeared in the aerial ocean. It is to be greatly disliked by the aristoin full flight. It tries to come up with cratic caste officers. the Republique. It ascends in a wide curve. Suddenly there is a buzzing noise before it. It must be the Frenchman. It seems that he got lost in the dark. A yell of triumph escapes the observer. The apparatus mounts quickly in a spiral curve. Indeed, it is the Republique!

The German airship Victoria now is like a hawk measuring the distance Now the searchlight plays, and it sends flashes of light over the Repub-Hque.

Bombs are thrown. The observer watches them in the quick light. One sinks into the night; another one also; but the third one make; a hit-It strikes the stern!

The Republique, unable to fly over the enemy, moves along with diminishing speed.

Now the Victoria is preparing for the finishing stroke. It swoops down like an eagle, sure of its pre. airship seems to stand on end. And now bomb after bomb drops

down with almost mathematical exactness. The Republique groans and writhes from her gaping wounds. She peared recently with headlines in the is mortally hurt. The linen covering the wings hang about the rods like trade-marks. The signature of the flesh cut to shred. Now it blazes up— a gigantic firework. Then the French airship goes out in darkness and missing.

The placard bore this inscription:

Good day to the Frenchmen.

the line, and Antwerp is taken?"

you know Russia is beaten all along

The Frenchmen smiled. A French

JOKE, THEN KILL EACH OTHER; the French lines a horse around whose I German trenches," says this subaltern. neck hung a large placard and several well-thumbed. German newspapers. We also frequently play tricks on each other when we can, omitting to

> Copenhagen.-1 wo snipyards Kiel, the Germania and the junior offices says that in the enemy's trenches not more than thirty or forty yards away from his own the Gerare building 30 armored lighters capa ble of carrying 500 men each and tray



BERTHA KRUPP, GUNMAKER



It is a strange thing that in the great European war one side personi-fles its destroying force as a charming young woman and the other as a venerable old gentleman.

It is "Bertha Krupp" who fights for the Germans and "Papa Creusot who fights for the French. The German soldiers often say "Bertha is talking again" when they hear the shrick of the terrible Krupp guns and the French soldiers say "Papa Creusot is giving the Germans a lesson.

Of course, everybody knows that Bertha Krupp is the principal helress of the great Krupp gun works at Es aso, probably the greatest establishment of its kind in the world. The name "Papa Creusot" is really taken from the place—Le Creusot—where the French guns are made.

The Baroness Bertha Krupp von Bohlen, or, as she will always be known, Bertha Krupp, is unassuming, charitable and beloved by all those Bertha is one of two sisters, the only

children of the late Alfred Krupp, the gunmaker of Essen. Because of the act that the kaiser, recognizing the gunmaker was an important factor in the empire, acted as godfather to Bertha, she has received more attention and is better known than her sister. The young matron is noted for the charities that she supports with her immense fortune. From the income from the manufacture of the big guns which breathe destruction a fraction is set aside by Bertha Krupp to help some of her 50,000 pensioners. A large orphan' asylum is supported by the Krupp money. When Bertha Krupp was to be married she was so important a personage that the kaiser took upon himself the role of Cupid and arranged her marriage to Baron Gustav von Bohlen Halbach, in whom he was interested.

The present war must be regarded as the crowning achievement of "Bertha Krupp." Not only have the Krupp works furnished a vast amount of efficient field artillery to the Germans, but they have supplied the enormous siege guns that only could have enabled the Germans to smash the French

forts opposed to them.

Whichever side wins it seems that both "Bertha Krupp" and "Papa Creusot" will profit enormously. It was shown some time ago that the Krupp works were spending \$200,000 a year to popularize the idea of war among politicians and writers. They are now reaping the benefit of this expenditure.

PLANS EXPLORING EXPEDITION

Cant. J. Foster Stackhouse, F. R. G. S., F. R. Z. S., F. R. S. G. S., etc., is now organizing an expedition that stirs the blood of every real adventurer. For six years he and his companions will forget civilization and its luxuries and sail away into virtually unknown parts of the world. Their reward will be a trip to all the even seas, visits to islands and territories still untrod by the feet of white men, discovery and adventure in every latitude from the equatorial Pacific to the Sea of Okhotsk and then back again to the Antarctic-and glory. They will have a chance to study the oceans as they were never observed before, and they will be participants in the principal object of the voyage, the discovery and mapping of 2,500 pnknown islands, rocks and reefs in the Pacific, reported from time to time by

skippers and never officially charted. The expedition is known as the

British-American Oceanographic expedition, and it will make its voyage in the Discovery, the ship in which Captain Scott made his last and fatal trip to the Antarctic regions. The vessel is now fitting in London. Next May it will sail from New York, down to the Panama canal and out into the Pacific, where trade routes will be explore for about three years.

GERMAN OFFICERS FEW NOW WHEN KEY PITTMAN WAS IN NOME

Rules for Promotion From Ranks Are Modified to Make Up the Shortage.

Bordeaux.-O dispatch from Geneva to the Temps says that owing to the enormous losses in officers the German military authorities are now permitting the promotion of non-commis sioned officers and even private soldiers who distinguish th the face of the enemy to the rank of officer on the simple recommendation of a colonel and without the previous submission of the nomination, as here tofore, for the approbation of other

This is supposed to be a concession of a democratic nature and is certain

SAVES SEVEN OF THE ENEMY

Wounded German Rescues French men and Becomes a Hero In the Hospital.

Paris.-"Among the wounded men from the fighting on the Yser was a young German with a bloodless, intellectual face. His head was a mass of bandages. He had just been taken from a Red Cross train and placed tenderly in a bed in an improvised hospital. The nurses gathered around him, some of them in tears.

"'He saved the lives of seven French soldiers.' This, written on a blood-stained sheet of packing paper pinned upon a blanket, told that the young German was a hero. That was all the French ambulance men found time to tell us"

Paris.-After passing through

censor's hands, the Intransigeant apfirst column of an article on German writer, Leon Bailby, also appeared, but the entire text of the story was The column was simply

use our rifles."

Germane Build Lighters.

occasionally indulge in a little pleas-antry. Germans, sheltered in con-crete lined quarries, chazed toward



In the early and rough days of Nome, Alaska, Key Pittman, who now is the junior senator from Nevada, served a term as prosecuting attorney. Naturally he acquired a large acquaintance among the lawless ele ment and its members, in turn, gained a high respect for the legal abilities to jail. The quite natural result was that after his term as prosecuting attorney closed he found himself in com mand of a large criminal practice: Among his clients were a number of the leaders of the rough and morally irresponsible crowd who turned to him to extricate them from the troubles in which they frequently found themselves. Too often, however, they falled to pay the lawyer for his services, and finally Mr. Pittman grew tired of working for them for nothing. In those days in Nome coal was

sold largely by the sack and was very

Shortly after the arrest of a notoriously shady character for the theft of 180 of these precious sacks, one of the accused man's pals came to Pittman to retain his services. "Look here, Jack," replied Pittman. "I'm tired of working for you crooks for nothing. I'm neither a millionaire nor a philanthropist. You get some one else to defend Chick."

"We'll pay you for this," replied Jack. "We've got the stuff to do it." "Is Chick innocent?" queried Pittman, "Sure, he's as innocent as a babe," came the encouraging reply.

"Well, how much do I get for defending him?"

"Mr. Pittman, if you get Chick off we'll give you half the coal."

MAN OF THE HOUR IN TURKEY

Enver Pasha, minister of war leader of the Young Turk party and son-in-law of the sultan, stands forth just now as the most prominent figure in the Ottoman empire. He is one of the four actual directors of the destinies of Turkey, and the most forceful of the three. He is said to be consumed by ambition and to be lieve himself to be a man of destiny He affects the genius of Napoleon, and dreams in secret of converting the actual Ottoman directory into a consulate. In the role of first consul he would then change the consulate into an empire, following the example of

Enver, who was born in Roumelia only thirty-five years ago, is the hero of the Tripolitan war. Also he was the assassin of Nazim Pasha, the gencralissimo of the Turkish army. Nagim belonged to the Old Turk party. Honest, patriotic and brave, he re sented the very best in the Turk. His

©

the members of the directory. They have spilled the blood of their adver-saries ruthlessly and many shocking murders are laid at their doors. The people hate them bitterly and the sultan fears them intensely, so the news that they have been slain would cause no surprise at any time, and relatives of Nazim are many.