

OCEAN'S DEEPEST SPOT.

A PLACE HAS BEEN FOUND OVER FIVE MILES DEEP.

What Kind of Fish Live Here?—Scientists Ask if They Are Eels, and Whether a New Fauna and Flora May be Found.

The deepest spot in the ocean has been found. More than five miles of wire ran out without the bottom being reached. Then the wire broke. This spot was recently discovered by the surveying ship Penguin, near the Friendly Islands, in the South Pacific. Commander Balfour, of that ship, reports that this remarkable discovery was made in latitude 23.40 south, longitude 175.10 west. When he first discovered this extraordinary hole, which so far as we know now is bottomless, Capt. Balfour attempted to take the depth and the sounding line was run out.

After 4,300 fathoms had run out over the side of the ship, the wire broke, and a rising sea and wind prevented any further attempt of the kind being made. Upon the second attempt he managed to pass 4,900 fathoms, or 29,400 feet of the wire over the ship's side, before the wire broke, and put an end to the experiment.

The deepest spot in the ocean previously known was close to the coast of Japan, where a sounding had been made of 4,655 fathoms. This is 245 fathoms, or more than 1,400 feet shallower than the deep hole which has now been discovered.

How much deeper it goes than 4,900 fathoms no man can know. It is a piece of water more than

FIVE MILES DEEP.

What the pressure must be at the bottom no scientist has yet been bold enough to conjecture.

There is no glass instrument that could resist this pressure. It would be impossible with the most improved scientific appliances to take the temperature at this enormous depth.

No living thing that is known to science could exist at a depth so great as this, where the pressure must be equal to many hundred or thousand foot tons, sufficient to squeeze the life out of any fish. Even brass and iron instruments lowered to this enormous depth would be twisted and distorted.

The most painstaking work in low-such as this will not suffice to keep it from breaking. This is because of the friction of the water against the wire.

In spite of every appliance of balance and spring in the machinery on deck, designed to counteract the motion of the vessel, the increase and decrease of pressure caused by rising and falling on a wave will snap the strongest wire when it has been lowered to so great a distance.

All of the water at the bottom must support the weight of the water on top of it. The consequence is that the water in the lowest depths is compressed under enormous pressure.

The theory has been advanced that some strange

UNKNOWN CREATURES

may live in this highly compressed water. There may be fish of a kind so peculiar that they cannot exist closer to the surface, where the water is thinner and the pressure less.

Through countless ages of living in the darkest, deepest depths of ocean these fish may have evolved forms and natures unknown to men of science, because hitherto such vast depths have been unexplored. What the bottom of such a place may be like is only a matter of conjecture.

It may support a fauna and flora of its own. It may have its own plant and animal life, which some daring scientist will bring to light to astonish and amaze the scientific world.

Here, where there can be no light, the fish, if fish there be, must be eyeless, like that queer breed of fish which Darwin cited existing in the rivers of the Mammoth Cave, but still, under the scalpel of the scientist disclosing what is known in biology as a "rudimentary eye." The fishers of these deepest depths may have rudimentary eyes and rudimentary lungs.

They may have been pressed hard and flat like a pancake by the enormous weight of the water above them and may indeed move about by a method as strange and curious as was that of the kangaroo when first brought to the attention of Europe. These are questions for the scientific world to solve. They have been brought to the front by the discovery of the Penguin at a spot in the ocean deeper than any that has been known hitherto.

Sala's Eventful Life.

The late George Augustus Sala was patted on the head by Wellington; heard Malibran sing and Paganini play; saw the coronation of Queen Victoria, and lived to celebrate her jubilee; saw Louis Philippe while he was still king of the French; witnessed the second funeral of Napoleon; gazed on three revolutions in the French capital; saw old Czar Nicholas at the Ascot races; attended the funeral of the assassinated Alexander II, and lived in Russia when there were millions of white serfs there; followed Garibaldi in his campaign in Tyrol; was in the Franco-Mexican war, and at the storming of Puebla; heard the first Turkish constitution proclaimed in Constantinople from the steps of the old Seraglio; listened to Daniel O'Connell in the London Tavern; spent thirteen years in America during the civil war and met Lincoln, Seward, Sumner, Greeley, and Grant, as well as Jefferson Davis, and was a friend of Dickens and Thackeray.

Right in Style.

Mrs. De Style—My dear, your hair needs trimming a little.
Mr. De Style—Too cold! Phew! Everything is frozen solid this morning. Where's my fur muffler?
Mrs. De Style—Where are you going?
Mr. De Style—To Stall & Feeders, to tell them to send a man around to clip our horses.

NOW IT'S FALSE EYELASHES.

False Eyebrows, Too, Are Produced by a Needle and a Thread of Hair.

The very latest false thing in the way of feminine adornment is false eyebrows and false eyelashes, which are put in—not on—with such cunning art that even the closest scrutiny will not discover the imposture.

At present the employment of this new discovery is limited to a small number of lyric and dramatic artists in London and Paris—for the pain is considerable, the process slow and costly—but, like everything else, it will doubtless spread and in due time find its way across the Atlantic to these shores.

It was a Parisian coiffeur, it is said, who discovered the method by which hairs can be planted, one by one, where they grow thin upon the eyebrows and in the places where eyelashes are missing or short. It is said that, when shaded by these long lashes, ordinarily good-looking eyes take on a soft languor that is irresistible, and that fine eyes have their beauty much enhanced by this device.

THE OPERATION

by which new eyelashes are put in is as follows: Armed with a fine needle, in which is threaded a hair of the same shade as those which it is to replace—a hair plucked from the head of the victim is generally used—the operator attacks the extreme edge of the eyelid, between the epidermis and the light, fatty hem which borders it. The needle passes in and out along the edge of the lid, leaving its hair thread in loops of carefully graded length.

When this is done the ends of these loops are cut off and trimmed, and the result is a fine, thick, long set of eyelashes. It is the finishing touch, however, which is to come which makes them seem like nature's own. When they are first cut they stick out in the most singular fashion, giving the person a peculiarly weird and uncanny look, like a wax figure. To remedy this the operator's next step is to take a pair of tiny silver curling tongs, no larger than knitting needles, and give them the exact curve which is essential to perfect beauty.

The lower lid is operated upon in the same way. Then the patient's eyes are carefully banded for ten hours, and the following day there is no trace of the operation. It is claimed that these false lashes will stay in, and with frequent touchings up with the tiny curling tongs will look extremely well for six months. Then the process has to be gone through with again.

Eyebrows are doctored in practically the same way, though if the customer prefers he may avoid the pain and hours of enforced seclusion by having the place where his new supercilii adorne him to be, treated with some chemical which it is dangerous to use on the lids, and which makes the operation on the eye brows painless.

The composition of this lotion is a secret, and its inventor, knowing he has a good thing, does not neglect to charge as much as he can get, and many people prefer to suffer the physical pain instead.

OUT OF THE ORDINARY.

The University press at Oxford has appliances for printing 150 different languages.

Postmen mounted on bicycles collecting letters from the pillar boxes may be seen in the West End of London.

There is a professional woman diver in Gravesend, England, who often makes as much as \$35 a day in her strange calling.

Five Mormon missionaries left Salt Lake City a few days ago bound for New Zealand to establish a mission among the Maoris.

Corn is being used as fuel in central Iowa, the farmers claiming that the prevailing price would not repay the cost of husking and marketing.

Ten years ago there were 7,000 lakes and ponds in Minnesota. One-third of these are now dry, and the others are largely shrunken in area.

A Chesterville, Me., couple recently celebrated their golden wedding in the very house into which they moved on their wedding day, fifty years before.

A Kansas district has written a contract with a teacher to teach the school, chop the wood, make the fire, sweep and find the matches for \$35 a month. The teacher is a woman.

Of the 4,914 sealskins brought into Port Townsend, Washington, during the season just closed, 3,650 were of female seals, an indication of the rate at which the seal herds are being destroyed.

The Bank of England has 1,160 officials on its payroll, which amounts to about \$1,500,000 a year, and 1,000 clerks. If a clerk is late three times he receives a warning, the fourth time he is discharged at once.

The weapon of the swordfish probably served as the model for one of the earliest forms of the sword. Many early swords, particularly among the marine nations, were edged with the teeth of sharks.

Three times as many American horses have been sold in England this year as were called for in 1894, and their average price at the ports of shipment has been \$155. They are used chiefly for draught in London.

A novel document was filed in the office of the county recorder at Sedalia, Mo., a few days ago. It is a paper wherein Mrs. Belle Asher apprentices her daughter, Letha Ashewer, 9 years old to Mary Jane Love, "to learn the trade and art of dressmaking."

J. L. Allen, a telegraph operator at Loretto, in Marion county, Ky., has invented a railroad clock that is a marvel of ingenuity. It registers each train as it passes, and an accompanying device gives warning to incoming trains if another train has passed the station within fifteen minutes.

Joel Connors, an old resident of Darke County, Ind., who died recently, instead of being very poor, as he said he was, had nearly \$10,000 in gold. His wife did not know he had accumulated the money until just before he died, when he told her of it. He did not definitely describe its hiding place, and what has been found was widely scattered.

THE FARM.

Value of Crop Rotation.

The farmer of to-day who wishes to succeed must keep up the fertility of his land or failure is inevitable. The benefits to be derived from a specific rotation of crops is too little understood by the average farmer. The importance of adopting a specific rotation is more apparent when we become familiar with certain relations that our soils sustain to the animal kingdom. Different crops extract from the soil different elements of fertility. We have all seen practical examples that substantiate correctness of this theory; for instance, we have seen farms given up to the production of a single crop until they no longer gave profitable yields. But when a different crop was planted, or a rotation of dissimilar crops commenced these lands produced abundantly. The average productiveness of our soils is diminishing. They are in bad mechanical condition, and are lacking in fertility. A full knowledge of this should lead to a search for methods by which not only our present standard of fertility may be maintained, but a higher standard secured and indefinitely held, in which clover (that life-giving and healing balm for old worn-out soils) should always be given the first place. By constant cropping we long since exhausted the fertility of our soils. It was calculated by nature to not only furnish a vast store of fertility to our soils, but to put them in such mechanical condition that they might be easily reduced to a fine tilth, and at the same time assist in liberating the latent stores of fertility. Plant growth is the transformation of inorganic into organic substances. All plants require certain elements for their growth, but not all in the same proportion. The combustible parts of all plants contain nitrogen, oxygen, hydrogen, and carbon; all these except the nitrogen of some plants are received directly from the atmosphere. We cannot add the exact amount of necessary elements and be sure the plants will extract them, for we cannot know the required chemical action of the heat, moisture, etc., which are beyond our control. Nitrogen is the element most likely to be absent in sterile soils, and if it can be supplied the fertility of the soil is renewed. Hence we should have in our rotation a crop that is able to supply a vast quantity of humus, in order to change soils from their present obstinate tendency to a more tillable character. Clover is well calculated to do this, and because of its being an excellent and safe antecedent of any grain or vegetable crop, it should be found first in order of every rotation, whatever the further order may be. Clover is a nitrogen-storing plant, and I would advise a four or five years' rotation. By this, if our clover is so fostered as to develop an abundant growth of both roots and foliage, and the plant allowed to return humus to the soil in vast quantities by plowing all, or nearly all, of the crop down, and in addition to this, if all the barnyard manure (carefully saved) that it is possible to manufacture by feeding all the coarse products of the farm to stock is applied, we should not only be able to maintain, but to constantly increase the productiveness of our soils, which is the only safe basis on which we may build, even hope for continued success in the business of farming. For if we keep on taking away and adding nothing to the soil, we will soon have not enough left to let our friends know where we are. A man with a limited capital has as good a chance of drawing indefinitely on his bank account, as the farmer has of reaping an indefinite number of grain crops from his land, without the certainty of getting both Summer fallowing, which has usually been looked upon as a first-rate way of adding to the fertility, is, in the main at its best, only a means of rendering more quickly available the dormant stock of undeveloped fertility which nature has slowly accumulated. A moderate application of barnyard manure is frequently found equal to fallow as a stimulant to the production of a paying crop of wheat. But the underlying secret of success of both methods is that the capital account in the shape of fertilizing material is being worked off, and nothing put back to replace the perpetual drafts made upon it. The rapid exhaustion of decayed and decaying vegetable matter, tends to alter very much the mechanical condition of the soil, and the alteration is always in the wrong direction. Rotation, the best way by which crops can be had with the smallest waste of fertility, is not only the best course for preventing soil exhaustion, but the best means for preventing the multiplication of weeds and insects. My rotation is clover, corn, oats, wheat. It is hardly safe to lay down a single rule or mode for every body, or for all kinds of soil. Care should be exercised in adopting a rotation to know that the crops grown are of such a character that your soils are well calculated to produce. It will be the wisdom of a practical farmer, if he gives heed to the truths which science demonstrates, and realizes the results deduced by the scientific investigator alike from science and observation. And it is of the highest importance that we should look far enough ahead to avoid shipwreck. A week or two of severe drought in the growing season means failure more or less disastrous, for every farmer who undertakes to produce a succession of grain crops, even with the help of occasional summer fallows. This is the age of specialties and specialists. The most successful business men are they who attend strictly to their own particular business instead of venturing into numerous outside enterprises or speculations. So in the agricultural world, we must make our work a business, and conduct it on business principles if we would make it pay. For to succeed now-a-days we must be complete masters of what we undertake, and unless we devote our entire time to it cannot achieve the necessary mastery.

Cows Choking.

Occasionally a case of choking occurs, perhaps from cattle accidentally obtaining access to the whole roots or tubers,

or in a case where, from disease of the oesophagus, other food material may cause choking, but for the most part among breeders who do not use a pulper, and who either give their roots whole or roughly cut up with a hatchet. The last-mentioned plan is perhaps the worst of all systems of feeding roots, as they are cut into irregularly-shaped chunks, provided with plenty of angles, that tend to their impaction in the gullet. Cattle biting a mouthful out of a big root have to chew it, and it is generally small roots and tubers, and irregularly-cut pieces, that cause choking. If you have had much trouble with cows choking it argues a bad system of management, for where ordinary care is taken choking is practically unknown; unless, as we have said, from accident or disease of the oesophagus, causing dilation or stricture of the gullet. It is not customary to feed potatoes whole, nor is it desirable, for of all food material the class of potatoes fed to stock are the most liable to cause obstruction. Potatoes given to cattle should be fairly clean as a quantity of soil or stones is calculated to cause digestive derangement. If they are clean enough to feed they are clean enough to pulp. In the absence of a pulper, and where they are being fed raw on a small scale to any class of farm stock, they may be rendered safe by smashing them. How best to proceed when choked depends not a little on the position of the impacting body and its nature. An instrument is by no means always essential in a case of choking, but it is as well to have one and to know how to use it in case of emergency, or when the symptoms are urgent.

Horses and Sheep.

Most farmers and stockmen will admit, we suppose, that the prospects of breeding the above two classes of live stock are not now, and have not been for some time past, especially roseate; yet let us venture the prophecy that any intelligent persistent breeder who keeps right steadily at his business, will make a fair thing out of the venture in the years to come.

It is folly to leave one branch of live stock business for another, when other men are doing the same thing, so that prices are utterly demoralized. Nothing but loss can be the result of such a procedure. The time to buy is when every man wants to sell, the time to sell is when every one wants to buy.

A short time ago, stockmen were tumbling over one another trying to dispose of sheep, practically giving them away. Of course any sane man could see that the outcome of such a practice must sooner or later make sheep paying property. So just hold on to your sheep, that is, all the best of them, the sooner the culls go the better; but the good ones feed up and breed up and be ready to take the reward. Mutton sells well even if wool is too low for profit.

So with horses, the market for poor, medium and common stock is not worth much; but a good round-bodied, cobby, short-legged, sound animal, so wanted even now at a fair price. So also with large draft animals, well put together.

In conclusion let the point be emphasized. Give the market what it wants and horses and sheep will still be found of value.

ITEMS OF INTEREST.

Some of the French railroads transport wine in bulk in tank cars.

Four-fifths of the cotton crop of the world is produced in the United States.

The Sultan of Turkey has just been presented with a sumptuously-equipped horseless carriage.

Miniature Indian corn grows in Brazil. The ears are about the size of a little finger, and the grains are as little as mustard seed.

A fat man in Paris, named M. Canon Berg, consumes about five times as much food as an ordinary person. His weight is 500 pounds.

George F. McQuillan, of Portland, Me., has a cherry tree, on which a pear grew this year. A pear tree stands close to the cherry tree.

The highest liquor licenses in this country are paid in Massachusetts. In Great Barrington the license fee is \$2,300; in Haverhill, \$2,000; in Pittsfield, \$2,000.

Something unusual occurred not long ago in Copenhagen. A retired military officer, aged 82, celebrated his second silver wedding. His second wife is 52 years of age.

A bright boy in a Boston school was asked to name six animals of the Arctic zone. With the confidence of a college professor, he promptly answered, "Three polar bears and three seals."

Bears are this year more numerous and rapacious than usual in Okefenokee Swamp, Ga. One farmer, who dwells near the swamp, recently had sixteen hogs killed by bears in one week.

A safety purse, for ladies' use, has been invented. It has two straps, one to be connected with a ring on the finger, and the other to be attached to the waist. It cannot be dropped or wrenched away.

The Neighbors.

Mrs. Bricktop (bursting with pride)—How dy'e like my new carpet, Mrs. Crosseye?

Mrs. Crosseye (bursting with envy)—It's—er—very nice indeed, Mrs. Bricktop, fer—Brussels. By the way, I nearly forgot what I came for. I wish you would lend me your lawn-mower a few moments.

Lawn-mower? Why, certainly. But what on earth can you want of a lawn-mower this time of the year? I desire to thin down our velvet carpet in the nursery a little, the children are always losing their marbles in it.

Didn't Get a Key.

Mr. Slimpurse—I see the kitchen clock is not going. Didn't you get a key today?

Mrs. Slimpurse—No.

Left you as you were going into a jeweler's.

Yes, but Mrs. Stuckupp happened to be there looking at some pearls. You don't suppose I'd ask for a five-cent kitchen clock key under those circumstances, do you?

What did you do?

I asked how long it would take to clean a diamond necklace, and came out.

INFAMY OF THE GOLDEN HORN.

Interesting Information Regarding the Capital of Turkey.

Now that the public attention is so keenly drawn to the almost anarchic state of Turkey, the following particulars of the capital of the Ottoman empire will be of interest: Byzantium, Islamboul, or Constantinople as the place has been variously called, is situated at the junction of the Bosphorus and the Sea of Marmora, and may be said to be composed of three distinct towns, viz: Stamboul, Pera-Galata and Scutari.

The two first named are on the European shore, and are divided by the creek called the Golden Horn, while Scutari lies on the Asiatic side, and is separated from them by the Bosphorus. Stamboul, or Constantinople proper, occupies the site of ancient Byzantium, and, like ancient Rome, is built on seven hills. On the first of these are the Old Seraglio and the famous mosque of Santa Sophia. Stamboul lies on a triangular promontory washed by the waters of the Golden Horn of the North, and by the limpid Sea of Marmora on the south, while the swift current of the Bosphorus flows past its eastern front.

Scutari, although a suburb of Constantinople, is practically a separate town, the distance across the water being about two miles. It largely resembles Stamboul, both externally and internally, with its

NUMEROUS MOSQUES.

its bazaars, public baths and manufactories. It will be remembered chiefly by English readers on account of its hospital having been used by the Anglo-French army in the winter of 1854-5 and by reason of its beautiful English cemetery with its monument to the heroes of the Crimean campaign. Its population is now about 60,000, that of the whole capital being about one million and a half.

Stamboul is the native city, and contains most of the government and public buildings. Here are situated, for instance, the Sublime Porte (a gateway of justice, from which the government of Turkey takes its name), the war office, the seraglio, the law courts, the railway station, the custom house, the mosques of Santa Sophia and countless others; the mint and museums, the Han Yeni, and the Egyptian bazaars. The landward side of the city of Stamboul is bounded by the walls of Theodosius, rebuilt in 447 A. D., and now in a ruinous state.

Pera-Galata is the European or Christian town, and the center of business, the Imperial Ottoman and other banks, the Exchange, and steamship and merchants' offices being in Galata. Most of the embassies are situated on the hill of Pera. The principal street of Constantinople, where all European shops are, is the Grande Rue de Pera, and the next in importance is the Rue Tepe Bachi, along which the Pera-Galata trams run, and where the best hotels, the British embassy and the Petits Champs Municipality Gardens are situated. The Yildiz Kiosk, where at present the sultan resides, is practically in the country, about four miles from the sublime porte. The palace is surrounded by barracks, where a large force of Imperial Guards is quartered; and no strangers are allowed to enter the gates.

THE GOLDEN HORN

—La Corne d'Or, Chryso Keras—call it what you will, the name of the classic waterway is one with which to conjure. That its greatest glory is now gone is not to be disputed; that it still remains the most interesting strip of water in the world is as little to be denied. On one side of it rises a lordly line of mosques, those of Santa Sophia, Sultan Mahmud, Sultan Selim, Sultan Bajazet, of Sultan Mahamod, conqueror of the Christians—who shall say how many more? Up the heights on the further shore climb the palaces of the foreign ambassadors, that of Britain, as is meet and right, standing above them all.

Crouching down by the water's edge are the arsenal and the admiralty, barracks and custom houses, prisons and powder magazine; every one who wishes to pile up a block of government buildings seeks a site for it on the shores of the Golden Horn. Until sixty years ago, those who wished to cross the Horn called up a kaik or waited for a ferry-boat; then it occurred to the sultan Mahmud II. that a permanent way might be an advantage. Accordingly he summoned the grand admiral—no less important an official is custodian of the Golden Horn—and bade him see the thing should be done, the sultan adding significantly that he meant to survey the undertaking in person at a specific date. Georgi, a Greek, took the work in hand and did it well, as his lord attested, when the way was baptized in the name "Noossretya" (the benefaction). From sunset to sunrise throughout the year it was declared that this bridge should remain open, while during the feast of Rhamazan free passage is allowed throughout the night, that the followers of Allah may visit the mosques at their own times.

OLGA'S BAPTISM.

The Czar's Wee Daughter Has to Undergo a Fatiguing Ceremony.

Though provisional baptism was at once performed by the Metropolitan of the Holy Russian Church and the name of Olga, one of the most revered patron saints of the empire, was bestowed on the little Grand-Duchess of Russia, the state ceremony will be postponed for some weeks. Indeed, this would be too trying an affair for a new-born baby, for it involves a triple immersion in the font and a somewhat protracted ritual, and confirmation follows immediately upon christening. This last ceremony consists of the anointing of eyes, ears, mouth, hands and feet with consecrated oil. A cross, enriched with precious stones, the gift of the godfather, is then hung about the child's neck, and should never be removed during life, and an Eikon, or holy picture, is placed on its breast, while its name, written on a sheet of paper, is laid thereon. All these proceedings are accompanied by prayers and exorcisms, while the godmother holds the baby in her arms in the midst of a gorgeous group of royal and official personages, each holding a lighted taper.