

NEW GAUGING DEVICE

INSTRUMENT MEASURES 1-40,000,000 OF AN INCH.

Nottingham, Eng., Scientist Constructs Most Delicate Bit of Apparatus Known—Promises to Revolutionize Certain Branches.

London.—A remarkable discovery made by Dr. P. E. Shaw, one of the physical science lecturers of the university college at Nottingham, whereby measurements up to the 1-70,000,000th part of an inch can be taken is likely to lead to some vitally important developments in scientific investigation.

The apparatus has proved of the greatest use in measuring engineering gauges, surpassing all other methods in delicacy and accuracy.

The most important branches of science which will receive aid from the invention will be those dealing with the investigation of the secrets of life and matter.

When Shaw was conducting his experiments he had to use the vaults under the university and could work only in the dead of night when all the factories were closed and traffic in the streets entirely suspended.

Some idea of the delicacy of the instrument may be gained from the fact that the vibrations of an engine 100 yards from the vault make it impossible for Shaw to work.

The apparatus consists of a fine micrometer screw and a series of six levers acting in conjunction with it.

RAM UNEARTHED FORTUNE

Animal Tried an Experiment and Died, But Owner Made Money from the Results.

Washington, D. C.—A ram imported from England to improve the breed of sheep raised near Durango, Col., "rubbed" at a strange plant which it had never seen in England and partook heartily of its verdure because it sent up the first green shoots of the spring.

The discovery has led to the organization of a company in Detroit which will continue experiments upon a large scale with the shrub.

Essex, Conn.—William H. Parmelee, merchant and dockmaster at the Essex steamboat landing, has in his possession a relic which he prizes very highly.

REVOLUTIONIZE STEEL WORK

New Process of Electric Smelting to Cut Pig Iron Cost a Third—Electric Smelting.

Sault Ste. Marie, Can.—By a new method that promises to revolutionize the iron and steel industry, pig iron can be made for \$10 a ton, which is five dollars less than the cost under the system now generally in use.

The plants where the work was done are owned by the Lake Superior corporation. Dr. Herault, a French expert, had charge of the tests.

Largest Gold Output. Reports of the world's production of gold last year show the largest output of which there is any record.

SNARES "THIEF" BY 'PHONE

Mrs. Rudolph Ortman Summons Police—"Noises" Prove to Be Cook and Her Sweetheart.

Chicago.—Rudolph Ortman, first vice president of the Griffin Wheel company, and living at 99 Lincoln Park boulevard, found his residence in an uproar when he returned the other night.

Mrs. Ortman has in her employ a domestic named Hannah, and she has a sweetheart named Fritz. As arranged when she started to work for the family, Fritz was allowed to call Friday evenings, and he came as usual.

Detective Hlott and three policemen hurried to the house, and discovered that the "burglars" were Fritz and Hannah, who were in the dining-room exchanging confidences and planning what they would do in the future, when their ships arrive in port.

BEWARE OF WIND ON SHINS

New Terror to Everyday Life—Exposure of Limbs Chills Blood.

London.—A new terror is added to everyday life owing to the discovery by a medical journal of an unexpected and insidious method of catching cold.

"It is not generally known," says the British Journal of Nursing, "how frequently a bad cold is induced by coldness of the shins due to thin stockings, or by their exposure to draughts, or a railway train, or in other chilly conveyances."

"The blood vessels on the front of the shin are peculiarly exposed to such influences, because the skin covering them is so thin, and thus it can easily be understood that such exposure to cold on the front of the leg may chill the blood circulating through it."

"For the same reason, cold draughts on the back of the neck, where again the skin is thin, and the blood vessels are easily exposed to atmospheric influence, are a very common but often overlooked cause of bad colds."

"The moral of all this is obvious—especially in weather such as this, or when traveling to keep the front of the legs and back of the neck warmly covered."

VAST CAVERN OF WONDERS

Kentuckians Return from Week's Exploration with Tales of Animals, Mirrored Rooms and Noises.

Danville, Ky.—Felling many strange tales of a newly discovered cave five miles from Danville and two miles east of Perryville. Irvine Parks, who found it, Eugene Carpenter, George and Joseph Godfrey and John Mitchell have returned bearing geological curiosities and five ossuaries and seven coons.

Equipped with lanterns the men penetrated the cave eight miles, and were unable to reach the end of it. They carried provisions to last one week, and they stayed that long. Parks and his companions say the cave rivals in splendor the famous Mammoth Cave, in Edmonson county.

BELL IS 200 YEARS OLD.

Resurrected for Service as Fog Signal for Steamers at Essex, Conn., Landing.

Essex, Conn.—William H. Parmelee, merchant and dockmaster at the Essex steamboat landing, has in his possession a relic which he prizes very highly.

Flying Squirrel in Chimney. A flying squirrel recently came down the chimney of a Santa Claus at William C. Leavitt's home in Norway.

Painting Faces. Mrs. Painter—I see the left side of the face is usually considered by artists to be more beautiful than the right.

Sleep Required. Seven hours of sleep is the minimum amount required by the average person, according to Prof. Weygand, of the university of Würzburg.

CHICKEN FEATHERS.

SOME OF THE USES TO WHICH THEY ARE TURNED.

What Finally Becomes of the Covering of Ducks, Geese and Turkeys—Some Trade Secrets.

One turkey supplies more different grades of feathers than a season's receipts of turkeys show different grades of feathers, and although five cents a pound covers the range of difference in value of the toughest old tom turkeys and the plumpest young hen, the feathers sell at five cents a pound for the body feathers up to 40 cents a pound for the fine tail feathers.

Local poultry men, says the Indianapolis News, sort six to eight grades of turkey feathers and the buyers make even more assortments, the feathers being used for as many different purposes.

The fine tail feathers used for dust-ers are kept separate and sell for about 40 cents a pound and the "skirt" feathers are worth nearly as much. The wing and "point" feathers are also carefully saved and sold to manufacturers of featherbone and other substitutes for whalebone.

Duck feathers are worth about 35 cents a pound for white, to 50 cents for mixed. Dealers say the principal reason that goose and duck feathers are worth more than the finest turkey and chicken feathers is that, aside from being fluffier, there is an absence of odor to them that cannot be overcome entirely in chicken and turkey feathers.

Most of the chicken feathers go in the five to ten cents a pound class, to be used for cheap feather beds and pillows, the white feathers being saved separate and bringing a good premium over the mixed grades.

Feathers shipped from this market are packed in bales of 200 pounds or in six-foot sacks. The tail and wing feathers are usually packed in boxes and sometimes tied in neat bundles.

Five chickens will give a pound of feathers, and with Indianapolis firms killing two to three thousand chickens a day for home consumption and shipment this market has nearly two tons of feathers a week to sell.

A single carload of feathers shipped to Cincinnati the other day contained about six tons. They cost the shipper more than \$1,000. Cincinnati and Chicago are good buyers of all grades of feathers, most of the local shipments going to these cities.

PEOPLE SCARED THE LION.

Zoo Animal Escaped from Cage, But Was Glad to Get Back in It.

A group of loungers were discussing the recent escape of a lion at one of the summer parks just outside of Newark, and one expressed his belief that it must have been something of a scare, says the New York Press.

"Scare!" echoed a man connected with the park. "I should say it was a scare. The people made such a din I was afraid the poor old fellow would die of fright before we could get him back to his cage."

"We found him hiding behind a tree, and it was ten minutes before we could induce him to face that yelling mob and get back to where he knew he was safe. He is the gentlest old fellow in the world, and never would have wandered out had he not been frightened by the man who fell into the cage from the cycle whirl above. Of course that upset him, and when he saw the door open he naturally ran out."

"Then the people made such a noise that his one idea was to flee. The more he ran the more they yelled, and when we did get him back it was hours before he stopped trembling."

"It was a shame to scare the poor old fellow like that."

Social Influences. In England it is not what you know that is of importance, but who you know; not what you are, but who you are; not what you do for years ago, but what others will do for you.

TENEMENT DWELLERS

HABITS OF FAMILIES IN CROWDED CITY DISTRICTS.

There Is a Strong Resemblance to Primitive Man in Their Treatment of One Another.

A study of the tenement house family will at once suggest a close resemblance between primitive and tenement house man. Lack of capital, migratory habits, high birth and child mortality rates, maternal ignorance, uncontrolled parental affection and sense of proprietorship, sex taboos, lack of "self-determination" in matrimonial instability are circumstances of characters common to both.

Even the members of the family who have had a fair amount of schooling possess small reasoning powers. They show little curiosity or skepticism. If they are unable to understand a thing in the beginning they show little desire to comprehend its meaning.

Most of the men read daily or Sunday papers. The women have little opportunity to read. When they do buy a paper they discuss the latest murder, the last automobile accident or the fashionable wedding with their neighbors.

Everybody has crayons and chromos of parents, aunts, uncles, brothers, sisters, cousins, etc. The pictures are copied from photographs, or they are crayon drawings made by the installment artist.

Memory cards, which express the sorrow of the family, and give date of birth and death of the deceased, are sent to the friends of the family.

In the Italian home, however, there is usually some attempt toward artistic expression. The daughter of the house takes piano lessons "for to finish her education."

The Boston terrier is a development of the English fighting dog known as the bull-and-terrier. The breed originated from a cross between the bull dog and terrier, but the Boston terrier is now neither a mongrel nor a freak.

The Chinese in Mexico. The Chinese who have come to this country as immigrants are, for the most part, peaceable and orderly people, giving little trouble to the police of the capital, or of the interior cities.

The Chinese coming to Mexico are even of the better class of laboring people a home, though there are some exceptions. Merchants find the industrious Chinese good customers and careful of their credit, meeting their bills promptly.

With Proper Setting. The man had tried to kiss her. She drew back with hauteur. "Sir," she exclaimed, "have you no sense of propriety, or fitness of,—" By this time she had succeeded in turning the lamp low.

Disappointed Man. "Did Cateby marry for love?" "Yes, poor fellow, and he got noth'ng but money."—Detroit Free Press.

ZUNI INDIANS' GREAT FEAT

Account of One That Surpasses the Tricks of Magic Performed by the Hindus.

The medicine men among the Zuni Indians perform a feat at the annual "corn festival" which surpasses the famous mango-growing trick of the Hindu. Many scientists have been present to witness this strange ceremony, but have never been able to fathom the mystery of it.

In front of the southern opening of the medicine lodge a large square of clean yellow sand, carefully smoothed, and packed, is spread. With a ceremonial arrow figures, representing the Great Spirit, the earth, sun, sky and rain, are drawn. There are also the symbols of the corn and a bountiful harvest.

The hour for the ceremony arrives, and at the right moment the medicine man comes forth from his lodge and takes a seat in the opening of the lodge, facing the sand square. The warriors and chiefs arrange themselves around the square, according to rank. The ceremonial pipe is then filled and lighted and the medicine man blows one puff in each direction of the compass and two to the heavens.

The great moment has arrived. With impressive solemnity the medicine man thrusts the sacred arrow into the sand, withdraws it and places a grain of corn in the hole thus made. Carefully smoothing the sand over it, he resumes his seat, while the assembled chiefs smoke their pipes in stolid silence.

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Frivolous Definitions. Luxury—That which makes the poor discontent and bores the rich.

Consistency—The one jewel that does not arouse a woman's envy.

Popularity—The price of self-respect.

Bet—Denying yourself the indigestible food you like and eating the digestible things you don't like.

Actor—One who pays more attention to the bill-board than the board-bill.

Caution—The brake that stops a career from running up-hill to success.

Curiosity—Paying a thousand dollars to see your appendix.

Good Judgment—Finding out what kind of advice a man wants and giving it to him.

Conscience—The internal whisper that says: "Don't do it; you might get caught."

Vanity—The food of fools.

Appreciation—Envy in sheep's clothing.

A Compromise—An amicable understanding by which you and your wife agree to let her have her own way.

Allimony—A grass widow's pension.

High Finance—Making two millions grow where none grew before.—Saturday Evening Post.

SEES EVIL FOR 1906.

PARIS SEEBERS PREDICTS MANY CATASTROPHES.

Mrs. Thebes Who Foretold Bloody Year for 1905 Presages Mad Twelvemonth—Belgium to Be Prominent Figure.

Paris.—The new year does not bring much good to anybody if we are to believe the prediction of Mrs. Thebes, the seeress made famous by Alexander Dumas, fils. In her almanac for 1906 which has just appeared, she says:

"As I predicted years ago that 1906 would be a bloody year I now predict that 1906 will be a mad year. The civilized world, or, rather, the world which likes to call itself civilized, is in a stage of transformation. What will emerge from the chrysalis? A monster. It will take a long time and many bloody dramas before war between the classes and nations will be followed by peace and friendship and establishing of a new social order. I once more predict that the small country of Belgium is destined to play a strange and important part in this transformation, which is to come, and which will change the whole political situation in Europe in a most remarkable manner."

"The disturbances which are now threatening the Russian empire will spread to Germany and before the end of 1906 the German colossus, buff as it is on a foundation of clay, will begin to crumble into dust. The days of more than one prince are counted, and I am not afraid to say that altogether the year of 1906 will bring the most astonishing events."

"In France the political situation will continue to be as unsettled as ever and to a certain extent more dangerous, though the danger will be more imaginary than real, and in spite of violent financial crises and struggles between political parties the country will emerge unharmed."

"I am not able to say whether we shall have any great war, that depends on too many different circumstances and the book of destiny reveals nothing, but neither does it reveal that Europe will remain in peace."

IS RELIC OF A DINER-OUT.

"E. M. P.'s" Knife and Fork Case Carried 200 Years Ago on Exhibition in Collection.

Chicago.—Just who "E. M. P." was is not known. That he lived in Saxony 200 years or more ago and that in his day and generation he was a great diner-out there can be no doubt. The proof lies in the fact that the leather velvet-lined case in which he carried his knife and fork shows evidence of much carrying.

In those days knives and forks were ranked as the greatest luxuries. The thrifty housewives of Saxony, whatever their wealth and standing, did not possess sets of knives and forks. To own one was a sign of great prosperity. Therefore each guest carried his or her own knife and fork when invited out to dine.

From the ruins of Babylon where they were, it is said more than 3,500 years, are several seals, which, cut in stones or pebbles, show the earliest use of the crescent and the star.

ADMIRALTY BARS DRINKING

Officers Claim Whisky Habit Destroys Nerve, Quickness of Brain and Efficiency.

London.—When ships belonging to the navies of other countries visit British ships in the future it looks as if there will not be much flow of wine in the entertainment afforded by the officers, for the admiralty has set its face against the consumption of alcohol except in moderate doses by naval officers.

Sea lords assert daily that the whisky habit destroys the nerve quickness of brain and is in consequence fatal to fleet efficiency.

Officers' wine books are being examined, and no officer under the age of 20 is permitted to consume spirits of any kind. As a reason for the order it is claimed the officers of ships at home which are provided with a nucleus for crews have no work to do in the afternoons, and for that their good habits are endangered by leisure.

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Find Two-Tailed Comet. A telephone message has been received at the Harvard observatory from Prof. Percival Lowell saying that he had found a second comet on the photograph made on November 29 at 9 hours 54 minutes time, seven hours west of Greenwich, eighth ascension 338.5, declination minus 2.7. The comet was moving two minutes an hour south by west or north by east. The comet had two tails, one extending north and the other northeast.

Story by Kaiser. Emperor William declares that he has no warlike plans, but the London newspapers will regard this as another of William's clever stories under cover of which he may be suspected of intending to send a fleet of warships up the Thames.