Latest Projects Of Science

Possibility of Generating Power in Tropical Waters— Chemistry Offers Aid to Insane

Nikola Tesla has once more focused attention on the possibility of extracting energy from tropic waters-a possibility whch Georges Claude tried to convert into a reality on an experimental scale at Matanzas, Cuba. The basic principle is not difficult to under-

Water bolls at 212 degrees F. at sealevel, where the atmosphere exerts a pressure of 14.6 pounds to the square inch. On a mountain 10,000 feet high the atmospheric pressure is only ten pounds, so that water boils at 190 degrees F. If we could remove the atmospheric pressure almost entirely water could boll without any heat at

The surface temperatures of Caribbean waters is about 75 degrees, but at a depth of 3,000 feet it is not much above 35 to 38 degrees F. Pump the surface water into a fireless "boiler" and it will boil if the air is exhausted! from the boiler. The steam given off the turbine is condensed to form a! drives a turbine and the exhaust from racuum by means of cold water drawn from the depths. Hence we have a kind of sink into which heat units! flow, driving a turbine in the process. When they read of projects such as those of Claude and Tesla, engineers sharpen their pencils and begin to figure. Suppose the turbino were of 35,-000 kidowatt size. The rotating portion, or "ortor," would have a diameter pipe leading from the "boiler" to the of 100 feet. The diameter of the steam throttle would be about 25 feet. The very largest power houses would be pigmies in comparison with a Claude or Tesla plant of small capacity. Add o this the difficulty of designing plants of any size to avoid the slightest leakage, and we see how remote s the realization of what must be dismissed as an enchanting technical

Game birds can eat with impunity rain poisoned with strychnine, not ecause they are immune to strychine (they die if it is injected into heir blood), but because the poison loes not pass through the walls of he intestines. A man can swallow nake venom, but it will kill him if he ets it into a scratch. He can acquire he parrot disease by way of the nouth, but certain monkeys yield to only when the blood is directly afected.

These facts were presented by Proessor Wilder Bangroft of Cornell Uniersity before the American Chemical aciety to defend and elaborate views nat a famous French physician, laude Bernard, advanced over sixty ears ago on the subject of insanity. All poisons, anesthetics and drugs hat interfere with the brain or the ensory nerves produce mild insanity, ecause they affect thinking and acon. Thus anesthesia causes a coagution or puckering of the proteins in e brain and sensory nerves, with the esult that emotions and reasoning o influenced. If the affected proins are made mushier normality is stored. This actually turns out to the case when ephedrine or sodium iocyanate is administered to anesetized men, dogs, rabbits and gold-

All this means that chemistry is adually discovering how the tissues the brain and nerves can be chemiily affected to treat the insane. Not the physician but to the chemist ust we look for much of our progress medicine.-W. K.

stronomers Successfully

Use Plane as Observatory Los Angeles.-Scientists, using an rplane as their observatory, recentsaw what probably was the greatt shower of the age-old Leonid meors since the historic display of 1866. It was the "hit show" of the unirse, coming only once in every 33 ars, and first seen just/a thousand ars ago. The spectators were nine en, including Dr. Paul W. Merrill, ted astronomer of the Mount Wil-Observatory, Pasadena, Cal., who in a night mail plane and watched they flew from Salt Lake City to

s Angeles. The shower of flaming fragments peared at one time with a freency of more than one a minute 39 minutes. In all nearly 150 were inted and there probably were more den from sight by the wing of the

monoplane. the most brilliant of these left a in that was visible for nearly four nutes. It diverted from the straight es of its predecessors by turning at ht angles from its course as it flew ough the air, probably 50 miles

Trust a Girl

he school inspector was giving t in general knowledge to the mixed

le wrote on the board the Roman MIXTURE. res LXXX.

Now, then, my boy," he said, pointto a smart-looking youth, "tell the s what that stands for?"

sefore the boy could reply a little sprang to her feet. know," she put in coyly. "Love kisses, sir."

O. A. C. Short Courses 1932

1004		•				
Live-stock and Field Crops	Jan.	4	to	Jan.	30	
Poultry Raising	Jan.	5	to	Jan.	30	
Beekeeping	Jan.	5	to	Jan.	16	
Drainage and Drainage Surveying						
Fruit and Vegetable Growing						
Floriculture and Landscape Gardening						
Factory Cheese and Buttermaking						
Ice Cream, (a) For experienced makers				Feb.		
(b) For inexperienced makers		28	to	Apr.	2	
Creamery and Cream Grading together with		20	•-	Mar.	21	
Cheesemaking and Mechanical Refrigeration						
Farm Power				Jan.		
Farm Mechanics	Feb.	2	to	Feb.	13	
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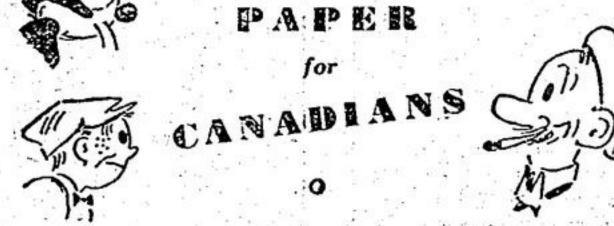
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Chart Fletchere CHILDREN CRY FOR IT



'A SINGLE SIN PROVES IT

Hearts of Athletes Show Difference

From Study of Those of Nurmi and Hempl Doctor Says Action, Not Size, Counts

Berlin .- Dr. Victor Gottheiner, roentgenologist, who invented X-ray motion pictures, has made a special study of the organic constitution of athletes and recently filmed Finish runner Nurmi's heart in action, holds that athletic prowess is not so much a matter of how bodily organs are made but how they work and that the latter depends largely on what goes on in the brain. He threw on the screen a reel showing the heart and lungs of the German champion runner, Paul Hempl, in contrast to Nurmi's, and pointed out that whereas Nurmi's heart is more than double the average size Hempl's is barely average.

"Nurmi is in physical constitution an ideal athlete." Dr. Gottheiner said. "But Hempl is so far from it-in fact, he is asthenic; his extraordinary performance shows what a man can do when he has the will for it."

Dr. Gottheiner said he had started as a pathological anatomist but on the basis of his X-ray researches had come to the conclusion that mere knowledge of the organic structure was almost meaningless.

"When a heart has been cut out of the body," he said, "it is just a chunkof meat. You must know it in action before you know anything useful about it. Take Nurmi's heart: from a static X-ray picture of it no doctor could tell whether it was not enlarged by severe heart disease. A sick heart works unevenly.

"Look at the film of Nurmi's heart and you will see in what perfect rhythm it functions. It shows, indeed, an anomaly in its action unobserved in ordinary hearts; in pumping it turns on its axis through about a quarter circle but that is only because it is so big it otherwise would not find room in his chest Nurmi developed his heart—which is perfectly sound to that extraordinary size much the same way as another athlete develops hugo blceps. But unlike the latter Nurmi's huge heart demands constant exercise; if he stopped training very. likely he would fall ill."

Armistice Day Silence

Oh, let us learn, we pray Thee God.

We who have lightly broken our brothers' hearts; And when hot passion starts

sway, Oh, teach us, God, we pray.

Just for a moment will the world's pulse cease, And as her clanging noises sink to

Let, for that moment, peace Drop, like a sudden bird upon her nest.

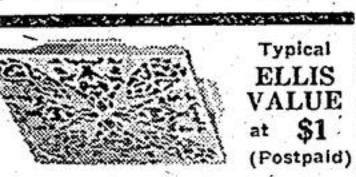
On earth at Thy behest! So we in stillness, seeing what we

Thy children yet, may turn, and with our tears Wash out the merciless years; Wash - out the clamors and the were acquainted"

wrongs of war, And man no longer mar. -A Jacqueline Shaw.

The Imperial Conference

London Daily Telegraph (Ind Cons.): Serious difficulties in Australia and New Zealand led to a postponement of the Imperial Conference office, so Betty answered it. to an unfixed date in 1932. These exist no longer, and in both those Dominions the Governments' desire for an early meeting has been made girl." known. In this country the position times has been given what is asked heart to buy a new one. for-a free hand for the reconstructmeans that shall be deemed effective; am again." and that mandate has been sought and obtained with a specific insistence cluded from the methods of adjusting | night?" our economic life to the altered conditions of world commerce. Thus, armed, the Government will take part in the Economic Conference completely untrammelled by the doctrinal commitments which have clogged its activities hitherto; and for the first time the basketh the other days, mum?" the policy of Empire economic unity will be placed in the way of realiza-



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Cause of This Depression

corporations. And would our oft-bewildered senses

to corporations. The farmer says it is the low price

'The silver man says it is the action of Wall Street.

The consumer says it is the tariff. The debtor says it is the creditor. The creditor says it is the debtor. The preacher says it is the devil.

Howe-"We are." Watt-"You didn't seem to recog nize each other when you met."

Mr. Lee was entertaining his small daughter in his lumber yard. The phone rang while he was out of the

lumber yard?"

has been magically changed; the A Scot, who had worn the same hat

Going into the only hat shop in his ing of our economic fabric by any neighborhood, he said: "Well, here I

She-"Say, it's past midnight. Do

He-"Gosh, I'll have to telephone mother first."

Mistress-"Saturdays I shall go to market with you." Bridget-"But who's going to carry

Foreman - "Well, everything all

Night Watchman-"Yes, I haven't ful and interesting, are too often conchecked off everything and there's

became epidemic table scraps were This very popular silver-plated Teapot stand is square and has a neatly pierced tell what the darned thing was. Granddesign. Order now! Also send for com- mother's handbag may have contained hundreds of inexpensive articles, all new, a lot of foolish things, but it never Every bcy asks for more than he expects to get. The woman who used to who thinks his wife has quit smoking good literatur . The publishers give you a set of it free when you buy a set of trash. We'll credit Admiral Byrd with finding all that land down at the South Pole, but just the same how is he going to get it defrosted? Naturally some wom think better of their first husband after they have been hooked up a few years with their

> Nurse-"Your wife has just given birth to triplets."

Brown--"Gosh, that's what comes of her working in the recorder's office. Everything is triplicate."

meet expenses?". Ramsey-"Hard? Man alive! meet expenses every time I turn

get marired. Are you afraid to pop the

Peter-"No; afraid to question the claim to do. But taken regularly over

Cooper (at the Southern Winter Resort)-"When did you discover that you loved me?"

he feels. Now this morning I feel as

fresh as a two-year old."

"THESE HARD TIMES"

"The hard times and scarcity of money makes it more important than ever to economize. One way I save on clothes is by renewing the color of faded or out-of-style dresses, coats, stockings, and underwear. For dyeing, or tinting, I always use Diamond Dyes. They are the most economical ones by far because they never fail to produce results that make you proud. Why, things look better than new when redyed with Diamond Dyes. They never spot, streak, or run. They go on smoothly and evenly, when in the hands of even a tenyear-old child. Another thing, Diamond Dyes never take the life out of cioth or leave it limp as some dyes do. They deserve to be called 'the world's finest dyes'!"

S.B.G., Quebec.

A judge says it is the existence of

A financier says it is the hostility

of wheat and cotton.

The manufacturer says it is the fear of free trade.

The Wall Street men say it is the action of the silver men.

Now what have you got to say about

Watt-"I thought you and Foozello

Howe-"Our acquaintance is purely telephonic." .

ing eggs-with perfect shells. Being all-Canadian, your dollar buys 100 cents' worth every time.

Caller-"Helle, is this Mr. Lee's Betty-"No, this is Mr. Lee's little

strongest Government of modern for fifteen years, decided with heavy

that a tariff policy is not to be ex- you think you can stay here all

done so bad for the first night. I've the power of truth, and lie bed-ridonly one thing missing—the steam den in the dormitory of the soul,

and exploded errors.-S. T. Coleridge In the old days before mayonnaise eal Japanesa China hash instead of salad, and you could contained a lipstick or cigarette case. be ashamed of her past is now having. it syndicated. An optimist is a guy cigarettes when he finds cigar butts Complete, full-size, 22-piece Tea Set. Real China. Handsome wild rose design in pink and around his house. More than one girl has given a boy friend the bounce for green with delf blue bands. A set you will be proud of. Given FREE for selling a \$6.00 assortment of Christmas Cards, etc. Express rubbering at other girls. You can tell charge only. We take back any goods not sold.
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Frank-"Why don't you and Helen

'Agnes-"When I found out that you were the only unmarried man in the

Boss-"A man is never older than

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