

CAMELS OF THE DESERT.

Their Peculiar Adaptability to Life in the Sandy Wastes.

The camel thrives only in desert regions. And herein lies its usefulness to man, for by its means alone is he enabled to cross barren tracts otherwise impassable.

Though it will manage to subsist for long periods on the thorny scrub such as forms the only vegetation of desert areas and with very little water, its complacency in these matters may be overtaxed, as was disastrously shown during the first expedition to Khartoum.

ATLAS AND HIS LOAD.

It Was the Heavens, Not the Earth, the Titan of Mythology Upheld.

Strictly speaking, "atlas" is a misnomer for a map book, since it was not the world, but the heavens, that the Atlas of mythology upheld.

Atlas, it was said, made war with other Titans upon Zeus and, being conquered, was condemned to bear heaven upon his head and hands.

In any case, Atlas was always associated with a heavy burden strongly borne. Thus Shakespeare makes Warwick say to Gloucester, "Thou art no Atlas for so great a weight."

An Eccentric Bishop. Bishop Wilson of Calcutta had as housekeeper a venerable lady who remembered the duel between Sir Phillip Francis and Warren Hastings on Aug. 17, 1780.

His sermons, too, were rare. Preaching against dishonesty, especially in horseflesh, as one of the great English fathers in India, he went on, "Nor are we, servants of the altar, free from yielding to this temptation."

Golf Defined. On the terrace of a country club a group of nongolfers were taking tea.

"Spleen on the green, I'd call it," said a female nongolfer.

The Burglar's Prayer. Sir Herbert Risleigh, speaking of the castles of eastern Bengal at a meeting of the Royal Anthropological Institute, said a curious system of religious worship prevailed among a caste who were professional burglars.

That Face! "Look me straight in the face and tell me you really love me," he said warmly to the sweet young thing who stood in front of him with downcast eyes.

The Cause. "What is the cause of social unrest?" "The desire," replied Mr. Dustin Star, "of the workman for leisure and of the leisurely man for something to keep him busy."

HIGH EXPLOSIVES.

Making Them is a Very Delicate and Complex Process.

Almost all the high explosives have cotton as their base. It is true that very good sporting powder can be made from wood pulp; but, as the editor of Nature remarks, "the artilleryist would be in great difficulty if he were provided with such a propellant, because in order to obtain any sort of regularity the nitration of the wood pulp has to be kept at a low point, and the ballistics, on which the artilleryist depends, would be quite thrown out."

High explosives are cellulose highly nitrated—that is, highly charged with nitrogen. This process consists of immersing cotton waste (that has been repeatedly tressed, picked and dried) in a mixture of nitric and sulphuric acids, in the proportion of 71 per cent sulphuric acid, 21 per cent nitric acid and 8 per cent water.

The manufacturer does his best to regulate his output, so that it shall contain approximately eleven molecules of nitrate to the quadruple molecule of cellulose, as shown in the formula, or a content of nitrogen that ranges between 12.93 and 13.05 per cent.

INDIA'S QUEER BELIEFS.

Buddhists Would Die Rather Than Lose a Limb or Eat Meat.

India's population is 325,000,000. Practically all the races and religions of the world are represented. Ninety-eight and six-tenths per cent of the people cannot read or write.

The Buddhists will not eat meat or take even a medicine derived from an animal. They died by millions during the bubonic plague rather than take a prophylactic serum made from pepsin and beef broth—because the pig from which pepsin was obtained was unclean to the Mohammedan and Hindu.

When You "See Stars." The man who when struck violently on the head says he "saw stars" is not far from telling the truth.

Tibetan Penal Code. The Tibetan penal code is curious. Murder is punished with a fine varying according to the importance of the slain, theft by a fine of seven to one hundred times the value of the article stolen.

Literary. "Oh, I simply adore Meredith and Browning and Henry James," said the gushing young person.

The Rip Van Winkle Kind. Salesman—Why not try one of our Rip Van Winkle rugs, madam? Prospective Purchaser—What kind are they? Salesman—They have an unusually long nap.—Indianapolis Star.

The Outlet. Physiology Teacher—Clarence, you may explain how we hear things. Clarence—Pa tells 'em to ma as a secret, and ma gives 'em away at the bridge club.—Cleveland Leader.

A Difference. "You told me Jones had become an actor."

Strong Motive. "Are you familiar with the motive of Ethel's new play?"

At the Station. "How dare you kiss me, sir?" "Yes, and he has kissed me too!" "Beg your pardon, ladies! I am all confused. I'm looking for my wife."

Switzerland's Cupola Fort. The Swiss reckon that their cupola fort on the St. Gothard, manned by 200 artillerymen, could easily hold the pass against an army of 50,000.

So Thoughtful. Tailor—How many pockets in your trousers? Customer—Only one, please. My wife is a busy woman, and I want to save her time when she goes through them.—Buffalo Courier.

STRENUOUS PASTIME.

The Whip Game as Played by Natives of British Guiana.

Of all the games it has been my lot to witness the most strenuous was the whip game I saw in British Guiana.

Then the players, men and boys, lined up in two rows facing each other. Each carried a whip ornamented with fiber tassels, those of the two end players having whistles attached.

Shouts of "Yau au!" rang along the line, and the players waved their whips and swayed gently backward and forward as they stamped.

Presently the two end men passed down between the rows, while those lined up moved slowly in the opposite direction. In rotation the other pairs of men did likewise, and then the whistle men ran swiftly to their original places.

They raised their whips and feigned to lash out at each other without much hurt.

Then one of them stood firmly and half turned away from the other. Immediately his whip sang through the air and came down on his opponent's calf with a crack.

Again and again he submitted to the lash, and then it was the other's turn. I cannot say who won—both were stoles of tremendous endurance.

THE FREEZING OF LIGHT. Radium Rays Congel at a Temperature of Minus 312 Degrees.

The world stood with gaping mouth and baited breath when science announced the phenomenon of frozen air, but wonderment has probably reached its limit when one learns that such an intangible and weightless thing as light has been frozen.

REAL ACTORS ON THE STAGE. How They Would Seem Now if Movies Had Come First.

We can well imagine that a generation brought up exclusively on moving pictures would hail the sudden introduction of the actual performers as a great invention.

Like all great discoveries, the process is exceedingly simple and based upon formulas that one marvels at not having been employed long ago.

An Appeal to Vanity. A Mussulman general gained a victory over the Greeks and captured their leader.

Retold For Choir Singers. One of the wealthy members of a fashionable church in Boston approached her pastor with the complaint that she was greatly disturbed by one of her neighbors.

Hard Luck. "People can talk of their troubles," said Mrs. Wagleigh, "but I think Mrs. Jones has the hardest luck of any one."

Sign For a Dog. "I've bought a bulldog," said Parsniff to his friend Lessup, "and I want a motto to put over his kennel."

Unforeseen. "Really, doctor, the medicine you prescribed for me is splendid. I think I shall be all right in a few days."

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FALLING A MILE.

Curious Effect of Dropping Rocks Down a Deep Mine Shaft.

In reference to the deep mine shafts at Calumet some experiments conducted by members of the faculty of the Michigan College of Mines are interesting. It had been noticed that in the vertical shafts at the Tamarack mine if some ore or rock were spilled near the surface men working in the bottom of the shaft a mile below were not much bothered and sometimes only observed "a little dust."

The explanation is that the earth is revolving from west to east, which gave the ball an eastward component in its fall because a particle on the surface of the earth is traveling at a higher rate of speed than one nearer the center, although at the same angular velocity.

There Are Some Curious Customs in This Queer World. There has been much discussion over the proper bringing up of children, but ideas continue to differ.

The Filipino father cries out with proud delight as his three-year-old girl baby takes her puff at her first cigar.

Among the Seri Indians of the gulf of California the father is the last one expected to have any influence on the children.

A Navajo father administers punishment to his children very much as any other father does, but the Navajo boy has a means of protection denied to white boys.

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MAGIC COAL TAR.

Once Despised, It Is Now a Source of Limitless Products.

SPANS THE WORLD OF COLOR.

It Yields Almost Every Shade or Hue and is Used in Practically Every Industry—In Medicine and Surgery, Also, It Has Worked Wonders.

Among the almost limitless number of natural products of this country coal tar stands well in the lead in the variety of uses to which it may be applied. Evil smelling, it is the rough material from which many valuable substances have been obtained after years of persistence by science and industry.

These substances include a wide range of colors, various burning and lubricating oils, asphalt for pavements, photographic developers and a great number of medicines, flavors and perfumes. Coal tar is used in practically every manufacturing process where dyes are needed, in making cloths, silks, dress materials, colored papers and even colored articles of food.

About a century ago coal tar was considered almost a waste product, and no one had thought it worth while to experiment with it. At that time gas was being introduced as a new light, and Frederick Accum, who wrote one of the first books on gas lighting, suggested the boiling of the tar in a still and the condensation and collection of the volatile products.

One was heavy and the other light. It was soon found that the heavy could be satisfactorily used as a preservative for wood that had to be fixed underground or submerged in water and was used extensively in preserving piers and wharfs.

Further experiments with the lighter oil were made by a Scotch chemist, Macintosh, who used it in waterproofing the clothing which still bears his name. It also is used as a solvent in varnish making and as coal naphtha for lighting.

Experiments with naphtha disclosed a rich treasury of colors which for centuries had been locked up in coal and its refuse—tar. Benzene was extracted from naphtha and this in turn produced the different shades of violet, green, blue and yellow.

Another chemist made the commercial manufacture of benzene possible. He was experimenting on the artificial production of quinine, and, using a base known as aniline, obtained the coloring matter called mauve.

This laid the foundation for the coal tar color industry which has developed until today almost every color and shade of color is derived from aniline. Aniline had been obtained previously from the indigo plant "anil."

The discovery of mauve created a large demand for the artificial aniline base and gave unexpected value to benzene. It yielded aniline by being treated with nitric acid and with the borings of cast iron powdered into dust.

Having done its work in the aniline still, the dust was used by the gas maker to cleanse his coal gas from sulphur, and then it passed to the manufacturing chemist, who burned the sulphur out of it and produced sulphuric acid—a cycle of operations whose beginning and end was the utilization of waste.

This method of producing color was responsible for the desolate madder fields of France and Holland and for the loss to the Hindus of their long cherished indigo cultivation. Anthracene, one of the heavier oils of coal tar, caused the fall of the madder growing industry. The madder produced violets, reds, blacks, purples and dark browns.

Anthracene was sold very cheaply for lubricating purposes until certain chemists heated it with zinc filings and produced alizarin, and then the secret of the madder plant was discovered.

In this way chemistry displaced agriculture, one pound of alizarin having the coloring power of ninety pounds of madder, and the lubricating oil sold at a trifle as waste became a valuable coloring matter worth \$500 a ton, thereby creating a vast industry.

In medicine and surgery coal tar has worked wonders. Saccharin, many hundred times the sweetening power of sugar, is used by diabetic patients. Carbolic acid is separated from the oil of coal tar by successive distillations, and in surgical operations a spray of germ killing carbolic acid is used.

Quinine, antipyrine and other fever assuagers are made from coal tar, and various antiseptics and food preservatives also are obtained from it.

Vanilla flavoring for cooking, which formerly was prepared from a bean, can now be obtained from the vanilla of the gas works, and even this vanilla can be made into a heliotrope perfume by adding oil of almonds, while the latter can be produced by treating benzene with an acid.