

SCIENTIFIC STUDY.

An Interesting Problem Opened Up—
Germ's Fight Germs.

A report furnished to the Bombay government by the eminent bacteriologist, Hankin, has induced the Medical Press to assert that there is ground for confident expectation that a discovery made by a young Parsee doctor named Ghadiali "has opened up a field full of brilliant therapeutic prospects" in the treatment of typhoid. During a series of years the youthful physician examined with the microscope the living organisms in many different samples of water, and noted that one particular bacillus was never present along with that of enteric or typhoid fever. The question then naturally arose whether the newly discovered microcosm killed the typhoid organisms or vice versa; but a series of experiments showed that, under favorable conditions, the strangers always conquered in the struggle for supremacy. Rabbits and guinea pigs were then subjected to the severe test of having the new bacillus injected into their peritoneal cavities with the object of finding whether the strange organisms might not be as hurtful to life as those which they displaced. It would obviously be of little use to introduce a supposed therapeutic agent whose effect upon the patient would be to put him "out of the frying pan into the fire." The animals subjected to the experiments showed no signs of any injurious results from the microorganism. Then was applied the crucial test of inducing a man to swallow water having the "microcosm ghadiali," as it has been called by Hankin, and the discoverer's observations convinced him that the new bacillus was harmless to the human subject.

The further development of this most interesting and important study in therapeutic bacteriology will be watched with great curiosity not unmixed with incredulity on the part of medical men. The proposed method of attacking the typhoid bacillus presents features in striking contrast to the successful treatments suggested by bacteriology for other diseases. For instance, diphtheria in children and anthrax in sheep and cattle are brought under control by means of "attenuated cultures"—liquids containing real disease germs, which have been weakened by passing them through uncoagulated processes, or through the blood of animals having a resistant energy. The probable explanation of the therapeutic action of these attenuated generations is that, by interbreeding with those already in the system of the patient, they destroy the vitality of the enemy and enable the healthy blood to kill it and expel it from the body. It has lately been asserted that even for asthma—a disease hitherto believed to be unconnected with specific micro-organisms of any sort—a prospect of bacteriological cure has been opened up by recent investigations; but in the campaign which is now to be commenced against typhoid open warfare to destroy the bacillus is to be tried rather than the indirect method of weakening by interbreeding. The method is analogous to that by which some of the scales on fruit trees have been exterminated in certain places through the introduction of the California ladybird, that preys upon them, and breeds faster and faster so long as the tree has any scales left. A bacillus that would destroy the typhoid bacteria in the same way as the ladybird has treated the deadly scale on fruit trees would indeed be a boon to humanity.—Adelaide (Australia) Observer.

Got His Deserts.

One of the rough brutes who think it is fun to come up behind a friend and strike him hard between the shoulders or on the back of the neck, merely as a cordial form of greeting, met with his just deserts in the corridor of a hotel on Chestnut street a few days ago. He thought he recognized a friend and gave him a hard punch in the back, saying: "Hello, Jack, how are you?" But it wasn't Jack; it was a stranger, and an athletic one, too. The blow nearly took him off his feet, but he turned quickly and shot his fist on the nose of the other man with a force that brought forth a torrent of blood. The porters helped the cordial man to the wash room, where he spent the next half hour endeavoring to stop the flow of gore and making resolutions not to be so exceedingly cordial in the future. The athletic man merely remarked to a friend that he had met the cordial stripe before.—Philadelphia Press.

The Growth of His Grace.

The young duke of Marlborough has vastly improved since his marriage, and those who knew him in his salubrious days at Cambridge are at the change for the better is really marvelous. Now he has become both urbane and useful, and goes about opening things and presiding over things in the most praiseworthy fashion.

His speeches are not very felicitous and rather resemble the clumsy utterances of that arch bore, his grandfather, than whom a more heavy individual never existed.

WHY THEY DID NOT ELOPE.

A Youthful Couple and Their Charming ly Planned Romance.

That I was in love was a fact that did not admit of a shadow of doubt. My love was returned—the strong yearnings of my 19-year-old heart went out in the direction of the most beautiful maiden in all—she is the most beautiful maiden in all—she is in return sent out the yearnings of her heart to meet mine.

We were determined to be married; we would fly to the nearest city, when the household was in the hands of Morphew; Janet would become in a moment's time Mrs. Jason Brown, and I Mrs. Jason Brown's husband.

At 12 o'clock I was to leave my steathly get my father's gray nag, harness her and proceed to Janet, who was to be waiting for me at her chamber window, where I was to place a ladder, which she was to descend:

There was but one difficulty in the way; Janet's room was shared by her sister, Fanny, a little mischievous creature of 11, who, to use Janet's words, was awake all hours of the night.

There was but one way; if Fanny was aroused she must be bribed into silence; for that purpose I placed in Janet's hand a round, shining silver dollar.

But Janet needed assistance, so she concluded to let Fanny into her confidence the same afternoon we started, and so prevent any chance of her raising the house by a sudden outcry.

The long-looked-for and yet dreaded night came at last, the old kitchen clock warned me the appointed time had arrived, and with slow, sad and yet noiseless step I left the house and in a few minutes was jogging along toward the home of Janet. What possessed me I cannot tell, but I had taken from an old chest a blue swallow-tail coat that had belonged to my grandfather in time of the wars and in the pride of my youth had got into it. The tails came nearly to my heels, while the waist was nearly to my arm pits, the sleeves hiding the luxuriant pair of silk gloves I had indulged in for the occasion, and above this uncouth pile of blue cloth was perched a hat of very ancient appearance.

Fanny had evidently been bribed into silence. As I stood there I could see her light, blithe little figure flit to and fro by the window, and how I blessed her from the bottom of my heart for her kindness.

At last Janet commenced descending the ladder, and in a very short time was at my side, when we both upheld our hands for a bundle of clothing Fanny was to throw down to us.

"Be quiet, Fan," whispered Janet, as her sister appeared at the window and poised the bundle above our heads. "Be quiet, Fan, for heaven's sake, and drop it quickly."

But Fannie still stood there, swinging backward and forward the huge bundle, without heeding Janet's earnest entreaty.

"Do, do throw it, Fanny dear! Do have some mercy on me. What if a thief should know of this; what if he should be awakened?"

"La, give it to her, Fan; don't plague your sister; she's in a hurry!" called a voice from the closed blinds of the parlor windows, which belonged to no other than Dr. Stoddard. "Give her the things. Only be still about it, Fan."

For a moment we were petrified. What should we do? While we stood undecided two huge mattresses fell at our feet, followed immediately by sheets, quilts, tablecloths and other articles of all kinds and descriptions.

"Mother, mother, don't one of these new feather beds belong to Janet?" called Charlie Stoddard from one part of the house.

"Yes, yes, and a bolster and a pair of nice pillows, too. Carry 'em out of the front door," was the answer.

"Whose horse have you, Jason?" asked the doctor, pushing up the blind. "Your father's? Humpf, that old gray isn't worth button to go! Sam, hurry away and saddle Black Molly for Jason; it's time they were off!"

"Look, father and mother, and see Jason's new coat and hat!" cried Fan. "Isn't that coat a beauty, father? Just look at the length of its tails!"

"Well," drawled the doctor, "that coat is handsome."

"And his hat, father?" called the wicked little Fan.

"I declare!" exclaimed the doctor. "Wife, wife, look here and see Jason's coat and hat."

It was all plain. Fan had betrayed us. I vowed vengeance upon her until broad daylight, and then hid in the haystack, and stayed there until Charlie Stoddard brought home my father's horse.

The old gentleman was frightened; wanted to know how he came by the horse. He was told to ask me; he did ask me, and I made a clean breast of it, and I am sure of this: I never looked at a girl for seven years.

When the eighth came round, I remembered my old vow against Fan Stoddard. Well, to make a long story short, I married Fanny. Janet became a parson's wife.—London Evening News.

AMBLYOPIA.

An Optician Defines It—Tests His Patients.

When the examiner of eyes finds a case in which his diagnosis fails and he can proceed no further in his effort to make his patient see, he complacently calls it "Amblyopia," and dismisses the case. The patient, as one drowning, catches at a straw, goes to another eye specialist and is straightway fitted with glasses that dispel the gloom from his soul, and he henceforth sings the praises of the optician who supplied the glasses, for seeing is believing.

The first examiner, not a book abashed, turns over his record book and proudly tells his next patient: "Here are a dozen people who, having vainly tried all the other specialists, came to me and found relief."

From this it follows that, what then constitutes amblyopia? The optician who hits upon the most errors of refraction and successfully corrects them and misses the fewest would reply "what the other fellow doesn't know." But from an optician's standpoint, a definition that can be applied to his own requirements is needed. Again, amblyopia for an optician need not be the same for a physician. For some seemingly amblyopic eyes cease to be so under proper medical treatment.

The optician has at hand three means for determining whether or not a patient suffers from amblyopia. One is the pinhole disk, which shows the apparent incompleteness of vision and lack of improvement with lenses. The pinhole test must be followed by the retinoscope and the refractive errors corrected. Having done this, it might be supposed that the person ought to see. Not so; for occasionally we find the refractive media in perfect accord with each other, and yet the person under examination is amblyopic. Accordingly, we must supplement the retinoscopic test with the ophthalmoscopic. Laying bare the retina and optic nerve with the ophthalmoscope, we compare the defective eye with the normal eye. The least departure in appearance of the optic disk from normal may cause much amblyopia. It is not within the domain of the optician to name the symptoms of disease in the eye, or if he has named them to prescribe a course of treatment. Nor, if he finds the eye still amblyopic when in an apparently normal condition, is it his business to declare that the rest of the trouble lies in the brain or nervous system. Let him leave this to the physician and the surgeon. What concerns the optician most is having his glasses prove a perfect correction of optical defects, and when his glasses do not thus fulfill their purpose, to be able to say with satisfaction that it is not fault of the optician or of the glasses.

Amblyopia means, for the optician, that dullness of vision which comes from a cause outside of the limits of his operation. It exists when the incapacity of the visual organ fails to respond to improvements through the application of test case lenses, the retinoscope and the ophthalmoscope. Amblyopia means, for the optician, that dullness of vision which comes from a cause outside of the limits of his operation. It exists when the incapacity of the visual organ fails to respond to improvements through the application of test case lenses, the retinoscope and the ophthalmoscope.

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