LUMINOUS BACTERIA.

THE QUEER LIFE WHICH MAKES THE SEA PHOSPHORESCENT.

How These Immeasurable Millions of the Smallest Living Organisms Divide and Multiply — Air a Necessity For Their Flashes of Silvery Fire.

Nature dazzles the eye of man with many wonderful phenomena, but perhaps never more so than when she turns the gloomy night waters of the sea into a sheet of silvery fire. It is only lately that any very serious effort has been made to study his phenomenon, but the research has been abundantly rewarded, for it is now pretty certain that the luminosity is due to the presence in the water of various kinds of bacteria.

Now, bacteria are the very smallest living organisms of which we have cognizance. Millions of them can lie on a penny. Therefore to produce the gleaming appearance recognized by us as phosphorescence they must be present in numbers too enormous even to contemplate with our finite minds. It would be immeasurably easier to reckon with the stars for multitude than with those phosphorescent bacteria. They are colorless, rodlike bodies, only known to us in the land revealed by the highest powers of the microscope, and careful comparison shows minor differences among them. For instance, some of them are capable of independent motion—we can hardly call it swimming—others are nonmotile, some are inclosed in a jellylike covering, and others are without this sheath. Their power of motion is probably due to excessively fine hairs at their extremities, which, moving to and fro in the water, act the part of oars. These cilia have not been found in all forms of bacteria which move, but their presence is suspected, since every advance in the study bridge an forms increases the number of present. h are seen to possess them.

Councilman it producing bacteria are the meeting to bacteria, and so far some Messrs. J. J. varieties have been distin- Faulkner, the named. The names in such present. The bids wly either given from the lo- City Clerk J. ir appearance (thus, photo It is difficulticum, found in the Baltic), lowest bid discoverer (for example, photo submitted Fischeri, after Professor Fisch- specification some striking attribute (to cern. The bacterium phosphorescens, the a report est light giving species). member should they lie at the bottom of the mat- ginee that phosphorescence is due to their bace—has been and can be proved in ley, pretty ways. It is not sufficient, with that we should always detect by examination of luminous sea To prove that they are the cause we must be able to procure lumi- by introducing them into water that cost of previously show this quality, and half of be done thus:

the Cite a few of these tiny organisms into sea water or broth prepared from fish and keep at a suitable temperature. They can then be cultivated without much difficulty, and as they spread and develop phosphorescence appears, so that a removal of the vessel into another room shows unmistakably the glow of the familiar light. It only appears, however, at the surface of the liquid, where the oxygen of the air has free access to the bacteria. If, for experiment's sake, the supply of fresh air be cut off—that is, if no oxygen be allowed to come near them—then the little colony of bacteria loses its fascinating power and remains dull and shorn of its glory. But restore the air, and the microbes again recover their normal condition and luminosity seems a natural corollary.

There is a tale told that a woman whose husband made bacteria his study took a leaf out of his book and cultivated these bacteria on gelatin in such a way that as they developed they shone out the message "Hommage a M. Pasteur." The shining letters were then photographed and the picture sent to the great bacteriologist, thus conveying in graceful form the warm appreciation in which he was held by those following in his steps.

The explanation, too, of the luminous shoals of fish is now made plain, and we can apparently get "fiery herrings" at will. No longer are we to believe that the herrings themselves, by the exercise of some marvelous power or by the excretion of an extraordinary substance, give rise to the striking luminosity, but rather that their brightness is due to myriads of these infinitesimal bodies, which cling to their surfaces and invest them in a coat of shining light. Thus if some herrings newly caught and with the sea water still fresh on them be placed on one plate and covered down with another and then put into a suitable temperature and left for a day and a night glints of light can at the end ... to be detected at various points away for bodies when they are examined in light room. If they are yet again put ... another 24 hours, the points of light ... until the whole of the fish are 193; AA ... in a beautiful bluish glow. The 912; BBL then at its best and gradually bid $31,219; as the fish putrefies and the $33,319. The dries up.

track ov ... ttle of the light giving matter be scraped off the skins of the herrings and examined under the microscope, it shows itself to be nothing but colonies or collections of bacteria, all living at a great pace, dividing, multiplying and developing at a ... us rate. Each member of a colony ... normally roundish in shape, but in the stage of reproduction it is continually ... ting into a long ellipse, a constriction appears at the middle, and it divides ... Each of these two in their turn ... become constricted and divide. elongate, be ... s on, the process being often And so it go ... short chains are formed, the so rapid the ... rtions being unable to break ... in time. The particular bacterium which affects herrings and cod is remarkable for its great luminosity. In fact, it exceeds all other species in this quality.

It is a curious fact that the addition of a little sugar to the liquid or the gelatin on which these phosphorescent bacteria are being cultivated increases very much their power of producing light. The sugar must, however, be used with great moderation, as too much of it has a contrary effect and checks the luminosity altogether. The reason for this is that nearly all this class of bacteria require carbon as nourishment if they are to develop to their highest powers. Now, sugar is very largely composed of carbon; hence the good results which follow its presence.

It would of course be presumptuous and doubtless erroneous to say that all the phosphorescence of the sea is due solely to photo bacteria. It can only be asserted in the present state of our knowledge that they are certainly responsible for a great share of it. But this wonder of nature must now be regarded as yet another instance of the mighty results accomplished through the agency of the smallest of living things.—G. Clarke Nutall in Nature.

A Good Job Coming.

Jeweler—How was your boy pleased with the watch I sold you?

Fond Father—Very well, sir. He isn't ready to have it put together yet, but be patient. I'll send him around with it in a day or two.—Jewelers' Weekly.

The longest lived people have generally been those who made breakfast the principal meal of the day. The stomach has more vigor in the morning than at any time.

Half of the umbrellas used in the country are produced in Philadelphia; 12,000,000 is said to be the number produced annually in this country.

WHEN I AM DEAD.

When I am dead, my dearest,
Sing no sad songs for me.
Plant thou no roses at my head,
Nor shady cypress tree.
Be the green grass above me
With showers and dewdrops wet,
And if thou wilt remember,
And if thou wilt forget.

I shall not see the shadows,
I shall not feel the rain,
I shall not hear the nightingale
Sing on as if in pain,
And, dreaming through the twilight
That doth not rise nor set,
Haply I may remember,
And haply may forget.
—Christina G. Rossetti.

DIFFUSED ILLUMINATION.

The Plan Used In the Library of Columbia University.

There has been ever since the world emerged from the dim light of the tallow dip a desire for more and more brilliant illumination, without color, without shadows and yet with abundance of light. This light for best effects should come from as many directions above the line of sight as possible. In interior illumination the floors and side walls should therefore be dark, the ceiling as light as possible and the illumination should come from as many sources as practicable. If one direction only is available, then the opposite wall should be kept light to give reflection. Few people realize that a "dead white" surface reflects about 80 per cent of the light which falls upon it, and, therefore, that a white wall or ceiling is an excellent reflector, and, in fact, absorbs much less light than does any transmissive diffusion apparatus, such as ground glass globes, etc., which often absorb 40 to 60 per cent of the light impinging upon them.

A desire for diffused illumination for bringing out the architectural effects of the new Columbia University library led to the following design for this purpose: A white opaque sphere 7 feet in diameter was suspended from the middle of the dome, 85 feet above the floor, by one-quarter inch steel rope, the latter being entirely invisible from below. To all appearances the sphere floats in the air. The globe is a framework of wood covered with veneering and coated with a white matt surface wash, its general appearance being that of a ground glass surface. This is illuminated to an intrinsic brilliancy of from 75 to 300 foot candles by rays from eight Colt projection lanterns placed in eight equidistant corners of the four upper balconies.

These lights are boxed in so that only the projecting lens is visible. Each of them throws a disk of light 6 feet 6 inches in diameter upon the sphere. The eight disks overlap so that the whole sphere seems to glow with a pale, diffused light. The effect is beautiful in the extreme. The surface seems translucent, and the light seems to come from a certain depth within and to bathe the whole globe with a warm light. As the globe floats below the ceiling it is difficult to locate it. Whether it is near by or a moon in the clear sky miles away is left to the imagination. This is not intended as a light by which to read, the tables all having reading lamps, but it is possible to read with considerable ease on the floor of the reading room by the light of the sphere alone.

A crude test gives the approximate candle power as about 500, but the light is so white and so agreeable that it gives one the impression of greater power. The eight lamps take about 150 amperes, the whole lighting of the main reading room taking about 300 amperes, while the central room of the Congressional library at Washington, about 10 per cent larger, requires nearly 900 amperes.—Progressive Age.

How High Is Your Chair?

Some curious experiments have been made by a Harvard professor to prove what is really the best height for the chair you sit on and the desk you write at. Every person, it appears, ought to have a chair specially made to suit his or her height, and the seat of the chair should be exactly one-quarter of your height from the floor. Thus if you are 6 feet high the chair seat should be 18 inches. The width of the seat should exactly equal its height, and it should slope backward three-quarters of an inch to the foot. The back should be a trifle higher than the seat and sloped slightly, not too much.

Finally your desk should be two-thirds as high again as the seat of your chair. Thus if your chair seat is 24 inches the desk should be 40 inches in height. When you have attended to all these little details, you can sit and write all day without feeling that backache that comes from chairs and desks that don't fit you.—Boston Traveler.

Unprofitable Counterfeiting.

Dishonest people work harder for smaller profit than honest ones. The secret service has discovered that counterfeit 1 cent pieces are being made. When the old copper cents were in use, they were about the same value in weight as the metal itself, but copper has grown cheaper, and the cent of today is only one-third of the old fashioned one. A man or woman working very hard can turn out about 500 of these cents in one day. Besides the cost of the metal is the cost of the mold and of the chemicals used in finishing them, the entire amount being about one-quarter of the face value. Upon this statement the counterfeiter would clear only $3.75 a day, but the trouble in "shoving the queer," as they call passing the counterfeit, is extremely great, so that the malefactor is usually obliged to get two or three assistants to help him. This would reduce the pay to about 80 cents a piece for a hard day's work.—New York Mail and Express.

A Mountain of Gold.

The most famous and most puzzling of all gold mines is Mount Morgan. It is supposed to be the product of a hot water spring and is simply a mountain of gold, but of gold that has already been treated by nature. In some faroff age the hill has been a huge natural crucible and all the gold it contains has been already mined, chemically dissolved and precipitated by nature herself. All the gold ever discovered in the mountain exists in a sort of golden flour dissolved through ironstone. —London Answers.

She Cut His Hair.

"Sammy," said Delilah determinedly, "hereafter I intend to cut your hair myself. You give up altogether too much to that Dutch barber."

Samson's subsequent appearance, amid the ridicule of the Philistines, brought down the house.—Philistine.

Whales' Ages.

The age of whales is ascertained by the size and number of laminae of the whalebone, that increase yearly. Ages of 300 and 400 years have been assigned to whales from these indications.

WONDERFUL MINING TOOLS.

James Bray, an Expert Blacksmith, Has a Unique Collection.

What probably constitutes the handsomest and most original set of miner's tools in the city, if not in the west, is in the possession of James Bray, who is an expert blacksmith, as his work shows, made each article of the collection himself and were he anything but the modest man he is the praise which every exhibition of the tools evokes would turn his head to an inordinate and dangerous degree.

The tools are seven in number, and consist of three pole picks of the kind used by experts to break off samples of rock and four candlesticks. The eyes and straps of two of the picks are forged from one piece of steel, and the manner in which the wood of the handles is worked into the straps is quite a puzzle. Particularly is this the case with one of the picks, which has four straps and shows the same number of apparent divisions in the handle. One mining man after carefully examining the tool gave it as his opinion that the wood was simply inlaid. The prompt offer of Mr. Bray to bet $50 that only one piece of wood constituted the handle and the straps were forged around and his willingness to allow the tool to be cut to pieces in proof of his assertion caused the other man to change his mind, and he declined to bet.

As much ingenuity as is displayed in the manufacture of the picks, it is completely overshadowed by that manifested in the composition of the candlesticks. One of them is made so that it can be taken apart and fits into the end of the handle of one of the picks. Another has a regular pistol grip in place of the ordinary loop or ring and can be closed up something after the manner of a clasp knife. A cover working with a spring fits over the socket into which the candle is inserted and is so arranged that as soon as the candle is consumed even with the top of the socket the cover flies forward and extinguishes the candle.

In addition Mr. Bray has still another folding candlestick made to be carried in the pocket. It is so arranged that either the hook or spike can be used, or both can be folded back and the stick carried in the hand. Still another stick, which is covered by a patent, has a knife attachment connected with the hook for cutting fuse, an arrangement for splitting the fuse and ripping open the paper that covers giant powder, in case it is found necessary to crowd it into a small hole, and also an appliance for crimping the cap. This stick is also provided with the automatic extinguisher.

So far as novelty is concerned the gem of the collection perhaps is a folding stick with a horn handle and is called "the puzzler." A puzzler it is indeed, for as yet nobody has been found able to open it, although, according to Mr. Bray, fully 9,000 people have attempted the feat. Two miniature copies of the first mentioned folding stick complete the collection. One of them when closed is less than one inch in length and can be worn as a watch charm, while the other is a trifle larger and heavier.—Anaconda Standard.

The Way to Dock a Catboat.

Making a dock will not be simple, on account of the necessity of killing the greater part of the boat's way before touching the dock. In general this is done by approaching at an acute angle to the line you purpose to make the dock on and rounding up abruptly by putting the rudder hard over and letting the sheet run to spill the wind out of the sail. This abrupt turn serves to kill nearly all the headway and should leave only enough for the boat to carry up to the dock. The remaining headway is checked by going up in the bow and "fending off."

The abruptness of the turn and the amount of room allowed for rounding up will vary according to the wind and can only be acquired by practice. At first there will be just as much liability of your killing the headway too soon and having to get an oar out to pole up as there is of not killing it sufficiently. In the latter case, if you see the boat after rounding up has too much momentum for you to check easily by standing in the bow, drop the centerboard and weigh on it. The dragging of the board on the bottom will form a most effective brake.—Harper's Round Table.

The Feet of Beauty.

She was an immigrant, sitting on a bench in the Barge Office eating a large semicircular section of pie, but she was a study for a painter. Small, slender, with the metallic brown tint which the Italian sun had burned into her peasant face and hands, she was dressed in a combination of cornflower blue, the color of her eyes, and rose pink. Her gown was blue with a rose colored handkerchief about the shoulders, and another figured in pink and blue twisted around her head. The delicate yet bright color set off her brown skin and her eyes to perfection. She was really charming—unless you happened to glance at her feet.

From under the edge of her cornflower kirtle appeared frankly a pair of brogans that would have done no discredit to a 6 foot Irishman. They were men's boots, such as many of the Italian peasant women wear—number 11 at least, whereas the fair creature who wore them was certainly less than 5 feet high.—New York Commercial Advertiser.

Grimm and Women Students.

The well known historian of art, Professor Hermann Grimm of the University of Berlin, explains why he refuses to admit women to his lectures. He says that during the 25 years that he has been lecturing to students he has grown into a certain method of presenting things. But when he sees women among his listeners he is embarrassed. He often has to put things in a different way and could not speak freely, as he formerly did. If he were younger, he would try to adapt himself to the changed conditions, but for the two or three semesters of active work that still remain before him he does not think it worth while. And then he offers a reminder of how much help he has given to young women students who have come to him privately for it.

She Knew Him.

While Charles Dudley Warner, as it is related, was a guest at an old time southern home near Nashville he expressed a desire to see a real, typical negro. So the most loquacious old "aunty" was brought in. To the surprise of every one she would not say a word beyond "Yes, sah," or "No, sah."

After the departure of the distinguished guest she was asked the reason of her silence. With as much dignity and scorn as a grande dame "aunty" replied:

"Ugh! I wa'n't gwine talk to dat Yankee. I knowed him soon's I seed him. He's de very one dat stole mistiss' silver du'in de wah."

Willing to Yield.

The Troy Times tells of a little girl who had been naughty. When bedtime came, her mother said to her, "Now, Mabel, when you say your prayers, be sure to ask God to help you not to be a naughty little girl." Mabel promised that she would add this petition to her prayers. So when she had finished her usual form she spoke as follows:

"And now, O God, please keep Mabel from being a naughty little girl." There was a pause, then she concluded, "Nevertheless thy will, not mine, be done!"

A Servian Custom.

In Servia there still survives a wonderful old institution known as the Zadruga. It is the living together of a whole tribe, numbering sometimes as many as 100 persons, all under the absolute authority of one chief. He keeps all the money, makes all purchases and decides the minutest details of family life. As a family grows the home has at be enlarged, and sometimes it stretches the whole length of a street.

There are many curious things sold in the Russian markets, and one can buy eels and snakes and chicken legs. Lambs' feet are sold as a great dainty, and calves' feet are bought for soup.

Switzerland has a special academy, established by an association of hotel keepers, at which every winter 30 men are specially educated for the hotel business.

HEALTH FOR TEN CENTS!

FOR THE FAMILY.

"I take pleasure in praising your valuable remedy CASCARETS. I and my whole family received relief from the first small box we tried. I certainly recommend CASCARETS for the cures they make and trust they will find a place in every home. Yours for success." PETER WEBB, Jr., Palm Grove Ave., McKeesport, Pa.

FOR CHILDREN.

"I shall never be without CASCARETS. My children are always delighted when I give them a portion of a tablet, and cry for more. They are the most pleasant medicine I have ever tried. They have found a permanent place in my home." MRS. JOHN FLAGEL, Box 680, Michigan City, Ind.

FOR PILES.

"I suffered the tortures of the damned with protruding piles brought on by constipation with which I was afflicted for twenty years. I ran across your CASCARETS in the town of Newell, Ia., and never found anything to equal them. To-day I am entirely free from piles and feel like a new man." C. H. KEITZ, 1411 Jones St., Sioux City, Ia.

FOR HEADACHE.

"Both my wife and myself have been using CASCARETS, and they are the best medicine we have ever had in the house. Last week my wife was frantic with headache for two days; she tried some of your CASCARETS and they relieved the pain in her head almost immediately. We both recommend Cascarets." CHAS. STEDEFORD, Pittsburgh Safe & Deposit Co., Pittsburgh, Pa.

FOR BAD BREATH.

"I have been using CASCARETS and as a mild and effective laxative they are simply wonderful. My daughter and I were bothered with sick stomach and our breath was very bad. After taking a few doses of Cascarets we have improved wonderfully. They are a great help in the family." WILHELMINA NAGEL, 1137 Rittenhouse St., Cincinnati, Ohio.

FOR PIMPLES.

"My wife had pimples on her face, but she has been taking CASCARETS and they have all disappeared. I had been troubled with constipation for some time, but after taking the first Cascaret I have had no trouble with this ailment. We cannot speak too highly of Cascarets." FRED WARTMAN, 5708 Germantown Ave., Philadelphia, Pa.

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CANDY CATHARTIC

Cascarets

CURE CONSTIPATION

REGULATE THE LIVER

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This is a gift of friendship and appreciation to the many friends of CASCARETS CANDY CATHARTIC, whom we can reach in no other way. **ANY ONE** who will mail the direction slip out of a 50c box of CASCARETS, or two direction slips out of two 25c boxes to the manufacturer's address **CAN OBTAIN** absolutely FREE, a gold-plated, hand-enameled bonbonniere just like the cut shown herewith, certainly a beautiful specimen of the jeweler's art. **THIS HANDSOME PRESENT** is especially fitted for a lady's dressing table, as a handy and convenient receptacle for that ideal laxative, liver stimulant and intestinal tonic, CASCARETS Candy Cathartic.

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not only with the bonbonniere, but with its contents. CASCARETS are so mild, so fragrant, so palatable, so pleasant, yet positive in their action, that they form the only proper laxative for ladies, children, and the household in general. Any one unable to obtain direction slips as above, by purchasing from their druggists, send us 50c in stamps, and receive a 50c box of CASCARETS with

BONBONNIERE FREE. STERLING REMEDY CO., CHICAGO, MONTREAL, CAN., NEW YORK.

FOR CONSTIPATION.

"I have gone 14 days at a time without movement of the bowels. Chronic constipation for seven years placed me in this terrible condition; I did everything I heard of but never found any relief until I began using CASCARETS. I now have from one to three passages a day, and if I was rich I would give $100.00 for each movement; it is such a relief." AYLMER L. HUNT, 1689 Russell St., Detroit Mich.

FOR BILIOUSNESS.

"I have used your valuable CASCARETS and find them perfect. Couldn't do without them. I have used them for some time for indigestion and biliousness and am now completely cured. Recommend them to every one. Once tried, you will never be without them in the family." EDW. A. MARX, Albany, N. Y.

FOR WORMS.

"A tape worm eighteen feet long at least came on the scene after my taking two CASCARETS. This I am sure has caused my bad health for the past three years. I am still taking Cascarets, the only cathartic worthy of notice by sensible people." GEO. W. BOWLES, Baird, Miss.

FOR DYSPEPSIA.

"For six years I was a victim of dyspepsia in its worst form. I could eat nothing but milk toast, and at times my stomach would not retain and digest even that. Last March I began taking CASCARETS and since then I have steadily improved, until I am as well as I ever was in my life." DAVID H. MURPHY, Newark, O.

FOR LAZY LIVER.

"I have been troubled a great deal with a torpid liver, which produces constipation. I found CASCARETS to be all you claim for them, and secured such relief the first trial that I purchased another supply and was completely cured. I shall only be too glad to recommend Cascarets whenever the opportunity is presented." J. A. SMITH, 2920 Susquehanna Ave., Philadelphia, Pa.

FOR BAD BLOOD.

"CASCARETS do all claimed for them and are a truly wonderful medicine. I have often wished for a medicine pleasant to take, and at last have found it in CASCARETS. Since taking them my blood has been purified and my complexion has improved wonderfully, and I feel much better in every way." MRS. SALLIE E. SELLARS, Luttrell, Tenn.

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FODDER IN THE TREE TOPS.

Cattle In Hawaii May In Time Develop Scansorial Attributes.

A cow cannot climb a tree—undoubted fact in natural history. Yet if environment can effect what some believe it can a few generations of cattle in Hawaii are likely to evolve a race of scansorial kine, for the common fodder for cows and horses grows on trees.

There are only two directions in the islands of the Pacific, and everybody uses the terms windward and leeward as glibly as if bred aboard ship to use sailors' English. In Hawaii these two directions are distinctly marked—on the windward side of every island, tropical rains, growth of green things to jungle luxuriance; on the leeward side, drought rarely broken, scanty grasses precariously existing in a sun baked soil, for most months of most years sere and brown. But as not every one can live to windward, and it seems a pity to let so much leeward go to waste which might otherwise be good, the algaroba tree has been introduced from the African aridities and has made cattle ranching a successful possibility on the dry lands.

Priests of the French mission were the introducers, they having become acquainted with its value in Algeria. As its name shows, it is the Carob tree of the "Arabian Nights," the source of most people's knowledge of things Arabic. The tree grows most luxuriantly in most Hawaiian soils and bears continuously the year around. This is a matter of particular importance, for it is the fruit which is of value. The tree grows to the height attained by large maples and branches luxuriantly so as to shade a considerable area, and as the leaves are both abundant and large, there is formed a protection against the heat which stock appreciate. The fruit is a large fleshy pod filled with beans the size of a horse chestnut. It is upon the pods and the beans that cattle feed. This fodder is so satisfying that for long periods cattle are fed on nothing else and reach market in prime condition.—New York Sun.

AN INGRATE SOLDIER.

His Cowardly Action, However, Was the Making of a Nobleman.

Here is a story of the battlefield. There was war between the Swedes and the Danes. One day a great battle was fought and the Swedes were beaten and driven from the field. A soldier of the Danes who had been slightly wounded was sitting on the ground. He was about to take a drink from a flask. All at once he heard some one say:

"Oh, sir, give me a drink, for I am dying!"

It was a wounded Swede who spoke. He was lying on the ground only a little way off. The Dane went to him at once. He knelt down by the side of his fallen foe and pressed the flask to his lips. "Drink," said he, "for thy need is greater than mine."

Hardly had he spoken these words when the Swede raised himself on his elbow. He pulled a pistol from his pocket and shot at the man who would have befriended him. The bullet grazed the Dane's shoulder, but did not do him much harm.

"Ah, you rascal!" he cried. "I was going to befriend you, and you repay me by trying to kill me. Now I will punish you. I would have given you all the water, but now you shall have only half." And with that he drank the half of it and then gave the rest to the Swede.

When the king of the Danes heard about this, he sent for the soldier and had him tell the story just as it was.

"Why did you spare the life of the Swede after he had tried to kill you?" asked the king.

"Because, sir," said the soldier, "I could never kill a wounded enemy."

"Then you deserve to be a nobleman," said the king. And he rewarded him by making him a knight and giving him a noble title.—"Famous Stories Retold."

The Waste of War.

A shell thrown from a 24 ton quick firing gun rushes through the air at the velocity of 4,900 feet per second, striking its object with a force equal to that of 11,230 tons falling one foot. And yet, comparatively speaking, they are very harmless. Thus, during the one day bombardment of Alexandria by the British fleet of 12 ships, lasting from 7 a. m. to 4:30 p. m., no less than 3,165 shells were thrown into the town, yet not more than 800 Egyptians were killed—that is, it took, roughly speaking, six shells to kill one man.

Again, during the Franco-German war, the Germans threw 30,000 shells into Belfort, killing only 60 Frenchmen, or 500 shells to kill one Frenchman. At Strasburg, in the same war, it took 18 shells to kill every man. And at the siege of Paris 110,000 shells killed only 107 and wounded 209.

Weighting a Horse's Stern.

Some of the officers and men of a vessel once anchored in the harbor of Funchal, Madeira, went ashore for a horseback ride around the island.

About half way up the mountain we came across a little mizzentopman, flushed and evidently very warm, riding a spirited little horse, with a stone tied up in a silk handkerchief slung to his tail.

The first lieutenant laughed and said, "What are you doing with that handkerchief, Brown?"

"Why, you see, sir," said Brown, "that when I first hitched her up she pitched badly, being too much by the head, so I just rigged this stone on aft and brought her down to her bearings, and she sails now like a clipper, sir."—"On a Man-of-war."

In No Danger.

As a picturesque description of that mediocrity which nothing can inspire, Zion's Herald quotes the remark of Father Taylor to a divinity student who had taken the place temporarily of Boston's famous "sailor preacher."

After the sermon, as they descended the pulpit stairs, the student asked:

"Father Taylor, what did you think of my sermon this morning?"

Approaching him in a fatherly way and placing his hand on the student's shoulder, he replied:

"My dear brother, if your text had had the smallpox, your sermon could not have caught it."

Economy In Food.

The most economical mode of preparing food is a due mixture of meat and vegetable substance in the form of soups, but no man should live upon soup alone any more than he should live upon meat or fine flour bread. Health, as well as appetite, requires variety

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The deterioration of the garnet and topaz is much more rapid than that of the ruby, but it takes a different form. While the garnet becomes lighter the topaz turns cloudy and dull and loses all its brightness.

LAFAYETTE'S GOOD MEMORY.

He Remembered a Room He Had Not Seen For Fifty Years.

Washington's headquarters at Newburg, a small old fashioned Dutch house, fronting the Hudson river, is now owned by the state of New York. In repairing it care was taken to preserve the ancient form of every part that was renewed. The front door opens into a large, square room, which was used by Washington for his public audience and as a dining hall. It is remarkable for having seven doors and only one window.

In a recent publication, "A Godchild of Washington," the author quotes from the New York Mirror for 1834 an interesting anecdote connected with this room. Its authority is Colonel Nicholas Fish, a soldier of the Revolution and the father of Hon. Hamilton Fish, secretary of state under President Grant.

Just before Lafayette's death he was invited with the American minister to dine at the house of Marbois, who was the French secretary of legation to the American colonies during the Revolution. When dinner was announced, the company were shown into a room which contrasted strangely with the elegance of the other apartments.

A low boarded, painted ceiling, with large beams, a single small, uncurtained window, with numerous small doors, as well as the general style of the whole, gave at first the idea of the kitchen or largest room of a Dutch or Belgian farmhouse.

On a rough table was a repast, which consisted of a large dish of meat, uncouth looking pastry and wine in decanters and bottles, accompanied by glass and silver mugs, such as indicated other habits and tastes than those of modern Paris.

"Do you know where you are?" said the host to Lafayette.

He paused for a few moments—he had seen something like this before, but when and where?

"Ah, the seven doors and one window! And the silver camp goblets, such as the marshals of France used in my youth!" exclaimed Lafayette. "We are at Washington's headquarters on the Hudson 50 years ago!"—Youth's Companion.

FISH AS FOOD.

There Is No Evidence That It Supplies Phosphorus to the Brain.

Why is fish called a brain diet? Does it really nourish the brain more than other articles of food? What kinds of fish are best in this respect, and does the method of cooking make any difference—that is, is boiled or fried fish better?

A chemical examination of fish shows that it contains a considerable amount of phosphorus. A chemical examination of the human brain shows that it also contains a considerable amount of phosphorus. From this fact the chemist jumps to the conclusion that fish must be especially good as a brain food, but there is not the slightest experimental evidence to support this theory. On the other hand, it is a well attested fact that those communities and tribes of men which subsist most largely upon fish are the lowest in the scale of human development. The Tierra del Fuegians live almost exclusively on raw fish and are perhaps the lowest of all human be... A young student in a western college once wrote to Artemus Ward asking how much fish he thought he should eat to supply his daily mental needs. The wit replied that he thought a small whale would be about suited to his requirements.

Fish, like other forms of flesh, are most digestible eaten raw, but as few palates could tolerate the flavor of raw fish it may be suggested that broiling or boiling is the next best method of preparation. Fried fish, like fried beef, is almost wholly indigestible, as the fat renders the lean or albuminous portion of the fish almost wholly incapable of digestion by the gastric juice. —Voice.

The Mile In Many Countries.

The English mile, used also in this country, measures 1,760 yards, or 5,280 feet. But the mile of foreign countries varies almost as much as the language, so that traveling a mile is one thing either shorter or longer, in other countries. The French system of the "kilometer," or 1,000 meters, is also used in Belgium and Holland. To cyclers and others traveling in those countries the kilometer—equal to 1,094 yards—is used as a mile measure. The Spanish mile is 1,522 yards, and the have the easiest time of all in making a mile record, their mile being only 609 yards. In Norway and Sweden the mile is 11,690 yards, and in Germany it equals three English miles. Other differences are: Italian, 2,025 yards; Portuguese, 2,250; Austria, 8,297, and Denmark, 8,238.

SHERMAN'S FAD.

How He Got the Reputation of "The Great American Beau."

"General, I never understood how it was you came to gain the reputation of 'The Great American Beau.' Won't you enlighten us?"

The question tickled him. The seamed face dissolved into wrinkles, and after laughing in his silent way for a minute or two he said:

"Well, now, you will be surprised when I tell you that that whole thing was the work of General Grant, but it's a fact. Just after the war closed Grant asked me to take a ride with him in Washington behind a horse he had just bought and of which he was very fond. As we spun down the avenue I said, 'See here, Grant, now that the piping times of peace have come we must choose a fad.'

"'What are you driving at, Sherman?' he asked.

"'I mean to say that if we don't fix upon something the public will do it for us, and it may not be pleasant.'

"'Well, it is pretty generally known that I am fond of horses. I suppose that will answer for me. What have you in mind?'

"I told him I had fixed upon nothing as yet, but would try to do so. Meanwhile I asked for his help. He said he would be glad to serve me.

"Now, what do you suppose Grant did?" asked Sherman, with pretended indignation. "Why, he made straight for the newspaper correspondents and told them that I had formed the resolution to devote the rest of my life to earning the name of a gallant for all the young ladies in the country. At the same time he intimated to the newspaper men that he would take it as a personal favor if they would do what they could to spread the news. It would doubtless be of assistance to me, and he was sure I would appreciate the kindness.

"Well, those correspondents didn't need any urging. The whole thing was heralded from one end of the country to the other, my first knowledge coming from the papers themselves. I saw through the whole thing, though Grant tried to play innocent. Ah, he was a sly wag, but," added Sherman, "I forgave him, and I find the work of trying to live up to the reputation he made for me the most delightful pursuit of my life."—Edward S. Ellis in Chautauquan.

Wales as a Mimic.

They tell a rather good story about his royal highness the Prince of Wales. One morning he was taking a walk in St. James park before breakfast when he found himself followed by a well dressed but crazy looking old woman. Having seen this woman before, and probably guessing what her object was, the prince resolved to take no notice of her, but continued his walk until obliged to turn homeward. The woman immediately stood before him and courtesied. The prince raised his hat and tried to pass on.

"I have a grievance, your royal highness," began the stranger, producing from her hand bag a roll of closely written parchment.

"Ach, madam, thees is not zo first time I have been taken for ze Prince of Wales!" was the reply in a gruff voice, with a strong German accent.

After flashing a glance of deepest scorn upon him, the old lady put away her precious documents, remarking, 'I have the honor to have known all the members of the royal family, and if my eyesight were not becoming bad nowadays I should not have made such an astonishing error as to take you for the prince." The Prince of Wales again took off his hat, smiled and proceeded on his way.

Irish Legal Wits.

The mots of the celebrated wits—Harry Deane Grady, Lysaght and Keller—of the Irish bar early in the present century are now in large measure forgotten. Some few are, however, on record. Harry Deane Grady, a leader of the Munster bar, voted in the Irish house of commons to support the union against the wishes of his constituents, one of whom remonstrated indignantly with him on his intended course of action, "What, do you mean to sell your country?" "Yes," was the cool reply, "and very happy I am to have a country to sell."

Ned Lysaght, a celebrated wit and poetaster of the period in very embarrassed circumstances, applied to Mr. La Touche, the well known banker, for a place in his establishment. "What situation, my dear Lysaght, could possibly suit you?" said his friend, who felt himself in a difficulty. "Not only one, but two," was the reply. "Pray what are they?" "If you will only, my dear La Touche, make me cashier for one day, I'll become runner the next."—London Law Notes.

Gladstone Nicknames.

A collection of the nicknames that were from time to time conferred upon Mr. Gladstone would be a fine dictionary of epithets alike of love and dislike. Besides such perennials as the Grand Old Man, "the G. O. M.," and the People's William, we recall the Franchise Bill, the Pope of England, St. William the Woodcutter, the Mahdi of Midlothian, the Old Parliamentary Hand, the People's Will, Mr. Merrypebble, the Ancient Senator, Youart the Man, Hawarden Bill, Prime Billy, W. G., the Only William and the Old Gentleman. At one time his name was a favorite theme for Christmas charades, among which may be remembered the following elegant outburst of a Conservative wit: "I should be my first, if I could throw my second at my whole."

A Good Collector.

A Lewiston young man tells how he secured his place as collector for a large house in that city. He was working for $3 a week for an Auburn man and used to collect bills. He had a bill of $8.50 against a rich Lewiston man, and whenever he went to collect it the man never had the change. But he kept right after him till he worried the life nearly out of the man. One day the Lewistonian paid him and told him he never wanted to see him again and ordered him out with strong language.

A week later the same man sent him an offer of $16 a week to do collecting and assistant bookkeeping and added, "You're the best collector I know."—Kennebec Journal.

Shoved Back the Tide.

"Bletherin Bobbie, a Dumfarlin cairter," went down to Charlestown one day for a load of sand, but to his dismay found it was high water, and none could be got. After pouring out the vials of his wrath on the harbor master for allowing the tide to rise he went home with his empty cart. Coming back next day when it happened to be low water, he exclaimed:

"Aye, this is something like the thing. The best o' folk's nane the waur o' bein spoken to."—Dundee People's Journal.

As to Noses.

What is the standard of nasal beauty? Men are proud of their aquilines, but they forget that stern and portentous beaks failed to save Rome. They swear by their straight Greek noses, heedless of the fact that the once warlike Hellenes are today weaker than sucklings. The Tartars, who have no noses to speak of, thought the wife of Genghis Khan the loveliest woman in Asia because she had only two holes where her nose should have been. The women mostly admired by men of today have pug noses. When Cary sang the baldheads held out their arms to catch her, for, with her "nez retrousse" elevated over the footlights, she seemed in the act of springing into their embraces. Mirabeau had a nose as broad and as flat as that of a Hottentot, but he was a great man with the ladies. Gibbon had no nose at all, yet there was not a man of his time so successful with the fair sex.—New York Press.

Quite a "Character."

Here is a "character" given to a servant on leaving her last situation: "The bearer has been in my house a year, less 11 months. During this time she has shown herself diligent at the house door, frugal in work, mindful of herself, prompt in excuses, friendly toward men, faithful to her lovers and honest when everything was out of the way."—London Tit-Bits.

Proved.

De Million—I must say I am very much disappointed in you. You told me before when you were married you would prove that you had business ability.

Du Percly—Well, my dear sir, I proved that when I married your daughter.—Baltimore Jewish Comment.