

SCIENTIFIC SCRAPS.

At the top of Mount Blanc the boiling point of water is 185 degrees Fahrenheit.

When the body of a starving man or animal loses two-fifths of its substance it loses life.

Jupiter completes the entire circuit of the star vault in about eleven years and 315 days.

The pause following the beat of the heart is the rest of that organ, the time amounting to eight hours in the twenty-four.

The mineral selenite is the crystalline form of sulphate of lime, and is often found as the remains of fossil shells.

Water is 771 times heavier than air at the ordinary pressure of thirty inches, while the temperature of both is thirty-two degrees Fahrenheit.

Neither cold nor boiling water, alcohol, ether nor ammonia reduce sponge-fiber to a soluble consistence; even the strongest acids and alkalis act upon it but slowly.

The average velocity with which the particles of hydrogen gas are moving under the ordinary pressure, and at a temperature of thirty-two degrees Fahrenheit, is 1.4 miles per second.

It seems that there is a poison in lupins which produces in sheep a disease closely resembling jaundice. This virus can be neutralized, on the authority of Doctor G. Liebacher and Professor Kuhn, by resorting to steaming.

McFleishen has made a comparison between the bark of young oaks grown respectively upon sandy loams, upon peaty soil that had been once burned, and upon a similar soil that had been thrice burned, and found the proportion of tannin highest in the product of peaty soil.

Begging of Mrs. Garfield.

A letter from Cleveland, Ohio, says: Since the death of her husband Mrs. Garfield has received more than 1,200 letters, from strangers in all parts of the country, begging for some part of the fund which was subscribed throughout the United States for her benefit. Most of these letters have been delivered directly to Mrs. Garfield, and many of them have been sent to her cousin, Mrs. Mason, with whom she stayed during the funeral week, and next door to whom she is now living for the winter. Mother Garfield has also had a great many similar letters, and in one instance at least Miss Mollie was appealed to by a correspondent who desired to become her stepfather. Mrs. Garfield has read all of these letters and then burned them.

Soon after Mrs. Garfield came here from Mentor to reside she received a letter from a woman asking her for several thousand dollars to pay off her husband's debts. She inclosed a photograph of her insolvent husband, and asked further that Mrs. Garfield solicit President Arthur to give him a clerkship of some sort under the government. Mrs. Garfield destroyed both the letter and picture. Six weeks later this same woman wrote to say that she and her husband had enjoyed a vacation journey of nearly five thousand miles, the delights of which had been impaired only by the ever present recollection of her husband's debts and Mrs. Garfield's bereavement. While by this time the public had for the most part forgotten Mrs. Garfield's sorrow, this disinterested but interesting correspondent begged to assure her that she still bore it in mind and shared with the nation's widow the grief of the nation's bereavement. She also inclosed a postage stamp for the return of her former letter and her husband's picture, in case Mrs. Garfield was not disposed to grant her requests.

Several letters were received from church societies asking for help with their debts. One woman wrote for money to buy a mourning dress for herself, and a tombstone for her son, lately dead. Another, who had lost one husband in the war, had married another husband who was a worthless and undesirable companion. She wanted money to enable her to leave him. A young girl wrote for money for her wedding trousseau.

A Polite People.

The city of Lucknow, India, is renowned for the politeness of its people, exceeding, it would seem, that of the French, who are generally regarded as the polite people in the world. A correspondent, writing from the spot, gives a ludicrous illustration of the extent to which the natives carry their ideas of courtesy. Two native gentlemen, on their way to the railway station, accidentally fell into a ditch. One would suppose that both would have been on their feet in a twinkling; but no, the law of politeness interfered, and one said to the other: "When your honor rises then I may get up." "No, your honor should get up first," replied the other. "Never; how could I take precedence of your honor?" and thus the contest went on for an hour, it is said, because neither gentleman would consent to violate the laws of good breeding.

TOPICS OF THE DAY.

The United States army retired list is limited to 400. There are at present only seven vacancies, while fifty officers are eligible to retirement.

Within the past seven or eight years there have been twelve defalcations in the United States, from which the aggregate loss has been \$8,320,000.

The opinion of a recent biographer is that a country village may, in a few years, produce as many of the men who make a country great as London, with all her intelligence and wealth.

Mr. Walter, proprietor of the London Times, who has recently been in this country, says that before the close of the next century the United States will have a population of 200,000,000.

The escape with life of five miners, who by an explosion of a sand blast near New Chicago, Montana Territory, were thrown two hundred and fifty feet high and fell into a vein, was almost miraculous. Three hundred cubic yards of rock on which they stood went up with them. This going up with over a thousand tons of rock and not being killed coming down, beats anything in the line of modern escapes.

A co-operative society in Philadelphia has six stores open. This represents a steady growth from a very small beginning eight years ago. The three groceries and one meat market yield a handsome profit, besides providing goods for the 980 members at a discount from regular rates; but the dry goods and the shoe stores have barely paid expenses. On the whole, however, the enterprise is a sound success.

The aesthetic craze, which is chiefly a mania for the antique—and therefore a confession, to a certain extent, of the barrenness of modern civilization—has extended from the head to the stomach, and we are to witness, it seems, a revival of the cooking recipes, bills of fare, etc., of the fifteenth century. The idea originated with some English maniac. What we are coming to may be imagined when it is called to mind that two centuries before Queen Anne they had wooden bowls and pewter platters, and used their fingers at table, having no forks.

Telegraphing in Japan and China is no easy job. There are 44,000 characters or hieroglyphics in the language, and no telegraphic alphabet is equal to the task of representing them. A system has been devised by which only 6,900 characters, divided into 214 classes, need be used, and by the aid of numbers they can be transmitted by wire. But imagine a lightning operator in America trying to send several thousand words of a newspaper "special" by such a method as that. The operator, the message and the telegraph editor would all probably be badly "broken up" in the operation.

The holy league in Russia was started about three months ago to detect Nihilists and persons sympathizing with the cause in the ranks of Russian society. The members of the league belong to all classes of society, from that nearest the throne to the petty shopkeeper. The association is a secret one, and it is only by certain signs that members recognize each other. On joining the league a solemn undertaking is demanded from the person desirous of playing the part of a spy in the circle of his intimate friends and acquaintances. The salaries of the agents vary according to the value of their services and the zeal they display in the work of denunciation. Among a numerous body of Russian intelligent men this means of extirpating Nihilism is ridiculed and condemned.

The latest gold discoveries have been made along the Deloite river, a tributary of the Great Mackenzie river of the North. The Deloite is said to be navigable for a distance of 500 miles, but it is full of dangerous canons, rocks, sharp bends and whirlpools, in which timber of large diameter and fifty feet in length has been seen to disappear and foremost. Chinamen have made their way there in large numbers. They can get along where white men fail, and there are few places where they make less than \$10 to \$20 a day per man out of their rockers. They plant potatoes and cabbages on the banks of the river, and in other useful ways spend time that white miners would be more likely to spend in drinking whisky. Trappers say that it gets so cold in winter in this region that quicksilver freezes hard enough to be made into bullets, but they experience no ill effects from the intensity of the cold.

To show where the products of our forests go we will enumerate a few items: To make shoe pegs enough for American use consumes annually 100,000 cords of timber, and to make our inciner matches 300,000 cubic feet of the best pine are required every year. Laths and boot trees take 500,000 cords

of birch, beech and maple, and the handles of tools 500,000 more. The baking of our bricks consumes 2,000,000 cords of wood, or what would cover with forests about 50,000 acres of land. Telegraph poles already up represent 800,000 trees, and their annual repair consumes about 300,000 more. The ties of our railroads consume annually thirty years' growth of 75,000 acres, and to fence all our railroads would cost \$45,000,000, with a yearly expenditure of \$15,000,000 for repairs. These are some of the ways in which American forests are going. There are others. Our packing boxes, for instance, cost in 1874 \$12,000,000, while the timber used each year in making wagons and agricultural implements is valued at more than \$100,000,000.

The French society for the prevention of cruelty to animals does not appear yet to have extended its operations so far south as the ancient city of Arles and other places in Provence, for the prefects of the departments which now constitute the former province on the shores of the Mediterranean have been obliged to send a communication to the mayors of every town and village, enjoining them to put down a brutal pastime known as "Bœuf à la Bourgne." It has been the custom, Sunday afternoons, to fasten two heavy ropes to the horns of an ox and drag him through the streets, while a mob of men and women belabor him with sticks. The animal is never allowed to escape with his life; and the Journal des Debats states that the excitement sometimes reaches such a pitch that the crowd drag him into a bonfire and burn him alive. What may have been the origin of this custom it is not easy to say; but it is surprising that so barbarous a practice should have been allowed to survive to the present day; and official circulars so often fail of their effect that this one may likely enough share their common fate.

Curiosities of Pain.

Most people are familiar with the fact that a person who has lost his arm or his leg may have excruciating pains seemingly in the lost hand or foot—pains, perhaps, that may appear to dart from finger to finger, or from toe to toe, just as fiercely as he could have felt them if the member had not been cut off. He may find himself scratching his wooden foot to relieve the itching. Different from this is the occurrence of pain in a part of the body at a distance from the seat of the disturbance—in the head, for instance, when the seat of it is in the lower part of the spinal column; or in the foot, the seat of it being in the hip—both patient and physician being often misled in the case.

Unlike both of these cases, is an effect produced on one side of the body by an irritation applied to the other. In the case of paralysis affecting one-half the body, a mustard plaster applied to the sound side will often restore sensibility to the paralyzed side. The restoration, however, is not permanent, though it will last several days.

In the case of a similar loss of feeling often affecting hysterical patients, it has been fully restored by a plaster applied to the sound side; while, in other cases, a real transfer takes place the sound side losing what the affected side gains.

In the case of a healthy person, however, while sensibility to touch and pain is increased on the side irritated by the plaster, it is diminished in the same ratio at the corresponding point on the other.

We are in the main double, with two brains, two sets of nerve centers, and two sets of nerves going to the two sides of the body. The irritation on one side extends up to the common center of both sides, and thence down to the other side.

Yards in a Mile.

Mile in England or America, 1,760 yards.
Mile in Russia, 1,100 yards.
Mile in Italy 2,497 yards.
Mile in Scotland and Ireland, 2,200 yards.
Mile in Poland, 4,100 yards.
Mile in Spain, 5,028 yards.
Mile in Germany, 5,866 yards.
Mile in Sweden and Denmark, 7,233 yards.
Mile in Hungary, 8,800 yards.
A league in England and America, 5,280 yards.

Italy, at the commencement of the present year, possessed 1,454 newspapers and periodicals, of which 149 were dailies. Milan headed the list with 210 journals; then came Rome with 147; Naples, 114; Florence, 101; Turin, 87; Palermo, 59; Genoa, 56; Bologna, 61; Alessandria, 39, and Venice, 32. Of the daily papers 18 appear at Rome, 16 at Naples, 13 at Palermo, 12 at Milan, 9 at Florence, 6 at Turin, and 5 at Venice. On an average there is one journal to 19,281 of the population, and 8,000 readers to each journal. The oldest Italian journal dates from 1797. In 1836 there were only 185 periodicals in Italy, of which 110 were published in Rome.

PEARLS OF THOUGHT.

Belief is not in our power, but truthfulness is.

Without the rich heart wealth is an ugly beggar.

Impatience dries the blood sooner than age or sorrow.

Borrowing money is a bad habit; and borrowing trouble is no better.

As fire is discovered by its own light, so is virtue by its own excellence.

The only sin which we never forgive in each other is difference of opinion.

The virtue of prosperity is temperance; the virtue of adversity is fortitude.

To correct an evil which already exists is not so wise as to foresee and prevent it.

We understand death for the first time when he puts his hand upon one we love.

If you would not have affliction visit you twice, listen at once to what it teaches.

No man can be brave who considers pain to be the greatest evil of life, nor temperate who considers pleasure to be the highest good.

The Profession of Journalism.

At the last Tufts college commencement dinner Mr. Z. L. White, editor of the Providence (R. I.) Press, was called upon to speak for the profession of journalism. He said, in substance: I have been asked to say a word for a profession which does not need speaking for; the press, like the poor, you have always with you, and it needs no word from me to introduce it. The profession of journalism has grown up almost within the memory of those present. It is only a few years ago that newspapers were not the power that they are to-day. Among the influences tending to change the character of journalism and to elevate it to its present high standard, that of the colleges of the country and its institutions of learning is one of the strongest.

The importance of the influence of the profession of journalism leads to the consideration of the responsibility of the journalist. There is no other class of professional men on whom so great a responsibility rests. The duty of the journalist to-day is not only to present to the world a mirror of events, to hold up a record of contemporaneous history, but also to present this record in such a way that the proper lesson may be drawn from it. After midnight, within an hour or two of the time when the paper goes to press, the editor hears for the first time of some event of great national importance; on the spur of the moment, without time for reflection, he must present it to the world in his editorial in such a way as will lead his readers to look upon it in the right and proper light. When we consider these things we cannot over-estimate the responsibility which rests upon him.

The great newspaper to-day is not the mouthpiece of politicians, or intended to promote the ambitions of single men who control them. As a class, the newspapers of to-day are independent, owned and controlled by men who have no special ambition of their own, and who are hence able better to judge events. The public service of this country is improving daily, and this fact is due, to a great extent, to the existence of a free and independent press.

I would say to-day to those young men who propose to enter journalism, you cannot place too high an estimate upon the calling you have chosen. Enter it with the idea of work. Journalism to-day demands a devotion such as no other profession requires. Of those who enter it not more than one-fourth continue to the end. The drudgery, the long hours, the incessant demands of journalism are too great for many to bear. But to him who enters it able and prepared to undergo the necessary strain and toil the possibilities of reward are great.

In Luck.

He sat on a window-sill in the post-office and jingled forty cents in change, and when another boy asked him if he was going out to look for Christmas presents he replied:

"No, I hain't. I'm in luck this year."

"How?"

"Well, my sister is down with the measles, and she can't expect anything but medicine. Ben run away two weeks ago, and I won't have to get him anything. Mam pulled my hair yesterday and she knows she's gone up for any Christmas present."

"But there's your father?"

"Oh, yes. I expected I was stuck on the old man, and was kinder looking around for a nice pipe, but this morning he gave me one on the ear, and that settled his Christmas goose in a second. These 'ere forty cents are going to be used to buy a good boy a heap of peanuts, taffy, chestnuts and candy, and the good boy is just my size and age."—*Detroit Free Press.*

Falling drops wear rocks.

MARRIAGE BENEFIT SCHEMES.

Methods of Companies Organized to Insure Persons Contemplating Matrimony.

The Indianapolis (Ind.) Review of a late date says: On Thursday afternoon the Reviewer called at the office of the secretary of state, and looking over the articles of association, found the marriage benefit business fairly booming. The first one of these associations that filed articles of incorporation was the Royal Marriage Benefit association of Union City, which opened the matrimonial prize-package business early in October, and they are now flocking in at the rate of eight or ten a day. The following is a list of the companies organized up to Thursday afternoon: [Here follows a list of seventy-one companies organized in Indiana.]

Following this marriage benefit business, which bids fair to have at least half a dozen associations in each county, comes a new scheme, the first of the series being the Mutual Benefit Birth association of Logansport. The paragraph describing the purposes of this manner of association reads thus:

"The object of this association shall be to provide a fund from which each member may draw benefits at the time of the birth of a child to her upon whom the certificate is issued or upon the maturity of claims against the association."

The following advertisement is clipped from a daily paper of this city:

WANTED—\$10 TO \$15 WITHOUT INVESTING MONEY OR TIME. The above amount will be paid to males or females who will inform us of the date of their approaching marriage. Those engaged to be married will find it to their interest to call on or address the Matrimonial Brokerage agency, 14 Virginia avenue (Vance block), M. H. Daniels, Manager. All information strictly confidential.

The scheme of this broker is to induce people contemplating marriage to call on him and inform him when the wedding is to take place, and for this information (as strictly confidential as female pills) he pays "from \$10 to \$50" for the privilege of taking out certificates on the candidate for matrimony in his (the broker's) own right. The broker pays for the certificate and all the assessments, and reaps his profit when the marriage takes place. The amount paid for each "certificate" is \$3, and the broker can get as many certificates as he chooses to pay for, sometimes in different companies, placing as many as a hundred certificates on one candidate. The companies promise to pay at the rate of sixty cents a day on each share or certificate, from the time the insurance is taken until conjugialization takes place. Say that a candidate takes out a hundred certificates, and marries in ninety days. For these hundred certificates he (or she) pays \$300, which goes into the breeches of the five or seven incorporators who run the benefit; ("benefit" has the same number of letters in it that "policy" has, and though played differently, is not altogether a dissimilar game,) and, for this investment, is to receive, when married, at the end of ninety days, at the rate of sixty cents a day on each certificate, a total of \$5,400. Now that looks pretty on paper. It is more glowing when exhaled by a silver-tongued marriage broker.

The bottom is sure to tumble out of every one of these institutions, and it is safe to predict that there isn't one of those now organized that will be alive six months hence. The certificate buyers go into this marriage benefit scheme to go in to win. They will marry in from thirty to ninety days. These companies are young now. Wait until the marrying gets lively. Say that there are, ninety days hence, twenty-five members in one of these companies, and twenty-four hundred of them marry within that time. As the assessments on each certificate are one dollar it is easy to see that something will happen when these conjugial atoms coalesce. But the proprietors of the companies won't lose a nickel. They give security for nothing. They knock down the three dollars on each certificate and get twenty cents on each one dollar assessment. Some of the companies are now making money hand over fist. One of the Union City associations is said to be \$30,000 ahead. The five incorporators of another company are dividing weekly dividends of \$1,500, \$300 a head.

This system of insurance can but have a most pernicious outcome. It will lead to a great number of unsatisfactory marriages. People will marry in haste to repent at leisure, and the divorce business will be big enough to make Indiana a byword and a reproach all over the world. It is about as neat a scheme and will flourish about as long as the woman's deposit swindle of Boston.

The extent of paper making on this side of the Atlantic seems satisfactory. According to recent statistics the number of paper mills in the United States is set down as 980; in the United Kingdom, 650; in Germany, 513; in France, 539; in Italy, 306; in Austria, 169; in Spain, 63; in Portugal, 16; in Belgium, 29; in Holland, 16; in Denmark, 19; in Switzerland, 15; in Japan, 6; in Greece, 1; in Roumania, 1; in Cuba, 1.

Story of a Poor Artist.

In an article on the struggle for existence maintained by impecunious artists in New York, the Truth of that city tells this story: But the hardships of this calling were probably never better illustrated than in the case of a young Englishman who had come to this country thinking, as many another European has thought, that he would find America an El Dorado. He was of the lightning artist school, and immediately upon his arrival in New York made application to several illustrated papers for work. In every instance he found no opening, and encountered only refusals.

Day after day he trudged about to the different offices of the dailies, weeklies, monthlies—everything and anything—his portfolio under his arm, begging that his work might only be inspected. But the refusals were as persistent as his coming, and he finally became such a nuisance that he was almost literally kicked out of the different offices.

Finally he sold one sketch to the editor of a weekly paper. The price was one dollar, and he was told to come the next day and get his money. He went home to his young wife, who had come all the way from England with him, and they both rejoiced over his good fortune. The sky looked much brighter the next day when he went for his dollar, but when he was told to come again the sunshine lost some of its warmth, and he went home to his expectant wife and bread and tea, feeling that somehow or other fortune had tricked him.

He went again and again for that dollar, but was put off each time until he began to think that work sold was even worse than work to be sold. Finally the editor paid him the paltry sum, and as he took it with a lump swelling up into his throat and the tears almost in his eyes, he said:

"I—I had to pay forty cents car-fare to collect that dollar, sir!"

"Well, what of that; are you not still sixty cents in?" was the philanthropic answer of this most Samaritan-like editor.

But ill luck was not always in store for this plucky young fellow, and one day when he had gone down to Harper's, expecting to be turned away as usual, he was surprised that the man to whom he had applied took two of his sketches into an inner room, and after remaining some time, returned and stated that the work had been accepted and at once gave the surprised artist an order on the cashier. Almost blinded with the tears of joy that welled up from his swelling heart, he presented the order and received the money without counting. When he had gotten into the street he counted it and found \$16. He could not credit his fortune, and going back to the cashier, said:

"I think there is some mistake, sir!"

The cashier counted the money and showed him the order for the amount paid. He could scarcely get home fast enough, and when he did arrive he ordered his wife to hold out her apron and slowly counted the bills into it. Her eyes were distended to their utmost as she asked incredulously:

"Is it all yours?"

"I suppose there was much congratulation after that?" said Truth, to whom the artist had related this story.

"No, sir," was the quick reply, "steak!"

In all the Bohemian classes of New York there is probably no other which affords so rich or interesting a theme for study as that of the poor artists, men and women, whose personal qualities certainly merit a better fate than the starving condition in which most of them suffer.

How an Eating-House was Ruined.

There is a well-known story of the ruin of a London luncheon shop by a spiteful and envious rival. The latter hired a boy to enter the successful shop exactly at the time when it was most crowded, and to lay on the counter, before the eyes of all the wondering and horrified guests, a dead cat. "That makes nine, ma'am," said the brazen-faced urchin, as he deposited his burden and left the shop. What avail were protestations of innocence from the indignant president of the counter? The plot had been carefully laid, and it resulted, as was expected, in a stampede of the diners, to return no more.—*Temple Bar.*

Two young ladies have done all the work on the *Guadalupe* (Cal.) Telegraph. They have been writing the editorial articles and the local reports, preparing the general news and miscellaneous reading matter, setting the type, making up the forms, lifting them from the stone to the press, doing the presswork on a No. 7 Washington hand press, and mailing and distributing the papers. This work usually required on the same paper a force of three men. The young ladies are said, moreover, not to represent the muscular type of their sex, but to be gentle and fair to look upon. Those girls should have a policeman, at least, and we can put them on the track of one willing to be engaged.—*Tracy Times.*