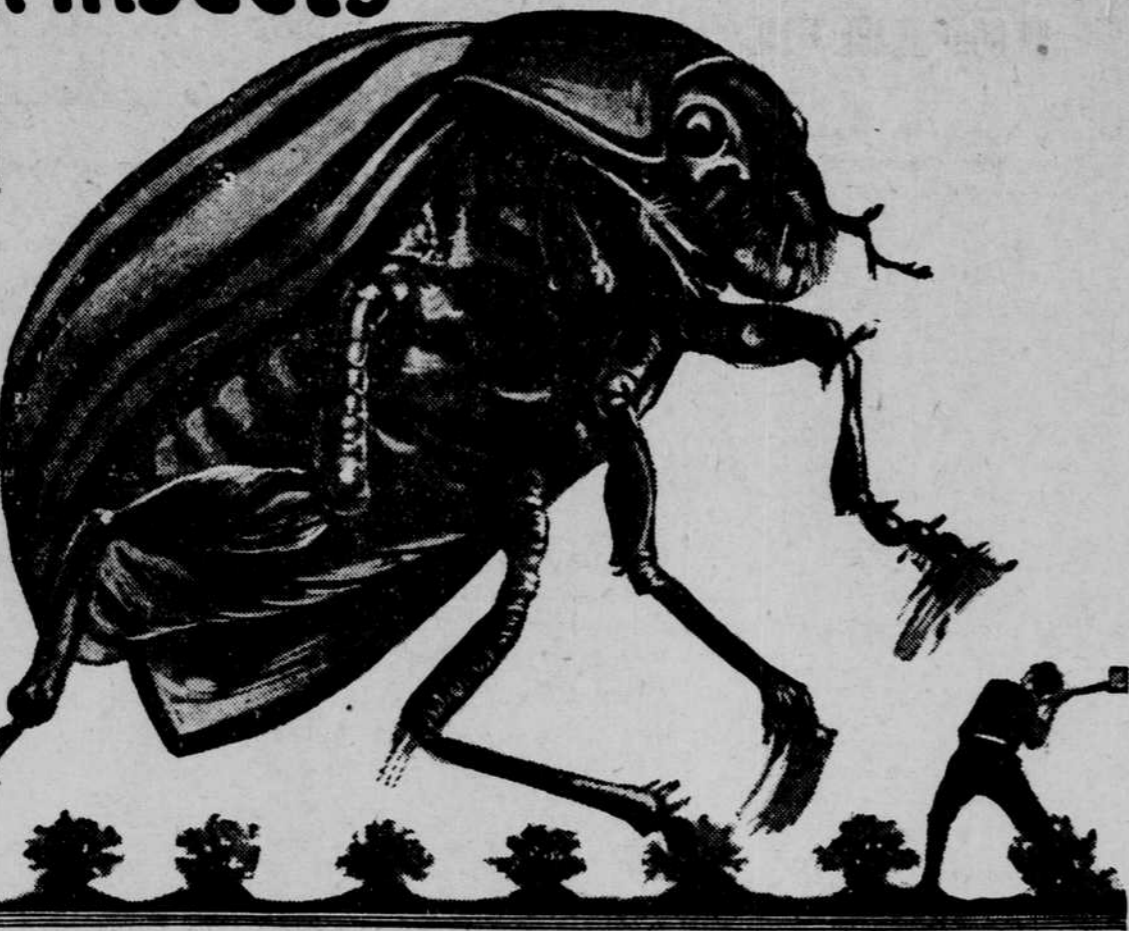


Battle Man Must Fight With Insects



PROGENY OF ONE PAIR OF POTATO BUGS COMPARED TO MAN OF AVERAGE HEIGHT

THE foremost scientists of the world have been agreed for the last decade that the crucial struggle of humanity will not be that of nations warring for territory which each envies the other, but will be a colossal battle to keep from being driven off the earth itself! And in this battle it will be mankind against bugs!

By its fecundity, its enormous comparative strength—sometimes equivalent of what would be, if the bug were as large as a horse, 1,000-horsepower—and in its inextinguishable passionate and concentrated will to live and its enormous adaptability the insect kingdom makes the human race appear incredibly inefficient.

Civilization has for the last twenty years and more been steadily overturning the balance of nature, which has kept the insect kingdom down, and this scientist throughout the world have recognized. Within half that time what amounts to a world-wide organization has been formed to find and make known to all who care the best ways to cope with the fast-growing swarms which menace humanity. It is recognized that only by a tireless, long and costly and dangerous struggle will man be able to retain his dominance and freedom to develop his world.

The latest warning of this peril to humanity has been sounded in a most remarkable fashion by Prof. C. A. Ealand, one of the foremost entomologists of the world and the late principal of the East Anglian college of agriculture of England. Professor Ealand begins his remarkable work, which he calls "Insects and Man," with the following statement:

"It is fortunate for man that the insect world is a house divided against itself. Except for this check the human race would be extinct in five or six years."

The fecundity of many insects is enormous. Huxley estimated that, mishaps apart, a single green fly would in ten generations produce a mass of organic matter equivalent to 500,000,000 human beings, or as many as the whole population of the Chinese empire.

From the earliest times man has suffered from insect damage to his crops, his live stock and himself. Locust plagues rivaling those of Egypt have come to man from time to time.

The United States suffers damage annually to the extent of \$40,000,000 owing to the depredations of the Hessian fly; the cotton boll weevil causes an annual loss of \$30,000,000; the codling moth \$15,000,000, and the chinch bug \$7,000,000. Add to this the damage done by gypsy and brown-tail moths and the San Jose scale, to say nothing of the host of minor pests, and the total assumes alarming proportions.

The struggle for supremacy between insects and man is a very real one the world over.

But only by ceaseless struggle can man keep his dominance. In his fight against insects and bugs he has arrayed against him an incredible fecundity and power of destruction.

The majority of people—unscientific people, that is—says Professor Ealand, think that the locust is the most destructive insect. This is partly because of the Biblical plague having been fixed in their minds. The locusts have done more damage in South Africa and hindered agricultural pro-

gress there more than anywhere else in the world. In one winter alone the locust damage in South Africa was estimated at \$5,000,000.

To cope with the insects the government has established a central bureau for watching them. Flights can be predicted and measures taken to minimize them.

In the latter half of 1912 locust swarms did \$10,000,000 damage in our own island of Visaya, in the Philippines.

While the locust is prolific the cotton weevil beats him. Professor Ealand estimates that one weevil laying her 139 eggs by June 10 would probably bring half that number—say 75—to maturity by June 23. There are at least four generations in a season, and the second generation would number about 2,450; the third 85,750, and the last and final generation 1,001,250, or a total of 3,089,520 individuals as the progeny of a single pair of weevils and their progeny in a season. That is to say, one weevil for every square foot of area in a 75-acre field. As over 50 per cent are destroyed by natural conditions, it is doubtful if the actual increase in one season from a single pair ever exceeds 2,000,000. Alarming figures in all conscience, exclaims the entomologist.

This is only one of a vast number of insects that man has to fight against. Next come the disease carriers.

First in the disease is the mosquito, which infests man with malaria, yellow fever and filariasis. Many parts of the tropics and localities otherwise most desirable are practically uninhabitable to civilized man, owing to the ravages of malaria.

Malaria has been held responsible for the wiping out of the ancient Greeks.

Not health alone, but man's very pockets are affected by this overwhelming incubus. The mosquito plague has been responsible for arresting the development of the whole state of New Jersey.

Malaria is a country rather than a town disease. It was once supposed to be caused by dwelling in damp and marshy places, and even now the belief dies hard in the minds of many people, but it has been proved beyond dispute that by the bite of infected mosquitoes, and by that means alone, can this dread disease be transmitted from man to man.

Various estimates have been made as to the number of bacteria that may be carried about the body of a single healthy, active fly. One investigator, Torry, puts the number at 28,000,000 in its intestine and 4,500,000 on the outer surface. Eaten and Mason, by careful experiment, found that the number of external bacteria varied from 550 to over 6,500,000; other observers have put the number as high as 500,000,000 per fly. The numbers seem incredible. That one house fly can carry about its body as many as 500,000,000 germs is almost beyond belief, yet the estimated number is not the result of guesswork, but of careful experiment. Looking at the matter from the most favorable point of view, and supposing each fly to carry only 550 bacteria from place to place, the proposition, says Professor Ealand, is not pleasant.

The dreadful infantile paralysis has been discovered to be carried by the stable fly.

Then there is the sleeping sickness, which is carried by the tsetse fly. Whole districts of Africa are absolute-

RESULTS ARE SHOWN

HUMANE TREATMENT DECREASES CRIME, SAYS WARDEN.

HONOR SYSTEM HAS ITS EFFECT

Fenton Tells Heads of State Institutions What Has Been Done at Pen During Past 3 Years.

Lincoln.—Humane treatment, properly cooked and wholesome food and the honor system have combined to reduce the criminal class of Nebraska 15 per cent, Warden W. T. Fenton told heads of the fifteen Nebraska state institutions last week under whose supervision they are.

The warden told briefly of the reforms accomplished at the penitentiary during the past three years, including the abolishing of the dope traffic, improving the food, starting a prison school, where men are now taught practical business methods and trades, allowing the men the freedom of the yard on Sundays and holidays, introduction of baseball and moving pictures and the adoption of a set of rules with less vigorous penalties than before. Dr. W. M. Baxter, speaking on the need of a state dentist, pointed out that the state employed a veterinarian to look after its prize cattle, but neglected its unfortunates most shamefully. Some of the inmates at the state institutions suffer much pain because of the lack of dental attention. Dr. Baxter declared. Superintendent F. W. Booth of the school for the deaf presented a paper in favor of the oral training for the deaf. At the Nebraska school for the deaf 102 pupils were using the oral system instead of the sign language, according to Booth.

To Fill Up Guard.

Immediate steps to round out the membership of the national guard and make it not only up to, but beyond requirements, will be taken by General Hall. The commanding officer of the organization made trips to Gordon, Gothenburg and intermediate towns during the past week and took a look over organizations which have been clamoring for admittance. General Hall has made a clear distinction between preparedness—as far as he is able to reflect the president's wishes—and what some people term "peace." He argues that preparedness does not mean war by any means. He believes it is insurance against war, and that it is the same kind of protection to the nation that police forces are to the cities and sheriff's staffs are to the counties of the state. "If we are to have an army and a navy," says the general, "we must have them up to a point where they are worth something. It would be folly for us to delude ourselves into believing that we had real protection when a time came we actually needed it and it proved to be weak and ineffectual." The general is hopeful that no small amount of attention will be given by the coming congress to the upbuilding of the national guard organizations of the various states. He believes that the more men who can see voluntary service in the guards, the greater will be their respect for law, and the greater will be their worth to the country and to themselves because of the disciplinary training which it offers.

Thomas Back on Kearney.

State Superintendent Thomas has returned after some work in connection with his department. He brought back with him a picture of a mile of road which has been built by Buffalo county adjoining the west line of the city of Kearney along the Lincoln highway. The road is fifteen feet wide and is made of cement. It is the intention of the county officials, Mr. Thomas learned, to build two miles more if the present road fills the requirements.

May Pay Occupation Tax.

Indications that all express companies have decided to bow to the provisions of the Smith 2 per cent occupation tax are apparent at the state house. The Adams Express Co. has made its payment, and the Wells-Fargo sent word it would do so as soon as a minor point with relation to money order revenue of the company is settled. The tax will amount to about \$20,000 a year.

Suffragists Turned Down.

The delegation of suffragists composed of Sarah Field, Oregon; Frances Jolisse of San Francisco and Mabel Vernon, who are trekking across the country in automobiles carrying a petition to congress asking that that body give the women a chance at the ballot, were not successful in getting the name of Governor Morehead on their petition.

McKelvie for Governor.

Former Lieutenant Governor McKelvie will be a candidate for the republican nomination for governor. Petitions which have been quietly circulated over the state are beginning to reach Lincoln and it is said that when a sufficient number have accumulated, they will be taken to the state house and filed. It is said that E. H. Marshall of Lincoln is back of the petition movement and has been sending out letters accompanied with blank petitions asking that these be signed up and returned.

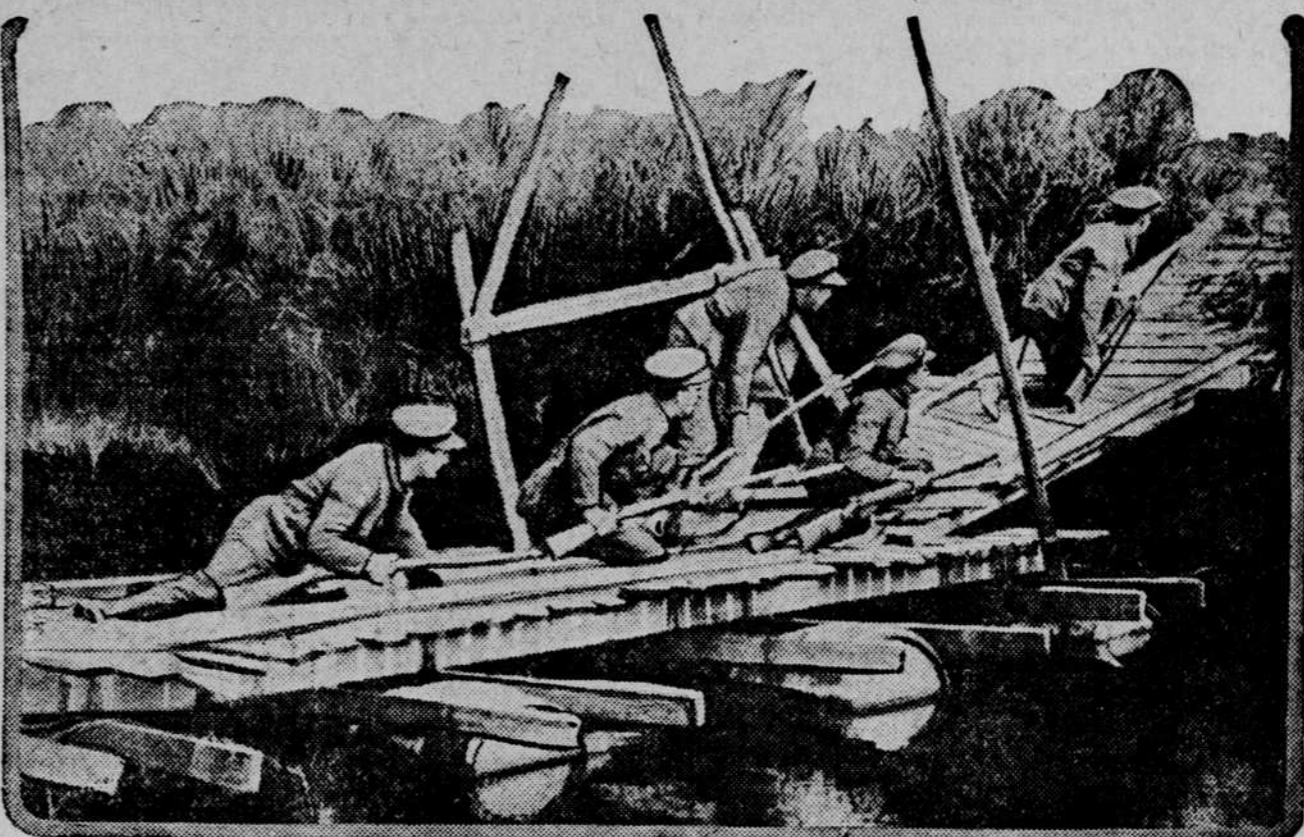
Rutenbeck Very Ill.

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Fairbury Wants Bridge.

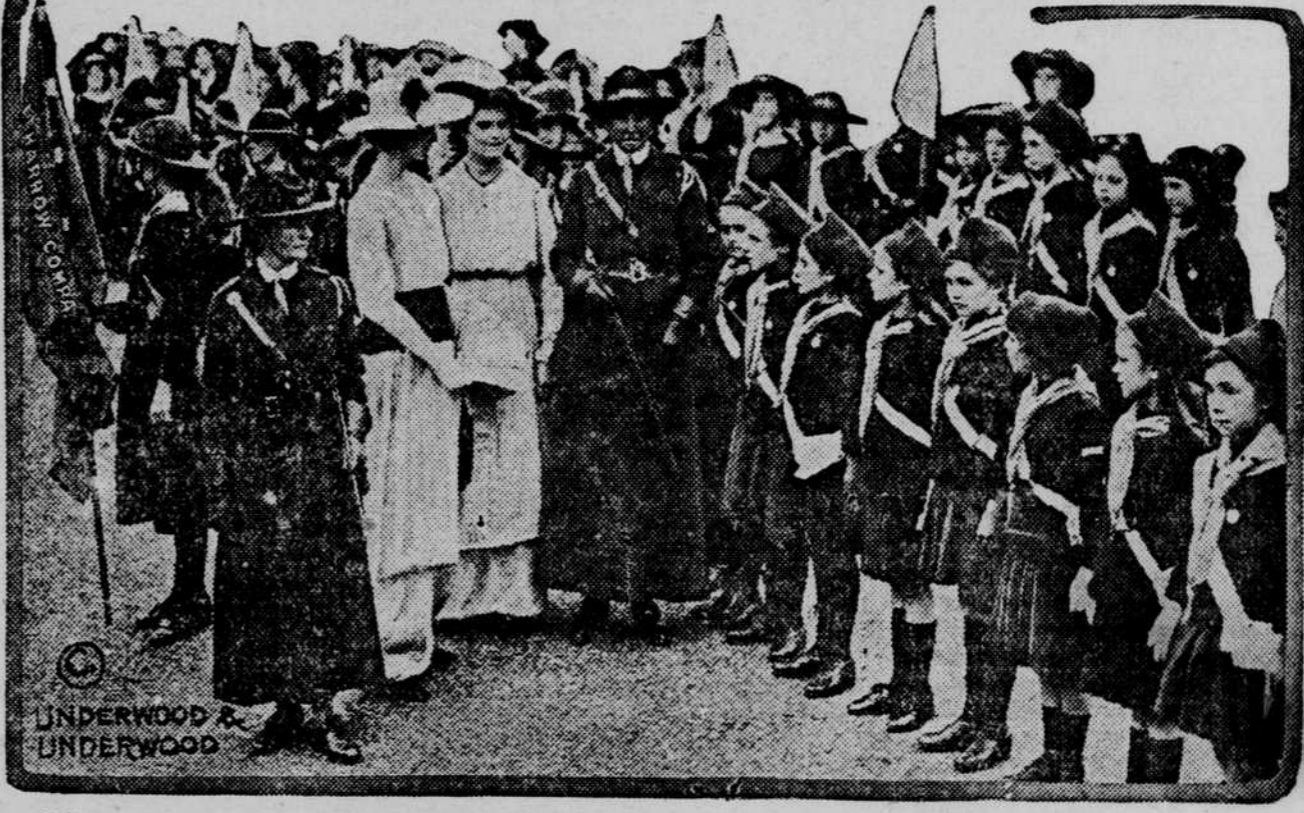
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BELGIAN SCOUTING PARTY IN FLANDERS



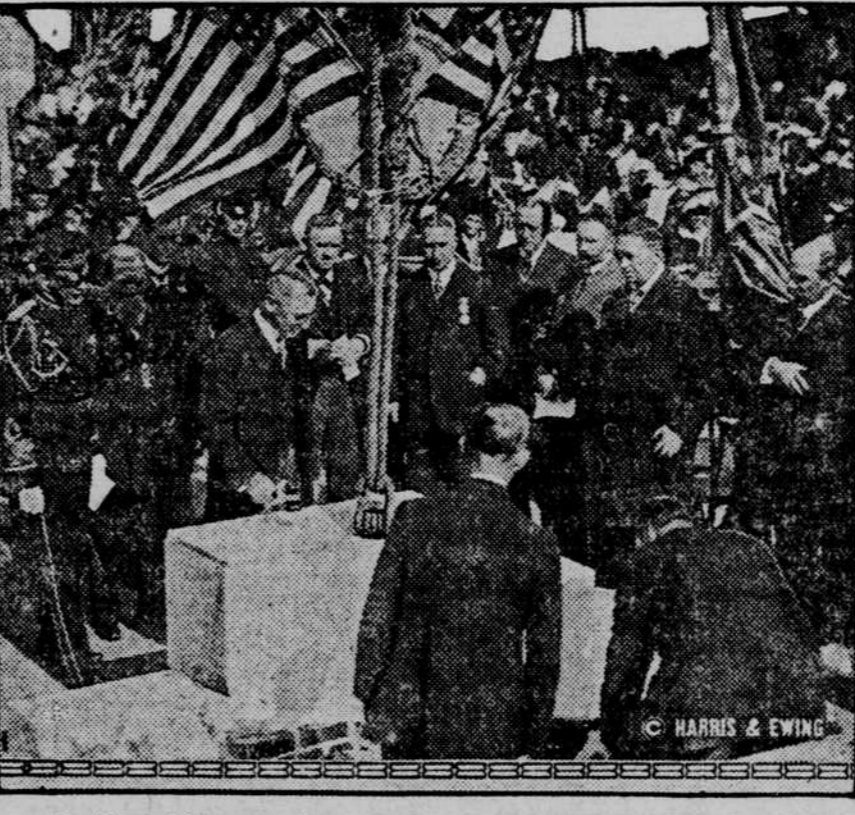
Here is a Belgian scouting party dressed in khaki uniform making its way stealthily over a pontoon bridge "somewhere" in Flanders.

INSPECTING ENGLISH GIRL GUARDS



Following the lead of the Boy Scouts, the girlhood of England is organizing into companies known as Girl Guards. These little women are taught rudimentary household and social welfare facts which will be of use to them and their country when they grow up. The picture shows the duchess of Marlborough (in white at left) inspecting the Guard of Honor of the First Harrow company at Harrow, England.

PRESIDENT WILSON LAYS CORNERSTONE



President Wilson is shown in the accompanying picture officiating at the cornerstone laying exercises at the huge memorial amphitheater now being built in Arlington National cemetery as a tribute to the heroes of the Civil war.

WOMEN MAKING SHELLS



In the ammunition factories of France as well as of England women have largely taken the place of men. One of them is here seen working on shells that are not yet bored.

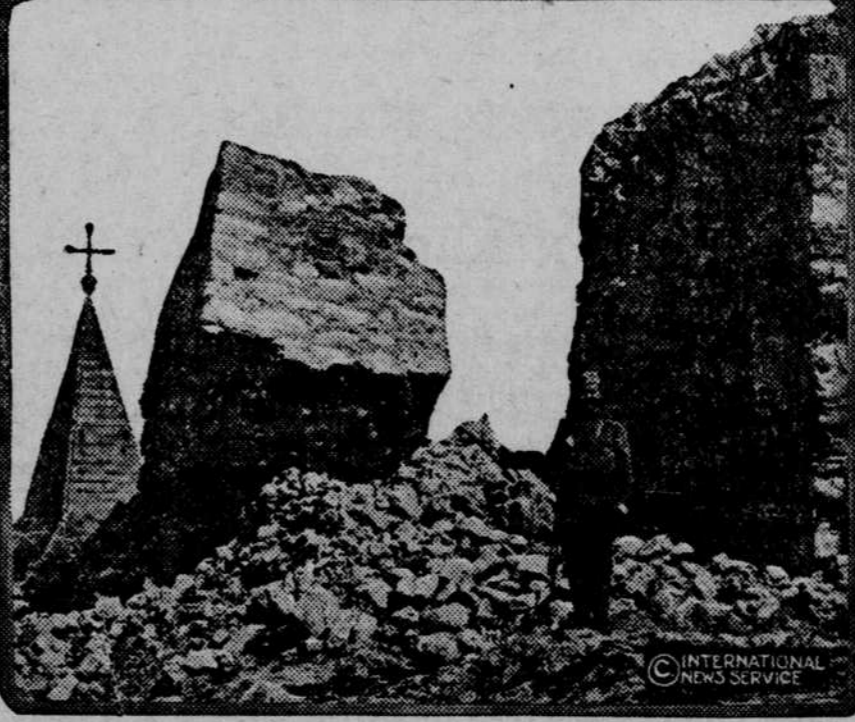
Always Working Garb.

James Keir Hardie, the British labor leader, whose death is announced, never relinquished his working-class garb, and many were the occasions when his rough attire led to mistakes on the part of others. One story is that Keir Hardie, then many years ago M. P., was challenged by a policeman outside the house of commons. The officer asked Mr. Hardie if he was working there. "Yes." "On the roof?" (which was undergoing repair). "No," answered the leader of the independent labor party, "on the floor." Another time a landlady refused to let him have rooms until he gave references—he looked too rough. The good woman was astonished when Mr. Hardie named a number of the most prominent men in commons. He was arrested in Belgium a few years ago on suspicion of being in collusion with a notorious anarchist whom the police had detained. The Belgian police never could understand why a British M. P. was not elaborately attired.

Loud-Speaking Telephone.

In England there has appeared a new telephone device which renders possible the summoning of a subscriber back to the telephone after he has been asked to "hold the wire" while the party at the other end is looking up some desired information. The device is in reality a loud-speaking horn. If the subscriber called does not wish to hold the receiver to his ear, he can place it over the horn and go about his duties. The calling party's voice is so amplified that he may be heard throughout a room.

BELGRADE'S FORTRESS WALL SHATTERED



The effect of heavy artillery fire on the walls of a fort is well shown in this photograph of part of the fortress of Belgrade after it had been shelled by the Austro-German guns.

BRIEF INFORMATION

Berlin scientists have invented a nourishing yeast, containing more than 50 per cent albumen, prepared from sugar and ammonium sulphate.

Duchess Queen Alexandra of England, who recently celebrated her seventieth anniversary, is showing a great interest in the war, especially in the fortunes of the officers at the front whom she has known personally. If they return wounded she visits them in the hospitals.

Children may not be seen in the streets of Bergen, Norway, after a certain hour, which varies with the season. The church bells of the town peal a signal for them to return home, and the police see to it that they obey.

James Thomas Ross, a famous English "fence," has been sentenced to three years' imprisonment. Before the authorities discovered his real occupation he passed as an eminently respectable manufacturer of muffins.

SNAPSHOTS

Next to a holiday Sunday is the longest day of the year.

Mrs. Tug Watts, who is taking on weight, should have a new pair of trousers. Her husband's are becoming entirely too small for her.

Every advertiser seems to think his remedy for eczema the best one.

Red Cloud is dead. But, inasmuch as Red Cloud hadn't rained a drop for 40 years, his demise is of interest only to the bereaved relatives.

An ornery man's dog sticks to his master. But a good man's dog disappears, leaving no clue.

It is cheaper to go by way of the water wagon, and that will account for a number of the fares.

The men may have their faults, but there is this to say for them, they do not kiss each other.

There is a theory to the effect that when a country dog comes to town he spends the day guarding his master's wagon. As a matter of fact, when a country dog comes to town he spends the day roystering with the town dogs.

A former society whale of this city has been landed by a girl who has fished for sun perch. As has often been pointed out, it all depends on the bait.

Eph Wiley says the surgeons who are bragging about the new anesthetic never heard his wife's preacher.

Removing Obdurate Screw.

To remove an obdurate screw, apply a red-hot iron to the head for a short time, the screwdriver being used immediately while the screw is hot.

Valuable Employee.

"I never hear of Walker, the pedestrian, any more. What's become of him?" "He's working for a real estate concern, establishing records between the houses they sell and the station. When they tell a man a house is ten minutes' walk from the station, they are in a position to prove it."

Bride's Dilemma.

The Bride—"I hate having to thank those horrid Smiths for that awful tea set. It seems sinful to lie for the sake of people one doesn't like."

Hard Things of Life.

Hard things that come our way are not hard when we do them. They are hard only when we don't do them or when we do them imperfectly. Duty is not hard when it is cheerfully and vigorously done. Duty is hard only when it is not properly met—that is, when it is done without good will, or when it is not done at all.

What's the Use?

He—Do you know Poe's "Raven"?

She—Why, no, what's the matter with him?—Club Fellow.

Would Outgrow It.

A Louisville journalist was excessively proud of his little boy. Turning to the old black nurse, "Auntie," said he, stroking the little pate, "this boy seems to have a journalistic head."

"Oh," cried the untutored old aunty, soothly, "never you mind 'bout dat; dat'll come right in time."

Creating a Nuisance.

An odd assortment of hearts to a woman who does not want them is really a confounded nuisance.—W. J. Locke in Septimus.

The Macdonald Clans.

The Macdonald Clan is by right of antiquity, power, and numbers usually accorded premier place among the great families of Scotland. In addition to the Clan of Macdonald itself, there are Macdonald of Clanranald, Macdonnell of Glenary, Macdonald of the Isles and Sleat and Macdonald of Staffa.

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