

and twilight than at any other time, and its soft, plumage, feathered legs and somewhat flattened face give it an aspect approaching that of an owl.  
(To be Continued.)

### Is War a Disease or a Remedy?

BY ALLAN MCDAIRMID.

I recently overheard a farmer's wife expressing her mind in regard to the war in general, and those whom she considered responsible for it, in particular. As she had a son at the front she could hardly be blamed for having very pronounced opinions on the subject, and for a leaning towards the "peace at any price" party. She said war was the work of the devil and it was because such a large majority of mankind were on the down-grade morally, that practically the whole civilized world was in arms. This fighting business was all wrong, and nothing good could come out of it. I suppose it is natural for us, when we see a person take a very extreme view of any case, to look around and try to find the other side of the question, and as I listened to this mother expressing her feelings about the system and the individuals which were conspiring to kill her boy, I couldn't help wondering if, after all there might not be a reason sufficiently good to justify every loss of life and property that has taken place on the battle-fields of the world in the past three years, or a little less.

It isn't easy for us to see it at the first glance, but most of us will admit that it might possibly be so, because, to come down to the fine point, none of us have a very clear idea or conception of the purpose of this whole scheme of creation or of the destiny of man. We don't know where we came from, and we're not very sure where we're going when we leave here, so we are hardly competent to give a very intelligent opinion on the matter of what means should be employed to guide us from starting point to finish.

It's a fact that the majority of us are not gifted with a very good sense of proportion, because, if we were, we would be immeasurably more shocked at the degradation of the drunkard than at the death of our soldiers on the battlefield. In the civilized world a million human beings commit suicide every year, but we don't give the fact a second thought, though it means the last word in failure to each individual. Losing one's life in battle may not be any serious set-back to the person concerned. We don't know. But failure to make use of the opportunities that life hands out to us is the one great loss for which there is no compensation; and our failure to realize this is my reason for saying that we don't judge things according to their true value. So, to get back to our starting point, is it not quite likely that this war, which so many look on as an unmixed evil, may be a dose of medicine that is being administered to the world in the hope of curing her of some of the ills she has fallen heir to, or created for herself? Might it not be Nature's remedy? There seems to be a certain amount of stimulant in the dope, anyway. It has even been strong enough to waken up old John Bull, who has been more or less asleep for these many years. And I feel sure that before the German submarines are through with him he will be so thoroughly aroused that he will have put a stop to the waste of so many million bushels of grain as are at present being used in the manufacture of beer and other unnecessary drinks. John is very slow to change and rather stubborn. He reminds me of a pig I saw a farmer friend of mine trying to drive to the barn, the other day. He did it by facing the pig towards the house.

So, in something the same way the end will be achieved in the case of old England. Her moral regeneration is being accomplished through the sacrifices she is compelled to make in her fight for life. Not in a thousand years of peace would she develop an absolutely sober and moral population. This condition of things has not, of course, been yet brought about, but there is a strong tendency in that direction, and war-time measures are directly responsible. If Nature cannot lead she drives, and a good many of us have experienced a touch of her whip, and nations get it as well as individuals.

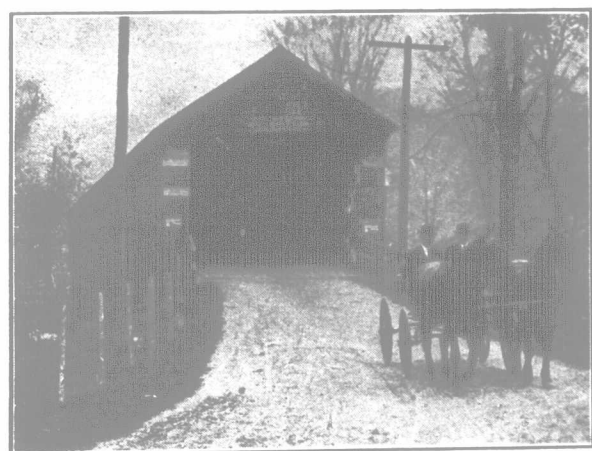
Some writers are fond of telling us that civilization is a failure and that this war has proved it. These are the men of short vision who cannot see that the good humanity has to travel leads through a hilly country, and that ups and downs are our inevitable lot. We may at present be in one of the valleys between the heights of past and future endeavors, but our progress is upward just the same. And some day we'll reach a point where we can all look back over the road we have travelled and see this for ourselves. This world is a success and human existence is not a failure, because we have at least achieved something, and are making a good fight to retain it. And past achievements are the best guarantee of similar accomplishments to come. War is in some respects comparable to the backward swing of the pendulum, but, if so, we know that the hands of the clock of time move steadily forward, not only in spite of the backward swing, but partly because of it.

And so I think we are justified in saying also, that war, while it may be a disease that man brings on himself by his ignorance and self-will, is also the remedy nature enforces, to counteract these failings. Our Old Mother is not going to let her children run very far off the "straight and narrow way" without making an effort to bring them back. And as she uses pain and sickness to attain this object in the case of the individual, so she uses war where a nation or world is concerned. This is hard doctrine, but we know that no man ever ran contrary to the laws of the Universe for any length of time, and found his road an easy one. We can't expect to sow thistles and reap wheat. A harvest is being gathered in Europe just now that proves that.

### Joint-Ill in Foals.

Many theories have been advanced re the cause of joint-ill, also known as navel-ill or septic arthritis in foals. Some claim that it is simply another name for pervious urachus or leaking navel, in which more or less of the urine escapes through the navel opening. Those who have had experience, have noticed that this is not a fact. They are two distinct pathological conditions. In some cases they co-exist, but either condition is very frequently seen without being accompanied or complicated by the other; hence there is not necessarily a connection. Pervious urachus, when not complicated, can usually be successfully treated, while joint-ill, unless skillfully treated in the very early stages, usually proves fatal. Some claim that joint-ill is a disease of weakly foals; others that it is a disease of foals that get too much milk; others, that it is due to some undetermined alteration in the dam's milk; others, that it is due to exposure to cold and dampness; and still others that it is due to the nature of the dam's food. Some claim that it is due to failure of the foal to receive the first milk of the dam, called colostrum. Again, others claim that the disease is congenital, being contracted in an undetermined manner during foetal life. Upon the latter assumption, some enterprising people have put upon the market and advertised a specific preventive treatment to be administered to the dam for some considerable time before parturition. None of these theories have been proven correct. It has been proven beyond reasonable doubt that the disease is due to a specific germ or virus that gains entrance to the blood, but just how this is accomplished may be open to debate.

Bacteriologists claim to be able to isolate the germ in the exudate caused by the discharge in all cases. It is generally conceded that the germ gains the circulation through a raw surface, generally, if not always, the navel opening. It multiplies rapidly, has an affinity for the joints, lodges in them, continues to multiply, causes severe irritation, heat, swelling and often suppuration. Hence the name "Joint-ill." The view that the germ gains entrance during foetal life, is not supported by evidence, and not generally accepted. The germ exists in the soil, in dust on stable floors, and doubtless in some cases, on the hair of pregnant mares that are



One of the Few Remaining Covered Bridges.

stabled or grazed in quarters where it exists. The last fact accounts for the occasional very early symptoms of the disease that are sometimes noticed in foals, the germ having entered the foal during parturition. The trouble is much more frequently seen in foals that are born in the stable than in those born in the field. In some seasons the disease is much more prevalent than in others, and more common in some localities than in others. Owing to these facts we are convinced that certain climatic and certain geographical conditions favor the presence of the germ, but just what these conditions are has not been determined.

The symptoms evidently may become apparent soon after the infection enters the system. From a few hours to a few days, and, in rare cases, a few weeks after birth, the foal is noticed to be somewhat dull, lies a great deal, and shows lameness or stiffness in one or more legs. An examination reveals a swelling, heat and tenderness of one or more joints, often, but not always, the hocks or knees, but may be the hip, stifle, shoulder, elbow, fetlock or pastern. Any joint or joints may be affected. The trouble is often thought to have been caused by the dam treading on the foal, or by other injuries. The symptoms increase in intensity, sometimes quickly, at others, slowly. The swellings increase in size and soreness, the patient becomes weaker, less able to move, and lies most of the time. If helped to its feet it goes lame and sore, but in some cases will nurse fairly well and soon lie down again. As the symptoms increase in intensity the general debility also increases, and the desire for or ability to take nourishment diminishes. The joint or joints involved become puffy and, if they burst or are lanced, a muddy colored liquid escapes. In many cases the articular cartilages of the joint become destroyed. In these cases manipulation of the joint reveals a grating sound, caused by the bones rubbing against each other. When this stage is reached, it is a humane act to destroy the patient, as, though it is possible in some cases, to preserve life by careful nursing and attention, the animal will always be a cripple.

Preventive Treatment is the most important. If we admit the theory advanced, we can readily see that this consists in preventing the entrance of the germ

into the system. This can be done (where the germ exists) only by cleanliness and antiseptic measures. All dust, cobwebs, etc., should be swept out of the stable, and the stall should be regularly and thoroughly cleaned, and it is good practice to scatter slacked lime on the floor each morning before providing fresh bedding. It is good practice to give the stall a thorough coat of hot lime-wash containing about 5 per cent. carbolic acid or one of the coal-tar antiseptics. It is also good practice to wash the external genital organs, tail and hind quarters of the mare occasionally with an antiseptic or germicide as a 5 per cent. solution of carbolic acid or one of the above-mentioned antiseptics. When the mare is to foal on grass, of course all these precautions cannot be taken, but there is little danger (possibly none) of the germ being present on grass, but may exist in clay or sand void of grass. The most essential preventive measure that can be observed in all cases, is local attention to the navel as soon as possible after birth, and several times daily afterwards until it dries up and is thoroughly healed. Cases of pervious urachus favor the appearance of joint-ill, as it prevents healing of the navel opening, hence prolongs the time during which the avenue of entrance exists. The breeder should have on hand a supply of a strong antiseptic and germicide when his mare is about to foal. This may be a 10 per cent. solution of carbolic acid, formalin, or one of the coal-tar antiseptics, or a solution of corrosive sublimate. Some use tincture of iodine, full strength. The writer prefers a solution of corrosive sublimate, about 40 grains to a pint of water. This is a strong solution, but not sufficiently strong to exert a corrosive or caustic effect, and is an excellent antiseptic and germicide and practically non-irritant for external application. Whatever is used should be freely applied as soon as possible after birth, and four or five times daily afterwards, until the navel opening is entirely healed, which is usually the second or third day. When these precautions are properly observed there seldom appears a case of joint-ill, but it may occur under the most careful preventive treatment, and we are not justified in assuming that the theory and practice are at fault because they occasionally fail.

Curative Treatment is often ineffective, even when given early. The use of serums and anti-toxins manufactured especially for the purpose, and which can be properly administered only by a veterinarian, have been reasonably successful, both for prevention and cure, hence it is wise for a breeder to employ a veterinarian as soon as possible after the first symptoms are noticed. Even amateur treatment may occasionally be successful. It consists in bathing the affected joints long and often with hot water, and after bathing, rubbing well with a camphorated liniment, as one made of 1/2 oz. tincture of iodine, 2 drams gum camphor, 4 oz. extract of witch hazel and alcohol to make a pint. The foal should be given 5 to 10 grains (according to breed and size) of iodide of potassium in a little of the dam's milk, three times daily, and it should be helped to nurse frequently, at least every two hours, if it be not able to nurse without assistance. The mare should be well fed on milk-producing food, as good hay, bran, rolled oats, raw roots or grass, and should be given 1 to 1 1/2 drams iodide of potassium three times daily; such treatment may be successful in arresting the ravages of the germ and in destroying them. When the disease has reached the stage where abscesses are formed, they should be lanced, and the cavities then flushed out well three times daily with a good antiseptic as a 5 per cent. solution of carbolic acid. When the articular cartilages are destroyed and the bones can be heard or felt grating against each other, the animal should be destroyed, as, even though careful nursing may preserve life, the patient will always be a cripple.

W.H.P.

### The Horse and His Summer Work.

Horses can be maintained profitably on the farm only if producing cheap motive power or producing marketable foals. The cheapness of horse labor must be measured by the work done in proportion to money invested and feed consumed.

As a producer of power the horse competes with farm engines of all kinds, and should be rated accordingly. As with the engine so with the horse, the main requisites of cheap power production are: sufficient weight and strength to perform the regular work easily and, when necessary, carry a fair overload for a short time, quality of construction ensuring durability and a capacity to consume sufficient fuel (feed) to generate all the power that is possible. As also with the engine, the thorough fitting of the horse for work will ensure the production of more power at less cost.

The power developed by a horse of the right type is made up entirely of the energy contained in his daily feed plus the reserve energy (stored fat and muscle) of the body. The storage of energy in the horse in this way is, therefore, advisable as preparing him for that time when most work is required. The possible available energy in the way of horse-power from a pound of oats is 425 units of power, and from a pound of timothy hay is 150 units of power, while one pound of wheat straw contains no available power, since the energy contained is less than the amount used by the horse to digest it. It is clear, therefore, that the energy must be contained in the feed, and it must be in a readily available form.

For the average 1,500-pound horse at hard, steady work, a ration of 20 pounds of oats and 15 pounds of good hay produces about 11,000 units of power, which is about the work such a horse is capable of performing.

As the labor becomes heavier, so in the same proportion the food digested is diminished. Very severe