

"The Greatest Enemy of Babies is FEAR."

But Science Now Plans to Stand Guard at the Door of the Infant's Mind and Keep Out Those Fears Which Experiments Have Shown Are Not Instinctive, But Needlessly Acquired.



Jimmy is here swinging to and fro over a young chasm 20 feet deep. This sight would terrify most children.

A WORLD-WIDE fight against the greatest enemy of mankind—fear—may soon be started if the dream of a group of American psychologists is realized. This fight will be conducted along purely scientific lines and as a necessary preliminary to the main campaign an exhaustive study in infant psychology will first have to be made.

The infant mind, in fact, will be the main theater of action, for it is within the first three years of life that the thousands of fear states which afflict humanity are acquired.

This, at least, is the conclusion of scientists who have already been making experiments in infant psychology. And this will be their guiding principle in their attempt to eliminate unnatural fears from the lives of human beings.

Dr. John B. Watson, the celebrated New York psychologist, in a recently issued statement made an appeal for the founding of an institution where the human infant could be studied from birth to at least three years of age. It would lead, he said, to an untold wealth of new scientific conclusions and to a practical and common sense set of data upon the psychological care of the infant. He thought it was not too much to expect that an endowment fund for such a cause as this could be raised when more than the income from a million dollars was being spent annually in the study of the sea urchin, the coral and the jelly fish.

A shining illustration of the child mind from which all unnatural fears have been excluded is that furnished by little Jimmy Syracuse of New York, whose pictures appear on this page.

Jimmy Syracuse is 18 months old and has none of the commonly acquired fears of childhood and, to a limited extent, has combated his inherited fears. He is not afraid of the dark, the water, animals or great heights. From earliest infancy he has been taught to live a free, fearless and natural life.

His father owns a private park in upper Manhattan island and Jimmy roams around in it without any clothes, winter and summer. He never learned to fear the common accidents of childhood and, for that reason, he climbs trees, scales up and down rocks, and disports generally as a young animal might.

Another case of a child who has none of the usual fear responses is that of Bianca Blackburn of Los Angeles, Cal. Most children pick up a fear of water from their elders and, as a consequence, have a relatively difficult time learning to swim. Bianca, at the age of 3, swims with the ease of a young puppy and makes high dives without a trace of hesitancy.

The Two Types of Fear.

As a result of extensive experimental work done in the laboratory of Johns Hopkins university, Dr. Watson established, in a manner conclusive to himself and his fellow scientists, that only two types of fear were instinctive with children. Those are (1) the sudden removal of support and (2) a loud sound such as the striking of a long steel bar with a hammer.

In an article written for the Scientific Monthly, Dr. Watson said:

"These are the common stimuli (to fear) which are present almost daily in

the life of every infant. The reaction or response to such stimuli is a sudden catching of the breath, clutching randomly with the hands, the sudden closing of the eyes and the puckering of the lips followed in some cases by crying. In older children these reactions appear and, in addition, there is crawling away, running away and, in some cases, hiding the face. We have found no other stimuli which will call forth fear in the very young infant. It has been often stated that children are afraid of the dark, or animals, or of furry objects in general. . . . This is not the case."

These unnatural or artificial fears which are so prevalent in childhood and which finally become basic elements in a person's character, are acquired, as Dr. Watson goes on to prove, by association of ideas. In other words, one of the instinctive stimuli to fear—a sudden removal of support or a loud sound—is linked up in some forcible manner with some other object or situation and thereafter this second and harmless stimulus becomes a cause of fear.

For example, a child has no natural fear of the dark. But if the door to a darkened room in which he is lying is violently slammed he may thereafter associate all dark places with this loud

sound and, therefore, come to fear them. Likewise, if an animal is produced in front of a child at the same time a steel bar or tin pan is struck behind him, this animal will thereafter become a stimulus to fear. And, in most cases, all other animals resembling the one with which the experiment was made will excite a similar fear.

In his article in the Scientific Monthly, Dr. Watson describes several successive experiments with an infant named Albert.

Between the ages of 165 and 172 days this child was introduced to dogs, cats, mice, pigeons and wild animals at the zoo. The tests were continued by taking the child in his chair to a dark room and building a bonfire in front of him. In no case did he exhibit the slightest fear. In practically every case he would reach out his hand and try to stroke the object.

One of the animals presented was a white rat. Later, at the age of 11 months and 3 days, the following experiment was made:

A white rat was suddenly taken from the basket and presented to Albert. He began to reach for the rat with his left hand. Just as his hand touched the animal the bar was struck immediately behind his head. The infant jumped violently and fell forward, burying his face

in the mattress. He did not cry, however.

In order not to disturb the child unduly no further tests were given for one week. Albert was then brought back into the laboratory and the rat was suddenly presented without a sound. There was a steady fixation, but no tendency at first to reach for the rat. The rat was then placed nearer, whereupon tentative reaching movements were begun with the right hand. When the rat nosed the infant's left hand, the hand was immediately withdrawn.

The combined stimulation of rat and loud noise was then offered and Albert showed the common symptoms of fear. After this had been repeated once or twice the rat was brought out alone and the baby began to cry as soon as he caught sight of the animal. A similar experiment made after 30 days had elapsed showed that the fear of the rat still existed in the child's mind and it was also demonstrated that this fear had been transferred to similar appearing objects such as rabbits, dogs, fur coats and cotton wool.

In commenting on these experiments Dr. Watson said:

"We see that the conditioned fear to the rat which was experimentally set up



Jeff Tester

emotional reactions we thus would find a reason for the widespread change in the personality of children and possibly even of adults once even a strongly conditioned emotional reaction has been set up to any object or situation. It accounts for the many unreasoning fears and for a good deal of the sensitiveness of individuals to objects for which no adequate ground for such behavior can be offered in the past history of that individual. The importance of such a factor in shaping the life of the child needs no further emphasis from us.

"At present we are engaged upon the study of methods by means of which such directly conditioned fear responses and their transfers may be removed. The importance of establishing methods for the removal of these undesirable reactions is apparent to all. That such conditioned reactions are present in the life of every child many parents can testify. We have repeatedly had children brought to us whose emotional life had been so warped and twisted by such factors that the formation of the stable habits by means of which the race must maintain itself was seriously interfered with."

"The skeptic will be inclined to say that such things happen in the life of every day, but that the child immediately puts them aside and soon forgets or outgrows such happenings. We have not the full experimental data to combat this view, but we have the evidence to show that, in Albert at least, both the original fear of the rat and the transferred emotional reactions remained after a period of 30 days in which no experiments were made. Furthermore, the latter were still called out by the same objects which called them out in the above test. Our view is that such happenings are permanently impressed upon the growing child. They remain not only as a part of his reaction system, but also they tend to modify or prevent, by limiting the number of objects that he deals with, the formation of constructive habits. In other words, they modify his vocational future. When we consider that these conditioned emotional responses are being constantly set up in the growing child, not only in the realm of fear but in the realm of love and rage, and that they bring in their train a host of transferred responses, we begin to realize the importance of the pre-school age of the child."

Dr. Watson later said that parents and family physician should stand guard at the door of the infant mind and keep out these unnatural fears. In cases where conditioned fear responses were set up by accident, steps should be taken to remove them as soon as discovered. In order to do this, however, a great deal more data bearing on infant psychology will have to be compiled and placed in the hands of parents. It is for the purpose of making extensive experiments possible that he hopes to see an institution founded.

THE DERELICT.

I left her headed for Lord-Knows-Where, in latitude forty-nine, With a cargo of deals from Puget Sound and her bows blown off by a mine; I saw her just as the sun went down; I saw her—floating still.

"And 'I hope them deals will let her sink afore so long," said Bill.

It wasn't no use to stand by her; she could neither sail nor steer. With the better part of a thousand miles between her and Cape Clear. The sea was up to her waterways, and gaining fast below.

But I'd like to know that she went to her rest as a ship has a right to go.

For it's bitter hard on a decent ship, look at it how you may, When she's worked her traverse and done her trick and sailed with the best in her day.

To be floatin' around like a nine-day drowned on the western ocean swell, With never a one to hand and reef or steer and strike the bell:

No one to tend her blunder lamps, or light her masthead light, Or scour her planking, or scap her seams when the days are sunny and bright; No one to sit on her hatch and smoke and yarn when the day was done, And say, "That gear wants reevin', new some fine dog watch, my son."

No one to stand by the halyard pin when it's comin' on to blow; Never the roar of "Ho Grande" to the watch's stamp and go; Just the sea birds sittin' along the rail and callin' the long day through, Like the souls of old dead sailors that used to be her crew.

Never a port of all her ports for her to fetch again; Nothing: only the sea and sky, the sun and the wind and the rain. It's cruel hard on a decent ship, and so I tell you true, That I wish I knew she had gone to her rest as a good ship ought to do. —John A. Wass, M. M., in Adventure Magazine.

THE RAILROAD OF THE AIR

(Continued from Page 28)

rive from that capital, the Warsaw and Constantinople expresses come in from the east and the plane which left the Hook of Holland at noon deposits the passengers picked up en route at Rotterdam and Brussels.

So that the hundreds of voyagers who use these aerial "trains" daily may be given the most courteous and most agreeable service, the world's greatest air station—a magnificent structure dominated by a tower bearing a flashing airman's beacon and the aerials of a mighty wireless plant—is to be built at Le Bourget.

The Station de Luxe.

The station will be of permanent construction, an imposing, high roofed "salon des passagers." Apart from ticket issuing, restaurant, hotel and other air-transport functions, the scheme embraces the provision of small, luxuriously appointed offices in which time-saving business men, rushing toward Paris from different parts of Europe, will be able to meet after booking reservations in ad-

vance by wireless telephone even while still in the air.

The finishing touches are now being put to the exterior of this, the grand central terminal of the world's greatest aerial port. When it is constructed a business man in London may telegraph to his partner in Constantinople:

"Meet me in Paris tomorrow."

His next step is to book an office at Le Bourget terminal, engage sleeping rooms for himself and his associates and, if he desires, reserve a table in the dining room. Then he takes the late afternoon plane leaving London at 4 o'clock and is whisked to Le Bourget by 6:15 o'clock, just in time to see the Constantinople express glide down. Twelve hours are ahead of him for business and early the next morning each can again go his way, the Londoner having the opportunity of arriving at his office before the earliest clerk. Both were within five miles of Paris, but if they wished they could meet and live in comfort equal to that of the

finest hotel of the capital and yet be away from its attractions and distractions.

Like a Country Club.

Le Bourget station will contain 20 bedrooms, a cafe and all the features of a modern hotel, but because of its location at the edge of a great clearing, surrounded by green trees and fields and five miles from a city, this hotel will appear more like a country club.

One of the finest wireless telephone systems in Europe is to be found at Le Bourget. Every plane is equipped with wireless and the pilots are constantly in communication, either by wireless telegraphy or wireless telephony, with the terminal at Le Bourget. This means of communication permits the operation of a meteorological station, which has done much to make aerial navigation safer.

In the temporary station is a giant chart showing the countries traversed by the passenger planes. The pilots either headed for or away from Le Bourget wireless their information concerning storms, high winds and general climatic

Fear of the water is another bogey of childhood—but Bianca Blackburn of Los Angeles makes high dives from her father's hand and swims like a fish.

transferred to many other objects. The transfer was immediate and without any additional experience in connection with these other objects. In these transferred

conditions. This is posted on the chart, together with the position of the plane reporting, so that the flight of passengers between the capitals can be watched by their friends at Le Bourget.

New York English Unique.

(From O. O. McIntyre's Letter.)

In one of the east side schools the teacher inquired: "Can any little pupil tell me the meaning of stoic?"

One grimy hand shot up. Said teacher: "Abie Glutz seems to be the only one who has studied his lesson. Tell the children, Abie, the meaning of stoic."

"A stoic," said Abie, "is the boid what brings the bolbies."

Still the best of the east side stories concerns the lad on his first visit to the country.

"O! teacher, look at the boid!" he exclaimed.

"That is not a 'boid,' it is a bird," said teacher.

"Well, it makes a noise like a boid," was the rejoinder.