

Scientists and War.

"THERE are three lusts which are present in the subconscious mind of man which lie at the basis of war, the lust of *power*, the lust of *prestige*, and the lust of *possession*." These remarks were made by Dr. Gilbert J. Fowler in the course of his presidential address at a discussion on "Moral responsibility of scientists in modern warfare," held at Bangalore on 22nd August, under the joint auspices of the Society of Biological Chemists, India, and the Institute of Chemistry. Sir Martin Forster, Mr. Ernest Kirk, Rao Bahadur Prof. B. Venkatesachar and Prof. C. R. Narayan Rao took part in the discussion.

In the course of a thoughtful address, Dr. Fowler observed, "My scientific and professional work has brought me in contact with chemists and engineers all over the world including Moscow and Japan. I may, therefore, claim to be something of a citizen of the world and can have no desire to hate or destroy the many good friends I have made.

My experience will, in some degree no doubt, be that of many other scientists and therefore, the scientist is pre-eminently fitted to be a friend of all the world.

If, however, this worthy ambition is to be realised, it would seem necessary that certain commonly voiced statements and their implications should first be criticised.

One view which is gaining ground is that the discoveries of scientists are themselves largely the cause of war. The fallacy of this will be evident after a moment's thinking.

It is often apparently assumed that poison gas or chemical warfare is due to the secret and devious investigations of chemists. Actually I believe practically all the gaseous weapons, used in the war, had been discovered previously in the course of purely peaceful investigations.

Another statement constantly made is that war is *inevitable*. This is to mistake the fundamental causation of things. Guns do not attack the enemy automatically, their construction and operation depend obviously on the living mental agent behind them. Therefore it is with this mind that we have to deal. Even if this be granted, however, another frequent statement is that *human nature does not change*. This statement may contain a certain measure of truth but even if human nature doesn't change there need not be so much of it. I would remind you that the rate of scientific progress during the last 100 years has been something altogether exceptional in the history of the world. May we not believe that just as the chemical experiments of Roger Bacon were at the time looked upon as a species of black art, but are now part of the possible knowledge of every Board School child, so certain fundamental spiritual truths, the knowledge of which was supposed to be confined to a few saints, sages and mystics, may become the common property of humanity? The evil power of mass suggestion is only too evident. As the Bishop of Calcutta has so well argued "why cannot the voice of truth be equally well disseminated among the people of the world?" In this connection one might refer to another apparent assumption, that men of science are superior to war suggestion. I am afraid, as an American might say, "I should smile," I have not observed

that men of science are much less quarrelsome than other people. Personally I have not found that the study of chemistry has in itself enabled me more easily to control my temper or to suffer fools gladly.

Another assumption would seem to be that peace and democracy were desirable things to which all had a right much as we have to air and sunshine. On the contrary they are the rewards of great and persistent effort. Peace is the reward of righteousness. Democracy is the reward of self-discipline.

Another half truth is that war is due to a shortage of raw material on the part of certain nations. There is no shortage, *e.g.*, of tea. The Indian tea planter would be only too glad to sell as much as he could to anybody. It is not the present shortage but the fear of possible future shortage in case of war which is the trouble. Why then have War?

Actually the root cause of War lies deeper than these material difficulties. I would say that there are three lusts which are present in the subconscious mind of man, which lie at the basis of war, the lust of *power*, the lust of *prestige* and the lust of *possession*. These are all characteristic of the vulgar parvenu. I should like to read to you in contrast some words from one who cannot be accused of being a pacifist.

"Greatness consists in not being the echo of others, in not throwing dust in anyone's eyes, in seeking only what is necessary for the welfare of the country and making straight for the goal.... All kinds of obstacles will be put in your way; but in the conviction that you are not great, but small and weak, and expecting no help to reach you from any quarter, you will, in the end, surmount all hindrances. And if any man, after that, calls you great, you will simply laugh in his face."

These are the words of Mustapha Kemal and I would remind you that he has made a nation out of Turkey, and that he has got his way in the Dardanelles without a single threat.

Another Dictator has made much play with the idea that war is a school of character. No doubt, great qualities are exhibited during war, so they are during earthquakes, floods, shipwrecks and mining disasters. Yet we do not look upon these as blessings. I cannot do better than quote again, this time from our King Emperor who spoke as follows after reviewing the Guards:

"Humanity cries out for peace and the assurance of peace, and you will find in peace opportunities of duty and service as noble as any that bygone battlefields can show."

Let us not, therefore, as men of science make use of any of these half truths in our campaign for the abolition of war. I say for the abolition of War because the abolition of any particular weapon is only a part of our task. While it is arguable that there is little to choose between death or torture by poison gas and being smashed by a shell, it must be recognised that throughout the history of humanity certain limits have always been instinctively laid down. This was so even in the old Mosaic law and is implicit in the common expression "hitting below the

belt". Most people would sooner face a revolver than a bottle of vitriol.

Any joint effort, therefore, which can be made by the scientific workers of the world to limit the use of methods of warfare which involve death and torture to innocent and unprotected people is to be welcomed.

Nevertheless, the intelligence which is capable of investigating the furthest star or the smallest molecule, that has discovered means of communication which have annihilated space and time, can surely produce some result if it will honestly and humbly set itself to the study of these infernal forces which lie in the subconscious mind of man, and which need to be controlled by some higher energy if all the fair prospects of humanity are not to be obliterated in one hideous ruin. The famous psychiatrist Dr. Jung says "it is the psyche of man which makes wars.....the most tremendous danger that man has to face is the power of his ideas. No cosmic power on earth ever destroyed ten million men in four years but man's psyche did it and it can do it again. I am

afraid of one thing only, the thoughts of people. I have means of defence against things."

The following resolutions, put forward from the chair, were passed by the meeting:

"This meeting while pledging its support to every united effort which can be made to abolish methods of warfare which are repugnant to the common instinct of humanity recognises that the more important objective is the abolition of war itself.

To attain this end it would urge constant and strenuous activity on the part of thinkers and men of science.

In particular it records its opinion that more attention should be given by them to the study of the new economic conditions, which of necessity, accompany the advance of scientific research.

Of equal or greater importance is the study of means for controlling the evil effects of "mass suggestion," by the more powerful agency of widely disseminated right ideas through the adoption of an international system of education."

Rabies—A Note.

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RABIES is a very common and most unfortunate disease in Veterinary practice, especially in dogs. No attempt at treatment or relief can be made. If anything in the form of narcotics is given, it is likely to mask the characteristic symptoms and make diagnosis more difficult. Either the patient is allowed to die a natural death or destroyed when diagnosis is established beyond doubt.

In this article, the writer wishes to record certain symptoms of rabies which one comes across in daily practice. The symptoms of rabies, especially that of dumb form, are varied and are likely to escape one's notice, unless one has extensive practical experience.

There being no legislation about the control of stray dogs, this disease is playing a havoc taking a heavy toll of dogs and cattle in this country. Rabid cattle are not generally brought to hospitals. Dogs which are pet animals are generally brought to hospitals especially in cities; this disease is commonly observed among them. It is really a great menace to the dog world and in turn to human beings too. Costly and well-bred dogs stand a great chance of getting infection in spite of every precaution taken by the owner. For instance, a dog is being taken or led for a walk; some stray dog comes all of a sudden, bites it and disappears keeping the owner in doubt as to what type of dog it was: rabid or normal. We have had many such cases.

At this hospital, we have seen cases of rabies in horses, cows, buffaloes, sheep and goats, and dogs; in the latter we get a number of cases all the year round.

There are two forms of this disease, viz., furious and dumb. Furious form is very easy to detect and the symptoms are clear, viz., changed

appearance, silly look, very red eyes and rushing at every object which comes into view. Such dogs do a great deal of damage biting several persons and animals and thus spreading infection. In cases of furious form, the writer has observed that the dog said to disappear from the owner's house for two or three days, come back with the symptoms described above in a most exhausted condition biting everything that comes across, in the compound. In this form dogs are seen eating their own faeces. If allowed to live, these furious symptoms are followed by exhaustion, paralysis and death. Several cattle are infected by a dog suffering from this form of rabies. This is how cattle get infected.

In the dumb form, variety of symptoms are observed. Melancholy stage is common to both the forms and is generally passed unnoticed, duration being short and also being not in any way very diagnostic in the first instance; but when the disease advances, pronounced symptoms are shown and they will be as follows:—

Uneasiness of a very peculiar type, congestion of conjunctiva, salivation from mouth, drooping of the head, changed behaviour, paralysis of the lower jaw, tongue of a lead colour, vague and listless expression, incoordination of the hind limbs, which afterwards develops into complete paralysis. Eyes sink. The animal is prostrate, breathing very heavily, gets convulsions, breathing becomes more distressing and stertorous, becomes exhausted and dies.

Wasting of muscles is very rapid in rabies so much so the dog becomes almost a skeleton in a few days' time. In many cases' appetite is totally suspended; but in some, the animal tries to lap and eat up to the last. In some cases, simply dry retching of a peculiar type and