



Tuberculosis in Cattle.

Frank Harvey, M. D., D. V. S., Gives his Opinion on This Most Terrible Disease.

Dr. Frank Harvey has recently been asked to give his opinion upon tuberculosis in cattle. The following letter contains an answer to the questions propounded:

There are a number of diseases that are transmissible from animal to man, and strange to say, they are almost all of a malignant nature.

Some such diseases are, glanders in the horse, rabies in the dog, malignant catarrh in cattle, bovine variola (cow pox) to which we are indebted for vaccination; and tuberculosis (consumption) in cattle.

Now, during the last few years, it has become more generally accepted that tuberculosis is transmissible to man from cattle, consequently much has been written in journals, and papers, on the subject, and a great amount of interest manifested by the public, and in several States a great deal of good, and possibly some harm, has been accomplished by legislation.

It will perhaps appear to some, who have followed the matter closely, a remarkable fact that there is, and has been, such a diversity of opinion among writers, and investigators on the subject. Like most questions of the kind it has fallen the victim to excitement.

On the one hand, we read an article, written too by one whose opinion is worthy of respect, that there is hardly any tuberculosis in cattle and the same writer ridicules the idea that the disease is transmissible from cattle to the human being; on the other hand, another writer, whose opinion is of as much weight as that of the former writer, tells us that a large proportion of all cattle are tuberculous, and that we human beings exist, to a large extent on a diet of tubercle bacilli, served to us in milk, and poorly cooked beef. Now, it is probable that each writer is thoroughly sincere in his statements, and that they may even have been the result of actual observation, but if such observations had been carried further, or in other fields, each would have magnified his statements perhaps, and struck a happy medium in his views, and expressions on the subject. When I was engaged in the active practice of Veterinary Medicine I had ample opportunity of observing just how such diversity of opinion is likely to occur.

I investigated Worcester, and Somerset counties for tuberculosis in cattle for the State of Maryland, and although I made the most careful examination that I could, with the means at my disposal, I did not find a single case of tuberculosis among the cattle, or at least not one that I could diagnose as such. But again, I was called to examine a large herd in Virginia a few years ago, and found that the head of the herd, and a large proportion of the cows were tuberculous. I think there is no doubt that the disease is much more prevalent in herds in which there has been much in-and-in breeding, such breeding weakening the constitution of the cattle, and rendering them less able to resist the disease germs.

Poor, "scrubby" cattle are not as liable to have the disease as the more highly bred ones, because they are brought up to "rough it," and are exposed to the "hardships of life" from the beginning of their existence.

As to the question of "heredity," I do not believe that calves are born with tuberculosis, but I do believe that they inherit a weakened constitution, and when born are in a condition to hypochondria so that they are unable to resist the inroads upon their systems made by the tubercle bacilli, and as it is a case of "the survival of the fittest," they soon become victims of the disease.

The most important, and at the same time, the most difficult question, to answer, is, Is the disease transmissible to the human being from cattle, if so, by what means?

Bacteriologists have proved beyond a doubt that the meat of cattle that have died of tuberculosis is certainly a habit for tubercle, and also that a large quantity of milk sold in large cities, and elsewhere, also contained the bacilli in large quantities. The amount of disease propagated in this manner, it is impossible to ascertain, but it is generally believed by the medical profession to-day that tuberculosis can undoubtedly be contracted by consuming these articles of food, especially in an uncooked condition.

Thoroughly cooked beef, or boiled milk is probably devoid of the cause of danger.

Of course, everyone who eats poorly cooked beef, or unboiled milk which is known to be tuberculous, is not going to fall a victim to the disease, but anyone, especially one with a weakened, debilitated constitution would fare better on food which did not contain tubercle bacilli.

Now the question as to how to prevent the spread of Tuberculosis in cattle, and so keep tuberculous meat, and milk from being marketed for human food has engaged the attention of health-officers and all those who have the welfare, and health of the general public at heart, for a long time, and the legislatures of several States have enacted laws with a view to exterminating the disease, and preventing the sale of meat, or milk, which is known to be tuberculous.

A State veterinary surgeon who is competent to do such work attends to exterminating the disease, and a public health officer, who must also be a bacteriologist, examines the meat, and milk, and prevents the sale of that which is in his opinion unfit for food.

In those States that have a State

Veterinarian, anyone having suspicious cases among his cattle, or anyone who knows of such cattle, reports them to him, and he makes an examination. If he finds the cattle are tuberculous he orders the animals destroyed, and the State (sometimes) pays the owner a sum of money more or less, (generally less) than the value of the animals as reported by the owner.

Now, to diagnose a case of Tuberculosis, especially if it be an incipient case, is not so easy as many may imagine, even though the expert who attempts to do it has "Tuberculin" to assist him. A simple physical examination, that is, such a one as can be made with the aid of the special senses of sight, touch and hearing alone, is very unsatisfactory.

Cattle may be fat, and appear in good condition, and yet be victims of the disease.

One there may present no other symptoms than an inflamed udder, or a diseased gland, bone, or joint.

Then again all the symptoms of constitutional disease may be present, as for instance, cough, labored breathing, poor appetite, decreased supply of milk, staring, harsh coat, with general loss of condition and probably dysentery, and diarrhoea. Fever is often present. Now, although the animal may exhibit all these symptoms, and although a competent Veterinarian would be satisfied with these symptoms, and those he would find on a physical examination, yet the owner, who knows his loss will be great, wishes quite naturally, for some more convincing evidence. The animal is then tested with "Tuberculin."

In 1890 Dr. Koch, of Germany, announced to the world that he had discovered a substance which would aid much in diagnosing tuberculosis (consumption) in the human subject, and also would cure lupus, itself a tuberculous disease. He did not claim it as an absolute cure for tuberculosis, although he has received the credit, or, rather, the credit of making such a statement. He did, however, discover an agent which proved to be of much value in diagnosing bovine tuberculosis, even though the lesions were small and quite recent, but still it is not infallible.

It is not a remedy to be injected under the skin by every try, but should be used by scientific men, and its effects carefully watched, in an ideal case of Tuberculosis with the temperature about normal, the temperature will rise in from 9 to 15 hours several degrees, and then in from 4 to 6 hours will drop to below normal.

In a perfectly healthy animal no reaction whatever should take place.

Eminent investigators have found though, that in perfectly healthy animals, or at least such as showed no sign of tuberculous, or other disease, on post-mortem examination, shortly after, a well marked reaction took place, and then again animals which were condemned as tuberculous after physical examination, and were found so at post-mortem examination, were not affected in any way by the "Tuberculin."

Altogether I believe Tuberculin to be a very useful test in conjunction with physical examination, but I do not believe it to be infallible, and in my mind it is quite a question whether anyone's cow should be condemned as "tuberculous" on the "Tuberculin Test" alone. A thorough physical examination of the lungs and other parts should be made first, and that by a thoroughly competent man, and then the "Tuberculin" test applied and its value weighed without prejudice.

In conclusion, in making an estimate as to the number of tuberculous cattle in this State, I should be inclined to be conservative.

I am not inclined to believe that almost all the herds in the State are tuberculous, on the other hand I believe that what there is of it should be stamped out, as a protection to the public, and at the same time a protection to the owners of such stock. I do not believe that more than six or seven per cent of all the cattle of this State are tuberculous, and I believe that to be rather an extravagant estimate. It is impossible to ascertain, but it is generally believed by the medical profession to-day that tuberculosis can undoubtedly be contracted by consuming these articles of food, especially in an uncooked condition.

A FEBRUARY SONG.

Fair February first—
Month of St. Valentine and Cupid's sweet!
(Of all hard times I think these are the worst—
And there's that note to meet)
Month when the winter's snow
Melts from the icy ruin of the rose,
(Bills upon bills! and grasping greed,
I know
That mortgage will foreclose!)

When all the light-kissed hills
Give to the world their coronets of green,
(Lord what a flood of millinery bills!
What can the women mean?)
When from the thrilling throats
Of birds the pent-up melodies arise,
(Who would have thought the interest
On those notes

Would grow to that great size!)
When in her sad distress,
Earth seeks the Spring to soothe her
Sorrowing soul,
(O for a lodge in some vast wilderness—
A province at the pole.)
—FRANK STANTON.

THE POINT OF VIEW.

(A STORY.)

BY W. E. CHRISTIAN.

They had not met for ten years or more—indeed they had almost lost track of one another.

Their ways had parted as class mates on graduation day at the Naval Academy.

Dronillard had been forced out of the service on account of failing sight, had plunged into the Chicago wheat pit, and had made money. In fact, he was among the rising and aggressive operators, his name having recently appeared prominently in connection with one of the most daring and successful "corners" that had been made for some years in the number two Red Winter Berry.

Erskine had kept to the navy and had advanced in his profession, being received special mention for gallantry at one time, when his boat went down almost in sight of Yokohama. They both had much with which to interest one another, Dronillard in his directness, being stimulating to Erskine, and Erskine, in his polish, being entirely alleviating to Dronillard.

These were the two men, not either of them over thirty, who were strolling through the long pine grove bordering the St. Johns River, a few hours from Jacksonville. The lane through the grove was not so much frequented as not to be silent and restful by the river-like sheet of beaten silver through the narrow strip on their right. The benches of the pines, in Florida's winter-spring, were gratefully yielding to the tread, and these two seemed to welcome the spot as if they were drawn close to the sheltering bosom of Deep Quiet, where the noises and clatter and gabble of their outer-world were as unheard as if they did not exist.

If Dronillard had been puzzled as to the almost startling coincidence that had brought him and his old chum together at this old place, he was not long to be in doubt. True each had in a glancing hurried way known through chance common-friends of the well-doing of the other—but that was all.

From where they seated themselves on the rustic bench in the sifted light of the late afternoon, they could just catch a glimpse between the spaces of the thick foresters of the immense hostility that had sprung up as if in a night at the feet of the evening. It was New York put down in the midst of softening and picturesque and romantic solitude.

"The best of us, old chap, will get in a day," said Erskine as they sat together, "when the right woman comes along. Then it's about time, don't you think? I have been trilling long enough to become serious."

Whether I have or not, she made me serious, in some unaccountable way that seems to me as ridiculous as it is true. The woman I have met over the world are as bubbles—a twinkling light, and they are gone, with her it is different somehow—it's the same beacon steady as Doby Light—it went go out like the bubbles. I can't blow it out, I wish I could. It keeps shining at the same old stand. Heaven knows I tried hard to forget her.

"I ought not to be less frank with you," almost interrupted Dronillard. "I will tell you 'Jack.' That's the same confounded thing which brought me here."

Their voices both rang out over the great whisper of the great wood, in a laughter, that for once recalled days that would not come again.

"Tall? yes," said Erskine, "but that's not it exactly—it was probably—what shall I call it?—the reserved power, rather the reserved grace in her carriage and walk—the fullness of a force in her step and movement forward that was yet under tantalizing control to the tips of her feet—there's much of the princess in the woman."

"I am with you on the tallness," said Dronillard, "but why worry your mind with such painfully acute analyses of a woman's step and walk. The woman's thing—the woman as she stands wearing her head like a lily upon its lithe plant stem yielding but commanding. Why, even the stroke of her fingers upon the keys have the voice of command to me, brilliant, imperious command—each note comes decisive and final and polished and clear-cut. The note is finished as a piece of sculpture. And her eyes to match her notes, a calm, passionless gray that might be called cold at moments, always cool, if unwarmed by the smile. Her voice, too, comes sustained and soft and steady without too much of that light-ray that, in some women's voices, dazzle often in luminous laughter without conquering. She is to me more for what she does not express than for what she expresses—a seemingly feelingless suggestion of feeling—until I sometimes find myself taking the feeling on faith with an inclination not to be unwilling that she should turn out to be simply as she looks instead of the more that she may suggest."

"Your Chicago life," answered Erskine, "has made you satisfied, to be frank, with a more 'crude'—shall I say?—type than would satisfy the dreams that take shape during the idle moments of a navy life. Can I go back to the Academy and tell you in confidence Wyndham that you are a materialist in the pork-packing sense?"

"And you, a sentimentalist in the Bunthorne sense," retorted Dronillard. "That, we shall see," responded Erskine. "There is a difference between sentiment, as popularly known and sense of the beautiful. The one grasps vainly

at the evanescent fragrance of things; the other goes to the heart of the rose in search of color. That, we shall see," repeated Erskine, if we should hear her play this evening."

Nor could your 'eyes' move me with their classic coldness—or did you say coolness? I can see the light now as if of a transient flash of morning glory over moving waters—a cool light too sometimes—but always deep as if of a twinkling of light that one sometimes sees from the surface of a well of water away down barely touched with a glint even in the splendor of noon—a buried light trying to break through violet-blue which darkens in the evening.

The sky at its edges had passed through its afternoon gradations and variations of tint, it had come to the violet-breath and slate—and deepened silver and threat of gloom lines of the growing twilight. The two had risen from their seat and were almost up to the great hotel breaking out here and there in points of light. The terraces frescoed with palms and dark reds, with the murmur of piazza-voicings mingled with the sound of the falling spray of fountains caused them to pause on the broad concrete walk leading up to the grand entrance.

"That we shall see!" exclaimed Erskine in a subdued voice again. Listen Dronillard.

Miss Westland was at the piano at the dim end of the long drawing-room.

"Do you hear, Dronillard? That is what I came here to hear, and she who is playing—she is whom I came here to see."

"Do you hear? She is playing from one of the German masters—'playing'—No she is commencing with the Master—she does not play—to a 'sentimentalist' she commences."

"Do you hear, 'Chicago?' That note—how she fondles it—rather how she tenderly lifts into the sense as if she were lifting a rose-petal slowly with the lightest touch that she might gradually catch the full color underneath—and that group of notes—they seem to have their own unspoken dreams breathed into them through her finger-tips—and now—that breadth is kept noble by accompany. Her depth. She fingers so lovingly with each note until she has coaxed out of it its last bit of sweetness and then parts with it in a touch which seems to be a veritable sigh of parting."

Dronillard stood strangely silent. Had the day not been so far spent, one might have detected a pallor which even the most acute crises of the wheat-pit had never put upon his face.

"Let us go where you may see her unobserved," suggested Erskine.

Dronillard stood motionless, looking out toward the stretch of long, broad winding river.

A follow remorse, 'Chicago,' will ever be followed by a keen repentance—and, without your saying so, you are on your knees to me now for finding one a 'sentimentalist' to love the creative in, one might say, an agonizingly artistic musical progress toward a voicing of that which cannot be spoken.

The two had passed through the electric splendor of the great onyx-columned lobby and stood looking down toward the figure in the subdued light.

"And that is why you are here?" asked Dronillard, with hardly concealed emotion.

"Truly," replied Erskine, "and do you make apology for your 'sentimentalist' round-up of me?"

"Truly, do I, my old friend and rival," said Dronillard, "nor are you a materialist in adoring her as you do. A man must be a poet and beyond either of us to know her as she is."

"And now Dronillard for the object of your missionary-work—you have 'not said'."

"To-night will do for that," said Dronillard in half voice, as he grasped his friend's hand in an impulsive way, as he left him still looking now almost unconscious of Dronillard at the woman that he rapturously loved.

As Dronillard reached one of the tea-table porties, he pressed his hand hard to his brow, as he looked out toward the grove through which the two had strolled. His frame shook as if with a chill of agony.

"My God!" he exclaimed, bitterly, as I am a loyal friend of Jack Erskine, can I ever bear to tell him that I too came here to see Margaret Westland?"

A VALENTINE.

Valentines that speak of love,
Tender love and true;
Though I see a host none are
Sweet enough for you.

Why not send my heart, you say?
Dearest, don't you know
That I gave it all to you—
Gave it long ago?

I have nothing else to give,
For my lack of self
Renders it impossible
To offer you myself.

FEBRUARY'S DAY OFF.

(Quincy Herald.)

This is a month of holidays:
To count 'em keeps us busy—
There's ground-hog day,
And Lincoln's birth;
St. Valentine
Is still on earth;
But, Washington we most do praise—
His fame quite makes us dizzy.

Human Form Divine.

Bab Gives Her Opinion on How to Dress It—Garments Suited to Our Civilization.

(Copyright, 1898.)

New York, Feb. 12.—Always about this time of year the shop windows are filled with the most remarkable of white garments, while the newspapers are filled with advertisements of what they call "cheap underwear," but which is more elegantly referred to by the saleswomen as "fine lingerie." Whether it is that the odious dress reform undergarment is going out of fashion, and this has brought all these abominations to the fore, or the shopkeeper, appreciating that a reaction has set in, has concluded that he had better get rid of all this old stuff, or what, nobody exactly knows, but it is certain that some of the most hideous things are displayed, and as I have been to the window, I saw which bore the signature of a well-known artist represented as necessary for a woman nine out of the most diabolical garments that the eye of the printer's devil ever rested upon. Now, I am not a reformer, but I have had considerable experience, and in a tolerably long and varied life I have never met a woman who wore nine pieces of underwear at one time. Starting with the fact that one's petticoat has a firm foundation, as firm as Plymouth rock, and much better shaped, the average woman in good health need only wear, first, a somewhat long silk undervest, stockings, of course, stays, and, if she is inclined to be chilly, and has a tendency toward rheumatism, a well cut and not cumbersome flannel petticoat, with the one or two pieces of nainsook that are displayed in the shop windows, but which are seldom talked about, the petticoat may be of silk, or may be of moreen, but it is never white for street wear. With your heavy cloth skirt you need a stiff mooseen petticoat, that may be properly held out, but there is no use burdening oneself with a lot of unnecessary underwear to oblige the stupid shopkeepers. A woman walks well and easily when she has not got on a lot of starched underwear, and the line of beauty shows to much better advantage than when she is overburdened and has strings and belts cutting her, because she has no stays on, and is altogether hurried and that looking.

The human form divine, especially the female edition of it, does come in for an awful lot of discussion. The line of a woman's figure is talked about with the mention of Demas, while any or every where one is liable to face a picture of Venus, and it is quite possible to stumble over her in plaster on the sidewalk. Fancy wearing such draperies as Venus wore! Why, you would have to put heavy iron weights in them, which would make them hang against your knees, and you would sit on them and be wretched and would find yourself wishing that Venus had staid in the sea and been comfortable. But it is queer how these people, who are supposed to cultivate the mind, or the soul, or the brain, or whatever is the thinking part of people, are continually bothering about a woman's frills and frivols.

She must be rather a nice woman, and I don't know what induced her to write to me, but she asked, evidently in all sincerity, "Do you think skirts will be wired this year?" or if I thought a small hoopskirt would obtain. Personally I have always dreaded the hoopskirt. I never wore one, and I don't believe I would ever learn to control one. I feel sure that I could never sit on it correctly; that it would flare where it oughtn't to and give me a generally ridiculous appearance, then, too, as I have a very feminine weakness for high heels, I should probably put my foot in it, and "the flying women" would describe me as I came down stairs. I know a man whose favorite story is telling how a large rat got caught in his mother's hoopskirt. It is a story that strikes awe to the feminine heart, though the feminine brain refuses to accept it, and the feminine mind thinks that the man is telling a yarn.

Fashion writers—that is, people who write histories of fashion, learned people—are prone to say, in describing hoopskirts, that they are dignified in effect. Perhaps they are, but to produce a dignified effect in one a woman of about six feet would be required. No, I may tell the pleasant little woman who wrote that I do not think wires or hoopskirts will be worn. Women have been looking too well lately to care to make any great change in their appearance. The cloth skirt fitting the figure evenly and easily and the handsomely trimmed bodice make not only a smart get up, but one that is useful.

The reason I like the tailor-made frock is that I believe it to be an incentive to cleanliness. Any girl who wears one likes to have her skin look as white as possible, her hair as tidy, and, knowing that her boots show as she walks, she does not permit an unoccupied buttonhole, nor is she satisfied with a broken lace tied into a knot. She is particular about her gloves, and if she wears any white linen it is immaculate. Fashions may come and fashions may go, but the wise woman will retain a smart looking cloth gown for street wear be-

cause there are a hundred good reasons for it and not a single one against it. By the bye, the letter writing lady also asked something else. She wanted to know, "Do you think a desolite bodice immoral?" That depends. I believe that with a low bodice the neck should be white and well shaped, and that the frock should be cut so that the neck and shoulders show modestly.

A woman may write Sanskrit and speak Greek; she may be at the head of a society for the elevation of women in Africa, and she may know the finest line of difference between furniture made in the time of Louis Quinze and that achieved in the century before, but if she hasn't sense enough to know just how much of her neck and shoulders she should display she is an ignorant as the youngest baby in the house. A woman's arms, round, white, firm and well-formed, are delights, and a woman's throat, well shaped and white, is a marble column supporting the head above it, which is presumed to hold a sufficient amount of brains to hint to the world at large that the owner knows enough to show that world only what a modest woman would wish it to see. Modesty is a great virtue, but it is a complex one. There are many absolutely modest women, and many who are so immodest that one feels ashamed to even belong to the same sex.

I don't think it is quite right to hear women talk of their miseries and the manner in which they are being treated to the world at large, and yet women do it.

I don't think it is quite modest to gush over one's friends in public. Friendship is an exquisite plant, but it is one which can be easily killed, and if you want it to be fresh and beautiful and a joy in your life, then you must protect it from the vulgar eye.

I don't think it is quite modest to call whoever you may be fond of by pet names before other people. In fact, between you and me, I don't think it is quite modest to let the world at large see one's inner feelings. You shouldn't cultivate a horrible frigidity of manner, but you can be a little reserved.

I said modesty was complex, and it is. The modest woman's the one who wears her heart where the daws cannot peck at it and who keeps her own affairs to herself. She is the woman who doesn't talk loudly in public and who doesn't overdress. Modesty does not cover, it simply does not recognize the existence of, some sins. There are women who are as exquisitely modest as the angels, women who could put out their hands and lift up that other woman who has fallen and never feel that they were softening the tips of their fingers. The modest woman is the charitable one, for charity and purity are twin sisters.

BAR.

PLANT TREES.

What do we plant when we plant the tree?
We plant the ship which will cross the sea.
We plant the masts to carry the sails,
We plant the plank to withstand the gales.
The keel, the keelson and beam and knee,
We plant the ship when we plant the tree.

What do we plant when we plant the tree?
We plant the houses for you and me.
We plant the rafters, the shingles, the floors,
We plant the studding, the laths, the doors,
The beams and siding, all parts that be,
We plant the house when we plant the tree.

What do we plant when we plant the tree?
A thousand things that we daily see.
We plant the spire that out-towers the crag,
We plant the staff for our country's flag,
We plant the shade, from the hot sun free,
We plant all these when we plant the tree.

—J. STERLING WORTON.

THE HUMAN TOUCH.

High thoughts and noble in all lands
Help me; my soul is fed by such.
But ah, the touch of lips and hands—
The human touch!

Warm, vital, close, life's symbols dear,
These need I most, and now, and here.
—By Richard Burton, in the February Century.

Whittaker's "Protestant Episcopal Almanac" for 1898, which is out, is a careful and comprehensive digest of Episcopal Church statistics and growth. There are at present in that church 476 clergymen, an increase of 53 over the previous year; 6,332 churches, an increase of 46; 664,083 communicants, an increase of 22,328, and 433,600 Sunday school scholars, an increase of 12,077. Its contributions for all purposes during the last year were \$12,696,813.06, being an increase of \$10,933.05 over the previous year.

Christianity wants nothing so much in the world as sunny people, and the old and hungry for love than for bread, and the oil of joy is very cheap, and if you can help the poor on with a garment of praise, it will be better than blankets.—Professor Drummond.