Hre Scientific Deduction's

Science Monthly has lately given an 1-1350 that of the earth. gressive cooling of the earth, and its elation to the length of the day. Does the length of the day vary was it formerly shorter than now Will it, in the future, be lengthened ? The answer depends upon the mass of the earth, which varies, since metsoric dust perpetually falls upon the surface and thus increases the quantity of matter; and on its volume, which becomes smaller as the mass is progressively cooled. Laplace concluded from the data at his disposition that there had been no sensible change in the length of the day for

Woodward has repeated his calculation with new data and concludes that the duration of the day has not changed as much as half a second during the first 10,000,000 years after the beginning of solidification of the earth's material. When the cooling of the earth finally reaches its term the change will be marked. Prof. Woodward's result is that the ratio of the change of the day to its initial length is two-thirds of the proiplied by its cubical contraction. For example, if the primitive tem perature of the earth was 3,000 decrees C., and if its cubical contraction was that of iron, the day will be finally reduced about 6 per cent., that is to say by about an hour and a half. The lapse of time necessary to bring this about is enormous.

Three hundred thousand millions of ength of the day will not be sensibly affected on the other hand, after the expiration of 1,000,000 of millions of thousandth of the effect of secular cooling. Twenty millions of small supplied to them. neteors weighing on the average on gramme each fall on the earth daily, the length of day will not be increased a quarter of a second on this ac- British experts : the day will shorten, not lengthen,

THE MINOR PLANETS.

The director of the Berlin Astron ized the centenary of the discovery of in a certain region while other areas Ceres, the first known asteroid by more distant even, hear the signal. group of minor planets. Some of his noted during calm weather. printing exhaustive statistics of the nclusions follow.

The ascending modes of the asteroid orbits show a distinct tendency to congregate in the neighborhood of the ascending node of the orbit of Jupiter. Prof. Newcomb and pre-love to be considered only as an auxdicted from theory that this would be the case. Three hundred and filteen asteroids move in orbits whose inclination is less than 10 degrees; sun they fall into three main groups

mean distance of Jupiter.

A further discussion shows that it is very improbable that any considerable number of asteroids as bright tudes yet to be discovered. Assuming has a radius of 886 kilometers, Vesta SPECIFIC FOR MALARIAL FEVof 417 kilometers, Pallas of 292 kilo-

THE FAHRENHEIT THERMOM-

Sir Samuel Wilks prints in Knowledge a note on the history of the thermometer of Fahrenheit. He as- culiar to Germany comes from the cribes its origin to the invention of Prussian' war office. In 1866 the a thermometer which Sir Isaac New- guards' were breakfasting hurriedly. ton described in 1701. Newton's instrument was a tube filled with linseed oil, the starting point being the temperature of the human body, which is called 12. The duodecimal was then, of course, in general use. He divided the space between this and the freezing point of water into twelve parts and stated that the boiling point would be about 30 de-Fahrenheit, not finding the minute enough, first divided one of Newton's degrees into two parts and made it measure 24 instead of 12. Finding that he could not obtain a lower temperature than freezing by mixing ice and salt he chose this for his starting point and been made over to them for rations. counted 24 degrees up to body heat, calling the freezing point 8 and the he divided each degree into four missing. Inquiries were set on foot taining. parts. The numbering of Fahren- evidence was collected, and a volumheit's scale is thus accounted for. NATURAL GAS INDUSTRY AT

A recent French report recites the following statistics regarding the natural gas industry in the Pittsburg region. The beginning of the exploitation was in 1882. In 1884 the Philadelphia Gas Company, which now controls the industry, was founded. rears are required, according to At present the capital invested is Woodward, for 95 per cent. of the to- about \$44,000,000, the area of land tal contraction to take place. The exploited is about 42,000 acres, there are 1,200 gas wells of which only some 300 are in use. They produce more than 3,112,000 cubic metres of Weeks' War he was requested by the years. The fall of meteoric dust gas which are distributed through tends to increase the mass of the more than 2,400 miles of pipes, emearth and thus to change the length ploying some 2,500 workmen in their lost by the Grenadier Guards. When of the day, but the effect due to this use and care. Some 500 manufactor- the sum was paid, the subject was at ies and 40,000 private houses pay last officially dropped. annually about \$2,750,000 for the gas

PITTSBURG.

SOUND SIGNALS AT SEA. According to the Yacht the followbut in 1,000,000 of millions of years ing conclusions respecting sound signals at sea have been reached by

count. Taking everything together ...(1) In calm weather low notes are neard further than high; but the rebut the process will go on with ex- verse is true when the sea is rough and when the wind is opposite in direction to the direction from which the sound arrives. It sometimes hap-

> is advisable to stop all noises on the lines. The waiter, watching anxilistening vessel. It is better to stop ously, saw a shade pass over his face

(3) Under no conditions is a sound fore, to be considered only as an auxiliary warning.

MOSS ON THE NORTH SIDE OF TREES.

133 have inclinations between 10 and Every schoolboy who respects him 20 degrees; 29 have inclinations be- self knows that all the story books tween 20 and 30 degrees, and one of Pathfinders and Indian scouts (Pallas) is over 30 degrees. A dis- agree in saying that the moss grows cussion of the eccentricities shows on the north side of trees and that that there is a slight tendency for Indians thread their way through the large eccentricity and large inclina- trackless forests by remembering this tion to go together. There is a very rule. Every observant man of madistinct tendency for the longitudes ture age knows by experience that of perihelion to congregate near the this rule is chiefly exceptions. It has longitude of the perihelion of Jup-remained for Mr. Henry Kraemer of iter. When the asteroids are classed Philadelphia to give statistics on the according to their distance from the point. Of the trees he examined the moss was on the west side in 10 per with relatively empty gaps between. cent., on the northwest side in 10 per cent., on the north side in 10 per mean distance of Mars; there are cent., on the northeast side in 20 per 337 planets in the principal group ; cent., on the east side in 35 per cent. there are 18 planets at about the and on the southeast side in 15 per

ART OF PRIMITIVE PEOPLE. Mr. W. H. Holmes finds that the decorative designs of primitive peoas the 101 magnitude still remain ples can be divided into five wellundiscovered; but it is likely that marked classes; (1) Impressions there are many of the fainter magni- from the surfaces of rigid forms, such as baskets; (2) Impressions that the average asteroid reflects 24 from fabrics of pliable stuffs, such as per cent. of the incident solar light cloths and nets; (3) Impressions Mercury reflects 19, Mars 29 per from woven textures used over the cent.) it is possible to deduce an em- hand or over some modelling instru- chair very indignantly and said : pirical formula giving the diameter ment; (4) Impressions of cords of any asteroid in kilometres when wrapped about modelling padles or its brightness is known. If the as- rocking tools; (5) Impressions of uption is true (and it is probably bits of cords or other textile units, not very erroneous) then 202 planets singly or in groups, applied for orn-have radii under 40 kilometers, 201 ament only and so arranged as to have radii between 40 and 80 kilo- give textile-like patterns. In addition we have a large class of impressions ters and 12 have radii of over 120 and markings in which textile effects

arsenical preparation, viz : As (C H 3) O 3 Na 2. It is more effective han quinine and has various advantages over the latter which need not be here described. The experiments seem to show that a very practical Prof. Woodward in the Popular not above 1-17 that of the moon or and important discovery has been

One Cow Skin

An instance of military thrift and of red-tape system which is not pe-They had, on the previous day fought the battle of Soor, and had accomplished, altogether, a nine days' march. This was not the era of canned meats, and to each regiment had been allotted a certain number of cattle, which had been killed, skinned and cooked; but while the men were still eating, scouts came in with the news that the Austrians were near at hand

advance toward the enemy. The Grenadier Guards, conspicuous alsuch purpose that they failed to secure the skin of a cow which had When the official who was responinous correspondence lasting fourteen or fifteen months failed to account for the skin

The men got into marching order

There had been a cow. She had been made over to the guards. She had a hide. The hide was government property, representing a sum tariff. The governfixed by official ment must be credited with that sum. The hide was not forthcoming. Who should be responsible for its cash value?

It was at last decided that the colonel of the regiment should be held accountable, and a year and a half after the conclusion of the Seven war office to remit the sum of three

The Appreciative Cook

There was a New York writer who, being something of an epicure, found keen enjoyment in the light and toothsome pastry provided for the natrons of a certain French restaur-

the concocter of this pastry, and bade the waiter carry it to the cook with his compliments. The next day he was served a pie of unusual size. ornamented with pastry roses, and was told that it was an offering from the cook, who had been moved almost to the point of tears by his

was amazed to see reposing inside it (2) To hear a signal during fogs it the slip of blue paper which bore his and at once stepped forward,

"I don't care to eat my own words!" said the poet, sharply. But his pun was lost on the waiter.

"Ze cook said, monsieur," he ventured, humbly, "ze cook said, 'Monsieur makes his so beautiful verse on my pastry, I make my so beautiful pastry on his verse.' Ees it not so. monsieur ?"

"Monsieur" looked once more at the pie, and his dignity melted. "It is so," he said, briefly, and proceeded to test the flavor of his

Argument From Precedent.

Lincoln was once arguing a case against an opponent who tried to convince the jury that precedent is coln's reply, given in Miss Ida Tarbell's life of the great war president, was one of his many effective analogies in the form of a story,

his opponent, and began : "Old Squire Bagly, from Menard, to be left to him.

came into my office one day and

a lawyer. Has a man what's been that the document was lying in a elected justice of the peace a right to desk in the room. issue a marriage license?' "I told him not; whereupon the old Cannon, "unless I see it."

squire threw himself back in his "Lincoln, I thought you was a lawyer. Now, Bob Thomas and me had a bet on this thing, and we agreed to let you decide; but if this is your opinion I don't want it, for such an unnatural brute." I know a thunderin' sight better. I've been a squire eight years, and have done it all the time."

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ENJOYABLE EXCURSION

Given by Str. Prospector Yesterday

Phenominal Run Made From Indian River to Dawson in the Evening.

One of the most enjoyable excursions ever run out of Dawson was that given on the palatial steamer Prospector yesterday by her popular and in a few minutes were in rapid manager William Meed. In former years Mr. Meed had no one to assist him in the matter of entertaining ways for their despatch, hurried to guests aboard his steamer, but when he visited his old home in England last winter he took a partner in the person of a handsome, accomplished and remarkably pleasant little lady, sible for the value of the hide came and together Mr. and Mrs. Meed are boiling point of water 53. Later on to ask for it, it had to be reported most successful in the role of enter-It was a few minutes after 12

o'clock when the proud little steamer river being the objective point. 'The day was perfect and the trip up delightful one. A stop of an hour was made at Indian river where the kodak fiends, of which there were several in the party, got in their deadly work on the steamer and the excursionists, the latter being "tooken" singly, in groups, clusters and bunches. Lunch was eaten about one o'clock on the way up and while the excellent dinner was served. Manager Meed has secured the services of one of the best male cooks on the Yukon and those who travel by the Prospector this season may expect to be served with only the finest.

About the time the start for home was made a pool was gotten up as to the time the steamer would reach Dawson, each person making one guess and paying 50 cents into the pool. As the distance from Indian river to Dawson is 28 miles there were very few who thought the run down could possibly be made in less than two hours and some in their guesses allowed two and a half hours. The least time allowed was in the guess of F. J. Hemen, who reckoned she ought to make it in one hour and forty-seven minutes. His being the minimum guess, took the pot. Evidently the guessers did not know the Prospector as she came down like the wind, being tled up at the Dawson dock in one hour and 32 minutes after leaving Indian river. Among the excursionists were Mr. and Mrs. H. C. Davis, Mr. and Mrs. Richard Roediger, Mr. and Mrs. G. M. Allen, Mr. and Mrs. F. J. Hemen, Mr. and Mrs. E. J. White, Mrs. Englebrecht, Mrs. Farr, Miss Latimer, Mr. Tennant, Mr. Worder, Mr. George, Mr. McIntyre, Mr. Herbert, Mr. Stauf, Mr. Grant, Mr. Maynard, Mr. Goa. Mr. Wilson, Mr. Marks, Mr. Hathaway and others including g number of children.

Cutting Himself off

The Rev. Edward Cannon, a chaplain to King George IV., was a doggedly independent man. On one occasion he refused to compliment his royal master on his singing, and for a time fell into disfavor. His manner was high-handed and not always too courteous, but his actions were always on the side of right and justice. The biography of his friend Barham, superior to law, and that custom the author of the "Ingoldsby Lemakes things legal in all cases. Lin- gends," contains, among other anecdotes of Cannon, the story of how he disinherited himself.

A silly old lady summoned him to her house, and pretended to be de-Lincoln told the jury that he would clining in health. She told him she argue the case in the same way as had made her will, by which the whole of a considerable fortune was

"I don't believe it," said Cannon, after a pause, in which he eyed her "Lincoln; I want your advice as doubtfully. The lady assured him

"I won't believe it," persisted Smiling at his incredulity, she placed the will in his hands. Cannon read it.

"Well," he said deliberately, "if I had not seen it in your own hands, I could not have believed you were

Thrusting the paper between the bars of the grate, he continued in a severe, low voice, "Have you no one more nearly connected with you than 1? No one to whom your money should go, who has a right to be provided for first and best? Pooh! meters and Eros of only 16 kilometers. It is very probable that all the asteroids taken together have a mass of the strain of th You don't know how to make a will. I'll send you a lawyer, and he shall

a legacy; there's no harm in that. But I'm not going to take it all to please you. Good day, ma'am."

Cosmopolitan New York

The new Cathedral of St. John in New York will, in addition to its main hall, have seven "Chapels of Tongues'" where German, Spanish, French, Swedish, Italian, Armenian Greek and Choctaw.' and Chinese services will be held each Sunday. Nevertheless by the time the great cathedral is finished it is not unlikely that the crypt and transepts and anterooms will be required for other nationalities. A clergyman crucifixion are already represented called upon Bishop Potter the other New York, and the problem to day to ask that some provision be the same as it was then. made for religious services for some Mesopotamian immigrants.

"Really," replied the bishop, "cannot a handful of Mesopotamians be provided for in connection with your Armenian congregation?"

ments smiled. "I do not know, you call a handful, sir. There potamians within ten minutes' of where we are sitting this mon and as for their attendance Armenfan services, the language have about as little in common

The "Parthians and Medes and F" mites" are, perhaps, yet to com but the most of the other nation ities mentioned as present in Jer

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PLAIN D NU

MONDAY, M.

Full Hous Court

Skylight Kid' Realms-Un

As is always the noured too freely Saturday. In fact. three who got too Friday night and itation at th runks and when was preferred Ju missed them on a that Saturday wa Peter O'Dell 1 frunk but he brok Jap lodging hous almond-eyed propi both hands and s tell the truth \$1 and costs and

window Ernest Zouda, of Dawson, if no "Skylight Kid," fighting on the saloon building o he essayed to wor an was also dru ffender and a fre or 10 days at har "de dough," the get acquainted w

Reiger le

it to a liver

First avenue from

Reiger had taken a nip that he had ill at the stable The recently never having bee learns of their court when he i ting them. H. his morning for gravel from wi without a perm the gravel at th wont to get it years. Mr. Fors the gravel but he ing he had vio case was dismiss Patrick Joyce agrancy and be was proven that he was a "shor an inducement for money. He is a cluded that Pat

Fred Buteau, ter being his r Cay, the forme years of age, pl erous petty the Cockerine is Holy Cross mis long time been Mrs. Frank But called by their John Cay ran in Vancouver a His lather are

where he would

beg. He was g

mitted in cour the boy is wh that he, the fa with him.