SCIENTISTS WILL WIN THE NEXT WAR

NIKOLA TESLA, electrical scientist, says not armies alone but whole populations will be destroyed by use of wireless currents—His own air torpedo deadly

NIKOLA TESLA

IN THE science which man has spun out of his brain he has created a monstrous Frankenstein, which is now rending him limb from limb on the battlefields of Europe. But one of the fatal qualities of science is that it always progresses. What part will it play in the next world war? Will the inventive intellect by then have unloosed forces which, compared to the 42-centimeter howitzer of today, will be as the 42-centimeter gun is to the two-handed sword of the Roman legions? Yes, reply the experts; the present war is based on chemistry; but future warfare will wield the enormously more gigantic power of destruction provided by electricity, according to a writer in the St. Louis Post Dispatch.

Then it will not be a question of the annihilation of armies; it will be one of the extermination of whole populations. It will not be a matter of demolishing cities and fortresses, but of wiping whole nations at one stroke from the face of the earth. The scientists, in fact, offer us one ultimate alternative. Either man must conquer his innate murderous instincts and cease from war, or else in the end the human race will perish in a universal act of suicide such as Schopenhauer foretold—self slain by the unspeakable agencies of destruction with which science will inevitably arm us.

For 600 years gunpowder and its derivatives have ruled the destinies of mankind. A flash from the pestle of the scientist monk, Roger Bacon, blew feudalism off the globe, and made possible the coming of democracy. Gunpowder gave to the European races sway over the whole world; it subjected to them America, Asia and Africa. Little did Bacon dream of these consequences from his experiment with saltpeter and sulphur. Perhaps as little do we today realize the possibilities of the wireless current which in an instant bears the spoken word from Arlington to Honolulu.

In the imagination of every scientist in the world today there is a vision of a machine with a key by means of which a wave of electricity will be flashed through the air to explode the enemy's bombs, torpedoes, cartridges and magazines. The man who first perfects this device will go down in history—if any historians are left alive—as a greater man than Roger Bacon, for his invention will make lyddite and picric acid obsolete, and will send rifles, cannon and dreadnaughts to the junk heap.

Only one scientist so far makes a claim to have advanced some steps towards the perfect electric man killer. But that man is no other than Nikola Tesla, electrical wizard, who has just been awarded a part of this year's Noble prize for physics. In an interview the other day he laid down these prophesies:

1. This is the last war in which the explosive power of chemicals will decide the issue.
2. In the next war electricity will be the force of organized slaughter.

The confidence with which Tesla uttered these predictions is based upon an invention which he says he has just completed, but the details of which he is for the present jealously guarding, for fear they might be worked out by one of the belligerents in the present war. In case the United States were involved in war, however, he says he would place his device unreservedly at the disposition of the military authorities.

"It is, of course, possible," he said to a representative of the Post-Dispatch Sunday Magazine a few days ago, "to produce electrical effects at a distance by means of wireless energy. But the insurmountable difficulty thus far has been to aim an electric wave in one direction only, with all of its force concentrated on a given target.

"I will go so far as to say that, after twenty years of application to the problem of transmitting energy by wireless, I have just made a valuable advance in this direction. The stage has been reached where to an extent it is practicable to use this force in war, and to predict such a development as will make electricity supplant cannon in battle.

"It is impossible to give details at this time, but in a general way my invention can be used in three methods.

"In the first place, it will be possible to send an explosive body through the air—an aerial torpedo flying many times faster than an aeroplane—and to direct this projectile to the spot desired, where it can be exploded by wireless. It will be possible to guide the projectile by wireless after it has passed beyond the range of the eye, and the aim is so accurate that it is possible to reduce the error to a few feet in a thousand miles.

"In the second place, it will be practicable with this apparatus to produce effects at a distance which will interfere with the enemy and tend to make him ineffective.

"In the third place, it promises to be able to produce at a distance such effects of electrical tension as will jeopardize life and property."

The inventor declined to go into specific details, saying that it is safer to be specific after the fact. But one would gather from the words he did speak that he has contrived a torpedo of the air flying under its own power as a torpedo swims in the water, which can be steered by wireless and exploded by the same force. Such a projectile would have a range not of some twenty miles, like the highest power cannon, but one limited only by its own flying endurance. It would be harder to hit with shell and rifle fire than an aeroplane, because of its smaller size and swifter velocity, and it need not be manned by a crew who would be exposed to death at every instant.

Such a missile, aimed according to the mathematical formulas used today by gunners whose target is beyond the range of eye and telescope, could be dispatched for the destruction of a battleship long before her own guns would be able to come into play. Safe from the shells of the greatest ordnance, it could start from a point miles beyond their range and destroy the batteries without the possibility of a reply.

The second and third methods of which Tesla speaks are discussed in rather cryptic language, but leave the inference that he believes himself already able, in some degree, to produce at a distance by wireless an electric shock similar to that produced by touching a charged wire. One can think of no other way in which effects perilous to life and property could be obtained with electricity.

With this idea worked out to its ultimate perfection, one might foretell such appalling events in warfare as this: An entire army, in its trenches is without warning seized with the death agonies of a wretch in the electrical chair, and is exterminated by a silent enemy, using no bullets. Or, at a given moment, every living thing in a great city is struck dead as if by lightning, by means of a force unleashed hundreds of miles away by an officer who merely pulls a lever in a wireless tower.

Tesla appears to see in the future a warfare of electrical appliances more deadly than all the cannon ever made; he sees entire areas electrified and made untenable for any living creature. Death and destruction will be dealt out at unheard of distances, with zones of action more spacious than we now dream of. There is foreshadowed a conflict in which not armies but nations may be destroyed in a single action, by men armed with thunderbolts more mighty than those of the heavens. No wonder that Tesla, his own imagination recoiling in horror, says:

"I hope this is the invention that will make war impossible."

Another device for which inventors are seeking is one that will be able, by means of the wireless current, to explode at a distance the enemy's magazines of ammunition. If this were perfected, one man in London, by pressing a button, could set fire to all the explosives in the Krupp factories and blow that institution into bits; or he could blow up all the cartridges and explosives in the German army. Or another man in Berlin could with one stroke blow the English fleet out of the water with its own powder. In an article in a Paris newspaper recently, Marconi, father of wireless telegraphy, declared that such an invention would mean the abolition of firearms and a reversion to hand-to-hand fighting.

A Dutch inventor named Lanzius, now in New York, claims to have made such a device. An Italian inventor won considerable notoriety for himself two years ago by demonstrating an apparatus which he declared would explode ammunition at a distance by means of a wireless current—but he was shown to be a fraud. A young New Yorker, who already has several authentic inventions to his credit, declares he has perfected a method of emitting wireless current which will melt all metals within a certain radius. A California inventor asserts that he can create a flame at a distance by means of wireless, and offers to set fire to any fleet approaching the Pacific coast.

The Germans are reported to have used heat to destroy the barbed-wire entanglements of the Russians. Tesla believes that the result was obtained, if at all, by the projection of a flame produced by hydrogen gas under high pressure. Such a flame can readily be projected for 10 feet, which might be sufficient when the trenches are close enough together. In such a flame barbed wire would melt like wax.

In all of the belligerent countries, and in those which fear they may sometime become belligerents, the best brains are hard at work on the problem of contriving new methods of murder more deadly and more wholesale than those now employed. Some of their dreams of future warfare may seem fantastic. But the rude cannon of the Turks seemed an incredible prodigy at the siege of Constantinople in the fifteenth century; and to the artillerymen of our Revolutionary war the machine gun of today would appear an equal marvel. One can scarcely doubt that if man continues to maintain his delight in war, science will be at hand to supply him with weapons as advanced in murderous power over those today, as the arms of today surpass the sling and stone with which David, introducing the artillery of his era, slew the armored giant. Will human nerves be able to endure these colossal horrors? Probably; today they endure the shock of explosives, the sound of which would have sent Achilles to the madhouse.

TEST OF YOUTH

You often see a woman at the market pinching the end of a chicken's breastbone to find out how tender—in other words, how young—the fowl is. Oddly enough, the same test with human beings is one of the most reliable known. If in advanced life the lower part of your breastbone feels elastic when pushed inward, you may assume that no important changes have yet taken place in your arteries, or otherwise in your anatomical make-up.

The human breastbone is shaped like an ancient Roman sword, and the upper part of it is like the sword handle. Its point is a piece of cartilage, which anatomists call the "xiphoid" cartilage. The early hardening and stiffening of it indicate that the changes that accompany old age have prematurely begun.—Youth's Companion.

OR THEY WOULD BE MUCH TROUBLE.

As a rule women look at things differently from men—and it's a good thing for most husbands that they do.—Indianapolis Star.

Mrs. Kawler—Do you consider Alice very good looking?

Mrs. Blunderby—Oh, Alice is pretty enough; but I wouldn't call her an Adonis.

ELECTRIC FURNACES

An electric furnace for the heat treatment of steel used in automobile construction has been introduced. Its method of producing uniform, dependable heat that is so urgently sought by automobile manufacturers is quite novel in electric furnace practice, although its principle is comparable to that of the well-known Nernst lamp. Both the floor and the domelike covers of this furnace are of a refractory material which is practically nonconducting at ordinary temperatures. To start the furnace, a current is passed through a bed of coke laid on its floor. On being sufficiently heated the floor becomes a conductor and in turn heats the wall and top, rendering them conductive, until finally the entire furnace becomes incandescent. It is stated by those who have tried the furnace that its use in the heat treatment of automobile parts promises to be extensive in the future.

DEFINED.

Knicker—What are a congressman's duties?
Bocker—To run, sit, lie and stand.

HEMMED IN.

"How did you get that stitch in your side?"
"Oh, I got hemmed in a crowd."

Health for Sick Women

For Forty Years Lydia E. Pinkham's Vegetable Compound Has Been Woman's Most Reliable Medicine —Here is More Proof.

To women who are suffering from some form of woman's special ills, and have a constant fear of breaking down, the three following letters ought to bring hope:—

North Crandon, Wis.—"When I was 16 years old I got married and at 18 years I gave birth to twins and it left me with very poor health. I could not walk across the floor without having to sit down to rest and it was hard for me to keep about and do my work. I went to a doctor and he told me I had a displacement and ulcers, and would have to have an operation. This frightened me so much that I did not know what to do. Having heard of Lydia E. Pinkham's Vegetable Compound I thought I would give it a trial and it made me as well as ever. I cannot say enough in favor of the Pinkham remedies."—Mrs. Mayme Asbach, North Crandon, Wis.

Testimony from Oklahoma.

Lawton, Okla.—"When I began to take Lydia E. Pinkham's Vegetable Compound I seemed to be good for nothing. I tired easily and had headaches much of the time and was irregular. I took it again before my little child was born and it did me a wonderful amount of good at that time. I never fail to recommend Lydia E. Pinkham's Vegetable Compound to ailing women because it has done so much for me."—Mrs. A. L. McCasland, 509 Have St., Lawton, Okla.

From a Grateful Massachusetts Woman.

Roxbury, Mass.—"I was suffering from inflammation and was examined by a physician who found that my trouble was caused by a displacement. My symptoms were bearing down pains, backache, and sluggish liver. I tried several kinds of medicine; then I was asked to try Lydia E. Pinkham's Vegetable Compound. It has cured me and I am pleased to be in my usual good health by using it and highly recommend it."—Mrs. B. M. Osgood, 1 Haynes Park, Roxbury, Mass.

If you want special advice write to Lydia E. Pinkham Medicine Co. (confidential) Lynn, Mass. Your letter will be opened, read and answered by a woman and held in strict confidence.

Quite So.

"I said think the hero and the heroine were really in love with each other, but I'm glad they quarrel and fight off the stage."

"Oh, well, I dare say they make up easily."

Naturally.

"I hear they appointed an investigating committee to sift the charges against Alderman Jones."

"Yes, but all the committee accomplished was to throw dust in the eyes of the public."

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

COVETED BY ALL

but possessed by few—a beautiful head of hair. If yours is streaked with gray, or is harsh and stiff, you can restore it to its former beauty and luster by using "La Creole" Hair Dressing. Price $1.00.—Adv.

The Case Stated.

"Beauty is only skin deep."

"Yes, and it's got all other good qualities of a woman skinned, too."

Every time a man starts in business for himself he learns a lot of things he would rather not know.

Anyway, one-half the world suspects how evil live.

A Famous Physician's Wonderful Discovery

After a series of careful experiments and tests at the Invalids' Hotel and Surgical Institute, Buffalo, N. Y., covering many years, Dr. Pierce, the medical advisor of that hospital, announced his discovery that he could prove that a medicine which he called "ANURIC" was the best uric acid solvent now to be had. As a remedy for those easily recognized symptoms of inflammation as scalding urine, backache and frequent urination, as well as sediment in the urine or if uric acid in the blood has caused rheumatism, lumbago, sciatica, gout, it is simply wonderful how quickly "Anuric" acts, relieving the pains and stiffness, rapidly to disappear.

Swollen hands, ankles, legs are due to a dropsical condition, often caused by disordered kidneys. Naturally, when the kidneys are deranged the blood is filled with poisonous waste matter, which settles in the feet, ankles and wrists, or under the eyes in baggy formations.

It is just as necessary to keep the kidneys acting properly as to keep the bowels active.

The very first sensible way to take care of yourself is to take a glass of hot water before meals and get "Anuric" tablets. In this way it is quickly dissolved with the food passed on to the blood and readily reaches the kidneys, where it has a tonic effect in rebuilding those organs.

Stop and think this over and ask for a 50-cent package of "Anuric" or send Dr. Pierce 10c for trial pkg. "Anuric" usually takes more water than other eliminates now and as his water needs sugar. A short trial will convince you.—Adv.

Another Battle.

"What is that mob doing around that gate?"

"Those are bleacher fans, and they're fighting for their places in the sun."

Necessity.

"Brinkhaus has become a recreationist."

"Since when?"

"Since the butcher refused to give him any more credit."

The mind cure may be all right—but the patient must have a mind of his own to start with.

WOMAN'S CROWNING GLORY

is her hair. If yours is streaked with ugly, grizzly, gray hairs, use "La Creole" Hair Dressing and change it to the natural way. Price $1.00.—Adv.

Dr. Pierce's Pellets are best for liver, bowels and stomach. One little Pellet for a laxative, three for a cathartic.—Adv.

There are two kinds of fools—ignorant and educated.

Speaking of batters, the buckwheat brand is as popular as the baseball kind.

Give the average man advice and he will pass it up.

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