

Black Hole Victims

A new theory that the victims of the Black Hole of Calcutta died from heat stroke and not of asphyxia was advanced by Professor J. Barcroft, Professor of Physiology at Cambridge, in a lecture before the Research Defense Society in London.

One of the greatest living authorities on respiration, Professor Barcroft has often risked his life while carrying out his experiments. On one occasion during the war, when there was a dispute among scientists as to efficacy of prussic acid gas in warfare, he went with a dog into a chamber filled with the gas. The animal was dead within 1 minute 35 seconds but Mr. Barcroft walked out unscathed.

Professor Barcroft, who is a member of the Chemical Warfare Committee of the War Office, referred to the problem of the protection of London from air raids.

"One possible procedure," he continued, "would be to have subterranean rooms in which the essential services could be carried on, and I was asked how many persons could, in an extreme case, work in an unventilated room of a certain size. The first issue was this: If a certain number of people are in a closed room, what is the essential factor which will reduce the quality of their work? In a small way it is the same problem as that of what killed the people in the Black Hole of Calcutta.

"History has always assumed that they died of asphyxia. Modern views of ventilation all point in a different direction, namely: that they died of heat stroke. If there is no through current and the amount of heat produced by persons in a room is greater than the walls of the room can carry away, the temperature of the inhabitants must rise, and in the extreme case fatally."—London Daily Telegraph.

See Bouncing Of Lightning

Pittsfield, Mass.—Photos of a stroke of lightning, which bounced up and down ten times between the earth and a cloud, although to the eye it seemed a single flash, were made public recently.

The lightning was caught in a storm here this month by a camera film, travelling a mile a minute and operated by General Electric engineers.

The first stroke was down, fairly bright, and considerably forked. It appeared to grease a pathway in the air for what followed. This "grease" was ionization, a chain of air particles reaching from cloud to earth, all so highly electrified that they probably made an air column more conducive than the best copper wire.

For a millionth of a second after the first stroke the film was dark. Then down the ionized airway a thin dart of electricity shot from cloud to ground. As it faded a streak of fire shot upward, a tremendously heavy stroke travelling from the ground to the cloud.

The downward darts travelled at speeds ranging from about 2800 miles a second up to around 7500 miles. The big upward strokes showed speeds of 14000 up to 23000 miles a second.

The light downward strokes are called "leaders." Whether they are real darts or just long thin lines of electricity is in doubt. The picture evidence at present indicates they are more dartlike than anything else.

Deceiving the Partridge

On a neighboring estate the pheasants have been exaggerating an old, but not a frequent eccentricity, observes the London Spectator. Not one, but half a dozen, have laid eggs in partridge nests along with the partridge's eggs.

The partridges, which, both male and female, are among the best parents within the kingdom of birds, will on occasion scratch out or kick out the interloper's eggs; and in any event the partridge, not the pheasant, will take possession in brooding time.

Why the birds should double up in this way when "alms are innumerable and no nest is built passes comprehension.

The partridge may be aware of the difference between its own eggs and the larger eggs of the pheasant; but the nest-egg quite deceives it. This year several scores of partridge nests made by road or path-side have been found and robbed of the eggs for which imitations are substituted.

This real eggs are set under hens, and as soon as they begin to chip they are hurriedly restored to the real parent. By this device, which has greatly increased the stock of partridges, the birds run the minimum risk of being disturbed by man or vermin or predatory birds.

The courage and skill of the parents when once the chicks are born secure the brood against most of the dangers that threaten the eggs in the nest.

WINGS OF FORTUNE

BY LESLIE BERESFORD

SYNOPSIS

Sylvia Darnley, an orphan is employed at a travel bureau. In that way she meets John Christopher Fellowes, going to Paris and Monte Carlo. Because of poor business Sylvia loses her job, but at the same time Mrs. Paula Carmichael staying at the hotel with her brother, Tony Mallison, surprises her by telling her that she is heiress to a fortune by her uncle, Luke Messingham.

Accompanied by Paula and Tony Sylvia goes on a shopping orgy in Paris. Paula lends Florrie, her maid, to help Sylvia dress for her first big party in Paris. Sylvia feels Florrie has a definite dislike for her. Paula warns her of fortune seekers. She meets John Fellowes.

Sylvia simply could not understand the problem at all. It made John Christopher appear such a different kind of man from what she had imagined him, darkened him with shadows of suspicion which, somehow, she could not feel he deserved. Strangely, even after what she had just heard, she could not resist being stirred by that attraction for him which she had experienced from the very first moment she had seen him.

Perhaps that was why, although sorely tempted to tell Paula and Tony of that Malchester meeting, as well as what had passed between John Christopher and herself this evening, something urged her so strongly to keep her own counsel that she did so. As it happened, anyhow, Tony was anxious for them to get away from the hotel at once and begin their evening's amusement.

Sylvia was only too delighted to divert her thoughts from this disappointing opening to her first night in Paris. She resolved to dismiss John Christopher entirely from her mind when the three of them were

whirled in a luxurious car through the lively, arc-lit streets, as Tony laughingly put it, to paint Paris red.

Tony, as a matter of fact, had rather grown on Sylvia in the short time they had been so much together. When first she had known Paula and him, from the other side of the travel bureau counter at Malchester, she had thought Tony the kind of man for whom she would not care as a close acquaintance.

He had struck her as too fast altogether, not at all a man whom a girl would be wise to trust any further than she could see. And even after he and Paula had told her of her good fortune, she had at first been inclined to avoid him as much as possible.

But she had gradually believed herself wrong in this attitude, felt ashamed of it, and quickly begun to respond to the brotherly care he had taken of her, the attentions he lavished on her. To-night, in her disappointment over John Christopher, perhaps even because she wanted so much to forget all about him, she relaxed more than ever in her manner towards Tony.

In a way, reckless of mood, she even encouraged him. When their hands touched accidentally, for instance, while they were watching a sparkling revue from a box at the Folies Bergeres, she allowed him to clasp her fingers and hold them, let him unchecked slip his arm round her slender waist as they left the box to go on elsewhere for supper and dancing.

He was a wonderful dancer, a perfect partner, and she lost all sense of realities as she moved, with a delightful rhythm to his will, with a feeling of abandon to the beauty of the music and the romantic loveliness of the scene in which they whirled amid coloured lights and a throng of whispering, murmuring couples.

"You know it's all wrong!" she heard Tony saying as a deliciously dreamy waltz came to an end at a late hour and they were moving slowly to an alcove where Paula was chatting to a little party of friends

they had joined almost as soon as they came here.

"What's all wrong, Tony?" Sylvia smiled up at him questioningly, languorous from the effects of dancing, thinking that Tony really was almost too terribly handsome for words.

"This infernal fortune of yours," he said, almost savagely.

"Oh... I think it's just lovely!" she laughed. "I was only just telling myself what a wonderful thing money is. It makes life really worth living. Look where it's brought me. Think what I'd have been doing to-night away in Malchester."

"And what would that have been?"

"Fast asleep long since!" Sylvia decided after a glance at a lovely gem-studded wrist-watch she had bought for herself in London. "I should have gone to bed at ten o'clock well in the dumps, with three out of my seven days' notice gone, and starvation staring me in the face."

"So that I can claim to have helped you out of a nightmare?" Tony murmured in her ear.

"And yet," she reminded him, "you were saying my good fortune is all wrong?"

"From my point of view, it most certainly is..." He drew her aside into a shadowy niche, her hands suddenly drawn into his with a tender clasp.

"Don't you know that you're lovely, ravishingly lovely?" he was saying emotionally. "And a fellow like myself—well, can't you see what a terrible temptation it must be to me?"

"Temptation?" She looked up at him, knowing quite well what he meant, daring him all the same with her winsome smile.

"To fall madly, hopelessly in love with you, of course. What else?"

"All—in scarcely three days?" she laughed softly.

"Give me a chance!" he said. "Don't forget that I'd really known you longer than that, my dear. What about the first visit Paula and I paid to Malchester?"

"And Paula said that no girl was safe from you in London, Tony, don't forget!" she reminded him. "I'm afraid you're one of that sort. Falling in love's a habit of yours."

"Don't believe it! Paula knows better than that. Ask her. Besides, I haven't admitted falling in love with you, anyhow. Don't you see that it's more or less impossible?"

"Oh—why?" Sylvia asked.

"Just that infernal fortune of yours, of course. It stands right in the way. How can I, of all men in the world, let myself fall in love with you? Everyone—even you—might think it was only your fortune that attracted me."

"That wouldn't be very complimentary to me, would it, Tony?" she smiled up at him, smiling because she did not want to take him seriously, a little afraid of her earlier recklessness.

"Besides," she added, under her breath, "I mightn't have fallen in love with you, anyhow."

"Meaning that you couldn't?" he asked hoarsely.

"I think you're awfully nice, Tony. I'm terribly grateful for all you and Paula are doing for me, giving me such a lovely time. And—as a sort of cousin—or even a kind of adopted brother, Tony dear—I could think a tremendous lot of you."

"And of course I'd not right at all to have been saying what I have." He pressed his lips to her hands and released them, looking so repentant that Sylvia felt a wave of resentment in herself, for her recklessness in encouraging him so foolishly.

"Don't think that, Tony!" she urged. "It makes me, unhappy. I don't want to be unhappy to-night, or to think that you are."

"Oh, I'm far from that!" he laughed gaily, slipping an arm round her waist. "Nor are you going to be, either. Just forget all that silly rot I've been talking, dear. It's like my cheek to have imagined you might think more of me than—as you say—an adopted brother. That's the idea, and I'm more than content with it."

Sylvia, as he led her to rejoin the others, was not to know that his contentment was real enough—for the time being. He had indeed broken the ice with a tactfulness as deliberate as it was successful. He had made her think of him as a lover in waiting. He knew that he did not mean to wait very long.

It was an early hour in the morning before their gay little party broke up. Sylvia was surprised to discover what time it was. But she was not in the least tired. She was wide awake and supremely happy. The friends who had joined them were quite charming people. Two of them were Italians, the Conte and Contessa d'Abbate, and the third was a nice-looking American named Vanderduyl, who seemed immensely rich and was staying with the Italians.

They were all, it seemed, going to Monte Carlo in the next day or so, and would be meeting there again, so the parting outside the night-club in the grey dawn was only to be a short one. Sylvia, carried back to the hotel in the warmth and luxury of a big car, wondered whatever people in Malchester would think of her, if they could have seen her: now, coming home at such an unearthly hour.

Coming home as well to such luxury as was hers at this beautiful hotel. When, after parting with Paula and Tony in the corridor, she let herself into her sumptuous suite, with

"SALADA" TEA

Distinctive Quality

Fresh from the Gardens

Its colour scheme, of pale blue and old gold, it seemed difficult to her to realise once again the kind of room with which she had so lately been obliged to feel content.

(To be continued)

Gems From Life's Scrap-Book

"The eternal stars shine out as soon as it is dark enough."—Carlyle.

"The very circumstance, which your suffering sense deems wrathful and afflictive, Love can make an angel entertained unaware."—Mary Baker Eddy.

"With every anguish of our earthly part the spirit's light grows clearer."—Lowell.

"Fairer and more fruitful in spring the vine becomes from the skillful pruning of the husbandman."—Mestastasio.

"Let me be pruned, that I may grow."—Bishop Hall.

"Whatever purifies, sanctifies, and consecrates human life, is not an enemy, however much we suffer in the processes."—Mary Baker Eddy.

Who Rules U.S.?

The regular daily and nightly homicides, the regular stick-ups and hold-ups, the regular gang shootings and other crimes of violence continue at their regular rate. They are too familiar to be considered news. So, we ask, in all good faith, who runs this country? We don't see how the decent people can claim to run it. We don't ever see how the city and state and national governments can claim to run it. If the people or the government did run it, do you think for a minute they'd few thousand criminals could terrorize with impunity "the richest and most powerful nation on earth?"—New York Journal.

Market for Rayon

While production of rayon in Czechoslovakia has notably increased, it is still insufficient to supply domestic demand, according to a report from Mr. Sam E. Woods, commercial attaché at Prague, made to the United States Department of Commerce. Because of fashion changes, an enormous increase in rayon consumption occurred in 1933, amounting to 5,900,000 kilograms, as compared with only 4,600,000 kilograms in the preceding year.

Three rayon factories were operating during 1933, although one of these was forced to suspend operations toward the close of the year. The total output of these plants amounted to 3,200,000 kilograms of viscose rayon.

And He Won!

Consider the recent campaign in the incomparable state of Kansas. One candidate for the state legislature boasted of his honorable discharge from a local madhouse. In every stump speech, he waved the documents triumphantly. "I have papers here to prove I'm not crazy," he would cry. "Can my opponent say the same?" P.S.—He got the job.—The New Yorker.

Now that she has learned how easy it is to drop cigarette ashes, many a wife has decided her husband may be was right in saying they are good for the rug and keep the moths out.—Cincinnati Enquirer.

BABY'S OWN TABLETS

In hot weather, stomach disorders and indigestion occur more frequently. Also children may play too hard. Mrs. Mary Mason, 63 Atlantic St., Halifax, N.S., says: "When the children are overtired and restless in warm weather I give them Baby's Own Tablets before retiring and in the morning they are happy, contented children." Safe even for the tiniest baby, these sweet little tablets effectively relieve colic, summer complaint, simple fever and all minor disorders. Price 25c package. See Dr. Williams' BABY'S OWN TABLETS

EXPERT DENIES FEMALE IS MORE DEADLY THAN MALE

Director of New York Zoological Park Says Male of the Species is More Powerful Than Its Mate

New York.—Kipling was all wrong in the opinion of Dr. W. Reid Blair, when he observed that the female of the species is more deadly than the male.

Dr. Blair is in a position to know a lot about animals, both sexes. He is director of the New York Zoological Park—Bronx Zoo to the nature-loving, bear-feeding and lawn-littering public.

The male of the species, Dr. Blair declared today, is more dangerous, more powerful and more courageous than its mate.

"Among the higher forms of animal life," he said, "the males are larger, fiercer and better equipped with defensive and offensive weapons."

"It has been my experience, handling all sorts of animals here at the zoo, that the males are much harder to handle, much more dangerous than the females."

The reason, he said, is that upon the males falls the burden of protecting and providing for the home. He gave credit to the females for greater docility, gentleness and adaptability. He also thinks females exhibit more intelligence in captivity.—If intelligence is regarded as the ability of a creature to meet new situations.

The females are less ostentatious and

headstrong than their mates, he asserted.

In some high orders of the animal world, notably among the birds of prey, the female is larger than the male. Even then, Dr. Blair said, the male makes up for his deficiency in size by possessing more dash and courage.

So, in Dr. Blair's opinion, Kipling was merely taking advantage of his nice-sounding, but unscientific adage.

Its only basis in fact, he said, is that sometimes the females show a little more subtlety in its method of attack.

Dr. Blair mentioned that down in the basement of the animal world, among the lower and more primitive creatures such as insects and crustaceans, the female is usually larger and stronger than the male.

Frequently, she kills and devours him after all biological responsibilities have been met.

But going up the scale of life into the more advanced forms, the mammals for instance, including man, woman's place is in the home and here is the subordinate, domestic role.

Since this pattern of nature's seems contrary to the ideals of staunch feminists such as public office-holding, trans-Atlantic flying women,—Dr. Blair discreetly declined to do any theorizing or interpreting.

Models Flies

Woman is 'Responsible for Insect Replicas at London Museum

Down a long, narrow passage, made narrower by the procession of mammoth skulls stretching along in dim perspective; past bays heaped nightmarishly with antlered heads; and so, at last, up a ladder-like staircase to the west tower.

This is not the opening of a thriller; merely a summary of the devious ways behind the scenes at the Natural History Museum, South Kensington, London, Eng., by which one comes into the presence of the woman who is responsible for those enormous wax models of flies and caterpillars and mosquitoes which, placed in the glass cases of the entrance hall, have served as an interest-quickening introduction to the Museum.

Titivating the Monster See Miss Grace Edwards, in her tower-room, titivating a monstrous waxen malaria mosquito. At present it is not quite itself; its evil, greyish body hovers on its stand with only one wing; its head glares balefully, waving outraged antennae from a neighboring stand. But it is better met in this unadorned state than in its finished glory, because now the intricacies of its construction are laid bare.

The stages of its evolution are many. First of all there is life-size—and so small that you involuntarily crinkle up your eyes at it—in a little glass-covered box. Magnifying glasses and book-illustrations assist at the various enlarged drawings, which must be rigidly accurate and to scale.

When these have been done the actual modelling can begin. A plaster cast of the body having been made from a preliminary model, the wax is heated, correctly tinted, and then poured into this mould to cool and harden over central wires.

Authentic Sheen When the body comes out of the mould the exact markings of the mosquito are painted on it, and, since the mosquito is a hairy fellow, it is stuck with dozens of real hair bristles, or stiffened silk "hairs."

The wing-frame is then made of fine wire, bent and soldered into a beautiful tracery; on to this is gummed fine silk muslin, which is varnished and tinted with the authentic rose and green sheen of an insect's wing. A fine feathery edging has to be gummed all round the wings. There is then the wicked head to be moulded, proboscis and all, and the delicate antennae carefully poised.

Then the Monster is assembled and mounted, poised high on a stand, with wax models of its larvae and pupa beside it. and, behold, it is ready to make its bow to the public.

How long does all this take? At

any rate several weeks; such works of art cannot be turned out to a factory time-schedule.

And that they are works of art, experts of all nations will testify, even the layman can judge how expert a modeller Miss Edwards is from a case in the Museum entrance-hall, showing a meal of ham and a roll with house-filies on it. The ham looks succulently real, the roll rather dry. A mouthful of wax would surely reward if you bit into either of them.

The aspiring art-student should weigh well the list of necessary qualifications before choosing this interesting, but exacting career. First, a painstaking accuracy of draughtsmanship in the preliminary sketches; next an uncanny skill in modelling and, thirdly, a color-sense keen enough to cope with the indeterminate, mingling shades of nature.

That there are candidates who can pass this searching test is evident by the fact that, of late years, some of the provincial museums—notably Liverpool and Cardiff—have enlisted a woman modeller to make such wax models as they may require.

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The Preeminent Hotel Achievement



A PAGE FROM MY DIARY

by P.C.2

It's a mystery to me why some men can't take their

foot off the accelerator once in a while. I suppose it's some kind of disease—"speeditis"

I'd call it—and it takes a real shock of some sort to cure it. Like hiccoughs only it's a sight more serious. For instance—

Two days ago, about tea-time, a big car sailed past me this side of Jonesville. Had a clear road all right, but they were hopping to it—so I thought I'd check up, and maybe tell 'em to slow down a bit. That's how I came to be right there when the crash came, two minutes later.

Did that foolish driver slow down through the village? Not by a jugful. Just went right on as though the place

wasn't there. And right by the cross-roads in the middle of the village it happened.

Old man Higgins' big police dog ran out right in front. I heard the brakes go on then—the car almost lifted itself off the road—I heard a woman scream and the dog's last shriek—the car wobbled for a second as it went over the poor tyke, and then it struck the post in front of the store.

I was there almost on the second—and what a mess! Radiator and bumper smashed, fenders crushed—driver stunned and bleeding, his wife in hysterics. And a poor old dog dead in the road.

Why can't people slow down going through towns and villages? You tell me. Well—I'll be seeing you.