

Edson has secured a place with the three other great medical pioneers—Jenner, who discovered vaccination; Wells, who discovered anaesthesia, and Pasteur, who discovered the germ origin of disease.

The Medical Record to-morrow will publish the statements of Henry A. Mott, Ph. D., LL. D.; Dr. John H. Ripley, Dr. R. P. Lincoln and Dr. E. N. Brandt, all of New York City, and Dr. Lewis Balch, of Albany, N. Y. All of these physicians are of the very highest standing, and all of them have most carefully investigated the merit of Dr. Edson's remedy.

Twenty-three of these patients have been discharged cured. Sixty-eight are so far along toward complete recovery that the attending physicians announce a belief in the certainty of cure.

Ninety-one show marked improvement, but have not yet been under treatment long enough for the doctors to feel positive of coming recovery.

Three have resisted the remedy entirely. One died under treatment.

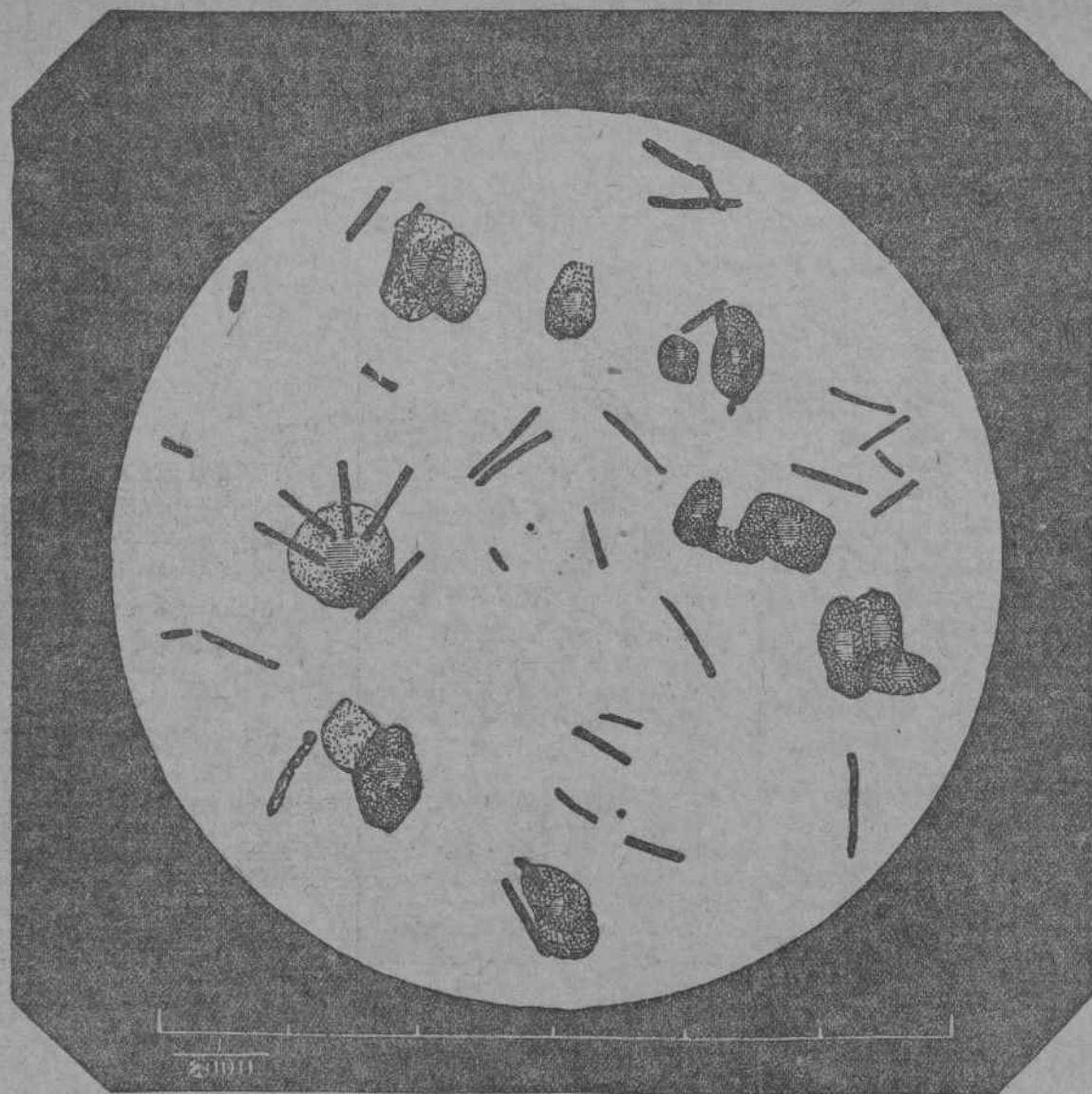
It should be stated that these last four cases were so far advanced that

the girl's life might be prolonged by taking her to a different climate, but not for more than one month. Dr. Brandt protested, but took the girl under treatment.

I saw her shortly after the treatment began, and she was then the typical consumptive in appearance. I also saw her on the day when Dr. Brandt administered the last dose of Dr. Edson's remedy. She was then as strong and healthy a young woman as one would wish to meet.

Probably no disease has so frequently disappointed really great scientists as consumption. A "cure" has been announced by many men, but in every instance the announcement has been made before the remedy was tried. In each case there was considerable logic in the theory, but in each case some mysterious puzzling details of tuberculosis stopped its effectiveness. It was because of these previous failures of various remedies to prove practically useless that Dr. Edson decided to keep all his experiments secret until he had—and until others had—carried them through to a point where nothing would be left uncertain.

All his work was based on the well-known curative qualities of carbolic acid, Stadler, Merck, Brieger, Salkowski, and other great chemists had years before declared that carbolic acid or phenol was a normal constituent of the blood of man, the horse and the cow. Dr. Edson argued that



These Are the Tubercle Bacilli Which Dr. Edson's Fluid Kills. Magnified 3,500 diameters. Photographed from an illustration for Da Costa's Medical Diagnosis.

forced under the skin. With the thumb and forefinger of one hand he gathered up a ridge of skin and flesh. The other hand drove the needle of the syringe with a gently vicious little dig into the patient's body, and two pressing fingers slowly forced the piston down until at the end of thirty seconds the syringe was empty.

EDWARD MARSHALL.

The Discoverer's Story.

How the Cure Was Thought Out, What It Is and the Work It Has Done.

By Cyrus Edson, M. D.

THIS is Dr. Edson's statement, which will appear in the Medical Record to-morrow: During a study of phenol, made in the early part of 1895, I was very much struck by the observations of Stadler, Merck, Brieger, Salkowski and others. These investigators declared phenol could be found in the secretion of man, the horse and the cow.

How long have you been under treatment? "Three weeks ago I had given up hope of living for more than three months. To-day I am not far from well, I think. My cough has almost entirely disappeared."

The Theory of Edson. The Edson cure differs from all recent scientific discoveries in being of a purely chemical nature. Anti-toxine, the preparation which cures diphtheria, is drawn from animals. It is, as its name indicates, an antidote to the poison (toxine) of diphtheria. This is its theory:

The germs, when an animal is attacked by a germ disease, will in time produce some counteracting substance which will kill themselves. If this were not so, the least illness would mean certain death. The ultimate death or recovery of the sufferer depends entirely upon the comparative strength of the two opposing forces.

The diphtheria serum, the anti-toxine, is created by inoculating animals with the disease of diphtheria in a mild form. From their veins is then drawn nature's own remedy. This anti-toxine is then injected into the veins of the human sufferer, where it reinforces the anti-toxine which has already been generated there.

It is along these lines which Koch worked in the experiment which resulted in "Koch's Lymph." The result of his labors, however, has proved that while the theory is successful with diphtheria, it cannot be practically applied in consumption.

sible to separate the toxine and anti-toxine of consumption as the toxine and anti-toxine of diphtheria had been separated. It proved that the remedy for consumption must be found outside of the human body.

Desiring to have the description of its manufacture as complete and scientific as possible, I requested Professor Henry A. Mott, the distinguished chemist, to investigate the process and report to me. Dr. Mott kindly consented, and his report is as follows:

Chemist Mott's Report.

"I have examined the preparation known as 'aseptol', as also the process employed in its manufacture, and I have the honor to report as follows: "By means of chemical analysis, there can be separated from the fluid in question a colorless crystalline salt, which is new to the medical profession, being a chemical combination of absolutely pure phenol and the alkaliid pilocarpine. This pilocarpine-phenyl-hydroxide exists in the fluid, dissolved in an aqueous 2.75 per cent solution of phenol.

Water 97.25 Carbolic Acid Mercks 2.75 Pilocarpin-phenyl hydroxide 0.01

Total 100.00 The composition of pilocarpine-phenyl-hydroxide, deduced by calculation, is as follows: Pilocarpine 33.02 Phenol 66.98

visible physiological action noted following an injection of two hundred and fifty minims, given to a man weighing one hundred and fifty pounds, except that traces of phenol were noted in the condensed vapor of the breath, and in the contents of the stomach drawn off through the oesophageal tube within three hours of injection.

A Specific for Malaria. My experience with pilocarpine-phenyl-hydroxide, as it regards malaria, leads me to consider it a specific, and of even greater efficiency than quinine.

Instances of Cures. In reporting results obtained from the application of the treatment described in the foregoing, I find myself confronted by many serious difficulties, not the least of which are lack of time and space.

Cure 1.—W. M., male, aged twenty-four, good family history. Has suffered from cough, normal weight, about 158 pounds; September 15, 1895, 128 pounds; had occasional night sweats and attacks of facial and intercostal neuralgia.

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laboratory which finally led to the production of the fluid I have used in my formulated treatment of phthisis.

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In the preparation of pilocarpine-phenyl-hydroxide, it is necessary only to weigh out an equivalent proportion of this purified phenol solution (after determining its strength by chemical analysis), heat the same to about 100 deg. C. (212 deg. F.), and then gradually add to it an equivalent amount of the pure alkaliid pilocarpine, when, on standing for ten or twelve hours, the crystallizable pilocarpine-phenyl-hydroxide will separate out.

Experiment has demonstrated that strict adherence to the above methods is required in order to produce aseptol of a uniform composition and of an absolutely colorless physical appearance. A cloudy, milky or slightly tinted preparation should be rejected. The proportions of the constituents do not permit of the presence of even traces of foreign bodies, if reliable results are to be expected.

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pectorant and stimulant of secretion of very considerable power. It causes a certain increase in the amount of excretor separated from the blood in the lung cells.

From what has been said, it will be apparent to all chemists that the fluid is a hydrophenol, containing a definite amount of the new pilocarpine compound.

It is not very difficult to make, provided one has the apparatus and is sufficiently careful. It needs extreme care, as the experience of my laboratory assistant, as written in a note to me, was as follows: "For two months I could not produce a satisfactory fluid more than once in three times; in fact, I think we threw away, during the first three months, about one-half or nearly all of what we should have saved; until our experiments with guinea pigs were such as to convince any one that no phenol solution of the strength of the pilocarpine-phenyl-hydroxide solution, except the latter, could be safely injected.

The solution prepared in my laboratory is a colorless fluid, strongly refracting light, having the characteristic odor and taste of phenol. Injected under the skin it causes a sharp, burning pain, not so severe as that following an injection of bichloride of mercury in solution. In the great majority of cases the injection is not followed by any local irritation whatsoever. In a few, a small nodule appears at the point of injection, which, as a rule, disappears after a few days. Dr. Glover G. Arnold, of New York, declares that this nodule results from injecting fluids against the flow of the capillary lymphatics, and advises all hypodermic injections to be made with needle inserted in the direction of the flow of these lymphatics.

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be obtained, and this contained no tubercle bacilli. The patient seemed in normal health; had gained six pounds; appetite excellent; objected to further treatment on the ground that he was well.

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Consumption's Cruel Record.

This diagram tells at a glance the frightful story of consumption's importance among diseases. Since the influenza made its appearance in 1891, pneumonia has caused more deaths than have tubercular diseases; up to that time consumption led the dreaded list, and it should be explained that in 20 or 21 per cent of cases, pneumonia causes death only because the sufferers are already predisposed toward consumption, and are thus particularly susceptible to the other disease.

Bar chart showing mortality rates for various diseases: Consumption (21%), Pneumonia (21%), Diarrhoeal disease (10%), Bright's disease (10%), Heart disease (10%), Diphtheria (10%), Apoplexy (10%), Cancer (10%), Measles (10%), Scarlet fever (10%), Typhoid fever (10%).

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Editor of the Journal
Sir—In answer to your question as to the working formula used in the preparation of Aseptol in Dr. Edson's laboratory, I forward the following:
Water - distilled - 97.25
Carbolic Acid Mercks 2.75
Pilocarpin - phenyl - hydroxide 0.01
Yours truly,
Lewis Balch

THE FORMULA DISCLOSED BY DR. EDSON'S CHEMIST.

all other treatment had been abandoned when Dr. Edson's method was applied. At no time did the attending physicians believe there was the slightest chance of recovery.

Of all of the diseases which afflict the human race tuberculosis is the most fatal.

How the Cure Operates. In other words, he has devised a way of flushing the human system with a disinfectant just as the sewers of New York City might be flushed with water containing carbolic acid. Into every artery and every vein Dr. Edson sends his preparation, which he calls aseptol, and wherever it finds a germ it kills it.

A Girl's Recovery. The story of a consumption patient is not less amazing. The writer was, during November and December, indebted to Dr. E. N. Brandt, who has a large practice at Hastings-on-the-Hudson, for an opportunity for watching this case. The patient was Nellie Brannock, of Dobbs Ferry. In May, 1895, she developed symptoms of consumption.

as it is really a part of the blood there must be some way of using it so that it would not be harmful in its effect on the health, and so that it would still retain its recognized properties as a germ killer.

Another illustration of its simplicity is this: In the offices of the Board of Health are several little saucers containing bouillon. In these saucers countless germs of the most terribly contagious diseases have been cultivated until each saucer contains millions of them. Any one of these germs would kill a man. If, however, one of the chemists of the Board of Health staff should pour over one of the saucers a solution of one part of carbolic acid to three thousand parts of water every germ within reach would be killed within twenty-four hours.

The Journal's representative watched the treatment of one patient, whom Dr. Edson describes in his report as "A. E."