The Fan as a Military Defence.

Who invented the fan? Eve, said the essayist, when she fanned herself with a palm leaf; Venus, declared the poet, Oliver Wendell Holmes, when she denuded one of her doves, a fan-tailed pigeon, of his plumes:

"My bird, I want your train," she cried;
"Come, don't let's have a fuss about it;
I'll make it beauty's pet and pride,
And you'll be better off without it."

he determined to yield to an impulse

The goddess spoke, and gently stripped
Her bird of every caudal feather;
A strand of gold-bright hair she clipped
And bound the glossy plumes together.

A pretty fancy and a charming fan, even if we cannot accept Venus's offhand assurance that he poor, submissive dove would be better off without his tail. But, whatever its origin, the fan in the Orient, an attribute of both sexes, has belonged, down all the ages of Occidental civilization, to woman alone. "Woman's weapon," it has been often called—a dainty weapon, wielded only in wars of gallantry between the sexes, to be sure. It has taken the great war to reveal the fan as a thing of serious military value, although not as an aggressive weapon but as an important means of defense against one of the most subtle and hideous perils of the newer warfare. This fan, so different from the pretty plaything of elegant ladies, was in no poet's fancy, but in sober fact, the invention of a woman. Her name is Hertha Ayrton, and she is English.

Mrs. Ayrton, the widow of a man of science, and scientific herself, was interested during the war in the problem of expelling poisonous gas from the trenches, from dugouts and from hollows in uneven ground, where it lay long after the attacking wave had passed over. She discovered that the proper way to use a fan is not to wave it about, making the air undulate over a wide space, but to bring it down sharply from the perpendicular to the horizontal, driving the air before it in steady puffs and setting up a fresh current from behind. On this simple principal she constructed the antigas fan.

The Ayrton antigas fan is not more than twenty inches square, is constructed of light material, and works on the hinge-and-spring principle. It was used by the British troops during the last months of the war, and the soldiers gladly testify to its effectiveness. The inventor has given public demonstrations in London with glass models of dugouts and tunnels, from which smoke, which was employed instead of gas, was quickly expelled.

At one of these demonstrations, Mrs. Ayrton, with a three-inch fan, sat at one end of a six-foot table while smoke was poured down from a funnel at the other end. The action of the miniature fan not only dispelled the fumes but quickly gained such control over them that the current of air set up prevented the smoke from coming out of the funnel. The use of this antigas fan in cases of accumulated sewer gas has also been crowned with success, the fan in this case being applied at the manhole. Her ideas are being applied in factories, motion-picture theatres, mines, and wherever noxious gases are generated, and they may even revolutionize our whole theory of ventilation.

To His Mother.

It was at Rouen that he decided to do it. Sitting in the quiet and comfort of the Y.M.C.A. hut, he reviewed the possibilities of the next few days and found them decidedly grim. His outfit was to go straight into action, and that until now he had always resisted. He would write a farewell letter to his mother in case he should fall.

His mother was a widow, and he was her only son. It seemed like giving in to death to write this letter—like signing his own death warrant. Yet if he should fall, there was one thing he wanted his mother to know. Slowly, and with infinite difficulty, he wrote his message.

Only one passage concerns us, and its glory is such that all motherhood should know it.

"Dear Mother. One thing especially I want you to know. Yours has been an unhappy life. Let this bring you joy. Your wish has always been my law. When I left home for business seven years ago, you told me that you wished me never to drink, gamble or swear. It was wise of you to use that word 'wish.' Just because it was not a command, but the anxiety of your great love to me, I have always respected it. From that day to this, I have never tasted strong drink, gambled, or sworn, or done anything else I felt you would be ashamed of. Dear mother, don't grieve if I fall. I believe in Christ, and I shall go with a clean soul to God."

The letter was closed and sealed and dispatched to a friend, to be sent to his mother, if necessary. Before he slept that night he determined, on his knees, to resist all gloomy forebodings.

A week later orders came to his battalion that a strong German machine-gun post must be captured. A Company was given the task, and failed. C. Company, our young hero in command, was ordered to take the gun. Through a hail of bullets they swept to victory.

A month went by, and the young officer was standing one day in the trenches. Snipers were busy, and he had been seeing that his men were not carelessly exposed at any point. Wearily he leaned against the back wall of the trench. Suddenly came an impulse to move his position. He could not explain it; nevertheless he obeyed and swung around on his elbow. Ping! A German bullet sank into the wall in the very spot against which his head had rested. So the days and nights went by with escape after escape. Still he struggled to maintain his confidence in life.

Soon after the armistice he returned home. Never will he or his mother forget the night when—after much thought—he handed his mother that letter. She had shed many tears in life—but never such tears of perfect joy and pride. When they knelt together in overwhelming gratitude it was as if they heard a Voice saying, "Woman, behold thy son! Son, behold thy mother!"

It Is Not Easy.

To apologize,
To begin over,
To admit error,
To be unselfish,
To take advice,
To be charitable,
To be considerate,
To keep on trying,
To think and then act,
To profit by mistakes,
To forgive and forget,
To shoulder a deserved blame,
BUT IT ALWAYS PAYS.

Said to be the largest in the world, and 400 miles in width, a new oil-field has been discovered in Western Canada.

German lace manufacturers are copying English patterns, and sending lace to Great Britain to sell at twenty per cent. less than the home production.

Solving the Secrets of the Sea.

No more distinctly scientific body than the British Association exists anywhere in the world, yet among the papers that fill the program of its annual meetings there are always some that have a wide popular and practical interest. At the latest meeting the address of the president, Prof. W. A. Herdman of the University of Liverpool, was devoted to oceanography, a subject on which he is an authority; and although the paper touched the scientific imagination in pointing out the immense field for study in the chemical, geological and biological story of the oceans and ocean life, it also dwelt upon the very practical matter of the food that we get or could get from the sea.

One of the things that President Herdman would do is to make some kind of census of the oceans, as a basis for calculating how much food they can be made to yield and what laws can be agreed upon for the protection of fish. It is evident from history and geology and archaeology that man has always got a considerable part of his food from the sea, yet it is the one field in which, with unimportant exceptions, he has established no individual rights and done no productive work. On land he has multiplied the gifts of nature a hundredfold and improved them in quality as well as in quantity; but what nature gives him from the sea he has taken in its casual form and quantity, and been content.

The future is likely to see a great change. It has been proved that an area of the sea can be made to yield a greater income than an equal area of good farming land, and only a beginning has been made as yet. The oyster business, the lobster business and the salmon business are almost the only departments of the great industry of fishing in which anything has been done to make the supply permanent. All the other important fisheries of the world—the cod, the sturgeon, the mackerel, the herring, the halibut, the swordfish—have been content to trust to luck and to go on depleting a natural supply that they have done nothing to increase or even to maintain.

As an illusration of the important secrets that the sea may hold, the story of the tilefish is worth recalling. The first of the species to be caught were taken south of Nantucket in 1879 and were at once declared by the United States Fish Commission to be an excellent food fish. For two years or so they came to market in considerable quantity. Then, in 1882, the schooner Navarino sailed for two days and a night through water the surface of which was covered with dead tilefish to the estimated number of 256,000 to the square mile. For a long time no tilefish were caught; then, a few years ago they began to reappear and are now plenty again. Men of science believe that the cause of the disaster was a sudden shifting of the Gulf Stream and a replacing inflow of cold water from the Labrador coast, but no one knows surely. "Hast thou entered into the springs of the sea? or hast thou walked in the search of the depth?"

—and the worst is yet to come

The Handwriting on the Wall.

The trail that leads to a thief is often tortuous, but that identification sometimes hinges on the most trivial circumstances is illustrated in a story from The Recollections of a Police Magistrate in the Canadian Magazine. A railway station at a small town in Ontario had been robbed and, besides some money, a number of express orders and railway tickets had been taken.

Before the numbers of the stolen orders had been reported, one of the orders was cashed in Toronto by a woman who signed her name as "Warren." The teller could not give a description of the woman but remembered that another young woman, who was also at the wicket, had given a little smile of recognition to the woman who was getting the money. It was easy to find the second woman, but she proved to have no recollection of the person wanted, except that she had attended business college with her for a short time two years before. She could not remember her name, but promised to try to recall it. A few hours afterwards she was still unable to recall the name, but she remembered having seen the girl write it on the wall of the cloak room of the college.

At the spot described the name was found. The principal of the college remembered something of the girl and thought she had been staying with friends in Toronto. The city directory was next consulted, but of the five families of the name in the city none had a Margaret, and it was a Margaret that was wanted. It was decided to call on all the addresses. The first one was that of a house showing signs of wealth and responsibility. It hardly seemed worth while, but the inspectors touched the bell, and almost immediately a refined-looking young woman answered.

"Is Miss Margaret —— here?" they politely inquired.

"That is my name."

It was a shock to the inspectors, but they proceeded quickly with their questions. Indignant denial was the first attitude. Then slowly came the admissions. She had cashed the check for a young man with whom she had attended a country school many years before. She led the way to a lodging house in a near-by street, where the inspectors captured two men and seized the rest of the stolen goods. One of the men a year previous had been a station master at the place that was robbed.

Miss Margaret little thought, when she wrote her name on the wall, that she was laying a trap to land her friend and one of his chums in prison.

Illness Cured by Merriment.

The power of the mind over contagious disease is well illustrated by Charles L. Leland in his "Have You a Strong Will?" He cites the case of the celebrated physician, Hufeland, who recalls a personal experience, as follows:

"I, myself, am an example that an established case of contagious illness can be cured by a glad exhilaration of spirits. It happened in the year of the war, 1807, when a pestilential fever broke out, that I had to attend many who were ill with it. And one morning I felt that I had every symptom of the disorder—giddiness, mental dullness, weakness of the limbs—every sign that I must suffer for many days before the malady would break out. But duty commanded, and others suffered more than I. I determined to go through all the morning's work as usual, and to enjoy a midday dinner to which I was invited. At this dinner, I gave myself up as much as I could to merriment, drank intentionally more wine than usual, went with an artificially excited fever to my home, went to bed, had a profuse perspiration, and rose in the morning cured."

A Terrible Explosion.

The strictest precautions are necessary in storing and handling the explosives that are used in the diamond mines of South Africa. The need of such stringency was emphasized by an explosion that wrecked a dozen magazines near the compound of the Victoria Mining Company three years before Mr. Gardner F. Williams assumed the management of the De Beers Company. In his book, The Diamond Mines of South Africa, Mr. Williams describes the result of the explosion:

The shock was felt from Dutoitspan to the farthest limits of the west end of the camps, and terror-stricken people rushed out of their houses to see a vast heaving cloud of smoke rising hundreds of feet into the sky.

The magazines were dashed to pieces, as the Kimberley papers reported, by the terrible power of the explosives. In most instances the galvanized iron was broken into tiny atoms as if by myriad hammers, and cartridges were scattered far and wide through the debris, exploding in volleys or in scattering blasts for many minutes after the explosion. One large stone was thrown as far as the Central Company's offices, a distance of two miles, and smaller ones to the west end, three miles from the magazines. In the most distant parts of the camp there was a startling breakage of windows, lamps and chandeliers; and the hotel bars and canteens were so heavily pelted that the floors were swimming with what we might call dynamite cocktail, a liquid composed of every liquor under heaven, from Cape Smoke to Heidsieck and Pommery. Witnesses of the explosion thought that hundreds of people had been killed and injured; but almost miraculously, as it seemed, only two persons were killed, one a white, the other a black.

A Thrifty Book Lover.

There are some singular discounts allowed in the book trade that on one occasion were happily illustrated by Mark Twain. One day while the humorist was connected with a publishing house he went to a bookcase and, picking up a volume, asked the price. He then suggested that, as a publisher, he was entitled to fifty per cent. discount. To this the clerk assented.

"As I am also the author of the book," said Mark Twain, "it would appear that I am again entitled to fifty per cent. discount."

The clerk bowed. He could not deny it.

"And as I am a personal friend of the proprietor," Mark modestly continued, "I presume you will allow me the usual twenty-five per cent. discount? If so, I think I may as well take the book. What's the tax?"

The clerk took out his pencil and figured industriously. Then he said with great obsequiousness, "As near as I can calculate, we owe you the book and about thirty-seven and one-half cents."

Your World Power.

Would you be at peace? Speak peace to the world.

Would you be healed? Speak health to the world.

Would you be loved? Speak love to the world.

Would you be successful? Speak success to the world.

For all the world is so closely akin that not one individual may realize his desire except all the world share it with him.

And every Good Word you send into the world is a silent, mighty power, working for Peace, Health, Love, Joy, Success to all the world—

Including yourself.

Silver Fox, Diamond of Fur Trade.

The silver or black-silver fox is a color phase of the common red fox found nearly everywhere in Canada. Silver foxes bear the same relation to red foxes that black squirrels do to gray squirrels, or black muskrats to brown muskrats. Through selective breeding in captivity, the silver or silver-black markings have become fairly constant and good animals reproduce true to type. In the typical silver fox, black replaces the red of the ordinary fox, the result being a beautiful black fur overlaid with a sprinkling of silvery white guard hairs. Between the ideal silver-black fox and the red are all grades of crosses, which, of course, are less valuable than the true silver blacks, yet worth many times the cost of the ordinary red.

The silver or silver-black fox was the first American fur animal to be domesticated permanently. Back in 1894 a trapper on Anticosti Island near Prince Edward Island, caught a pair of beautiful silver foxes which he sold to Charles Dalton of Prince Edward Island. He kept them on the island one year and they would not breed. He then turned them over to a Mr. Oulton who took them to Cherry Island. Oulton was the only inhabitant on the island, and the foxes, not being disturbed, raised the first pair of silver foxes that ever were reared in confinement. Dalton and Oulton had then demonstrated that it was possible to rear these very valuable animals in captivity, so they bought a few more wild foxes from trappers and continued to breed them. This fact they kept a dark secret from all their neighbors; in fact, they did not even tell the immediate members of their families. After a few years, when the number of foxes had increased, they killed a few and shipped them to London to the big auction sale of furs. So cautious were they about the natives knowing their business, that they sent the skins to market from different stations and received word of the results of the sales telegraphed in code. The prices received evidently were so high that the fox farmers showed signs of great prosperity. At any rate, it was not long before the "closed corporation" was broken and the neighbors also began to raise silver foxes.

In the early days of the business as high as $31,000 per pair was paid for breeders. Prices slowly declined until the end of the war, 1918, but since then they have steadily advanced until foxes for breeding now sell all the way from $600 to $2,000 apiece, and it is estimated there are more than 4,000 of the animals on the Island.

From Prince Edward Island the industry has spread into New England, Michigan and Alaska and into all of the provinces of Canada.

A Good Companion.

Lessing says: "The most agreeable of all companions is a simple, frank man, without any high pretensions to an aggressive greatness; one who loves life and understands the use of it; obliging, alike at all hours; above all, of a golden temper, and steadfast as an anchor. For such a one we gladly exchange the greatest genius, the most brilliant wit, the profoundest thinker.

"Let's Praise."

Let's praise each other now and then, and not be always blaming. It's good for women, also men; and if they would be aiming at making Life a pleasant round, in Compliments it should abound.

Of course, when Courting Days are on, before the happy Wedding, our words all show how much we're "Gone"; they're soft as feather bedding; but when the Honeymoon is past we fly the flag of love half-mast!

If Susie makes a ripping pie, or fries a crisp potato, don't eat your dinner with a sigh, and look as grim as Cato, but tell the lassie that it's Good, not let her think her pie's a Dud.

And when Maria trims a hat, don't grumble at expenses, or in the fire goes all the fat, and there are Moods and Tenses. No! Tell her that she looks a peach, and watch her sparkle at your speech.

In short, we're chary overmuch of due appreciation, and so Love hobbles on a Crutch, or dies of sheer starvation, when all we need is just to say: "By gum! You look A1 to-day!"

So easy! Yes, so easy that we let it drop unthinking, and get to giving Tit for Tat, and Discord comes like winking, whereas if we would practice Praise, a week would hold Seven Happy Days.

And it's the same with kiddies, too, you Fathers and you Mothers. Just praise 'em up for what they do; don't leave it all to others. A Bit of Praise from mum or dad has bucked up many a lass and lad.

France bought from the British all the railway lines they laid down in that country.

Something the Matter With Me.

It is a terrible thing to go through life with the conviction that something serious is the matter with you, that you are inferior in some way to those about you, that you lack certain ability or certain qualities which are necessary for great success, or to make your life count for very much.

To drag through the years with the belief that there is something wrong with you, that you lack ability to do the thing you long to do, or that you have a serious handicap, physically or mentally, that you are peculiar, queer, or inferior, takes the edge off your endeavor; it mars your peace of mind and happiness; it deprives you of the satisfaction which should come from honest effort to make good.

There are multitudes of people who have such convictions about themselves. They often have their beginning in the home or the school, when a child is told he is a dunce, a good-for-nothing, and will never amount to anything—that he can't learn like others, can't do things like others.

This unfavorable judgment makes an impression on the plastic mind of a child that lasts through life. A boy will grow up convinced that he is below par mentally, that there is something the matter with his mind, that he hasn't the ability of others about him, and that, no matter how hard he may try, he will never get ahead or amount to anything much. In time, this belief so undermines his ambition that he gives up attempting to excel in anything. His whole character becomes affected by this unhappy conviction of inferiority, and as a result his life is a failure.

We can only do what we believe we can. If we hold in mind a cheap, discreditable picture of ourself; if we doubt our efficiency, we erect a barrier between ourself and the power that achieves.

We may succeed when others do not believe in us, but never when we do not believe in ourselves.

"I see," remarked a gentleman as he paid a small newsboy for his paper, "that you are putting up a good many new buildings in your town." "That is the only kind we put up here, sir," replied the little fellow, with a touch of civic pride.

Co-operation and "Elbow Grease"

To-day nobody argues about the necessity for good roads. That the need is a vital one has come to be accepted without the possibility of question. And here is the story of how one community approached the problem—a story in which others may find suggestions of value.

In this case it happened to be the council of industry in a small Western town that first took the matter up. The town in question is a progressive little city, the centre of a fertile farming and ranching country, and of late years a large oil centre. Appreciating the need of better roads, and realizing that the funds available from taxation must always be inadequate for such demands, the local council of industry evolved a plan. Briefly, this was to name a certain date as "Good Roads Day," and to issue a call to every public-spirited citizen to devote that day toward the improvement of the main county highways.

This plan found ardent supporters, and the day set was June 22. Advertisements contributed by the two daily newspapers asked for one thousand workers to report for duty with tools, a generous lunch and unbounded enthusiasm. Captains were appointed, definite areas assigned, and as the volunteers appeared they were assigned to certain teams, their individual preferences being consulted wherever possible. By mutual agreement the stores and business houses of the town and several of the surrounding villages were closed for the day, and employer and employees alike contributed their fund of "elbow grease."

At seven o'clock on the appointed day the teams sallied forth by way of automobile and truck to their respective areas. Naturally, the masculine element predominated, but many wives accompanied their husbands, and greeted them at noon with lunches more than welcome to famished appetites. Under the impulse of cheery enthusiasm and good-natured rivalry the work progressed as paid labor might not have done. There may have beeen slackers; if there were, they were in the minority. By working day of old-fashioned effort.

Was it a success? Well, consider the results. A good many miles of road smoothed and leveled, culverts repaired and crossings improved, chuck holes filled in and boulders removed; for the city men, a quantity of healthily tired muscles, a supply of blisters that were displayed proudly as badges of honorably discharged service, appetites such as many an farmer, the consciousness that the next time he had occasion to make the trip to town, either by car, or with team or truck, he would find roads that were roads in something more than name; for farmer and city man alike, a solidarity of feeling, a renewed community loyalty that will contribute much to future enterprises. Was it worth while? Try it in your county and see.

BELGIAN COUNT HAS NO REDRESS

GERMAN OFFICER PLUNDERED HIS CASTLE

Heirlooms and Wealth All Gone; No Provision for Punishment of Thief.

Although he possesses the signed confession of the German officer who pillaged the Chateau Franc-Waret in Belgium during the early days of the war and has undeniable proof that the looter, who, although poor, was living on the proceeds of a sale of valuable tapestries and the contents of several coffers of silver and gold which had been buried in the garden of the chateau, Count Jean d'Andigne, member of a noted Belgian family, was astounded by the discovery, early in November, that the peace treaty has not left a possibility of punishing the marauder.

The plunderer, a man named Roemer, appeared before a Belgian court to give testimony, and after listening to his weird concoction the judges found punishment impossible, but assessed the costs—35,000 francs—which the officer paid without a murmur. The Count's story of his losses and his subsequent efforts to recover at least part of his wealth is typical of what has happened in scores of instances since the Allies decided to take only a limited number of German chiefs before the Leipsic tribunal.

Betrayed by His Servants.

When the war started the Count was in Carlsbad and succeeded in reaching France, but the rapid enemy advance cut him off from his chateau. The Germans pillaged the ancient estate of its works of art with the connivance of former German servants, who had discovered the wealth hidden behind false walls in the cellars.

As soon as the armistice was signed the Count decided to try to obtain justice, but justice proved as fleet in the chase as did the German marauders. While searching in the official records the Count learned that Col. Keller, who is now working in a town hall in the occupied regions, commanded troops at the chateau when it was pillaged. The latter admitted taking several souvenirs, but said that a subordinate pillaged the place thoroughly.

Roemer, safely ensconced beyond the Rhine, agreed to recount his war experiences to Count d'Andigne at a time when he was not cognizant of the latter's identity. He told his visitor how he dug up the chests of riches. Whether the Count became excited at this point is uncertain, but Roemer did not reveal the present location of the plunder which disappeared from the chateau and the Count was unable to continue the conversation until after the German officials of the Department of Justice were ordered to produce the former officer.

Roemer appeared at Mayence for interrogation and signed a confession that he had taken the property, but persisted that he had reburied it in the woods several miles from the chateau. He has returned there several times, he said, but was never able to locate the exact spot.

The investigators were unable to shake his testimony, but likewise they were unable to ascertain how Roemer amassed his present comfortable fortune, although there was testimony from Commander Keller to the effect that he, in order to avoid punishment for pillaging without permission, gave to his superiors "valuable presents," which are now known to have included heirlooms of the Count's family.

Moreover, Keller's home contains large stores of linens, laces and silks, as well as 100 cameras, which had accompanied him when frequent leaves from the front were granted to him. The fact that some articles have been identified by the Count does not worry either German or allied justice—Keller keeps what he has got and the aged Count has only the shell of the chateau to leave to his heirs.

The Greatest Worry of All.

I know of no sort of worry which gets such a terrific grip on people, which eats into the very marrow of one's being, like the money-worry, the worry about the wherewithall to exist.

Many men are so constituted that they can stand almost any other sort of trouble better than to worry about where money is coming from to pay household bills and to keep the family going.

Where there is a very small salary and a large family and the parents are ambitious for their children's education, ambitious to dress them decently, and to rear to be somebody, and after there is sickness and the little earnings have dwindled, the little savings gone, it takes a lot of stamina and character to keep one's courage and poise.

Canada had in May, 1920, 640 moving picture theatres, attended by 750,000 daily.

A silkworm now being produced in the United States will spin silk threads of any desired hue, the coloring matter being inserted into the silkworm's food.

Canada claims to have the largest storage dam in the world, the Gouin, at the head of the St. Maurice River, Quebec, with a capacity double that of the Assouan dam in Egypt.

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