

The Latest Fatal Wreck On the Tottering New Haven



The fatal New Haven Railroad wreck. Photograph shows how the engine crashed into rear Pullman, killing five and injuring twenty persons.

Engineer Charles J. Dougherty, in charge of the New Haven train, which crashed into the rear of a stalled train, June 12, with fatal results, testified at the inquest that the emergency and air brakes were ineffective and that he had reported the condition June 10. On Tuesday, previous to the accident, Dougherty testified, he tried the brakes to prevent running down a boy. The brakes did not work, and in trying to reverse his engine Dougherty strained his back so that he was physically unable to reverse his engine when he saw the train ahead of him. The Pullman into which Dougherty's engine crashed was a wooden car.

THE NEW PUBLIC HEALTH

The Advertiser Bureau of Public Health Information.
QUESTIONS. ANSWERS. COMMENTS.
Conducted by Institute of Public Health, London, Ont.

Questions should be addressed "The New Public Health," care The Advertiser, London, Ont.
Private questions accompanied by a stamped, self-addressed envelope will receive private answers. Medical treatment for individual cases cannot be prescribed.

Inclosed is a cutting taken from a discourse given by you, in The Advertiser, which to me is not very distinct, being a person always enjoying good health, all my life and am now seventy-two.

Kindly state what way one could detect a person having a contagious disease.

Answer.—I do not quite understand what you wish, so our misunderstanding seems to be mutual. The fact that you have enjoyed good health all your life to the age of seventy-two is a matter of congratulation; and if you mean that as a matter of fact you have never had an attack of any infectious disease, you are an exception. You are in fact an example of what the whole race will be fifty or one hundred years hence; one which does not know by personal experience what the infectious diseases are like.

As a matter of fact the recent Health Census made by the Institute of Public Health, shows that the average individual of twenty-one years old has suffered at least three attacks: consisting of any three of the following: Chickenpox, German measles, scarlet fever, whooping cough, measles, mumps, pneumonia or diphtheria. Of course, after twenty-one (and often before twenty-one) many persons suffer from tuberculosis, typhoid fever, smallpox, the venereal diseases and other infections, so that it is safe to say that the average person of your age has had at least four, often five, infectious diseases all told.

We seldom realize these things because we really do not think about them definitely. More than one parent, as the result of the Health Census, found that the children he or she would have said offhand "had never been sick" really had had three, four, five or six of the infectious diseases; but these had been forgotten until the parents sat down and began to think up what the real facts were.

You ask how to detect an infectious person? You would have to study medicine, but especially the infectious diseases, before you could pretend to know all the ins and outs, the different ways; and then you would have to study epidemiology as well in order to apply all these things successfully.

I could not tell you in this column what you would have to learn. Briefly, the chief subdivisions may be summarized thus: the "frank" cases, i.e., the well-developed cases, of tuberculosis, measles, scarlet fever, typhoid fever, etc., show very definite characteristics, many of which non-medical persons know. But unfortunately the bulk of the infectious diseases do not run this "frank," well-developed course. They take on disguises of various kinds, through which the trained expert sees almost at a glance, as a dentist would detect false teeth or a hair-dresser false hair, yet disguises that utterly mislead the inexperienced or the beginner. Sometimes these disguises will puzzle even experts and then reliance must be had on laboratory investigation, a search for the guilty germ under the microscope or by means of cultures; a search for peculiar occult changes in the blood; or for other signs that could never be detected at all by the ordinary senses. Finally the epidemiologist can often detect persons who, although well themselves, are infected and can produce the disease in others. This is the most recent, most intricate and most fascinating part of the whole proceeding, very simple in principle, often very difficult in practice, but wonderfully accurate in skillful hands.

It is a part of the many duties of the Institute to teach all these subdivisions, but only the very simplest of them—the recognition of "frank" full-blown cases, could be taught successfully to the non-medical man; although some non-medical men have done excellent pioneer work in epidemiology, notably Sedgwick, of Boston; Winslow, of New York; and Jordan, of Chicago.

Very little of this epidemiological work has yet been done in Canada and it is only beginning to be recognized as important here, although the ultimate abolition of infectious diseases rests upon it. Epidemiologists are now attached to the leading state and city boards of health in the United States, and in time will be considered an indispensable part of the staff of every board which pretends to reduce

disease instead of merely collecting garbage or cleaning streets.

It is not always convenient when away from home to boil the water for drinking. I would like you to tell me if there is any quicker way of killing the germs?

Answer.—Yes, what may be called the military method, since it has been used in emergency purification of large bodies of water such as would be necessary to troops on the march, who could not wait to have the water boiled and then cooled for them. This method is now used regularly on a large scale in typhoid epidemics from public water supplies; and even as a permanent method of purification in many cities.

There are several forms of this method, the essential part of which is to disinfect the water by adding to it some chemical which will kill the disease germs, and then disappear itself without harm to the consumer. Of course the latter is an essential point, for anyone knows that some disinfectants that will kill germs in water, would also kill the unfortunate who tried to drink the water afterwards.

Years ago permanganate of potash was thus used with more or less success, but was rather weak and slow; ozonized water is very expensive and not readily portable; copper is too slow although very effective, and is dangerous in large quantities.

Finally some one (a German, of course) suggested and used ozonized water, which is a very effective, cheap, portable, and one disadvantage that being cheap and common, people in general think it can't be any good, although as a matter of fact, chloride of lime is quite the cheapest, most powerful, most readily handled, and most harmless disinfectant we have, not excepting even sunlight, when the whole truth is told.

Chloride of lime "has such a nasty smell!" But this "nasty smell" is simply the smell of concentrated ozone, exactly the same thing to which people are fond of attributing the superiority of the air in their favorite places of residence!

Chemically, chloride of lime acts by producing ozone from the water in which it is dissolved. The ozone, which is a powerful oxidizing agent, literally "burns it up." It incidentally destroys germ life also, depending on the strength in which the ozone is present for its effectiveness. The ozone uses itself up, and disappears with the germs.

In order to secure disinfection of water for drinking purposes by ozone chemically set free, all that is necessary is to add the proper amount of good bleaching powder (33 per cent. available chlorine) to the water, wait a few minutes for its action to occur and then drink the water.

As compared with boiling water this method is cheaper (it uses up no fuel to boil the water, nor ice to cool it); it is quicker; it does not remove the oxygen from the water, as boiling does, leaving it flat and tasteless; if anything it adds oxygen; finally it does not make the water a better food for the bacteria as boiling does; boiled water must be used up quickly, or accidental germs from the air will rapidly infect it.

The method on a small scale for domestic use is as follows: A level teaspoonful of chloride of lime should be rubbed up in a teacup of water. Three cupfuls of water should be added and all teaspoonful of this last will disinfect two gallons of water. In ten minutes typhoid bacilli or dysentery-producing organisms in the water are destroyed.

An even simpler method for travellers consists in providing oneself with tablets or capsules containing exactly the amount necessary for a pint, quart, or other small quantity. All you have to do is to measure the water, throw in one or more tablets to correspond, and wait ten minutes.

"Hypo-chlorite," or chloride of lime to use the ordinary term, is a regular drug of the British Pharmacopoeia. The amount which the Pharmacopoeia gives as a reasonable dose is sufficient to disinfect fifty gallons of water, so only a very thirsty man, thirsty enough to drink one hundred gallons (!) at a sit-

ing, could possibly hurt himself with it.

Is it necessary for the very mild cases of infectious diseases to be isolated as well as the very severe ones?

Answer.—This question is something like asking if weeds will spread from stony ground any less than from good ground!

The severity or non-severity of a case has little to do (although at times it has something to do) with the severity or non-severity of the cases which may be derived from it. Good seed may fall on good ground, or on poor ground; that is, a good strong (or "virulent," as the bacteriologists say) germ may reach a very susceptible or non-susceptible person, or a person who is only moderately susceptible. In the case of the very susceptible person, a severe attack will probably follow; in the case of the moderately susceptible person, a moderate attack. But the germs transmitted to others from the very susceptible, the moderately susceptible or even the non-susceptible person (as explanation will happen) are necessarily the same original virulent germs of their descendants.

So also a weak germ (relatively "non-virulent") may produce a severe attack in a very susceptible person, and of course, no attack in a non-susceptible person. So also when this weak germ is transferred to another person, it remains weak like its immediate ancestors.

There are some exceptions, however; at all events, it would appear that comparatively weak germs, transferred rapidly from patient to patient may increase in virulence; this is the explanation of why epidemics are sometimes very mild when they begin but become more severe and fatal as they progress. Bacteriologists take advantage of this fact at times, and by transferring a weak germ from one animal to another increase its virulence very decidedly.

You may wonder why on earth anyone should ever wish to increase the virulence of a disease germ! One reason is that the study of the effects

of a very mild germ is too uncertain and time consuming; but a much more important reason is this: in preparing curative sera or vaccines, a non-virulent or slightly virulent culture does not produce sufficient reaction to secure the manufacture by the body of a strong antitoxin or antibody to the poison. Weak germs, like some other weak things in this world, do harm from their very weakness!

So do mild cases of infectious diseases. Because the attack is mild,

people think the sufferers are harmless and let them run round freely with other children. A severe case would be kept in bed or at least at home. Hence in the long run it is the mild cases that spread disease more than any other form.

Hardly ever does one see a severe epidemic without finding a history of mild cases of the same disease running at large for weeks or months beforehand.

H. W. HILL.

JOHN BRIGHT

[Manchester Guardian.]

"My life is in my speeches," John Bright used to say when consulted about his own biography, and perhaps that is the reason why, though there have been four or five monographs written about him, none has been an official in character, there has, till Mr. Trevelyan's Life, published last month, been no authorized record of his career. Mr. Trevelyan has been fortunate in having collected a mass of material, mostly of the nature of personal reminiscences, to handle, and having also the active assistance of the family and relations of Mr. John Bright himself. In addition, he has the advantage of the power of recollection which his father, Sir George Trevelyan, who entered Parliament close on a quarter of a century before Bright's death, was able to give him of the statesman's later career. The result is a piece of work which will not have to be done again. It definitely takes its rank with Lord Morley's "Life of Cobden," and together they give a complete picture of the greatest and most successful democratic movement of the nineteenth century.

Bright's political career was single of purpose, and his life simple and straightforward and in the end, as it were, a dissipation of energy which makes the life, for instance, of Gladstone a record not only of politics but of activities in literature, religion, and philosophy. Bright was at his best a quiet, pious member of the Society of Friends, and though to the end of his life he continued to use the quaint phraseology of the Society with its "thees" and "thous" in his letters, he was hardly an active member of the community as it was understood in his youth. When he was first about to enter Parliament the conflict between the warring ideals of politics and religion was strong, and he was at first undecided. Mr. Trevelyan, "between two religious ideals—on the one hand the quietist spirit of the older Friends who sought seclusion from the evil world, and on the other the new type of Quakerism, which was a religious duty to mix actively with the world and to win it over to the principles of peace, humanity and justice." In the event the latter principle won, and the State gained, while the community never really lost. The echoes of the conflict remained with Bright till the end of his days.

"The labors of my life," he wrote in the year 1875, "have taken me out of the way of service for my little Church and have led to a large extent unfitted me for it. I feel that there is nothing about the humblest office—shall I say that of doorkeeper?—which I could properly undertake." None the less we have the word of Lord Morley that Bright was a man of great power and influence, and that he had ever witnessed was John Bright reading a chapter of the Bible to his maid-servants shortly after his wife's death in his beautiful and feeling voice, followed by the Quaker silence.

His family life was at once simple and intense. His first wife died shortly after their only child was born, six years later he married again, but in the interval political claims pressed hard upon him, and his income was insufficient to maintain two houses. He was forced to separate from his family and live in lodgings in London while they remained at One Ash at Rochdale—from first to last his permanent home. He mixed little in London with political people, though his dining once with Lord John Russell brought a storm of criticism of the Minister, and consequently there is little material in the way of social reminiscence for his biographer to draw upon. The centre of his political life became from the forties onward in the House of Commons. But Rochdale remained as it had been, and in his youth, the source of all his private life, and when he died in 1889 it was in a simple cemetery at Rochdale that he was buried. The most precious years of his life for himself and for his country began in the early forties, when a chance meeting with Cobden set him on the track of the Corn Law and laid the foundation of his public career. It was in 1845, on the morning of his first wife's death, that Cobden, calling

UPTON SINCLAIR'S NEW WIFE



Mrs. Upton Sinclair, who was Mary Craig before she wedded the writer, who lost his first wife to the "Cowboy Poet," Harry Kemp.

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[Manchester Guardian.]

"Mr. Cobden called upon me as his friend and addressed me, as you might suppose, with words of condolence. After a time he looked up and said, 'There are thousands of homes in England at this moment where wives, mothers and children are dying of hunger. Now, if you will, when the first paroxysm of your grief is passed, I would advise you to come with me, and we will never rest till the Corn Law is repealed.' I accepted his invitation, I felt in my conscience that there was work which somebody must do, and from that time we never ceased to labor hard on behalf of the resolution which we had made."

The effect we know, not only from history, but because the whole fabric of our social and economic life, all our wealth and prosperity, and the mere bulk of our population are founded on what these two men accomplished. Mr. Trevelyan has put his finger on the cause of their success. To make a political economy popular and human is not easy, but it is what Cobden and Bright accomplished. They replaced Malthus and Ricardo as the mouthpieces of orthodox economic science. "Books of political economy used, it is said, to begin with the words 'Suppose a man on an island,' but Cobden's thought began with 'Visible starving Stockport,' and having put a girder round the commercial globe, came back with gathered treasures of obligation and ended at Stockport again, while to Bright Trade was a religious passion sustained by pity and wrath which he had the gift to communicate in their purest form to thousands of hearers at the time."

It is impossible within the limits of a short review to follow him in his equally vivid and complete chapters on the Crimean War, the American Civil War, and the great struggles over franchise reform and the factory acts, but something of what he says about Bright's oratory, the instrument by which he reached his country before and after he became a member of Parliament, and the thing for which he is still perhaps the most vividly remembered, must be quoted here. "He was a man of great power and influence, and that he had ever witnessed was John Bright reading a chapter of the Bible to his maid-servants shortly after his wife's death in his beautiful and feeling voice, followed by the Quaker silence."

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Pretty June Bride Will Join Cabinet Set



Miss Ethel McCormick of the "Baltimore Emersons," who is to be married to Francis M. McAdoo, son of the Secretary of the Treasury, on June 21st.

Nietzchi In English

Levy's Complete Translation—Attack on Christianity.

[From New York Post.] Sir Ray Lankester, expounding the gospel according to Metchnikoff, will have nothing to do with the theory of the preacher that "he who increases his knowledge increases his sorrow." "Greater knowledge," he says, "will, we can clearly see, destroy sorrow and bring man to an ever-growing happiness. It is even now doing so. If only we regulate our gardens properly—not our roses and cabbage-patches, but the teeming beds of micro-organisms in our honorable insides—we shall realize the ideal of human life, namely, 'the completion by all men of the normal cycle of healthy life, rounded off by natural death as by a sleep.'"

Our object and our expectation should be not to extend the term of human life beyond its present natural limit, which make it the regular and easy thing for everyone to reach that age, and to be healthy and useful (since the experience and wisdom of the old is valuable) until the last.

This consummation is not to be reached just yet. We, and our sons and grandsons, will doubtless continue to be prematurely bowed before completing our respective centuries. But our great-grand-grandsons will all be great-grand-grandfathers ere they die, with a gentle crease, creep in upon their scarce-defended wicket.

Bacteriologically speaking, this doctrine is doubtless all right—at any rate, it is safe from any criticism on my part. But before we throw up our caps and shout "Huzza!" on behalf of our centenarian posterity, we may perhaps do well to consider whether it is not a little premature to expect a "destroy sorrow and bring man to an ever-growing happiness" is Sir Ray Lankester's preaching as strong as his bacteriology? May not the preacher have known a thing or two concealed from the professor? Is it not possible that the quest of happiness is in itself self-defeating, and that a happy world would be a profoundly miserable world? I do not say that this is so, but I say that there is some reason to believe that the longing of life as necessarily synonymous with the destruction of sorrow.

On the very face of Sir Ray Lankester's prophecy, the matter for reflection. The nonagenarian of the future is not to feel that he lags superfluous on the stage, because "the wisdom of the old" is always valuable. But in the world of that day, as we are forced to conceive it, wisdom will be a drug in the market. Mankind, or even a particular nation, will have to be very wise indeed before they can be expelled from the system. Alcoholism, says Sir Ray Lankester, we can at once remove or reduce to a minimum by a still subtler and deadlier virus—can easily and readily be utterly exterminated if and when Governments decide to do so. Possibly; but these results, and the more potent triumphs of intellectual "gardening" can be achieved only in a community which is very, very wise and self-controlled to begin with. In other words, an interest in life, a high degree of wisdom is presupposed in the terms of the case; and, that being so, will the accumulated experience of age afford any excuse for ruthlessness? Where all are wise no one is wise; nor has accumulated experience any value except as a protection against the dangers of unwisdom, which are here eliminated in advance. No doubt tender youth and the heyday of the blood will, even in that wise world, be subject to illusions; but when once a man has reached maturity, it is hard to see how further experience should be of any service either to himself or his fellows.

This is only one example of the difficulties that confront us when we attempt to imagine a perfected state of existence. All our concepts are relative to an imperfect state, and cease to have any meaning when we think our imperfections away. Wisdom, happiness, fortitude, benevolence, most of the intellectual and all of the dramatic interests of life, are products of the evils and dangers with which we are encompassed. The "happiness" that we shall achieve by the complete suppression of these evils and dangers is as real, but is for the present unthinkable. That is no reason why we should desert from the fight against evil, or let our armor cool. There is still ample margin for effort; it will not be the next generation, nor the next, nor the next again, that will win sorrowful for excess of well-being. But do not let us forget that when our lot is perfected, we may perhaps find that very perfection a harder trial than all the rest.

Not that there can be any doubt of the inherent value of the ideal of

euthanasia. In whatever proportions we may find the good and evil of life meted out to us, the elimination of the fear of death can only be clear gain. Perhaps our nearer approach to this elimination is the clearest gain the present age has brought us. When we read that such a man as Samuel Johnson, who feared nothing in life, stood in constant terror of death—not of the process or moment of dissolution, but of the "great Perhaps" in itself—we cannot but rejoice to feel it almost impossible that, at the present day, such a mind as his should be subject to such a weakness. Most reasonable men of our time can say, without hesitation or pose, "Eh, no! no, sed me esse mortuum nihil gerimus."

It is, indeed, by a pure malady of the imagination that death, as distinct from the process of dying, has come to seem more terrible than sleep. It was the morbid, unbalanced, youthful Hamlet, who speculated on the possibility of evil dreams; the wise Prospero, approaching the evening of his life, uttered no such apprehensions. To the normal man, sleep is not only a necessity, but a joy. Is there a greater luxury than to yield, with a good conscience, after a sound day's work, to a soft, enveloping drowsiness? Is it only children who rebel against sleep, and hate to be put to bed. If their science had made the physical experience of death, for the generality of mankind, similar to that of falling asleep, Sir Ray Lankester's optimism will be in great measure justified. Only it may, perhaps, appear that many people will feel bedtime to have come before the clock strikes a hundred.

AN APT ILLUSTRATION. There is at Princeton an instructor in mathematics who was country bred, a fact that is frequently betrayed by some homesick saying of his. One day an undergraduate had performed some peculiarly useless and complicated process in arriving at the solution of a problem, when the instructor said: "This reminds me of a coil once owned by an old friend of mine down East. This coil was put to pasture, together with such scraps as come through unasked for. But in a crisis, as with a drowning man or one in battle, when there is no future, the veil is torn aside, the brain as a check and guide to memory ceases to work, and the past, the total sum of a man's consciousness, comes rushing in. M. Bergson quoted the case of a philosopher who survived an amputation in a battle in Italy last century. At the crisis he had an integral vision of his past. Life down to the smallest detail. Consciousness, then, transcends the brain which is its instrument. We, of course, distinguish between one consciousness and another, but all precise and numerical distinctions have necessarily to be expressed in terms of space, under which category consciousness cannot be referred. Cannot we, therefore, infer that the interpenetration which is found in all realities is true here also, and that mind closes the mind, and all consciousness is one with another? M. Bergson was here on obscure and difficult ground; he had taken us from the methods of physical research to the facts of it, and from a conception of individual consciousness to a conception of another. But he is an artist as well as a philosopher, and he ended on a lighter note.

Supposing, he said, Newton and Galileo had devoted themselves to physics instead of physical research, what point might we now have reached. Biology would have taken a different line—the line which the vitalists were even now entering upon. Medicine might have found in treatment by suggestion its main basis. And if in some undiscovered America psychical science had gone as well now as it was the incursion into our world of a steamship or an aeroplane might have raised the same kind of astonishment and indignant skepticism which psychical phenomena rouse in some of our scientists today. There might even have been a society founded for psychical research!

On this amusing inversion M. Bergson ended, and a few grateful and appreciative words from Mr. Balfour brought the meeting to a close.