nern antiqui-

Magnusson has the educational omen, who have ans of education. irls will be enshe thinks they their food-as tish universities ing-in order to include techniof importance, dic women are kinds of hand some necessary adapting it to a han Ireland, with attered over its here travel is so chools as in counions is practically

RUTH.

in to sin. ret of strength. little knowledge,

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re it over. ne qualities we disthe qualities we

upon the bank;

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lorless; no one has il. It is the moral acter, if either God

of talking that s in nothing. Not yet poorly repreit merely dilutes purpose. ike the present : not

r

there is no moment nt force and energy ne man who will not when they are fresh hope from them

orld's fair is over at nk heaven! Now the there will stop adnot to sell their pos-

Indiana is " Aunt attained her 104th inmate of the Old re Haute.

ole caused Binford County, Ill., to leave e years ago. From heard of him until his anger had cooled, his wife refused to

ter carried a bogus her predatory excurd a wax face and a It was the thief's ly transfer purloined s, laces, etc., to the usually gained much e little excursions.

WONDERS OF ALUMINUM.

the Future.

It is Driving Silver Out of the Arts to Some barnacles, seem to thrive on it, as they do

num. It is now on the market at 65e a pose. pound, and a thousand fresh uses for it have been discovered. Already it has driven silver out of the arts to some extent. It ity by gold and silver. In point of ductilhas almost superseded the latter metal as ity it is seventh among the metals, ranking foil for "gilt" work, because it is quite as after copper in that respect. It is equal beautiful and can be heaten into lear nearly to silver in taking and retaining a very high as thin as gold-leaf. The production of it polish. Fine effects are produced by first has surpassed that of nickel and will soon burnishing and then stamping it, so as to exceed that of copper and lead. In fact, show unpolished figures in relief. earth's crust. Every clay bank is a mine other instruments of physical science is of it, and nearly all rocks are literally ere- growing. heds of it. At present it is comparatively It is a remarkably good conductor of heat it is now derived are comparatively rare.

which will utilize the power of the Nisgara been for the safeguard thus provided the Tunnel. Up to January 1, 1893, the total huge obelisk might even now be in ruins. Its history is all before it.

and tear. Shoes of this metal are now em- unknown is quite certain.

FOR ROOFING.

the Transportation building at the World's | ing it as cheaply as iron. Columbian Exposition was on a base of thin aluminum foil. The metal "takes" oil-colors well, and sheets an i plaques of it are being manufactured in great quantities

for artists. One of the most important of future uses of aluminum is for kitchen utensils. The heavy iron pot, which the cook can scarcely lift off the fire, will be superseded by a vessel of the white metal that, while equal in capacity and strength, may be raised with a finger. This new material, remember, is as light as chalk. At the same time it is so strong that any kind of hollowware formed of it may be knocked about to any extent and bent into all sorts of shapes without breaking. An aluminum pot costs no more than a copper one, and, unlike the latter, it does not have to be lined with tin for culinery employment, because it does not corrode. For tea-kettles, coffeepots, and covered dishes intended to retain heat, it serves admirably.

Various accoutrements for German and French soldiers are now made of aluminum -such as breastplates, helmets, belts and buckies. From the military point of view in these days it is of the utmost importance to save every possible ounce of weight in equipment in order that the fighting man may carry the maximum quantity of ammunition. Even cartridge shells are being turned out in the same metal. The latter are drawn down to the finest sizes of wire. The addition of a small percentage of it to type metal makes the type far more durable. The remarkable development of the last few years in the quality of steel castings is due to an admixture of aluminum, which renders the steel more fluid. Even ordinary stoves now contain somewhat of the same ingredient.

A BEAUTIFUL ALLOY.

turns out thousands of medallions and would iron castings similarly treated. potes," nephews. They look like silver. Sounding-boards and stringed instruments

of various kinds are now being made of aluminum, which is elastic and capable of vibrations through a wide range of tone

as heavy, gold nearly eight times. It is not acted upon by organic secretions. Hence is is most serviceable for surgical instruments, for wire to sew up wounds, etc. It New Uses Found For the White Metal of is almost absolutely proof against sea water, per for sheathing the bottom of vessels. Unfortunately, those pernicious mollusks, Extent-Elichen Etensils and a Thon- on steel. But an aluminum bronze, made sand Other Things Made of It - Vast De by mixing a small percentage of the white metal with copper, is free from this ob-There is big news to be told about alumi-

THIRD IN MALLEABILITY. Aluminum is only exceeded in malleabil-

aluminum is destined soon to take the place It is absolutely non-magnetic, and for of lead and copper to a large degree, as this reason is largely employed for electricwell as that of iron when it becomes cheap al appliances. A small percentage of silver enough. Economical processes for its re- mixed with it hardens and strengthens it, duction a'one are needed. There is more making it most suitable for many kinds of of it in the world than there is of iron. It engineering and other scientific apparatus. forms 7 per cent. of the material of the The demand for it in astronomical and

dear because no method has as yet been and of electricity. On the latter account discovered for obtaining it at low cost from it was selected as the material of the common clays. The minerals from which pyramidal cap which now forms the apex of the Washington monument. This cap ex-The States produced 83 pounds of alumi- cited great interest in 1885, when it was num in 1883. In 1892 the output of the put on, the metal being at that time worth United States was 260,000 pounds. Last \$8 a pound. The monument has been struck year one concern in Germany, at the falls by lightning several times, but the dangerof the Rhine, turned out 720,000 pounds of ous fluid has been carried from the alumiit. The domestic production is to be large- num cap down the lightning rod 550 feet ly increased by works at Niagara Falls, into the ground. Perhaps if it had not

world's output of the metal has been only Aluminum was first isolated in 1827 by about 1000 tons. But it is not long since Wohler, who had previously discovered the aluminum was regarded only as a curious metals barium, magnesium and calcium, experimental creation of the laboratory. obtaining them from alkaline earths by means of electricity. Calcium is sold at Slate-pencils are among the novelties this day for \$300 an ounce, owing to the difficulty of separating it from the elements The soft aluminum wire, with sharpened with which it is ordinarily found combined, point, works admirably upon school slates. | though it is reckoned that the skeleton of a Such pencils are much more durable than man contains \$15,000 worth of it. That the old-fashioned kind, suffering less wear some of the existing metals remain as yet

ployed for race horses. Not only do they For a long time this white metal was possess the advantage of lightness, but they manufactured only in the laboratory of the are said to preserve the feet of the animals chemist for the sake of experiment. Only remarkably Racing shells are formed of half a dozen years ago melancholy notices single sheets of aluminum, one-nineteeth of were printed in the newspapers reporting an inch thick, weighing less than cedar. the death of "the only man who possessed One such boat, for four oarsmen, lowered the secret of producing it in large quantities the mile record nine seconds last summer. on an economical basis." Nevertheless, it can now be obtained in amounts practically unlimited for 65c a pound. It is on the Aluminum is beginning to be utilized for market in the form of ingots, plates, sheet, roofing, in sheets like tin, the cost of it for bars, wires, castings, foils, etc. Its prothat purpose being about the same as cop- erty of strength without weight renders t per. It may be rolled down to a thickness far more serviceable for mechanical ! of about 5-10,000ths of an inch. The poses in general than any other known s beaten "leaf" is now employed to a con- stance. It can be dissolved out of any cl ; siderable extent in decoration. It is thus bank by the use of concentrated sulpluing used in leading hotels of New York and acid, but the process is too costly. Sooner other cities. All the crnamental work of or later a method will be found for produc-

Frightened to Death-There are several well-authenticated cases where fright was the cause of death. An English surgeon tells of a drummer in India across whose legs a harmless lizard crawled while he was half asleep. He was sure that a cobra had bitten him, and it was too much for his nerves, and he died. Frederick I. of Prussia was killed by fear. His wife was insane, and one day she escaped from her keeper, and dabbing her clothes with blood, rushed upon her husband while he was dozing in his chair. King Frederick imagined her to be the white lady whose ghost was believed to invariably appear whenever the death of a member of the Royal family was to occur and he was thrown into a fever and died in six weeks. But perhaps the most remarkable death from fear was that of the Dutch painter, Pentman, who lived in the seventeenth century. One day he went into a room full of anatomical subjects to sketch some death heads and skeletons for a picture he intended to paint. The weather was very sultry, and while sketching he fell asleep. He was aroused by bones dancing around him, and the skeletons, suspended from the ceiling, clashed together. In a fit ot horror he threw himself out of the window. Though he sustained no serious injury and was informed that a slight earthquake has caused the commotion among the ghostly surroundings, he died in a few days of

nervous tremor. Our Uncle, the Pawnbroker.

"Uncle," as applied to the pawnbroker, is a wretched pun on the latin word uncus, a hook. Pawnbrokers employed a hook to lift articles pawned to upper shelves before sponts were adopted. "Gone to the uncus," is exactly tantamount to the A new and beautiful alloy is produced by modern phrase, "up the spout." The mixing twenty-two parts of aluminum with pronoun was inserted to carry out the pun. seventy-eight parts of gold, the result being The phrase "a ma tante" does not mean a rich ruby tint. The white metal is also "to my aunt's," but "to the scoundrel's, plated with gold, silver and mekel. It is the word tante, in French argot, being the employed in making the firest kind of art most reproachful word they can use speakcastings, engraved, chased, and repousse ing of a man. "Gone to my uncle's," in work being brought out with as much per- French, "C'est chez ma tante," at the fection of detail and finish as is exhibited pawnbroker's. In French the concierge de by electrotypes. The concern referred to prison is called "uncle," because the prisoners are "kept there in pawn" by the govgroups of human figures and animals in bas- ernment. In the seventh century a usurer relief, using molds of sand and plaster-of was called "my uncle" in the Wallon paris. These articles may be thrown provinces, because of his near connection across the room and will not break, as with spendthrifts, called in Latin, "ne-

The English Channel.

There are about eighty days in the year when the dreaded English channel is nearly pitch. The material has the great advantage as smooth as a mill pond; though there will of being proof against moisture, and it will generally occur a slight ground swell. If a not split under any circumstances. Ever northeast or southwest wind blows hard it 000. since the new metal became available at a is quite true that the sea in the channel is moderate price it has been utilized by ex- one of the worst in the world, though relaperimentors in flying machines. Before long tively slight. The tides, which are very it will be extensively used for bridges, various, crossing the wind, combined with ery. because it is so light and strong. Other the shallowness of the water and the fact uses to which it is being put are for pro- that the ebb and flood meet and part just tiles. pellers for ships, valves for air-brakes, off Dover, kick up at times an entirely opera glasses, picture frames, cigar cases peculiar and abominable ocean dance which modals, vases, salvers, watches, bicycles, even old salts cannot always stand. But at For these table manual forks and spoons. the worst the passage is now-a-days only a For these table utensils it has the disad- matter of some eighty or ninety minutesvantage that a slight coating of its own very different from those bygone times oxide always gives it a greasy feel so that when lugger rigged smacks or heavy cutters it is never likely to supersede silver in this used to roll the suffering passengers from coast to coast on such a wild sea as is de-Aluminum has a number of wonderful picted in Turner's famous picture or as when properties. Most striking among these is in 1822, the first steam packet, the Rob its lightness. Ten cubic inches of it weighs Roy, of fifty tons, came over on May 22, less than a pound. Iron is nearly four times bringing six adventurous persons.

WEREYOU ATTHEFA'R?

til These Thiags Were There-Bli You See A Masical Director's Observations and In-Them? Glass bricks.

Electric Buoys.

A \$15,000 clock.

A \$25,000 organ.

A golden chair. An \$80,000 clock. . An \$40 onyx cane. A bed worth \$950. 1500-year-old corn. A \$1000 arm chair. A \$1500 music box. Dom Pedro's chair. Microbe incubators. A \$300 Panama hat. A \$2500 glass dress. A 73-pound salmon. A 42-foot high clock. A cape worth \$17,500. A pole 215 feet high. Electrical engraving. The Mayflower bible. John Wesley's clock. Lace at \$1000 a yard. A 107-ton locomotive. A \$500 sea-otter skin. A 26-ton block of coal. A butfalo in alabaster. Milking by machinery. A nugget worth \$41,883. A plate valued at \$167. A steam mocking-bird. Footgear of 1500 sorts. A spun-glass umbrella. A palace built of corn. Girdle valued at \$30,000. A mantle marked \$1000. A bureau 150 years old. One of Gladstone's axes. Leather of 300 varieties. A \$19,000 gold certificate. Tree 36 fect in diameter. "Ta-ra-ra" in Egyptian. Diamonds worth \$100,000. A fishing rod worth \$750. A 150 year-old tea plant. Grace Darling's life boat. A bandsaw 22) feet long. An orange "liberty bell." Tea worth \$175 per pound. A \$13,000 fisheries display. Bamboo poles 70 feet long. A steel ingot worth \$2250 Watches valued at \$400,000. Horse and rider in prunes. Billiard balls worth \$80,000. A \$35,000 solid silver model. Japan exhibits corned beef. A 30,000-pound block of salt. A 300-year-old dwarf cedar. A horse model costing \$5000. American birds of 106 kinds, A brick warship cost \$80,000. Two miles of lunch counters. Egyptian "bum bum" candy. Forestry exhibits of 18 states. A skycycle or flying machine. Java women affect white hose. An 8000-pound piece of copper. A 12-ton lump of crystal alum. Forty races in friendly rivalry. A Jersey cow valued at \$15,000. An ammonia street car engine. Chickens hatched by electricity. A chocolate tower worth \$40,000. Watches mounted on butterflies. A cheese weighing 20,000 pounds. The national capital in flowers. Pearl necklace valued at \$100,000. An exhibit of "swiftest" poisons. A Krupp gun that shoots 20 miles. An iron eagle with 3000 feathers. A pavilion built of packing boxes. The biggest molding in the world. A shawl containing 24,000 stitches. One jewelry exhibit worth \$400,000. The judges of awards number 650. A silver statue weighing 21 tons. A hand that dates from 100 B. C. Oregon shows an 82 pound salmon. Brazil shows 2000 grades of coffee. Oldest lathe extant-the Blanchard. Munich shows an \$8750 microscope. A 50-toot high anthracite pyramid. Humpbacked whale, 471 feet long. The Washington monument in colns. A Japanese doll "baby" six feet high. A stained glass window worth \$6000. A group of windmills worth \$200,000. A gold nugget weighing 3040 ounces. Vases made in the fifteenth century. Clay pipe smoked by Miles Standish. The first umbrella imported to America. World's Fair exhibitors number 50,000. A Shakespearean vase valued at \$2000. One hundred and twenty carloads of glass, Log 42 inches square and 41 inches long A fountain that squirts California wine.

The lumber in the Ferris wheel cost \$12,-A piece of lead ore weighing 6500 pounds. Sixty-nine engines operated the machin

Paintings executed by Queen Victoria.

An elephant tusk weighing 158 pounds.

A 52-ton gun, with 1000-pound projec-A cook stove 25 feet high, 35 feet long,

20 feet wide. Freethinking often means thinking that is free from the restrictions which accurate [Tit Bits. knowledge of the recognized laws of reasoning lays upon scientific investigation.

Remember that nothing will supply the ledge useless, wit ridiculous, and genius contemptible.

SURE THAT OHICKENS TALK.

teresting Conclusions. Hamerik, the director at the Peabody siderably strengthened. Until three or Conservatory of Music and the composer of four years ago the so-called cordon consist-Norse symphonies, says that he has made ed of comparatively few men only. Service the discovery that chickens have a language on the frontier is very monotonous, and the which he, by careful attention and by ex- men selected for this work are generally periments, has partially mastered. He young recruits from the Eastern and central

"Chickens are the greatest gossips in the world. I know they have a language, for frontier guards receive their hard-earned when one is alone it will not talk at all. It and scanty pay, and on the 2nd and 16th may, perhaps, sing a little song to pass the of the same month it is regularly expended time away, but it will not talk to itself. in drink to the very last kopeck. As soon, however, as it meets another the co versation will begin. Their voices are they frequently take to stealing from the sometimes sweet and then again harsh and | Prussian farm-houses across the border line: discordant as is the case with human beings. Sometimes, however, they meet with a With me it makes a great difference piece of good luck. A Prussian hen or goose whether a fowl's voice is pleasant or dis- wanders innocently over the line and imagreeable, though most people do not seem | mediately disappears into the nearest Rusto notice the distinction. My chickens sian guard-house, where it forms a welcome China breed, and them I have paid the authorities. Complaint by the farmer that they have very acute senses of vision, be looked into, and that is the end of it. hearing, and taste, but they cannot smell. ed, and after eating anything more than Sometimes a signal shot is heard when usually palatable they will give vent to an smugglers are suspected to be in the neigh-exclamation of pleasure, just as a person bourhood of a sentry, the signal being taken under the same circumstances.

tain colors. Red airsandrives them crazy, all becomes still again. while blue is not to their liking by any | On cold winter nights, when the icy east means. One day I noticed that my chick- wind blows across the plains, wood fires like ens in the back yard were in a terrible state | beacons flicker at intervals all along the of excitement. I accidentally found out line, and here and there can be seen the tall the cause of it. There was a red curtain in figure of a guard engaged in the vain atthe back window of a house next door, and | tempt to thaw his frozen limbs. I could see them glance up at this and utter | The chief duty of Russian frontier guards their notes of alarm. I got the lady of tie consists in preventing smuggling and the house to have the curtain re-moved and the introduction of Nihilistic literature and commotion ceased. I tried an experiment proclamations into Russian territory. But with other colors, but they did not seem o the guards are often deceived-if they are mind any but blue, and this they did . t not bribed by the smugglers, which is frelike. I found if a blue ribbon or string 's mently the case: a state of affairs scarcely tied to one chicken's leg all the rest word surprising when one considers their miser-

keep away from it. gnish between white and colored peop. order to elude their vigilance. Two years For the latter they have a special aversion. | ago some smugglers on the Prussian side Whether it is because they know by instinct | began snowballing some villagers on the that negroes are so fond of them for eating Russian territory, and the latter returned purposes or not I cannot say. I once had the attack. But in the snowballs which five Cochin China pullets to which I gave were thrown from the Prussian side into the names of Pete, Pet, Pat, Pit, Pot. Russia yards of the most expensive Brussels Pete would respond readily when her name | lace were concealed. Thousands of Nihilwas called, but the others would come also istic proclamations were on one occasion with the exception of Pot, who would come smuggled through Silesia into Russia in the when I called her. Pete would come when | hollow staves of persons who, disguised as I called Pit, Pat, and Pet, showing that pious pilgrims, successfully eluded the she could not distinguish closely between vigilance of the guards and the hawk-eyes the vowels i, a, and e short. There was of the Secret Police. such a difference between these and Pot that the latter would recognize her name as soon as called. If the consonants were transposed, and I would call Top instead More of Them There than in Any Other of Pot, she would not notice.

"Crowing among roosters is a most interesting study. I have noted the crows of over 100 roosters and I have never found two alike. One may crow in this manner: 'Dum-didi-didi;' another may go, 'Dum-didi-didi-didi.' and so on. The crow is nearly always between 12 p. m. and 12 a.m., and is from three to seven seconds in duration. Roosters begin to crow at dawn and those further eastward crow the last. It is a kind of telegraph service from one to another. Generally there are seven crows given in the space of ten seconds from each other. Cocks crow a few minutes after being frightened and after eating, and I can almost tell exactly when they will begin. A rooster is by all odds the the proudest thing on earth with no exwith one in this respect."

Prof. Hamerik has made so deep a study of chickens that he can imitate their movements and reproduce their voices.



A Substitute-

James-" What's the matter, Brown?" Brown-" Everything going wrong. tell you, old fellow, I feel like taking poison and committing suicide."

James - "Oh, come, come, don't do any thing like that. Here, take another cigar-

A Straight "Rainbow."

straight rainbow was witnessed at Aboyne | no halting feet, no idle hands, but all move on the morning of the 26th of May, 1893. as if it was their last day on earth, and this Stretching along the falls of Merven and was the only hour in which to redeem a Culblean, and slightly below the top of misspent life. For lessons in industry and A set of 20 stamps valued at \$5000 each. the former, was a magnificent ribbon, perfect government go to the ants. exhibiting the full spectrum of colors from red to violet but without the slightest curve. The sun was shining in the east, while it was raining on Morven, which to produce figures in the form of a cross. -

Young people who learn to work will always fare better than idlers and dawdlers. want of prudence, and that negligence and irregularity long continued will make know-ledge useless wit ridiculous, and genius the ter to learn how against a time of misfortune. Wealth sometimes takes unto itself line with a gun or stick pointed at it. wings.

THE RUSSIAN FRONTIER.

How It is Kept.

The Russian garrisons on the Prussian A Baltimore special says :- Prof. Asger | frontier have been in the recent years conprovinces of the Empire.

On the 1st and 15th of every month the

Then a bad time sets in for them, and have nearly always been of the Cochin addition to the frugal rations provided by most attention naturally. I have discovered is useless. He is told that the matter will

At certain periods during the night an Their sense of taste is excellently develop- officer makes the round form post to post. will say 'Ah!' or so ething of that kind up by one guard after another, until as many as five or six reports break the silence "They are peculially susceptible to cer- of midnight. Then, if it is a false alarm,

"I have noticed that chickens can distin- Very ingenious tricks are resorted to in

ANTS IN FLORIDA.

Part of the World.

There are more ants to the square mile in Florida than in any other country in the world. There are ants which will measure more than half an inch in length, and then there are ants so small that they can scarcely be seen to move with the unaided eye. There are red ants and black ants, and troublesome ants. But as bad as they are, I have never heard of them eating the seat out of a man's trousers, as a missionary, the Rev. Mr. Wilson, once told the writer he saw the army ants do in India while the man was sitting on the earth for a few minutes beside

But the Florida ants will take out the lettuce and other minute seed from the soil in which they are planted and actually deception. A human being cannot compare stroy the bed. They will suck the life out of acres of young cucumbers and melon plants, uproot strawberry plants, cr cover the buds with earth to such an extent as to kill them. They will get into pie, pickle, sauce, sirup, sugar, on meat, in hash, will riddle a cake or fill a loaf of baker's bread till it is worthless. All remedies failing, I took to baiting them near their nests with slices of meat, bones, apple, and pear parings, and when I had from 50,000 to 100,000 out turned a kettle of boiling water on them. I have killed during the last week over 1,000,000 in the space of a quarter acre lot, and I have almost whipped them out. I had to do this to secure any lettuce plants, and many unobservant farmers complain of seedsmen when they should actribute their troubles to insects. It is very curious and instructive to see

how promptly the ants which escape the scalding will go to work taking out the dead, and, after piling them outside first, then go to excavating again and rebuilding their cells and runways. This being done very quickly the next work on hand is the laying in of a supply of food, by hauling the dead bodies of the hot-water victims into their storehouses. You may see a small black ant hauling and tugging at the carcass of a red ant twenty times its own weight, and he always succeeds, in the end, in landing it in the warehouse of the colony. Next you may see a sort of ambulance corps searching for the disabled. These are taken carefully to the underground house, where the surgeons and nurses are in waiting. Then, too, you may see the timekeepers and bosses directing this one, or turning another back on some errand or to some The peculiar phenomenon of a perfectly other duty. There is not a moment's delay,

Can't Miss a Rattlesnake.

The writer saw an Indian kill a rattlesnake in a very peculiar memner recently. accounts for the colors, though it is not so The rattler was about ten feet from the easy to account for the absence of the arch. Indian, who was resting the rifle on his The lowest part of the ribbon showed the knee, apparently taking aim. Whenever least refrangible colors. A white rainbow he moved the weapon a few inches the was seen in Edinburgh in January' 1878. snake would move around and get exactly A very remarkable mist-bow, or fog-bow was in line with it. Then, to show hew the witnessed by Mr. Edward Whymper, in des- thing was done, the Indian moved about cending the Mattorhorn, immediatelyafter the snake in a circle, and the reptile moved the disastrous accident which signalized his as if his tail was a pivot, always keeping first ascent in 1865, and is figured, as well his head and body in line with the gun. as described, in his work. In this case the The Indian then agreed to bandage his eyes circular bows were accompanied by straight, and shoot the snake in the mouth. The perpendicular, iridescent lines, which ap- writer bandaged the Indian's eyes, and, peared by their intersections with the bows | holding the gun at arm's length, the latter pulled the trigger and the ball entered the

snake's mouth. "How did you take aim?" was the query. "The snake he take aim," was the reply. We have talked with an old hunter on [Carson (Nev.) Appeal.