

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.

Through 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 Kharatum.

Two other factors in the adaptability of the camel to a desert life have to be taken into account. These are the feet and nostrils. The first named have but two toes, protected by very thick, horny pads to resist the burning sand, while the nostrils are long and slitlike and can be closed at will, thereby enabling the animal to survive the awful sandstorms which so frequently endanger the lives of travelers in these inhospitable regions.—St. Paul Pioneer Press.

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. Later tradition represented him as a man changed by means of Medusa's head into a mountain, upon which rested heaven and all its stars.

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."

It is not difficult to see how by an association of ideas this came to be chosen as the name for a book of maps which upholds and exhibits to us the whole world.

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. On entering the cathedral on a Sunday morning, fully robed, lawn sleeves and all, and passing the pew where the old lady sat he would pause and give her the "kiss of peace" before all the congregation, and this although he had met her at breakfast.

His sermons, too, were racy. Preaching against dishonesty, especially in horseflesh, as one of the great English failings in India, he went on, "Nor are we, servants of the altar, free from yielding to this temptation." Pointing to the occupant of the reading desk below him: "There is my dear and venerable brother, the archdeacon, down there. He is an instance of it. He once sold me a horse. It was unsound. 'I was a stranger, and he took me in.'"

Golf Defined.

On the terrace of a country club a group of nongolfers were talking tea. A male nongolfer said thoughtfully: "Golf might be defined as billiards gone to grass."

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

"Or the last flicker in the dying fire of athletics," sneered a young football player.

"The misuse of land and language," suggested a tennis champion.

"No, no; you're all wrong," said a famous angler. "Golf is simply a game wherein the ball lies badly and the player well."—Washington Post.

The Burglar's Prayer.

Sir Herbert Risle, speaking of the castes 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. They made a space in the ground, and a man then cut his arm and prayed to one of the earth gods that there might be a dark night and that he might succeed in obtaining great booty and escape capture.—London Standard.

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.

"Oh, I couldn't do that," came from the lips of the clever girl.—Yonkers Statesman.

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."—Washington Star.

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. After the acids have acted for the required time they are removed. The cotton is washed repeatedly and boiled several times in water. It is then pulped, partly dried and pressed into molds.

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.

The process is delicate and complex, for the proportions of acids and water must be exact and all must be chemically pure. Besides this, the cellulose must be of uniform grade, which is a most difficult thing to obtain.

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. Four per cent of the inhabitants eat regular meals. The remainder eat when they can and where they can. The average native in India lives on less food per diem than any other human being in the world. Religious prejudices are intense. Men willingly die rather than submit to some dismembering surgical operation, for did not Allah command them to appear before him as they left him to come into the world?

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, and the killing of this animal and the bull from which the broth was made was against the tenets of the Buddhist faith. I knew an editor in Poona, India, to absolutely refuse a \$3,000 yearly advertisement of a patent medicine because it contained pepsin.

Indians are fond of sweets and last year imported over \$40,000,000 worth of sugar. Clothing is made chiefly from cotton, which is largely grown in the country.—W. E. Aughlinbaugh in Leslie's.

When You "See Stars."

The man who when struck violently on the head says he "saw stars" is not far from telling the truth. The fact is that there is a phosphorescent power in the eye which does not attract a person's attention under ordinary conditions, but which is distributed and reveals itself whenever the head gets a sudden shock and sometimes even in the act of sneezing. A blow on the head results in a pressure of the blood vessels upon the retina, causing either total darkness or a faint blue light which floats before the eyes, and it is in this faint blue light the imagination discerns the thousands of fantastic forms and figures that by general acceptance are termed stars; hence, while the astronomical display so frequently mentioned may be said to be entirely a creature of the imagination, there is at least some foundation for the idea.

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. Here, again, the fine depends on the social importance of the person from whom the theft has been committed. The harboring of a thief is looked upon as a worse criminal than the thief himself. Ordeals by fire and by boiling water are still used as proofs of innocence or guilt, exactly as was the custom in Europe in the middle ages. And if the lamas never inflict death they are adepts at torture.

Literary.

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

"So do I," said Little Binks. "They are perfectly delightful. It's like sending your mind to a gymnasium. Er—do you read them in the original?"—New York Times.

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.

This world is to the sharpest, heaven to the most worthy.—Cicero.

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. Before the game the women handed around bowls of the native drink, "pairwarie."

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.

A gentle stamping began, which gradually grew louder till the earth seemed to throb.

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. The stamping increased in fury, and the whistlers whistled at each other in wild excitement.

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

The women ran up and down the rows offering their calabashes of "pairwarie," and then the real whipping began.

Two men challenged each other to a contest, and the rows retired, still stamping. The whippers, splendidly built fellows, stripped save for loin cloths, were a thrilling sight as they cautiously judged their distances, letting their whips just touch each other's legs.

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. The victim did not flinch, but joined his whipper in a wild sort of dance.

Again and again he submitted to the lash, and then it was the other's turn. I cannot say who won—both were stoups of tremendous endurance. I would have called the bout a draw.

Then the two whippers retired to an adjoining hut, where they indulged freely in "pairwarie," and others of the challenging rows took their places in the game, which lasted until the rows were exhausted.—Temple Manning, in Cleveland Plain Dealer.

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. So simple and logical a step would seem to them truly marvelous. At first the bodily presence of the actor might seem to them almost too oppressive, as we now feel it to be when we sit close up on a Shakespearean platform stage, but they would soon wonder why they had been so long content to blink at animated photographs.

The effect upon the actor would be most salutary. He would soon find that he was making himself laughably obvious. The astonishing callousness with which he has been accustomed to wring our withers would no longer serve his purpose. He would have to abandon the "irascible" look, the "revenge is sweet" look, the "jealousy" look, the "lovely dovey" look and all the other looks with which he now so impudently holds the camera in order to convey to us that he is feeling something, ah, so profoundly. He would have to unlearn all his looking glass grimaces and try to regain the natural mobility of human expression.

The historian of the drama would also give us a most instructive chapter on the emergence of the actor from the machine. He would hail it as a revolutionary step in the development of the drama, without which, in his opinion, the Hamlet that he worships would never have been possible. Knowing nothing of our pre-machine drama, he would not be tempted to draw the conclusion that with the rise and decay of moving pictures the drama has gone backward in order to go forward again.—New Republic.

Rather Hard on Father.

Among the Waiwai tribe of the Amazon basin, as among several others, the curious custom of the couvade prevails—that is, when a child is born the father takes to his hammock and remains there for a month. During this time he refrains from all strong food, and the women wait upon him as an invalid. Meantime the mother of the child goes about her work.—"Native Life in the Amazon Wilderness" in Travel.

The Same Thoughts.

Algy Staylate—I sometimes wish, don't ye know, that I had been born a rajah, don't ye know, over in India, don't ye know. Bell Britely (wearily)—Why, Mr. Staylate, how strange! I was just wishing that very same thing myself.—Puck.

The Hospitable Board.

"Your wife's dinner parties are always beautiful affairs."

"Yes," replied Mr. Cumrox. "At first people didn't seem to want to come to 'em. I guess mebbe the high cost of living is making a difference."—Washington Star.

A Difference.

"You told me Jones had become an actor."

"I didn't say anything of the kind. I told you he had gone on the stage."—Baltimore American.

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." It is stated that a car of broken rock could be dumped into the shaft without injury to a man standing directly underneath a mile down.

The reason is that the rock would never reach the bottom, but would lodge in the sides of the shaft on the timbers that protrude a few inches at intervals—that is, the rock would not fall straight, since these shafts are exactly vertical.

In the experiments conducted two round metal balls were dropped into the center of a shaft by burning threads by which they were suspended, so as to give them no lateral motion. It was tried to catch the balls in a box of clay in the bottom of the shaft. None of them was caught. One ball was never found afterward. The other was found in the east wall of the shaft only a few hundred feet below the surface.

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. Thus a ball or rock dropped in the shaft will strike the east wall a few hundred feet from the surface, possibly then rebounding several times in its drop until it lodges on a timber or on a level.—Engineering Magazine.

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.

It is customary to speak of the enormous generative power of heat, but more astounding still is the fact that by means of cold a force may be imprisoned and retained which when liberated traverses space at a velocity of 186,000 miles per second.

Like all great discoveries, the process is exceedingly simple and based upon formulas that one marvels at not having been employed long ago. Radium emits light which is called "emanation," and this "emanation" is nothing more or less than a gas. It is possible to freeze all gases, and when "emanation" is subjected to a temperature of 312 degrees below zero it becomes congealed.

The strangest feature of the phenomenon, however, is to be observed when the "emanation" commences to thaw, when from the surface of the surrounding liquid air brilliant spangles of light stream upward, producing a most beautiful and dazzling effect.—Birmingham Age-Herald.

An Appeal to Vanity.

A Mussulman general gained a victory over the Greeks and captured their leader. Having summoned the prisoner into his tent, he asked him what treatment he expected from his conqueror. "If you make war like a king," replied the Greek, "release me; if you make it like a trader, sell me; if you make it like a butcher, slaughter me." The Mussulman general set him free.

Abram-man.

It was at one time the practice to allow the inmates of the Abraham ward of Bethlehem hospital, London, to go about begging for the benefit of the hospital. Certain vagrants imposed on the charity inclined by pretending to be actual inmates and were therefore known as Abram-men; hence the term Abram-man, one who obtains money by shamming sickness.—London Express.

The Supreme Test.

"So you think Grace Brown is perfect, my son?"

"Why, yes, mother."

"Have you given her temper the supreme test?"

"What's that, mother?"

"Calling up a wrong number on the telephone with a cross operator at the other end and somebody trying to break in on the line."—Cleveland Plain Dealer.

Twixt Scylla and Charybdis.

"What are you so worried about?"

"My rich uncle wants to see me about his will and I'm afraid if I tell him that I am doing well that he will leave his money to his poor relations, while if I say that I am not doing well he'll leave it to a worthier one than myself."—Philadelphia Ledger.

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."—Munich Fliegende Blätter.

Strong Motive.

"Are you familiar with the motive of Ethik's new play?"

"Yes; he should be the money."—Birmingham Age-Herald.

IODIDE OF NITROGEN.

An Explosive So Deadly That to Make It is Suicide.

Explosives are solids which under certain conditions suddenly change into heated gas occupying many times the original space of the solids.

Ordinary gunpowder when fired turns into gas, of which the volume is 4,000 times as great as that of the powder. No wonder the bullet in front of it leaves the muzzle of the rifle in a hurry.

Today there are scores, even hundreds, of different sorts of explosives known to science. Some, such as lyddite, require a very considerable shock to explode them. Others, such as nitroglycerin, are fearfully dangerous to handle, for a few extra degrees of warmth or a very slight jar is sufficient to turn them instantly into gas.

Of the latter type there is nothing quite so unstable as iodide of nitrogen. It has to be made in alcohol. When allowed to dry it appears as a brown powder, and so unstable is this powder that a touch with a feather will set it off. The experiment has been tried of leaving a few grains upon a table mixed with a few grains of sugar. The first blue bottle that flew on the table and began to crawl among the grains caused an explosion.

The mere jarring of the air by a loud shout or a heavy footstep is sufficient to detonate iodide of nitrogen, and it need hardly be added that no one in his senses would attempt to make this terrible stuff. To do so in any quantity would be equivalent to committing suicide.—Pearson's Weekly.

BRINGING UP CHILDREN.

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. And the farther you get away from home the stranger the ideas seem.

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. The mother rules the younger members of the family, and when she must enforce her authority by physical force she calls, not on the father, but on one of her brothers or some other male adult of her family. The father must never chastise his 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. He has only to catch a rat by his own unaided efforts. From the moment he has accomplished this feat, no matter how young he may be, his father may not lay hands on him.

The children of the Point Barrow Eskimos have special training in politeness to foreigners. In conversing with strangers who make mistakes in the native dialect children must carefully note those mistakes and repeat them, even to imitating the wrong pronunciation of words. To speak correctly in such a case is likely to bring punishment from the parent of the child.—New York Sun.

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.

"It's positively unbearable," said she. "That man in the pew in front of us destroys all my devotional and pious feelings when he attempts to sing. Couldn't you ask him to change his pew?"

The good pastor was sorely perplexed. After a few moments' reflection he said:

"Well, I naturally would feel a little delicacy on that score, more especially as I would have to give a reason. But I will tell you what I might do." Here the pastor's face became illuminated with a happy thought. "I might ask him to join the choir."—Harper's Magazine.

Hard Luck.

"People can talk of their troubles," said Mrs. Wagleigh, "but I think Mrs. Jones has the hardest luck of any one. She is absolutely deprived by nature of enjoying a woman's greatest pleasure. She's a deaf mute and can't talk. She can only use her hands. Now, if that isn't awful tell me what is it?"

Mr. Wagleigh looked up from his evening paper. "I met her husband this afternoon," he said, "and he was tickled to pieces. His wife cut her fingers with the bread knife yesterday, and now she can't talk at all."—New York Telegram.

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. Can you think of one?"

"Why not use a dentist's sign. 'Teeth Inserted Here?'" suggested Lessup.—Kansas City Star.

Unforeseen.

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

"Well, well! Who would have thought it?"—Fliegende Blätter.

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.

If a man wishes to be treated with courtesy he should show courtesy to others.

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. The experiment was made, and the process yielded two oils. 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. Later 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 hothouse perfume by adding oil of almonds, while the latter can be produced by treating benzene with an acid. Huge quantities of this oil are used in the making of scented soaps. As a matter of fact there is scarcely a department of life into which the products of coal tar do not enter.—New York Times.

"And how does this hat look on me? Does it make me look younger?" asked the woman in the millinery shop.

"Ah, madam," replied the modista, "it makes you look \$30 younger."—Yonkers Statesman.

How Thoughtful.

Tailor—So 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.