

Scientific and Useful

A SIMPLE REMEDY FOR A CORN.

The following is said to be a simple remedy for corns:—Tie a piece of lemon on the corn for five nights, leaving it on all night. Then soak the foot in warm water, and the corn can be easily removed. When the root of the corn is taken out cover the toe with collodion or some other preparation to protect the skin, which will be sensitive. Unless the tender skin is protected it will soon form another corn. A piece of cotton saturated with vaseline and put over the toe will also effect this purpose.



IMITATION PRECIOUS STONES.

"Paste" from which imitation precious stones are made is widely known, but few are acquainted with the ingredients, though it is generally understood that the paste gains its brilliancy from the lead it contains. Formulas vary for the paste, but all contain rock crystal, which also contributes to the brilliancy, red lead, carbonate of potash, borax, and white arsenic. It is required that these articles shall be of a high grade of purity, as there is a considerable waste, so that the gems made from "strass," as the composition is technically known, are by no means inexpensive.



IS YOUR FOOD PURE?

To test the presence of coal-tar dyes in such things as jam, fruit syrups, or any other very red article of food, all that is necessary is to boil a piece of white woollen cloth, first wet thoroughly with boiling water, in the suspected article for five or ten minutes, and then wash out the cloth in boiling water. The natural colouring of the fruit will leave the cloth only a dull pink in hue, while artificial dyes make it a brilliant red. Honey is often adulterated with glucose, and its presence can be discovered by putting some of the honey in strong spirit of wine. If glucose is present, it will cause turbidity in the spirit, and will settle at the bottom in a thick gummy mass, while genuine honey forms into a flocculent precipitate, and when it has settled, leaves no turbidity. Adulterants are not always added because they are cheaper than the genuine article, but the public have a right to know when they are used; and it would be a distinct gain if, in case of suspicion, a simple test could always be applied.



ONE DROP OF WATER.

In a single drop of unfiltered water may be seen in miniature the tragedy that goes on perpetually in the world at large, for in the little drop there is a whole universe of life, with all its ferocious and death-dealing competition, with all its mystery and woe.

It was a French biologist who invented the method by which this wonderful state of things is demonstrated. He called the method the "hanging-drop shape," and it is beautifully simple. A drop of water from the edge of an ordinary pond is placed in a hollowed-out space on a small strip of glass and sealed with a bit of thinner glass. And now day after day and night after night the hideous business going on in that one drop of perfectly clear, and apparently pure, water may be watched and studied at the leisure of the observer.

The drop of water is a world in itself. Multitudes of animals swim about in it with plenty of room. The giant worms, with tremendous swishing tails, of whose approach one is made aware by the confusion and panic of the smaller creatures scurrying out of the way, in fear of their lives, and countless bacteria inhabit that drop as their permanent and proper home and their ranging place.

VEGETABLE EGGS.

Some discussion has arisen as to supplies of West Indian so-called vegetable eggs. Trial shipments are being sent from Jamaica to the London markets. The egg-plant—brinjal or aubergine—is *Solanum Melongena*, an annual supposed to have had its origin in India or Arabia, but now cultivated in all tropical countries, where the fruits are highly esteemed. They are eaten either raw or cooked in the same way as tomatoes, to which they are nearly related. There are many varieties, ranging in colour from white to black-purple, and in shape from that of a hen's egg to that of a German sausage. The largest we have seen were 8in long and 3in in diameter. They have not hitherto found much favour in this country, but here and there one hears of them being grown for table use. In continental countries, however, especially France and Italy, they are in general use. The plants thrive in the open air in England during the summer, but we have not, as a rule, sufficient warmth to make their cultivation profitable in this country. The success of the tomato and banana in the English market should encourage those who hope to make vegetable eggs grown in the West Indies as popular as those two kinds of fruit have become.



EROSION BY THE SEA.

A writer in the "Revue Scientifique," speaking of the inroads of the sea upon the borders of England, says that between Ribble and Dee, on the east coast, the land has been submerged since the fourteenth century, and the work is still going on. The walls of a castle that only 50 years ago stood half a mile from the sea are now washed by the waves. Near Land's End a whole region of 227 square miles has disappeared with more than 100 towns and villages. Since the time of Edward I. the area of the Duchy of Cornwall has been greatly reduced, and plainly so since 1776. At Selsea, Sussex, ships now cast anchor along a line that is called "the park," and which was formerly a park for deer. At Bexhill-on-Sea a submerged forest is visible at low tide. In Suffolk and Yorkshire many towns have been overwhelmed in comparatively recent times. Four hundred houses were carried away in a single year at Dunwich. Between 1353 and 1600 four churches disappeared. In 1399 Henry IV. disembarked at the port of Ravensburgh, but since 1338 Ravensburgh is no more. Easton, once an important town, could count a century ago, only a dozen inhabitants and two houses. The 33 years from 1867 to 1900 were marked by a reduction of the area of Great Britain from 36,964,260 in 36,782,653 acres. In a third of a century the loss has been 182,207 acres.



UNIVERSAL TIME STANDARDS.

The proposition to make Greenwich time the legal standard in France has, according to "Nature," been revived this winter. No statement is made about the chance that it will receive legislative sanction, but at least two pretexts for pursuing an independent course have been removed since the question was last seriously discussed by French statesmen and scientists. Spain, after long delay, fell into line only a few years ago, though the difference in time between Madrid and London is greater than that between Paris and London. Practically the whole of Europe now, except France and Russia, have officially sanctioned the related projects of having time belts exactly an hour apart, and making Greenwich the starting point to which they should all refer. America, it is hardly necessary to add, adopted the plan twenty years or more ago.

Another obstacle in the way of co-operation was a singular disagreement between British and French astronomers regarding the difference in longitude between Paris and Greenwich. Time changes four minutes for every degree as one goes eastward or westward, and though the computations of the experts

were only a few seconds apart, it was necessary to eliminate the discrepancy entirely before it would be feasible to say just how far back French clocks should be set when the new programme took effect. Within the last three or four years an international commission has made a fresh determination of the positions of the two cities, or, rather, of particular landmarks in them. On that point a harmonious conclusion was reached a few months ago. It is conceded on both sides of the English Channel that if France alters her standard at all it should be to the extent of 9 minutes and 21 seconds.

Popular prejudice against English ideas and institutions may account in some measure for the hesitation of the French people to accept a plan that has been approved by nearly all the other civilised nations of the world. However, if such a sentiment has exerted any influence in the past, it would appear to be less potent to-day than it was ten or twenty years ago. Now that the last important technical objection to taking the step has disappeared, therefore, it would not be surprising if France should formally commit herself to the project when it is next presented to her Senate and Chamber of Deputies.



MILITARY TROUT IN THE WAIRARAPA.

New Zealanders who know Masterton and the Wairarapa will be able to trace the localities mentioned in the following letter, in spite of the somewhat strange disguises in which the English compositor has sought to bury them. The letter appears in the "Field," and is written by Mr George Beetham, from Cannes. He says: "I have just received from my brother, Mr Richmond Beetham, of Masterton, Wellington, New Zealand, a letter which contains a reference to a fishing excursion to the Ruamahunga River, Wairarapa, Wellington, N.Z., which I think will interest your readers. 'I and Galway,' my brother writes, 'went to Holmes's place on the Ruamahunga below Bidnell's. We got fourteen fish averaging 5lb, and had the weather been more favourable we could have taken fifty. The habits of the fish are peculiar. You stand or sit on the bank about 10ft from the water, and watch them promenade up and down the river close by the bank. Each fish appears to have its own promenade, and does "sentry go" backwards and forwards up and down the river. They do not take the slightest notice of you. When the fish comes opposite to you, you put a locust about 3ft above his nose, it swerves a little and gulps it in, you count three and strike, then it fights like anything. You watch the whole operation, and the brighter the sunlight the more fish you catch. We were about two miles above where the river runs into the lake. There is a slight current, and the river is about 100 yards wide. When the fish gets to the top of his promenade he meets the other fish coming down; they apparently salute each other and turn, but if either fish should attempt to trespass on the other one's beat, he goes for him at once. We saw this several times. Some of the fish were not three yards from us when the locust was dropped over their noses. It was the most extraordinary fishing I ever did, and you know I have some experience. I must have another go at them. To show you how certain you are of your fish, we were just starting away in the car, the rods packed away, and the car moving on the slowest speed, when Holmes, who could see the water, said there was a big fish coming down. I stopped the car, put my rod together, attached the cast, put on a locust, and caught the fish, 8½lb. If they do not see the locust when they are going one way, you wait until they come back, because you know that this will be the case. This may sound like a trout yarn, but it is the absolute truth."

An Irishman and a coloured man had a grievance, and agreed to submit its settlement to prowess. They further agreed that when one of them was laced, and wanted to stop, he was to yell "Sufficient!" and the other must let him up. In a secluded spot they went at it hot and heavy. After half an hour the coloured man gave up and whistled from the bottom of the mix-up. "Sufficient!" "Be gorry, what a minny ye have!" said the Irishman. "Dive been tryin' I think of that word for tin minits."

RHEUMATIC CRIPPLE.

**Mrs. Violetta Rogers:
In Agony Day and Night
Bed-ridden for Months
Doctors Gave Her Up
No Rheumatism Now
Dr. Williams' Pink Pills.**

"I was so crippled with Rheumatism that the doctors said I would never walk again," said Mrs. Violetta Rogers, Manchester-street, Christchurch. "It was as much as I could do to feed myself. Morning after morning I had to be dressed and carried from my bed to the dining-room. There, on the couch, I would lie until bed-time, as helpless as the day I was born. Every joint and every muscle in my body was filled with pain. If I wanted to turn from one side to the other someone had to move me. My moans and groans could be heard in the street. Life was such a misery that I often prayed for Death. The doctors could find no way to ease my pain. They said my case was hopeless. And so it was—(1) I started Dr. Williams' Pink Pills for Pale People. Before four months were out, they put me on my feet as strong and active as you see me to-day. I tell everyone that the few boxes of Dr. Williams' Pink Pills are worth all the doctors and all the medicines that money can buy."

"Six years ago I got my first attack of Rheumatism," said Mrs. Rogers. "Somehow I think it must have been in my blood for years before it started to torture me. Dull gnawing pains came in my shoulders and then spread down my arms. In a few days, my fingers were so stiff and swollen that I could not close my hands. My arms were crippled every bit as bad. I could not even raise my hand to my head. Every day the Rheumatism spread further. It was so bad in my back that I had to cry out every time I stooped. Little by little the pain worked down my legs. My knees got stiff, and were all red and swollen. At last, every bone in my body ached. The pain wore me down to a wreck. I became weaker and weaker, until I was forced to lie up altogether. I couldn't move hand or foot."

"All the neighbours know how crippled I was," added Mrs. Rogers. "From my head to my toes, I was one mass of pain. It was even in my eyes. In fact, I was almost blind with the agony I suffered. Often I felt that I could not struggle against the pain another day. My flesh felt as if I had been battered and bruised. I could not bear anyone to come near me. All my joints were sore and tender. Often they burned like fire. I had to have two pillows on each side of me, to keep the bed-clothes from touching me. I was a misery to myself and everyone in the house. My husband got me everything that money could buy. But for all that the Rheumatism got worse. My feet swelled up to twice their size, and I thought I had Dropsy."

"Year after year I suffered like this. When the doctors could do me no more for me, I tried every morbid thing that people said was good for Rheumatism. In spite of it all, I went from bad to worse. At last, I gave up all hope. I saw nothing ahead of me but a few more years of agony, and a cruel death at the end. Sometimes I thought I would go mad before the end came. No one but God knows what I suffered."

"I was at Death's door when an old friend called to see me. All the time she sat by my bed, I was in agony. She knew that all the doctors had given me up, yet she did her best to put fresh hope in me. 'Why not try Dr. Williams' Pink Pills?' she asked. 'Oh,' I said, 'there's nothing will put an end to my sufferings now but Death.' But my friend said she knew better than that—and she went straight and bought me a box of Dr. Williams' Pink Pills. That box gave me a better spirit than I had had for many a long day. Two more boxes seemed to make me stronger and gave me fresh heart. My joints and muscles were not nearly so stiff, and in a little while I got back the use of my legs and arms. The swelling went out of my feet and I was soon able to get up and walk wherever I liked. Twelve boxes of Dr. Williams' Pink Pills cured me of Rheumatism that the doctors could not even ease. To this very day the neighbours will tell you that they never expected me to walk again. My one regret is that I didn't try Dr. Williams' Pink Pills sooner. They would have saved me years of suffering and expense."

Dr. Williams' Pink Pills cured Mrs. Rogers by driving the rheumatic poison out of her blood. They actually make new blood, just that; nothing more. In the same way, they drive out the germs of other diseases, and build up the blood to carry healing, health and strength to every nook and corner of the body. In New Zealand, Dr. Williams' Pink Pills have cured the worst cases of bloodlessness, indigestion, bloodiness, liver complaint, kidney trouble, weak lungs, asthma, influenza, headaches, backaches, lumbago, sciatica, neuralgia, nervousness, spinal weakness, skin complaints, and the special ailments of girls and women whose blood supply becomes weak, scanty or irregular. If anyone tries to palm off substitutes on you, write for the genuine to Dr. Williams' Medicine Co., Wellington—A box, six boxes, 1/6, post free. Medical advice given free.