SECURE SPECIMENS

Expeditions of Smithsonian Agents Narrated in Report.

Institution's New Pamphlet Tells of Work of Different Parties and of Many Specimens Received—Solar Rays Variable.

Washington.—Following the custom established in 1911, the Smithsonian Institution has just issued an illustrated pamphlet dealing with the many scientific expeditions conducted under its direction, or in which its representatives participated.

The pamphlet describes the work of about twenty different parties, and the territory covered includes certain portions of British East Africa, Abyssinia, Algeria, Eastern Siberia and Mongolia, the Altai mountains, Borneo, St. Lawrence island, Alaska, British Columbia, Alberta, Newfoundland, Labrador, the Panama canal zone, and the Bahama islands, and many sections of the United States.

The institution was represented by two small parties in Borneo.

Dr. W. L. Abbott, who financed the Dutch East Borneo expedition under Mr. H. C. Raven, and who has presented many large collections to the National museum, has been carrying on a personal investigation in Cashmere, where he has been trapping and studying the smaller mammals of that country, specimens of which have been sent to the museum.

Through the invitation of Dr. Theodore Lyman of Harvard university, the institution was enabled to cooperate with the Museum of Comparative Zoology in an expedition to the Altai mountains of Siberia and Mongolia.

George Mixter, another collaborator of the museum, also visited Siberia, where he secured certain mammals from the region about Lake Baikal, among them bear and seal.

Of particular interest was a trip made by Dr. Ales Hrdlicka to Siberia and Mongolia, to study the physical anthropology of the natives. His particular object was a search for data concerning the race which is supposed to have peopled America. He draws the conclusion that there exist in several places in Siberia, Mongolia and Tibet numerous remains of an ancient population, which was physically identical with and in all probability gave rise to the American Indian.

The hunting trip carried on by Paul J. Rainey in British East Africa, in which the institution was represented by Edmund Heller, was terminated in December, 1911, and since then the collection has been received at the National museum. Altogether the trip was a remarkably successful one; nearly 4,000 mammals, 1,000 reptiles, and 400 birds were obtained.

The astrophysicial observatory of the Smithsonian Institution again sent an expedition to Bassour, Algeria, for the continuation of the observations relative to the heat of the sun, an investigation on which the observatory has been working for the past seven years, with observing stations on Mount Wilson, Cal., and during two seasons in Algeria. Mr Abbot, the director of the observatory, states that the observations of the last year prove conclusively the supposed variability of the solar rays.

SPONGES FOR FERTILIZING.

The department of agriculture, through its bureau of soils, has recently completed analysis of the Loggerhead sponge, which grows abundantly in the waters of Southern Florida, to determine its value as a fertilizer. This sponge, according to Mr. Thomas E. Reedy of Key West, grows in countless thousands and to an enormous size in shallow water, where it is easy to procure. Mr. Reedy also states that the farmers of the Florida keys use the Loggerhead sponge with wonderful results and hardly ever use chemical fertilizers. Dr. H. F Moore of the United States bureau of fisheries cites the use of this sponge by citrus fruit growers of the Florida mainland and states that he has seen this sponge growing in such quantities that he has long thought it should be exploited.

A specialist of the department recently made analyses of samples from Key West which verify the value of this sponge as a fertilizer. The analyses show that the approximate results on air dry material show four per cent. of nitrogen, three-quarters of one per cent. each of potash and phosphoric acid, five per cent. of lime and 40 per cent. of organic matter. The specialists say that it is evident from the composition of this material and its demonstrated efficiency as a fertilizer that it has considerable value to farmers and fruit growers who have easy access to it in the shallows of the sea. The department is conducting further investigations to determine the feasibility of extending the use of this sponge as a fertilizer.

SEEKING INFORMATION.

While strange letters are not a rarity in government departments, the secretary of agriculture recently received a letter which breaks all records for inquiry having to do with drugs and medicine. This letter, which is printed below, omitting the name and address of the writer, gives an insight into a certain type of persons who think they can use all sorts of drugs and poisons in making patent medicine. An exact copy of the letter follows:

Secretary of Agriculture. wood this al bee alowed in medicen and wood it have to bee Patend before it Could bee spald and Arsnic Dovers Powders Quinene Epsons Salts and then A number of herbs that grows heare such as Mullin and and Barks. how much Arsnic wood bee alowed to say a galon of Chill Tonic pleaze write mee at once My Mother wants to make this Medecin and I want to know the Ruels before it is don.

Respectfully.

July 3rd, 1913.

——— and how much 188 alcohall wood bee alowed in one galon this to preserve it only I think sume youses 5% in Volum please tell just how much the law wood permit.

It is needless to say the experts of the bureau of chemistry did not encourage the writer to enter the patent medicine field. He was given specific warning as to the danger of preparing such substances in haphazard fashion, and also given full warning as to the federal law governing the matter.

The federal authorities, however, have no legal power under the food and drugs act to prevent these people from making this medicine containing poisonous substances. While there is strict legal regulation over the practice of medicine and the filling of prescriptions, the same legal control does not extend to the manufacture of patent medicine, provided the makers of these patent medicines state on the label the presence of all substances which the law says shall be so noted, and do not use a label that mistrands the article or misleads the purchaser as to its contents, and do not make any excessive or false claims as to its remedial powers, the federal authorities cannot stop the sale of the article in interstate commerce or otherwise.

CALENDAR REFORMED.

Thirty days hath September, April, June and November;
All the rest have thirty-one—

You know the rest. Over in the office of the comptroller of the treasury they don't believe in the second line of this old saying, but they stick absolutely to the first.

A case in point is that of Dr. Charles W. Richardson. He was ordered to active service on May 31, for that day only. His service was to deliver an address to the graduating class of the army medical school.

Doctor Richardson completed his active service by turning in his bill for one day's active service. When the matter came to the attention of Assistant Camptroller Warwick that official decided that in all cases where compensation is rated on a monthly basis each month, February included, the month is presumed to have thirty days and under the law the government does not pay for the thirty-first day. Therefore Doctor Richardson was refused pay for his labor on the 31st day of May.

In further explaining the decision treasury officials said that Doctor Richardson, had he delivered his address on February 28, would have received three days' pay.

The only thing left is to figure it out for yourself.

SENATOR WAS CURIOUS.

Senator-elect Robert E. Broussard of Louisiana is a wiser man now. The geological survey made him so.

Mr. Broussard was one of the first persons to venture out of his hotel after the severe storm that swept Washington a few days ago. On the sidewalks, where he traveled, he found thousands of pebbles of many shapes and colors. He noticed among others gray, blue and reddish-tinted stones. Believing that the storm had blown such pebbles out of the air or some distant planet, he became curious to know where they came from and whether or not they contained precious metals. He saved a handful of them, and without saying anything about his find, took the little stones to the geological survey for examination. He received a note saying:

"Pebbles, blown from the roof of a house that was being covered, some painted blue and others red."

RED TAPE TANGLED.

The red tape of the United States government simply gets tangled up until it costs the government a pretty penny. Recently an army officer sent in his gas and electric light bills, and these were tied up in so much red tape in the department that the government was finally penalized for the amount, and had to lose the discount. The auditor for the army held the officer responsible and deducted the amount from his credit, but the controller relieved him and allowed him the amount of the difference.

TO RESTORE PLATE.

The bronze plate placed on the mainmast of the battleship Maine in 1910 by the Daughters of the American Revolution of Habana, Cuba, is to be restored to the historic old spar, when it is erected in Arlington cemetery to mark the graves of the unknown dead of the ill-fated battleship. The Habana chapter of the daughters recently won the consent of the navy department archives when the work of raising the vessel was begun.

Overindulgence.

"My wife will know I drank too much at the banquet."

"Why, you are walking straight enough."

"But look at the bum umbrella I picked out."

Dreadful Slam.

"I guess I ain't much of a hit with Mrs. Wombat."

"Why not?"

"At the party last night, she left me to talk to her husband."

Mixed Metaphors.

"Jones has certainly a bad way of mixing up things in his talk."

"What's the matter now?"

"He says at his house staining the bare floors is the topic just now on the carpet."

Why?

"Why do people speak of 'the human race'?"

"Because men and women are always running after each other."—California Pelican.

Prolonged Function.

"The rich lady next door is very gracious of late."

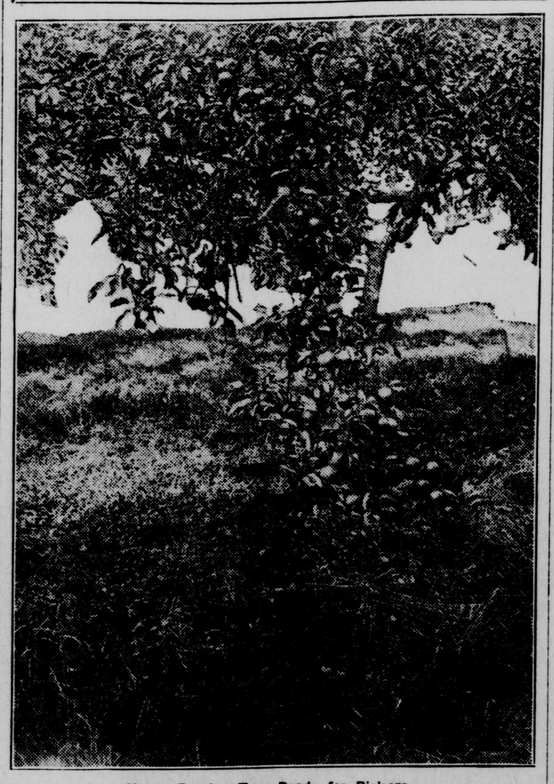
"I know the symptoms. She is going away for the summer, and hopes to jolly us into entertaining her cat while she is away."

Loud.

"That young Jones is bound to be heard from," said the Old Fogy, as he turned away from the window.

"Yes," remarked old Grouch. "I noticed his clothes this morning."

IMPROVE BY TOP-WORKING FRUIT TREES



Heavy Bearing Tree Ready for Pickers.

In a most interesting and instructive treatise on top grafting fruit trees, Prof. O. B. Whipple, of the Colorado experiment station, says it is becoming more and more apparent that certain localities and soils are peculiarly adapted to growing particular kinds and even varieties of fruit.

Commercial fruit-growing localities are making their reputation by being able to grow their few varieties well. There comes a time then when the grower will have to solve the problem as to what to do with the undesirable varieties. Shall he pull them out or graft them over to better varieties?

It has been proven by long experience that if properly done the grafting over of old trees by top working brings quicker returns than the replanting of young trees. In fact, it is not uncommon to see a fairly good crop on the three-year-old top of a top worked tree.

Trees properly worked over give crops which are sometimes more desirable than trees of the same variety grown from first class nursery stock.

Top working, as a means of establishing a weak-growing variety on a stronger root system than its own is now coming into favor. For instance, the Rome Beauty, when on its own roots, is on the best soil an indifferent grower, but when worked on some strong-growing stump it makes a very satisfactory tree.

The practice of grafting is not a mysterious art as many suppose, but is so simple that any careful orchardist can and should do it himself. All common fruit trees can easily be budded or grafted.

The apple and pear may be intergrafted upon each other and this is true of the peach, plum, apricot and almond. However, such wholesale mixing is not good in practice, and the pear and apple never make a good union.

Peach grafts start vigorously upon apricots and plums upon the peach trees. Professor Whipple says he has seen plum trees top-worked to peach trees with perfect unions and the ten-year-old tops bearing excellent crops.

Growth in diameter of the tree only takes place in a very small region between the bark and the sap wood. This part of the stem is called the cambium and in this thin layer of tissue the cells are still active while the activity of each succeeding layer on each side grows less and less.

The important point in grafting is to see that the cambium layers of the stock and the cion are matched at some point. When the growth is active we say the bark "peels." Budding is done during this period, not only because the ease with which the bark separates from the wood simplifies the work of inserting the bud, but as the growth is more active the tissues of the bud and the stock are more likely to unite.

It does not pay to graft trees which show poor growth, and it seldom pays to top work any crab. It is also questionable as to whether it pays to top work stone fruits. While good tops may be grown on either peach, apricot or almond, it is doubtful whether these crops will bear much quicker returns than young trees set in the place of the old ones.

There are various methods of grafting, the most common in the west being cleft and curf grafting. These operations are simple and are known to most orchadists.

In cleft grafting, the limb is sawed off squarely, the stub split down about two inches with the grafting chisel and the cleft is wedged open with the wedge on the back of a knife and the cion inserted as a wedge.

The first bud should be left a little below the top of the wedge, cutting the edge of the wedge opposite the bud a little thinner than the other. The cion is then driven firmly into place with the lower bud to be outside and a little below the top of the cleft.

It is important that the inner bark on the outer edge of the wedge should be brought in contact with the inner bark on the stub. It is between these parts that the union takes place.

Kerf grafting is almost the same as cleft grafting only the stub is prepared by saw cuts instead of splitting. These are made on opposite sides of the stub, and trimmed to thin V-shaped grooves with a saddler's knife, the cion is then trimmed to fit, driven firmly into place and waxed as in cleft grafting.

It is not good practice to remove the whole top of the tree the first year and graft all the stubs. Often this proves too much for the tree and it fails even after the grafts have made a good start. They may linger two or three years and then die.

A better plan is to cut away only enough limbs to set cion for a good top, generally about half of the tree. Working of more stubs results into dense top, or, necessitates their removal later.

The remaining limbs may be shortened, but some foliage is needed to protect the stubs and trunk from sun scald as well as to supply nourishment.

Budding is another method of putting a new top on young tree. The buds are generally set from six to twelve inches from the main stem, depending on the formation of the head. Two-year-old trees may be budded the following fall.

As any stem as large as a lead pencil may be budded quite easily.

Buds may be set during the month of July, August and September. Fall budding should generaly be given the preference over spring budding. In fall budding the buds are taken from the current year's growth and these may be inserted in the wood of one, two or three year's growth.

Heavier bark makes the insertion of the buds difficult.

Place the bud on the shady side of the stock. A T-shaped incision is made in the bark and the corners of the bark below the transversed cut raised to facilitate starting the bud.

The bud is then cut from the bud stick by starting the knife half an inch below the bud, cutting under and about the same distance above. The cut should be deep enough to leave a small shield of wood.

The bud is then shipped into place and well wrapped with raffia or soft wrapping twine, and this wrapping should be cut when the bud has united with the stock, which is usually within ten days or two weeks.

Care must be observed that the wrapping does not cut into the bark as too much pressure interferes with the flow of sap and tends to throw the bud into premature growth.

The buds set in August and September should remain dormant over winter and the following spring, as soon as the buds on the top of the stock begin to push out, the original top of the stock is cut away.

Vegetable Garden.

Farmers and fruit growers who are troubled to make ends meet, will find that every day's work put into the garden to the extent of providing a full supply of choice vegetables for the table, the year round, will improve the appearance of the balance sheet at the end of the year.

Prevent Bursting Heads.

Cabbage heads may be prevented from bursting by giving the stalks a jerk sufficient to break some of the roots and disturb the root system. This retards development.

Feed for Young Pigs.

Bran, milk and pasturage are some of the bulky feeds well adapted to the real young pig. They help to distend the digestive system, which enables the pig to use cheaper and coarser feeds to better advantage than the pig raised on concentrates.

American Machinery.

A feature of the agricultural fairs of 1912 in Scotland was the increased number and size of the American farming machinery exhibits.

Save All Fruit.

Make preparation to save all fruits that mature in your orchards this year. When the local market is overstocked, can, pickle, preserve and dry for winter use. Save the food products.

Then Try Bees.

If your small fruit does not bear this year, as you had hoped, try raising a few stands of bees next year. Their value is pollenization is rarely understood.

SUFFERED AWFUL PAINS

For Sixteen Years. Restored To Health by Lydia E. Pinkham's Vegetable Compound.

Moretown, Vermont.—"I was troubled with pains and irregularities for sixteen years, and was thin, weak and nervous. When I would lie down it would seem as if I was going right down out of sight into some dark hole, and the window curtains had faces that would peek out at me, and when I was out of doors it would seem as if something was going to happen. My blood was poor, my circulation was so bad I would be like a dead person at times. I had female weakness badly, my abdomen was sore and I had awful pains.



"I took Lydia E. Pinkham's Vegetable Compound and used the Sanative Wash and they certainly did wonders for me. My troubles disappeared and I am able to work hard every day."—Mrs. W. F. SAWYER, River View Farm, Moretown, Vermont.

Another Case.

Gifford, Iowa.—"I was troubled with female weakness, also with displacement. I had very severe and steady headache, also pain in back and was very thin and tired all the time. I commenced taking Lydia E. Pinkham's Vegetable Compound and I am cured of these troubles. I cannot praise your medicine too highly."—Mrs. INA MILLSLAGLE, Gifford, Iowa.



FOR SALE—IDEAL LOCATED HOME farm, 100 a. in Amherst Co., Va.; 50 a. cult., all tillable, 100 bearing fruit trees, house, barn, outbldgs., etc. Reasonable price and terms. E. A. Marshall, Madison Heights, Va.

W. N. U., BALTIMORE, NO. 37–1913.

Its Origin.

"I wonder who originated the expression, 'Here's a coil?'"

"I guess Adam did, when he saw Eve talking to the snake!"

Refuge in Confusion.

"I suppose that by this time your constituents fully understand your position?"

"No," replied Senator Sorghum, "but I think I have explained it at sufficient length to prevent them from making any further attempts to comprehend it."—Washington Star.

Political Cosmetics.

"Great Scott, Jonesey," said Wilkins, "that's a hefty bundle of papers you've got there! All campaign literature, I see."

"Yes," said Jonesey, "it's a bundle of political cosmetics for my wife."

"Political cosmetics?" cried Wilkins.

"Yep," said Jonesey. "She's in doubt as to her political complexion, and this stuff will help her to make up her mind."—Judge.

Flashlights.

It takes about a week for a girl's left arm to get used to carrying an engagement ring.

Hard luck is the best pavement you can lay for luck to get to your doors.

About the best thing that can happen to some men is to have their wives carry the family pocketbook.

It's tough to be broke right after a vacation but it's tougher still to be broke just before.

And here we are at the eighteenth hole, as the golfers say.—Detroit Free Press.

It is better to profit by your own strength than by the weakness of others.

His Reason.

"Don't take notice of the cook, dear."

"I have to. She's just given it."

Mrs. Winslow's Soothing Syrup for Children teething, softens the gums, reduces inflammation, allays pain, cures wind colic. 25c a bottle. Adv

Nothing to Retail.

De Garry—Won't you give me a kiss—just one?

Madge—Oh, pshaw! I like a man who makes love on a large scale.—Judge.

Use Roman Eye Balsam for scalding sensation in eyes and inflammation of eyes or eyelids. Adv.

Receipt.

Miss Summit—I must answer his letter and I want to write something that doesn't mean anything.

Miss Palisade—Why don't you tell him you love him?—Puck.

Acid Stomach, heartburn and nausea quickly disappear with the use of Wright's Indian Vegetable Pills. Send for trial box to 372 Pearl St., New York. Adv.

Strictly Fireproof.

Mrs. Cohenstein (at shore hotel)—Oh, Isaac! Subbose dis hotel should take fire!

Mr. Cohenstein—Imbossible, Rachel! Dey're making money.—Puck.

DOES YOUR HEAD ACHE? Try Hicks' CAPUDINE. It's liquid—pleasant to take—effects immediate—good to prevent Sick Headaches and Nervous Headaches also. Your money back if not satisfied. 10c., 25c. and 50c. at medicine stores. Adv.

Perhaps So.

"He's a queer man."

"How so?"

"Whenever the movies show the fashions of the day he takes them in."

"Perhaps he likes to see what the ladies are not wearing these days."

ACHY FEELINGS, PAIN IN LIMBS and all Malarious indications removed by Elixir Babek, that well known remedy for all such diseases.
"I have taken up the three bottles of your 'Elixir Babek,' and have not felt so well and entirely free from pain in limbs for five years."—Mrs. E. Higgins, Jacksonville, Fla.
Elixir Babek 50 cents, all druggists or by Parcels Post prepaid from Kloczewski & Co., Washington, D. C.

Considerate.

"Do you want a job as a farm hand?"

"No," replied Plodding Pete, "you have been kind to me in the past and I think too much of you to make you an object of jealous hatred among all your neighbors."—Washington Evening Star.

Important to Mothers
Examine carefully every bottle of CASTORIA, a safe and sure remedy for infants and children, and see that it
Bears the Signature of Chas. H. Fletcher
In Use For Over 30 Years.
Children Cry for Fletcher's Castoria

Home Campaign.

"Is your daughter going away this summer?"

"No; she has started a flirtation with the iceman, and we think her chances for getting married to him are very good."

Rocking-Chair Signs.

An observant Atchison woman says she can tell from the way a woman rocks on her front porch what condition the house behind her is in. If she sways back and forth with a floppy, comfortable motion, plumping both feet down in a relaxed sort of way, then everything about the house is absolutely clean and neat. But if she rocks in little nervous jerks, tapping her feet down at short and irregular intervals, it signifies that there are unmade beds behind her and stacks of unwashed dishes and dusty floors.—Atchison Globe.

Cuckoo Reformation.

A remarkable case of reformation on the part of two old cuckoos is reported by Col. A. M. Blake from his estate at Welwyn, Herts, England.

The colonel states that he found two young cuckoos with the parent birds in faithful attendance. As is generally known, the regular habit of the cuckoo is to lay its eggs in the nests of other birds, leaving the rearing of their offspring to perfect strangers.

This is said to be the third successive year that cuckoos have brought up their young at Welwyn.

Backache Warns You

Backache is one of Nature's warnings of kidney weakness. Kidney disease kills thousands every year.

Don't neglect a bad back. If your back is lame—if it hurts to stoop or lift—if there is irregularity of the secretions—suspect your kidneys. If you suffer headaches, dizziness and are tired, nervous and worn-out, you have further proof.

Use Doan's Kidney Pills, a fine remedy for bad backs and weak kidneys.

A Maine Case



Mrs. J. H. Bennett, 59 Fountain St., Gardiner, Me., says: "I was in bed four months with kidney trouble. My back felt as though it was broken. My body bloated and I could hardly see. Five doctors failed to help me. When I had given up hope, I began taking Doan's Kidney Pills. I was cured and now I weigh much more and am strong and healthy."

Get Doan's at Any Store. 50c a Box
DOAN'S KIDNEY PILLS
FOSTER-MILBURN CO., BUFFALO, N. Y.

Make the Liver Do its Duty

Nine times in ten when the liver is right the stomach and bowels are right. CARTER'S LITTLE LIVER PILLS gently but firmly compel a lazy liver to do its duty.



Cures Constipation, Indigestion, Sick Headache, and Distress After Eating.
SMALL PILL. SMALL DOSE. SMALL PRICE.
Genuine must bear Signature
Brent Good

Ithaca Guns



¶ The U. S. Government buys Ithaca Guns for Navy Officers—Uncle Sam always buys the best. ¶ Lasts a decade, forever one piece, coil main spring guaranteed forever. ¶ Cornell University used our lock. ¶ Hammer falls in plane of a remedy will increase your score. ¶ Invented shotgun FREE—describes 12 grades—$17.75 up. Five bores—28, 24, 16, 12 and 10. ¶ Send us this ad., with 15c. and get beautiful hanger—regular price 25c.
ITHACA GUN CO. BOX 62 ITHACA, N. Y.

Ignorant of His Own Language.

The Boston Americans were playing the Nationals in the Bean City one afternoon. Tris Speaker knocked out a long fly that fell between right field and center.

Danny Moeller, the speedy right fielder of the Nationals, went after it, crying out for the guidance of Milan in center:

"I have it! I have it!"

As soon as Moeller had caught the fly, a disgusted Boston fan remarked:

"That guy don't even know his own language. What he should have said is: 'I've got it!' I suppose he's some gink that's trying to make out he's been to college."

As a matter of fact Moeller not only went to college, but graduated.—Popular Magazine.

Ever notice how much fuss men make about their honor—on the stage?

Discretion.

"Your office doesn't seem to be doing a great deal of work."

"No; I'm trying to be as quiet and obscure as possible so that nobody will ask me to resign."—Washington Star.

Too Bad.

The Dentist—Let me see! I'll have to treat four teeth—eight teeth—eighteen teeth—

Mr. Pildo—Hold on! Four teeth, eight teeth, eighteen teeth! What do you think I am—a comb?—London Answers.

Why He Loved Her.

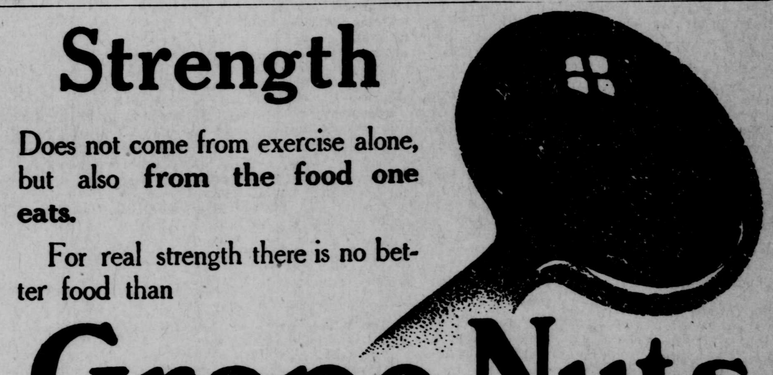
"Yes, young man, I know you! You've been in love with my daughter ever since you discovered that she was an heiress."

"But, my dear sir, you wouldn't have me marry a poor girl, would you? Why, I can't even support myself."—Life.

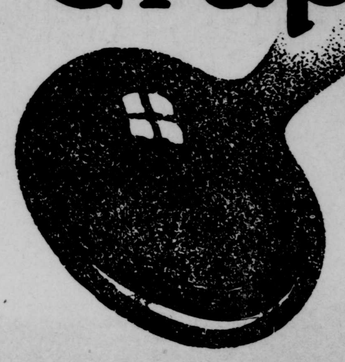
Strength

Does not come from exercise alone, but also from the food one eats.

For real strength there is no better food than



Grape-Nuts



A breakfast dish of Grape-Nuts and cream is the regular morning custom of a mighty host who know the value of right food.

Being partially predigested, Grape-Nuts is quickly converted into strength for body and brain—the power to "do things."

"There's a Reason"

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