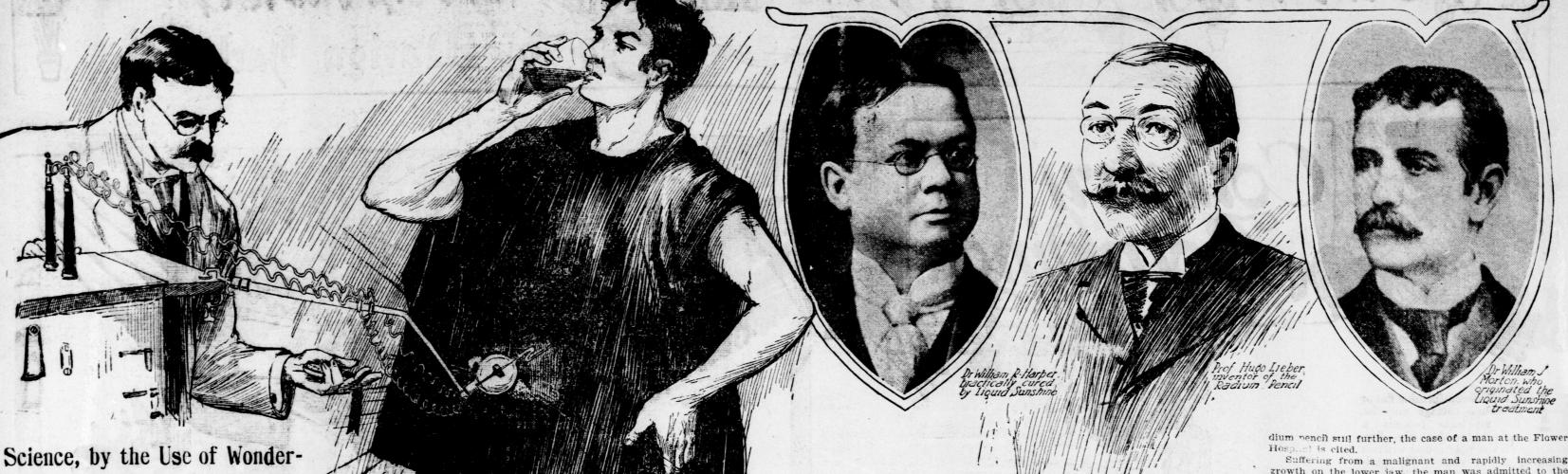
LIQUID SUNSHINE AND THE RADIUM PENCIL NOW CONQUERING CANCER



derful New Weapons of Offense, is Now Able to Attack Cancer Front and Rear and is Winning Notable Victories

N THE great, world-wide campaign now being waged upon that most terrible of all ills, cancer, two brand-new weapons of offense have just been devised. By one of these weapons-popularly known as liquid sunshin:"-science is for the first time enabled to attack cancer not only from the front, but from the rear as well.

By means of the other weapon-termed the "radium pencil"-science is able to apply radium directly to the infected point, instead of being obliged to satisfy itself with the employment of the cays of that wonderful metal diluted, so to speak, by passage through a glass or metal tube.

Already the efficiency of both weapons are being proved beyond the hopes, one might say, of the inventors themselves. Attacked in the rear by "liqui! sunshine," swallowed by the patient and made shorescent by the X-ray, even internal cancer, the most inaccessible. and therefore the most difficult of all to cure, apparently gives up the fight.

Hardly less astenishing are the cures attained through the "radium pencil." It is simply a piece of cellulcid covered by a thin coat of radium. After several applications the cancer, seemingly, is killed, and the spot is marked merely by a scar.

F THE two treatments, the one by "liquid sunshine" probably is the more important. It was by means of it that the practical cure of Professor William R. Harper, president of Chicago Uni-

versity, recently announced, was effected. Suffering from an advanced case of intestinal cancer, given up by his physicians and told that he had only a few months, at most, to live the philosophic educator

calmly abandoned himself to his fate. Indeed, he set about putting his earthly affairs in order and mapped out a course for the future of his university, so that the work he had so efficiently begun might be carried to its logical conclusion after his demise.

As a last resort, however, Dr. Larper's friends persuaded him to journey East and put himself under the care of Dr. William J. Morton, of New York, a specialist in cancer and similar ailments, who had discovered a new method of treatment, and had already demonstrated its efficacy in the hospitals of New York. Accompanied by his physician, Dr. Frank Billings, Dr.

Harper placed himself in the hands of Dr. Morton. Within three weeks it was announced that the area of Dr. Harper's affected parts had decreased from eighteen to seven square inches, and that, at the latter measurement, the diseased tissues were entirely free from the abdominal walls-a contact that had been greatly feared

More than that, Dr. Harper's weight had increased from 170 to 182 pounds-remarkable in itself. Since that

time his condition has improved steadily. A MEDICAL OPINION

Dr. Harper is not the only cancer sufferer cured by

Dr. Morton. Two others have benefited as well. Not only is "liquid sunshine," or artificial fluorescence, efficacious in the treatment of cancer, but in the treatment of tuberculosis and certain other ills, also. In writing of It in a recent issue of the New York Medical Journal and the Philadelphia Medical Journal, Dr. Morton had this

"Among the recent advances in electrotherapeutics. I may mention the plan proposed by myself of saturating the living human body with harmless fluorescent substances, like quinine, fluorescin, cosin, etc., and then subjecting the body thus saturated to the X-ray or to radium, whereupon these fluorescent substances are excited to give off their characteristic fluorescent light.

"We thus treat the patient, or some part of the patient, or any part of the patient desired, with interior light. This method means that light is developed within the very tissues themselves, in among the cells and fibres and cavities, and there effects its specific result. Whatever has been found to be true in greater or lesser degree in phototherapy of the external applications of light, is here produced internally, and in intimate relation to parts like the liver, spleen, lungs, etc., to which light has not hitherto been caused to penetrate.

"In such a combined treatment, the X-radiation and the radium radiations lose their identity, because they beie absorbed in the act of producing fluorescence. The X-ray and the radium are merely exciting causes, while the effective agency is the light.

"This treatment is giving excellent results in my hands, and has been followed by others very successfully. I am happy to note that my idea has been adapted to the purpose of illuminating the cavity of the stomach, by filling this organ with an innocent fluorescent fluid, and then swallowing the usual stomach lamp.

"Among substances which give fluorescence to light are quinine, sesculin, rhodamin, eosin, petroleum jelly, or Maseline, petroleum in general, paratin, tur erie indigo,

William Street Street Street Street Street Street Street

specific report of there cases. under this treatment, under the use of fluorescein and not qui-

nine, have recovered. In a recent case of amoeba coli, in a relapse occurred.)

"On the whole, the prospects the exterior.

clusion, be mentioned here.

minutes later make an X-ray exposure to a photographic plate, we obtain a radiograph of superior contrast and definition. In a similar manner fluorescopic examination of this patient, particularly of the thorax in the creulosis

these substances, which are beautifully fluorescent to It will be noted that, in this article, Dr. Morton made no mention of the treatment of cancer by the fluorescent solution, or "liquid sunshine." At the time the article was written, practical cure of Dr. Harper by it was not

The effect of "liquid sunshine" upon the germs of cancer is practically the same as that upon the germs of tuberculosis It kills them without injury to the healthful

tissue, thus enabling the latter to heal. Quite as rapid in its beneficial effect upon external cancer as "liquid sunshine" upon internal cancer is the

"It would seem here as if a new law of Roentgen ist, of New York. In Mr. Lieber's laboratory is a small glass tube, two inches long and a half inch in diameter, about one-third full of vellowish powder. It is radium.

terial. Many other experiments prove beyond question tation of the precious powder ever made into America. It

that this law holds good of fluorescent substances, at It was the exceedingly high price of radium that re-

"The special application that I am now making of this method is in tuberculosis, in the treatment of lupus, of tuberculous glands or other tuberculous deposits. My cases of lupus are now healing with greater rapidity than I have ever seen before, and my cases of tuberculous glands for a considerable sum of money.

ger weh quicker than before. Cases of tuberculous lungs are making really remarkable progress, with diminution of cough, cessation of night sweats, gain in flesh, diminution of the bacilli discovered in sputa, etc. I expect at an early date to make a

"Cases of chronic malaria

Which two abscesses had been opened, and in which to stem the progress of disease it had been proposed to open the colon and to inject ice water, the parasites have been absolutely destroyed. This case was recently reported to Dr. Stieglitz. (N. B .- Subsequently, however,

for this new method seem to be most brilliant, and we may note a distinct advance, namely, an advance where light is developed in the interior of the body, instead of, as previously, from "The method of the produc-

tion of light in the interior of tissues possesses two practical applications, which may, in con-"If we administer to a patient twenty drops of an aque-

ous solution of fluorescein, one part of the fluorescein to thirty of water; and, say, forty

of the lungs, is greatly aided."

radium pencil invented by Professor Hugo Lieber, a chem-

This quantity is said to constitute the largest impor-

sulted in the experiments by Professor Lieber. To avoid waste of radium, scientists have employed it only inclosed in glass or aluminum tubes, through which its rays easily penetrate. Thus, it will be observed that the metal was not applied immediately to an affected part. Moreover, a quantity necessary to produce successful results employed in such fashion might be had only

It occurred to Professor Lieber that by coating a celtuloid pencil or bit of celluloid very thinly with radium a more immediate and, therefore, more efficient contact with cancer might be had at much less cost. By exceeding care, he has been enabled to prepare such pencils cov-

ered by a working coat of radium at \$25 each. Probably the most significant tests of Professor Lieber's invention have been made at the Flower Hospital, in New York, where, passed over the affected parts, the pencils seem to produce an immediate remedial effect. Such a result was first noticed in the case of Mrs.

Sarah Oliver, of New Canaan, Conn. Mrs. Oliver is 82 years old, and the cancer that had attacked the instep of her left foot seemed destined to have its full destructive sway. At her age an attempt to use the knife would probably have been attended by fatal

Oliver eagerly consented to a trial of external application of the radium pencil. After less than two weeks of treat-

ment the cancer literally dropped off. To illustrate successful treatment of cancer by the ra-

Suffering from a malignant and rapidly increasing

growth on the lower jaw, the man was admitted to the hospital only a week or so ago. A weak heart rendered impracticable an operation with the knife.

A small quantity of cocaine was injected to deaden the pain, and two incisions were made in the cancer. Into each a pencil, about an inch and a quarter long, was inserted. Both were permitted to remain in the cancer for forty-eight hours, and then were renewed after the first effects had been carefully noted. Already the re-

sults are most encouraging. By the use of a radium pencil under the direction o Dr. W. Harvey King at the Flower Hospital, a woman suffering from a cancerous growth behind the ear is now

on a fair way to complete recovery. Many other cases are undergoing similar treatment, and in almost every instance the results are most prom-

More than twenty hospitals in different parts of America have made application for the pencils. Professor Lieber is most modest in regard to his invention. "I am a chemist, not a physician," he explains.

"I simply covered celluloid pencils with radium; the doc-

tors must tell you about the cures.' Not only in America, but abroad, the radium pencil proving its efficiency. In Olga Hospital, at Stuttgart, Germany, sufferers from lupus, one of the most serious and most persistent forms of skin disease, have been

THE TRIBULATIONS OF A BEARDED RABBI

TUPIDITY in Russian officialdom has been apparent handled by his captors, the terrified rabbi was hurried to positively amusing to those who do not suffer from it. Subjects of the Czar encounter many instances that seldom become known beyond the Russian boundaries. As a rule, however, they find it anything but

Here is a case recently chronicled in the Jewish Daily News, and of which I have made the following trans-

One evening not very long ago a brilliant social function engaged the attention of the Russian court. Members of the imperial family, Princes, Grand

Dukes, Ministers of State and diplomats swelled the gaily attired throng. During the evening the Czar and some of his guests formed a group that engaged in general conversation, in the course of which mention was made of the luxuriant

beards that, as a rule, adorn the faces of Russian He-Ever watchful for new sources of revenue, the Minister of Finance suggested that a tax be levied upon the owners

of flowing beards. The Minister of Foreign Affairs proposed an ukase compelling the removal of such facial At this juncture, Prince Mirsky, Minister of the In-

terior, interceded in behalf of the beard, encouragement of its growth and continuance of its mission.
"There is," he said, "in the suburbs of Vilna, a rabbi whose long and exceedingly beautiful beard is a source of great pride to his people, and would be a fit subject for

the brush of a painter. Overcome by curiosity, the Czar expressed his desire to see this remarkable heard with his own eyes. The wish, of course, was law with Mirsky.

Accordingly a telegraphic message was sent to the Governor of Vilna, ordering him to forward the rabbi to St. Petersburg.

New, the Governor had no idea of the real reason why

the rabbi was wanted, and the telegram did not explain.

A strong detachment of soldiers and police was, therefore, sent out at once to take the supposed culprit into Rudely awakened, dragged from bed and roughly

Whenever a crowd gathers in or about a station a dog

will approach it in a dignified manner, and seldom fails to

lure a contribution into the placarded box he carries.

travelers last year dropped coins that amounted to \$75

frequently to the outside world, and at times is headquarters. The next day, together with a number of murderers, burglars and other criminals, he was sent to The government transports its prisoners by primitive

methods. After a wearisome tramp of several weeks, the poor rabbi reached the capital, only to be thrown uncereniously into prison. Unable to learn the cause of his imprisonment, and not understanding the Russian tongue, unfortunate man could only resign himself to his fate and spend his days in tears, fasting and prayer. There

Israel's Guardian, however, neither slumbers nor overlooks. The rural Jews, followers of the unlucky shepherd, sent messages to their city brethren; the latter comunicated with their friends at the capital, and finally the good offices of Baron Zinsburg were enlisted.

Securing an audience with Prince Mirsky, the baron made inquiries about the imprisoned rabbi. For some time the Minister was unable to recall any memory of the man, or any reason for his arrest. At last recollection of the conversation about beards and

the Czar's demand dawned upon him. Cursing the stupidity of the officials, he hurriedly ordered the release of the rabbi, and commanded that he be escorted immediately to the private apartments of the

The jailers hastened to obey. They took the dazed rabbi from his cell, gave him a bath, a hair cut and a clean shave and sent him under guard to the palace.

Nobody at the palace knew why the man should be sent there—the rabbi certainly did not. Even the Czar was unable to fathom the mystery. A telephonic message of inquiry that reached Prince

Mirsky shortly afterward made that official jump.
"Tell his Majesty," he replied, "that it is the rabbi
with the most beautiful beard in all his imperial domain," "Why, the man hasn't any beard!" responded the Emperor, in astonishment, as he looked at the tall, clean-shaven and embarrassed stranger.

When the tangle was finally straightened, the rabbi was sent back to Viina, to grow another beard, if he could, while the prison warden was reprimanded.

Translated by REV. DR. NACHMAN HELLER.

Philadelphia.

Curious Facts From All Parts of the World

Balkan provinces that still remain subject to her control, living. Thirty thousand alone make a living by managalleging that they are used to "print" revolutionary litera-

stramonium, naphthalin red, litmus, henbane, gentian, flu-

orescent copper, potassium chromate, fluorescent cochi-

light, are not correspondingly fluorescent to the X-ray

and radium; while, on the other hanc, substances which

are not fluorescent to light are highly fluorescent to the

X-ray and radium. For instance, benzoate of sodium is

lately discovered, which I believed to be aesculinate of

silica. Certain it is that a sodium glass test tube in which

aesculin in solution has been retained for one or two

weeks produces a shadow picture upon a photographic

plate quite equal to that produced by a quarter of an inch

skiagraphy could be expressed in these terms, namely,

that contour shadows may be caused upon photographic

plates due to fluorescent absorption, rather than to the

arrest of the X-ray by the density of the intervening ma-

least in their dry state, and probably also in liquid form.

quinine, aesculin and fluorescein. Fluorescein is partic-

ularly decirable on account of its non-toxic properties.

"My principal therapeutical treatments have been with

"Among fluorescent substances, there is one I have

fluorescent to the X-ray and not fluorescent to light.

"I have found by experiment, however, that some of

low Liquid

SUNSHINE AND

THE X RAY ARE

EMPLOYED IN

CONJUNCTION

Lace is in greater request than ever this season. Blouses tea-gowns, afternoon and evening gowns, and theatre wraps are all lavishly rimmed with it, or often entirely composed of it.

Germany has 242,000 postal employes; the United States, 239,000; Great Britain, 194,060. None of the other States in the Postal Union possesses 100,000 postal employes. France has 81,000; Austria, 59,000; Russia, 57,962, and Japan, 57,965.

Great picture hats are not worn so much at the theatre as the little "capotes" that are so dainty and becoming And the modistes have created the smartest of little turbans, made to fit the head (generally in c'ack tulle), the tulle draped upon the wire foundation, and for trimming only a single white tip, an aigrette or a puple

The natives of certain parts of India are in the habit every year, in the summer, of diggin; the dry river banks for fish, which they dig out by hundreds, just as they would potatoes. The mud lumps are broken open, and the fish, perhaps eight or ten inches long, will be found alive, and often frisky. as if just removed from its supposedly native element, the water.

The most extraordinary forest in the world is one discovered by Dr Welwitsch, which occupies a tableland some six miles broad, at a height of 200 feet or 400 feet above the sea, near the west coast of Africa. The trunks of the trees are 4 feet in diameter, and yet they only attain a height of I foot, giving the tree the appearance of a round table. There are never more than two leaves, which attain a length of 6 feet and a breadth of 2 feet, the flowers forming crimson clusters.

After taking measurements of the height of women in France. England and America, a doctor announces that the English woman is the tallest and the American woman comes next. The average height of the French woman is 5 feet 1 inch. The American woman is nearly two inches taller, and the women of Great Britain half an inch taller than the latter. American women, however, weigh slightly more than either of the others, their average weight being about 117 pounds.

ing and steering canal boats in southern and middle Eng-

a way almost dramatic in its effect. Or dull spangles are used, instead, which change under the light to curious dark reds and greens. There are 10,700 pieces of wood, cloth and felt and 1185 feet of wire in a concert grand-piano. The ear. st

Glittering spangles in groups trim black gauze fans in

recorded public performance on the planoforte took place at Convent Garden, London, on May 16, 1767. The highest tide in the world is in the Bay of Fundy, between Nova Scotia and New Brunswick. The tide there

sometimes rises to the height of seventy-one feet, and the

increase is occasionally as much as a foot every five

The credit of having reached the highest altitude in a balloon is given to Mr. Bersen and Dr. Suring, of Berlin. They first went to the height of 30,000 feet, losing consciousness for brief intervals. They continued to ascend to 33,790 feet, when one of them became unconscious, and could not be aroused. The other, after opening the valve,

also became insensible, and neither recovered till the

balloon had dropped to 16,000 feet. Spain has a lawsuit, still unsettled, that has been in the courts 388 years, or since 1517. The case, which concerns a pension, began between the Marquis de Viana and the Count Torres de Cabrera, and the accumulated sum in dispute would have reached fabulous millions, had not four centuries of attorneys, barristers and court officials taken considerate measures of appropriation to prevent the sum becoming unwieldy.

Sale of seidlitz powders is prohibited in Siam. Some fifty years ago Phra Mongkut, the then ruling Emperor, bought a box of seidlitz powders from a trader missionary, and, misinterpreting the instructions on the lid, mixed the six blue-papered powders into one tumbler of water, and the six white-papered ones into another. Then he proceeded to swallow the resultant decoctions, one after the other. The result to the monarch may be imagined. In consequence of this the further sale of the remedy in question was prohibited-a prohibition which still remains

PRIZE DOGS COLLECT MONEY FOR CHARITY



Another successful collector is Eastleigh Rover, who romps about the Eastleigh Station.

Champion collector of them all is ondon Jack II, who has taken the place at Waterloo Station held for several In addition to the ten dogs now collecting for the orphanage, two others are being trained for the work. It is Although dead, the latter is still carrying on his good work. His body has been stuffed and mounted in a glass from box on their backs, and they seem to understand the fron box on their heads, and they seem to understand the case in the Waterloo Station. Through a slot in this case importance of their mission.