

Gates, Elmer. "Sure Cure for the Blues." *The Philadelphia Press, Sunday Magazine* (January 15, 1905) pp. 3-4.

SURE CURE FOR THE BLUES
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It is the misfortune of many, and particularly of women, that they take "the blues" too seriously. Those states of depression which are commonly referred to by this familiar title cause a great deal of unhappiness which a proper understanding of the facts involved necessarily would diminish and allay.

The first step toward such an understanding is the realization that the hopeless view of the future which depression causes is frequently a false view caused by an unnatural bodily state. The second step is a knowledge of the close unity and interdependence which exist between Mind and Body, and of the fact that no change can take place in the one without producing a corresponding change in the other.

Grief or fear or worry or shock or disappointment may cause the mental state which we call "despair." But it is doubtful whether this state of despair could long endure as a mental state alone without the unhealthful bodily changes which it sets up and which continue and sometimes perpetuate it. The response of any nerve or coordinated set of nerves to any impression grows weaker the longer that impression is repeated. Taking an extreme case, the grief of a mother over the loss of her child, it is a question of great interest how long the grief and despair could continue as a mental state alone without the bodily and functional changes which it produces and which largely assist in maintaining its continuance.

In fact, the phenomena here represented always have been, through the lack of convincing experiments, a fruitful field of controversy. For a long time the discussion throve over the question as to whether the initial impulse came from the Body and thence affected the Mind, or vice versa. One set of disputants insisted that we did not run because we were frightened, but that we were frightened because we ran, the initial impulse being instinctive and motor. The same school insisted that we did not weep because we were sad, but that we were sad because we wept. There is no doubt, however, and this fact I have been able to prove beyond doubt in the course of my experiments, that the initial impulse may come from either source.

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By way of a simple illustration, let the reader, if he be troubled with indigestion, think of some morning when he rose and found himself disgusted with various acts, persons and events in general, which on other mornings he viewed with indifference, if not geniality. On this special morning a state of nausea existed in his stomach, which, without his consciousness, set up the corresponding state in his Mind. Being physically or bodily disgusted, he was mentally disgusted as well, and his disgust extended even to trifles.

When I began my experiments to determine the effect of the various emotions upon the Body, it was known that under the influence of depressing emotions, such as shame or grief, the general system of bodily functions became depressed, the appetite diminished, the digestive and assimilative functions became impaired, the complexion became pallid, the respiration became slower and more inefficient, the circulation lagged, and the cutaneous eliminations lessened in activity. It also was known, a fact perhaps first pointed out by Spencer, that the emotions powerfully affected the secretory functions; that grief might diminish or poison the mother's milk or turn the hair white; that tender, sudden and intense emotion of the heart might stop its action.

It also was known that under cheerful and happy emotions the reverse effects were produced; that the respiratory, circulatory, digestive and assimilative functions were augmented in their activity; that the cheeks became rosy, the eyes bright, the appetite stronger, and every function of the body more efficient.

It was left to my experiments, however, to demonstrate the certain proof of this in experimental detail and express it in terms of physiology and of chemistry, and furthermore to show how these functional states might be largely governed, if not entirely controlled, by the Will.

The emotion called hate, its being accompanied by the greatest expenditure of vital energy, is perhaps the best one for us to consider by way of illustration. Hate sets up most rapidly those changes in the bodily tissue which are generally known as "metabolic." Metabolic changes in the tissue are of two kinds: the beneficial or "anabolic," and the injurious or "catabolic." I have shown by actual experiment that hate creates catabolic chemical products faster than the excretory functions can eliminate them. These products or "catabolins" are all poisonous and are highly injurious to the tissues. They include urea, ptomaines of various kinds which form part of the bodily waste, volatile alkaloids and other cutaneous exhalations and certain toxic elements which appear in the respiration. It thus will be understood readily that any long-continued state of hatred must profoundly modify tissue

and all physiological functions. If these toxic products were not eliminated, they would speedily cause death. Enough would be eliminated in one hour of intense hate, by a man of average strength, to cause the death of perhaps four-score persons, as these ptomaines are the deadliest poisons known to science.

Conversely, a study of the physiological results of the cheerful emotions reveals an entirely different set of chemical products in the "anabolins." All of these are tissue products, which are constructive, nutritive and healthily stimulating. They reveal a kind of stimulation which is unique to and peculiar to living tissue in that it makes no added draft upon the vital energy, like ordinary stimulation. This is an important point, and one which could not be studied too deeply for the benefit of the health of the human race.

Outside of the visible or measurable or calculable energy in the human Body, there appears to be a latent energy which thus can be drawn upon without in the least diminishing what might be called the visible supply. Life, as represented by the human Body, is so strange a thing, protoplasmic cell action is so completely modified by the varying states of the Will, that the further one investigates the more unmistakable becomes the truth that even in our minutest bodily processes we are under the dominion of a law which can be called only a Moral Law.

Love has the greatest power to augment all the vital functions. Hate has the greatest power to injure them.

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Coming now to the physiology of "the blues," it will be understood that the depressing emotion is reflected in various bodily states to a less degree than in the case of hate or extreme grief; but in the same general way the circulation is reduced in speed, the vital tide is lowered, the catabolic tissue products are injuring the health and are placing an abnormal burden upon the organs of elimination. The primary cause of "the blues" may be vested in some weak or diseased organ of the Body, which is manufacturing ptomaines of the kind referred to, in which case medical treatment and a hygienic mode of life, including the abandonment of any non-hygienic habit, are the source of cure. The primary cause may be in the Mind from social, domestic, financial or religious causes. But the important fact is that in either case the Will is one of the most important, if not the vitally important, field in which cure is to be sought.

Huxley said that there was no proof whatever that any impulse of the Will had power to move any mass of matter, great or small. This statement, when he at the same time referred to our power of

muscular action in response to our Will impulses, may be understood to cover a wide domain of philosophy yet uninvestigated. It is one of the deepest problems which Life presents to us. But my experiments have left no doubt whatever of the fact that our Will has a direct and invariable control over the metabolic changes in our tissues in the ways referred to. The proof of this lies in the satisfactory form of laboratory records.

To “think health” is to gain health. To “think disease,” is to increase disease. The moral of this needs no emphasis.

We all are familiar with the beneficial results which may accrue from special exercise, as of the muscles of the upper arm by the use of Indian clubs. The special, increased flow of blood to those parts produces increased nutrition and a local disproportionate development of muscular tissue.

I was somewhat surprised and greatly gratified to find, in my experiments for developing the color sense in dogs, that this was a law of the brain as well; that our mental attributes may each and all be greatly strengthened by special exercise in this way. When the dogs were killed, those which had been under daily development for a year revealed a set of cell structures in their brains which were entirely absent in those which had not been developed. By daily training one set of dogs to detect differences in color—the training system consisting of colored tin pans under which their food was placed—I not only enabled them to discriminate between the primary colors, but finally carried them so far that they could detect differences between the gradations or shades of the primary colors to a far greater degree than any dogs which ever had existed.

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That this newly developed faculty had produced an equally marked change in the brain tissue was experimental proof of an important principle. This is the principle of “brain building” by fixity of attention, or what I have named “dirigation” (from the Latin word meaning “to direct”). The question which immediately arose was: “If dirigation can produce such a marked effect in the mind and brain of a dog, what effects may it not produce in the superior organism of a man?”

The experimental answer to this question, as obtained in a long series of trials with children and with adults, has been most satisfactory. It has established with certainty the act that our Bodies are completely under the control of our Wills; so completely that the bodily response to the Will impulse, once a person has been trained to use his Will in this way, is so direct, so subservient, that it seems almost automatic. By a definite and psycho-physically regulated course of training in brain building

and Dirigation, any person can be taught to “Dirigate” into dominant activity a mental state which drives out of consciousness any other emotion or conviction, and this having been driven from the mind, the bodily state corresponding to it necessarily is driven from the Body. This is not a new therapeutic method. It is simply a subdivision of a new system of education which is designed to develop to its fullest capacity all the higher, better and more exalted attributes of our common human nature; to inhibit, repress and destroy all those other attributes in us which may lead us and place us far below the ideal standard of our race and our time, viz.: the Christian ideal.

The simplest exercise under this system, the one usually taken as a beginning, is Dirigation to some bodily part, as, for instance, to one of the little fingers. After concentrating his attention for a time upon this part, as instructed, the subject becomes conscious of a new feeling therein. This brings conviction to his mind and arouses interest in the work. Daily practice increases the power—the power to concentrate—and has a visible effect upon the feeblest Will. Once the power or the habit is established, it may be directed to any part of the Body; to the mental faculties as well as to the bodily functions. It can lead an invalid to health; a weak Will into strength. The mental conviction dominates the bodily state; and the healthy mental conviction automatically sets up those anabolic changes in tissue which rapidly become a cumulative assistance from the Body to the consistent and sustained effort which has been set up in the Mind. We have known hitherto the value of suggestion in the treatment of disease; but the idea has been in the state of a vague philosophical theorem rather than a physico-chemical fact.

The possibilities of Dirigation, properly taught, are practically limitless. Its value in the mental and moral development of children in particular is great, children showing by far the readiest and amplest response.

The Will controls the Body. This control, by proper and systematic training, may be developed to practical ends, with such results in health, in mental and physical strength, in the development and amplification of our mental powers, as will not be believed by many without ocular proof. I believe that it is the true and primary field of education, a field which up to now has been neglected, but which henceforth must claim first attention in all our systems of instruction, both religious and secular.

And one cannot investigate and ponder these facts without being perpetually driven back upon the Law previously referred to; a Law which yet dimly, but none the less certainly, seems to be emerging from the mists of ignorance which have so long enfolded it; the great Moral Law which seems to dominate all things living

and all the universe. The religious believer believes in a God of Love; the agnostic believes in a God of Law. But if Nature, as Lord Kelvin has declared, be benevolent; if the Primary Law which dominates all things living be a Law of Love; if thinking love be the certain path to health and to happiness, as thinking hate is the certain path to disease and to misery; if the Sermon on the Mount, as a definition of human duty be indorsed by experiment as the only wise human course in the pursuit of health, of happiness and of success—what can prevent the ultimate union, in spirit and in word, of Science with Religion, of the Christian Faith with the calm Reason of the twentieth century?

Truth is mighty and must prevail. Whatever is true, however it may affront existing prejudice, the world will ultimately come to believe. With men and with nations tendency is the only fact which really matters, and that the tendency of our time is not only an eager but a feverish search for the Truth, no one will deny. Nor is anyone likely to deny the immense importance of the line of inquiry here suggested and its great and beneficial effect upon mankind.

And it is upon the Will that inquiry and effort should be centered. Its mystery, the mystery of volition, human and divine, is the greatest question that confronts the scientific investigator of today. The data which already exist are voluminous. The New Testament, viewed as a scientific treatise setting forth the actual position of Man as a fact of Creation, is much further in accord with the convictions and conclusions of our most eminent experimentalists than is generally known. But without indulging in speculation or optimistic prophecy, it may be declared as certain that the Will of Man is supreme in its control of his own Body; that this fact is destined to be realized as a practical fact in our system of education; and that the pursuit of truth is not only the pursuit of happiness but also the pursuit of morality.

Confidence wins and despair fails in all the avenues of human endeavor. Depression where it is not due to some organic lesion, may be banished by the Will when the latter is properly trained and disciplined. And the immense possibilities of good in all men which lie in strengthening the Will along the path of wisdom, these lines may seem to suggest.